Capitalist Revolution, International Trade, Banking, Insurance

Volume II

Financial Perspectives of Economic History

László Vértesy

Gazdaságelemző Intézet
Institute for Economic Analysis
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László Vértesy

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Volume II
Capitalist Revolution, International Trade, Banking, Insurance

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Capitalist Revolution, International Trade,
Banking, Insurance

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Table of Contents

I. CAPITALISM 11

1. The Causes of Capitalism 16

2. Industrial Revolution 19

   2.1. Causes of the Industrial Revolution 24
   2.2. Improvements in Production 28

3. Bourgeois Revolutions 31

4. Capitalist Revolution in Theory 35

   4.1. Classical Economics – The Wealth of Nations: 1776 38
   4.2. The Spirit of Capitalism 41
   4.3. Felicitas Publica 47

5. The Results of Capitalism 50

   5.1. Debate on State Intervention 52
   5.2. Answers for the Wealth and Poverty of Nations 55
   5.3. History's Hockey Stick 58

References 62

II. INTERNATIONAL TRADE 69

6. The Concept of International Trade 73

   6.1. World, International and Foreign Economics 74
   6.2. Directions of International Trade 79
   6.3. Structure of National Economies 81

7. Antiquity: Empires and Trade Routes 86

   7.1. Greece 88
   7.2. Rome 90
   7.3. Great Trade Routes 92

8. Middle Ages - Distance Trade 97

   8.1. Levant 97
   8.2. Die Hanse 100
   8.3. Congress of Visegrád 102

9. Discoveries and International trade 104

9.1. Age of Discovery ... 104
9.2. Mercantilism and Prices ... 112
9.3. International Trading Countries and Companies ... 118

10. World Trade I. ... 130

10.1. Commercial Capitalism, the Rise of Advantages ... 130
10.2. Industrial Capitalism: Core and Peripheries ... 139
10.3. Imperialism and Monopoly Capitalism ... 142

11. World Trade II. ... 150

11.1. Multipolar World Economy ... 150
11.2. GATT – WTO ... 152
11.3. COMECON ... 155
11.4. EEC – EU ... 157
11.5. Other International Organizations ... 161

12. Regional Integrations and Cooperation ... 166

12.1. Europe ... 170
12.2. America ... 173
12.3. Asia ... 175
12.4. Africa ... 178

13. Globalization – Global trade ... 186

13.1. Globalization ... 187
13.2. MNCs and TNCs ... 195
13.3. Global Integrations ... 198
13.4. World Trade ... 203

References ... 206

III. BANKING ... 222

14. The Concept of Banking ... 225

14.1. Characteristics of Banking ... 226
14.2. Banks and the Banking System ... 243
14.3. Types of Banking Services ... 249

15. Antiquity ... 261

15.1. Greece ... 263
15.2. Rome ... 266

16. Middle Ages ... 271

16.1. Legacy of Levante 271
16.2. City banks 274
16.3. Florence - Firenze 275
16.4. Augsburg 277
16.5. Transactions 279

17. 17-19th Century 282

17.1. Central banks 283
17.2. Microfinancing, Cooperatives, Credit Unions 289
17.3. Transactions 295

18. 20th and 21st Century 300

18.1. General aspects 300
18.2. Central banks 310
18.3. Microfinancing, Cooperatives, Credit Unions 315
18.4. International, global initiatives 324
18.5. European Union 336
18.6. Trends: Digital, Green, and Ethical banking 348

References 356

IV. INSURANCE 376

19. The Concept of Insurance 379

19.1. Characteristics of Insurance 379
19.2. Types of Insurance 384

20. Antiquity 388

20.1. Greece 389
20.2. Rome 390

21. Middle Ages 392

21.1. Marine insurance 392
21.2. Legal frameworks and jurisdiction 394

22. 17-19th Century 398

22.1. Marine insurance 399
22.2. Property insurance 400
22.3. Business insurance 402
22.4. Life insurance 403
22.5. Accident and Health Insurance 406
22.6. Health Insurance 407

22.7. Reinsurance 409
22.8. Deposit Insurance 410
22.9. National Insurance 412

23.20th and 21st Century 415

23.1. Social insurance 417
23.2. Deposit Insurance 420
23.3. European Union 423
23.4. Trends 428

References 440

Preface

Lectorem meum, saluto!

Welcome back again; I am sincerely pleased to have the opportunity to greet the previous and new readers with genuine joy. In the first volume, we delved into a multitude of topics, ranging from the intricate science of economic history to the foundational principles of economics. We explored the evolution of economic thought, pondered the nuances of economic ethics, dissected the nature of money, and ventured into economic cycles, scrutinizing notable crises along the way.

We can continue continue our acquaintance with the events of the history of the economy with this companion. Now, as we embark on the journey through the second volume, we start from the capitalist revolution. Furthermore, the text poises to explore the dynamics of international trade, banking, and insurance. To fully grasp the depth of these subjects, I recommend revisiting the introductory chapters of the first volume, which laid the groundwork for our current issues. This volume continues in the footsteps of its predecessor, crafted with the same dedication to clarity and scholarly rigor, upon the inspiration of John Hick's and Max Weber's tradition. Each chapter commences with a concise economic primer, elucidating the fundamental concepts and theoretical underpinnings relevant to the topic. Our narrative spans epochs, tracing the trajectory of economic phenomena from antiquity through the Middle Ages, the modern era, and into the complexities of our contemporary world, reflecting upon present trends and implications. A distinctive feature of this work is the abundance of footnotes accompanying the text, which not only provides essential references and sources but also offers a treasure trove of recommended readings and supplementary literature, inviting the curious mind to delve deeper into the subject matter.

With these tools at your disposal, I extend my warmest wishes for an enlightening and enriching reading experience for these other topics from economic history.

László Vértesy
June 2024

I. CAPITALISM

Capitalism is an economic system characterized by the exclusive private ownership of the factors and means of production, with compensation for labor being exclusively in the form of wages. Functionally, it constitutes a system for the economic production and allocation of resources. Economic planning is decentralized, relying on competitive and voluntary decision-making processes. The viability of capitalism hinges on the enforcement of private property rights, which serves as a catalyst for capital investment and the efficient utilization of capital. The antithesis of pure capitalism is pure socialism, where all means of production are collectively or state-owned, and economic planning is centralized.

The conceptual framework for contemporary notions of private property originates from John Locke's **homestead principle** of 1690.[1] The distinction between private and common property is generated through labor, wherein individuals accrue ownership rights by amalgamating their labor with unclaimed resources. The legitimate methods of transferring ownership include voluntary exchange, gifting, inheritance, or the reclamation of abandoned (unowned) property.

> Though the earth and all inferior creatures be common to all men, yet every man has a "property" in his own "person". This nobody has any right to but himself. The "labour" of his body and the "work" of his hands, we may say, are properly his. Whatsoever, then, he removes out of the state that Nature hath provided and left it in, he hath mixed his labour with it, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state Nature placed it in, it hath by this labour something annexed to it that excludes the common right of other men. For this "labour" being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good left in common for others.
>
> John Locke

The **foundation of capitalism** lies in contracts, fair trade, and the right to compensation. It fosters efficiency by motivating resource owners to optimize the value of their property. Enterprises' proprietors retain ownership rights to the goods produced, preventing the alienation of workers from their labor. Its historical evolution traces back to European feudalism and mercantilism, culminating in industrialization and the widespread availability of consumer goods.

---

[1] Locke, J. (1689-90). *Two Treatises of Government*. London. Concerning the True Original Extent and End of Civil Government Book II, Chap 5, §26. 116. Rod Hay, McMaster University

The term **capitalism** derives from the Latin capitalis, meaning head of cattle. Geoffrey M. Hodgson writes,[2] that according to Fernand Braudel the word capitalist probably dates from the seventeenth century.[3] It was taken to mean an owner of much money or wealth. In French, A. R. J. Turgot used capitaliste in his 1774 Reflections on the Formation and Distribution of Wealth.[4] William Godwin used the word capitalist in his Enquiry concerning Political Justice.[5] David Ricardo used it several times in his Principles of political economy.[6] The person most widely credited with the invention of the word capitalisme is the socialist Louis Blanc in his Organisation du travail. Absent from at least the first five editions (from 1839 to 1848), it appears in the ninth, where Blanc (1850) wrote of the "fallacy" of the "usefulness of capital" being "perpetually confused with what I call capitalism, that is to say the appropriation of capital by some, to the exclusion of others."[7] In 1849 the word capitalism appeared in an English translation of an article by Blanc, written while he was in exile in London: "The suppression of capitalism cannot, then, have anything to do with the suppression of capital."[8] Shortly afterward, Pierre Joseph Proudhon used the term capitalisme, and its usage slowly widened in both English and French.[9] William Makepeace Thackeray wrote of capitalism in his novel The Newcomes from 1855.[10]

The term capitalism was scarcely recognized a century ago, but as depicted in the figure; its usage has skyrocketed since then. The figure illustrates fragments of all articles from The New York Times (excluding the sports section) containing the term capitalism.

---

[2] Hodgson, G. M. (2015). *Conceptualizing capitalism: Institutions, evolution, future*. University of Chicago Press. 252.

[3] Braudel, F. (1982). *Civilization and Capitalism, 15th– 18th Century*. Vol. 2, *The Wheels of Commerce*. London: Collins.

[4] Turgot, A. R. J. (1774, 2019). *Reflections on the Formation and the Distribution of Riches*. LM Publishers.

[5] Godwin, W. (1793, 2013). *An enquiry concerning political justice*. OUP Oxford.

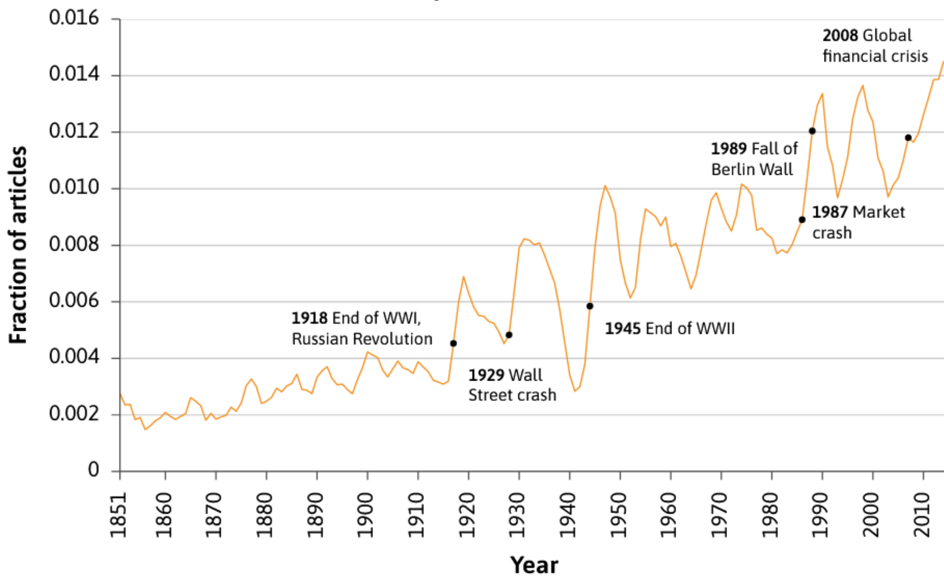
[6] Ricardo, D. (1817). *On the principles of political economy*. London: J. Murray.

[7] Blanc, L. (1850). *Organisation du travail*. 9th ed. Paris: Sociétée de l'industrie fraternelle. 161.

[8] It is unclear whether this is the first appearance of *capitalism* or *capitalisme* or whether it is preceded in an undiscovered 1848 or 1849 edition of *Organisation du travail*.
Blanc, L. (1849). The New World. *Monthly Review: The New World of Politics, Arts, Literature, and Sciences*, no. 1 (July): 5– 172. 117.

[9] Proudhon, P. J. (1851). *Les confessions d'un révolutionnaire*. Paris: Garnier. 271. Proudhon, P. J. (1840) 1890. *What Is Property? An Inquiry into the Principle of Right and Government*. Translated from the 1840 French ed. New York: Humbold.

[10] Thackeray, W. M. (1850). *The Newcomes: memoirs of a most respectable family* (Vol. 2). Harper.



Source: CoreEcon. (2021). The Economy: A South Asian Perspective. Figure 1.7 Mention of the word 'capitalism' in New York Times articles (1851–2015). (https://www.core-econ.org/the-economy-south-asia/book/text/01.html#16-capitalism-defined-private-property-markets-and-firms)

Among the **advantages**, capitalism is associated with rapid economic growth, and known for promoting efficiency in resource allocation. Market forces determine prices, which guide the allocation of resources based on demand and supply. This tends to reduce waste and inefficiency. The competitive market forces drive producers to minimize costs and maximize production. The profit motive encourages innovation, entrepreneurship, and investment, as businesses strive to create new products and technologies to gain a competitive edge. It has demonstrated the ability to generate wealth and raise the standard of living for a significant portion of the population. Capitalism generally supports individual economic freedom, allowing individuals the autonomy to make economic decisions and pursue their own interests, and choose their occupations, investments, and consumption patterns. Competition encourages businesses to cater to consumer preferences, leading to a diverse array of products and services. With job creation as businesses expand to meet market demands, it can contribute to lower unemployment rates and increased opportunities for employment. Capitalism is often more adaptable to changing economic conditions and technological advancements compared to centrally planned economies.

One of the most prominent **criticisms** of capitalism is the potential for significantly widening income and wealth inequality, with a concentration of resources among a small segment of the population. Those with capital and valuable skills may accumulate significant wealth, leaving others with fewer resources. They argue that in a pursuit of profit, businesses may exploit labor, leading to poor working conditions, low wages, and job insecurity for some workers. In the pursuit of profit, some businesses may engage in exploitative labor practices, such as low wages, poor working conditions, and lack of job security. In pure capitalist systems, there might be insufficient social safety nets, leading to challenges in providing adequate healthcare, education, and assistance to those facing economic hardships. These can lead to social and economic injustices. Capitalism is susceptible to market failures, such as monopolies, externalities, and information asymmetry, which can result in inefficient resource allocation or public goods, which may require government intervention. The profit-driven nature may encourage businesses to prioritize short-term gains and speculative behavior over long-term sustainability and social or environmental considerations: pollution and degradation; prioritizing financial gains over ecological concerns. Capitalist economies are prone to economic cycles, including periods of boom and bust, which can result in economic instability and recessions. The volatility can result in financial crises, unemployment, and social instability.

Pros and Cons of Capitalism

Advantages	Disadvantages
• economic freedom and growth • more efficient distribution of capital resources • innovation and competition: competition encourages innovation and inventions, technological development • markets allocate resources efficiently, as prices are formed based on supply and demand • competition results in a lower consumer prices, and wider consumer choice and selection • job creation, wages and the general standard of living rise overall • encourages the personal ambitions and motivation of individuals, as their efforts directly affect their income and success (individual freedom)	• generates huge income, wealth and social inequalities • unemployment and job insecurity (especially during economic recessions) • exploitation and unfair labor practices • can encourage corruption and crony capitalism in the pursuit of profit • causes negative effects such as market failures (cycles of boom and bust), environmental pollution and degradation (negative externalities) • can result in short-term thinking, focus and speculation • lack of social security • Marx: the development of the inherent class conflict between capital and labor

Source: own compilation of the author

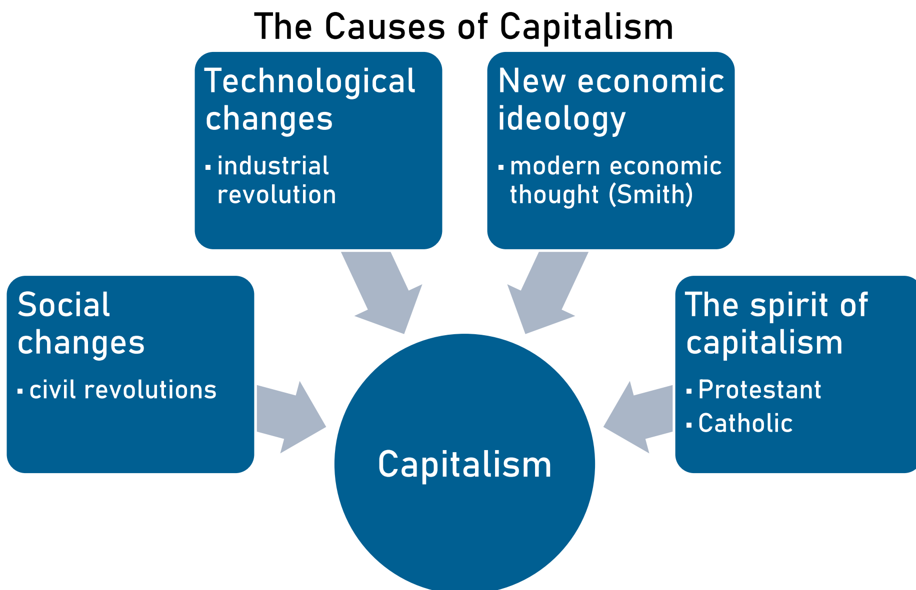
It is important to note that the interpretation of these advantages and disadvantages can vary based on different perspectives and policy approaches within a capitalist system. Additionally, many countries employ a mixed economic system that combines elements of capitalism and government intervention to address some of the shortcomings associated with pure capitalism.[11]

The **genesis and evolution** of capitalism have been subjects of extensive study and debate throughout history.[12] From its roots in the Industrial Revolution to the intricate theories of classical economics, the emergence and proliferation of capitalism have been influenced by a myriad of factors. In this exploration, we delve into the causes and catalysts that propelled the ascent of capitalism, tracing its origins from the transformative era of industrialization to the philosophical underpinnings that shaped its theoretical frameworks.[13] Beginning with an examination of the Industrial Revolution and its profound impacts on production processes, we take a look at the bourgeois revolutions that reshaped societal structures. Subsequently, we dvelve into the theoretical foundations of capitalism as expounded by seminal works such as Adam Smith's The Wealth of Nations or Max Weber's concept of the spirit of capitalism. Through this multifaceted analysis, we aim to unravel the complex tapestry of influences that have molded capitalism into the dominant economic paradigm it is today, shedding light on the interconnected forces that have propelled its advancement and engendered profound socio-economic transformations.

[11] Chiapello, E. (2013). Capitalism and its criticisms. *New spirits of capitalism? Crises, justifications, and dynamics*, 60-81.
Brennan, J. (2014). *Why not capitalism?*. Routledge.
[12] Jenkins, D., & Leroy, J. (2021). Introduction: The old history of capitalism. In *Histories of racial capitalism* (pp. 1-26). Columbia University Press.
Wood, E. M. (2002). *The origin of capitalism: A longer view*. Verso.
[13] Robbins, L. (1926). The dynamics of capitalism. *Economica*, (16), 31-39.

1. The Causes of Capitalism

The emergence and development of capitalism, can be attributed to various interconnected factors. This dominant economic system shaped societies worldwide with a complex interplay of social, technological, and ideological realms.[14] At its core, capitalism emerges as a response to profound shifts in human civilization, propelled by a confluence of social upheavals, technological advancements, and the emergence of new economic ideologies. In this exploration of the causes of capitalism, we delve into the transformative effects of civil revolutions, the seismic impact of the Industrial Revolution, the advent of modern economic thought heralded by luminaries like Adam Smith, and the intricate interplay between religious ethos and economic ethos, notably exemplified in the Protestant and Catholic traditions.



Source: own compilation of the author

Political and social transformations, particularly the **bourgeois revolutions** like the English Civil War, the French Revolution, and later the emergence of nation states played a crucial role in laying the foundations for capitalist systems.[15] These revolutions challenged feudal structures and paved

[14] Pirenne, H. (2023). *The stages in the social history of capitalism*. Good Press.
[15] Iversen, T., & Soskice, D. (2012). Modern capitalism and the advanced nation state: Understanding the causes of the crisis. *Coping with crisis: government reactions to the great recession*, 35-64.

the way for the rise of the bourgeoisie.[16] The **Industrial Revolution**, marked by significant technological advancements in manufacturing and transportation, had a profound impact on the economy. The mechanization of production processes led to increased efficiency and the growth of capitalist enterprises. The advent of the **classical or modern economic thinking**, as exemplified by economists like Adam Smith, contributed to the development of capitalist ideas. Smith's influential work, The Wealth of Nations, emphasized the benefits of free markets, individual self-interest, and limited government intervention. Max Weber's concept of the **Protestant Ethic** posits that certain Protestant religious beliefs, particularly in the Calvinist tradition, fostered a work ethic and values conducive to capitalist development. The idea that hard work and success in business were signs of predestined salvation played a role in shaping the capitalist spirit. While Weber focused on Protestantism, others argue that certain aspects of **Catholicism**, such as the emphasis on thrift and frugality, also contributed to the development of capitalist attitudes.[17]

These causes are interconnected and often mutually reinforcing. The social, technological, and ideological changes collectively shaped the trajectory of capitalism, leading to the emergence of modern market-oriented economies. The spirit of capitalism, influenced by religious and cultural factors, further played a role in shaping the values and behaviors conducive to the functioning of capitalist systems. Historians and economists do not agree on the relative importance of specific elements concerning explanations for the primacy of Great Britain and Europe in general.

[16] Sawhill, I. (2020). Capitalism and the future of democracy. In *Community Wealth Building and the Reconstruction of American Democracy* (pp. 77-100). Edward Elgar Publishing.

[17] Santori, P. (2021). *Thomas Aquinas and the civil economy tradition: the Mediterranean spirit of capitalism*. Routledge.

Stages of Capitalist Development

<table>
<tr><th></th><th>Social Structures of Accumulation</th><th>Systemic Cycles of Accumulation (Arrighi)</th><th>Dumenil and Levy</th></tr>
<tr><td rowspan="2">Late 19th Century Long Waves</td><td rowspan="2">Competitive Capitalism 1860s-1898</td><td>British Hegemony Material Expansion 1740-1870</td><td></td></tr>
<tr><td>British Hegemony Financial Expansion 1870-1930</td><td>First Structural Crisis 1870s-1890s</td></tr>
<tr><td>Early 20th Century Long Waves</td><td>Corporate Capitalism 1898-1939</td><td rowspan="2">American Hegemony Material Expansion 1870-1970</td><td>First Financial Hegemony 1900s-1920s

Great Depression 1930s</td></tr>
<tr><td rowspan="2">Mid-20th Century Long Waves</td><td rowspan="2">Regulated Capitalism 1939-1991</td><td>Keynesian Compromise 1940s-1960s</td></tr>
<tr><td>American Hegemony Financial Expansion 1970-?</td><td>Second Structural Crisis 1970s-1980s</td></tr>
<tr><td>Late 20th / Early 21st Century Long Wave</td><td>Transnational Capitalism 1991-?</td><td>American Hegemony Terminal Crisis?</td><td>Neoliberalism or Second Financial Hegemony 1990s-?</td></tr>
</table>

Source: Tabb, W. K. (2007). The Centrality of Finance. *Journal of World-Systems Research*, *13*(1), 1–11. https://doi.org/10.5195/jwsr.2007.357. 444

2. Industrial Revolution

The **Industrial Revolution** was a period of profound economic, technological, and social transformation that began in the late 18th century and continued into the 19th century. What we term the Industrial Revolution was more than the breaking of Malthusian cycles; it constituted a complex combination of interconnected intellectual, technological, social, economic, and moral changes.[18]

Previously, the **medieval guilds** were associations of artisans and merchants established in medieval Europe (approximately the 11th - 16th centuries) with the purpose of regulating trades, safeguarding interests, and offering social assistance.[19] These guilds comprised two main types: (i) merchant guilds, primarily for traders,[20] and (ii) craft guilds, which catered to skilled artisans.[21] Structurally, guilds operated hierarchically, with apprentices apprenticing under masters, progressing to become journeymen, and eventually gaining the ability to establish their own workshops. Their functions encompassed setting quality benchmarks for goods and services, negotiating equitable wages and working conditions, providing apprenticeship training and education, representing members in legal and political affairs, and furnishing social activities and support.[22] Guilds significantly contributed to the development of urban economies and crafts, fostering standardization and quality in production, and offering security and social welfare benefits to their members.[23] However, in later stages, guilds faced criticism for limiting competition and stifling innovation.[24] Eventually, guilds declined due to evolving economic and social structures.

---

[18] Hudson, P. (2014). *The industrial revolution*. Bloomsbury Publishing.; Toynbee, A. (2013). *The industrial revolution*. Read Books Ltd.; Ashton, T. S. (1997). *The industrial revolution 1760-1830*. Oxford University Press.

[19] Ogilvie, S. (2014). The economics of guilds. *Journal of Economic Perspectives*, *28*(4), 169-192.

Epstein, S. A. (1991). *Wage labor and guilds in medieval Europe*. UNC Press Books.

[20] Knight, R. (2023). *London Medieval Trade Guilds' Principles and Practices of Product Quality*. SAGE Publications: SAGE Business Cases Originals.

[21] Jullien, E., & Pauly, M. (2016). Craftsmen and guilds in the medieval and early modern periods.

[22] Bathija, S. (2021). Inclusion and Exclusion in Medieval European Craft Guilds. *SUURJ: Seattle University Undergraduate Research Journal*, *5*(1), 8.

[23] Rosser, G. (2015). *The art of solidarity in the middle ages: Guilds in England 1250-1550*. OUP Oxford.

[24] Epstein, S. R., & Prak, M. (Eds.). (2008). *Guilds, innovation and the European economy, 1400–1800*. Cambridge University Press.

It marked a shift from agrarian and manual labor-based economies to industrial and machine-driven ones. The era saw significant **advancements in technology**, including the development of steam engines, mechanized textile production, and innovations in iron and steel manufacturing. These technologies revolutionized industries and increased productivity. The introduction of the **factory system** replaced traditional cottage industries. Factories centralized production, allowing for more efficient organization, division of labor, and increased output. The shift to machinery and factory production had profound effects on the nature of **work**. While it increased efficiency, it also led to challenging working conditions, long hours, and often exploitative labor practices. Improved **transportation networks**, such as the construction of railways and canals, facilitated the movement of raw materials, goods, and people.[25]

The (often literal) goldmine of **colonialism** brought new wealth and new demand for the products of domestic industry, which drove the expansion and mechanization of production.[26] The Industrial Revolution brought about significant **economic changes**, including the rise of capitalism, the emergence of new economic classes, and the expansion of international trade. **Social structures** underwent transformation with the rise of an industrial middle class and the decline of traditional artisanal and agrarian societies. Social movements advocating for workers' rights and improved conditions emerged in response to the challenges posed by industrialization. With technological advancements, factories were no longer confined to locations near waterways or windmills; industrialists began constructing them in cities where a larger workforce was available. In other words, the growth of industries led to mass migrations from rural areas to urban centers, resulting in rapid **urbanization**.[27] Cities expanded to accommodate the influx of workers seeking employment in factories. Finally, it had a **global impact**, influencing economies and societies worldwide. Western countries, particularly Britain,

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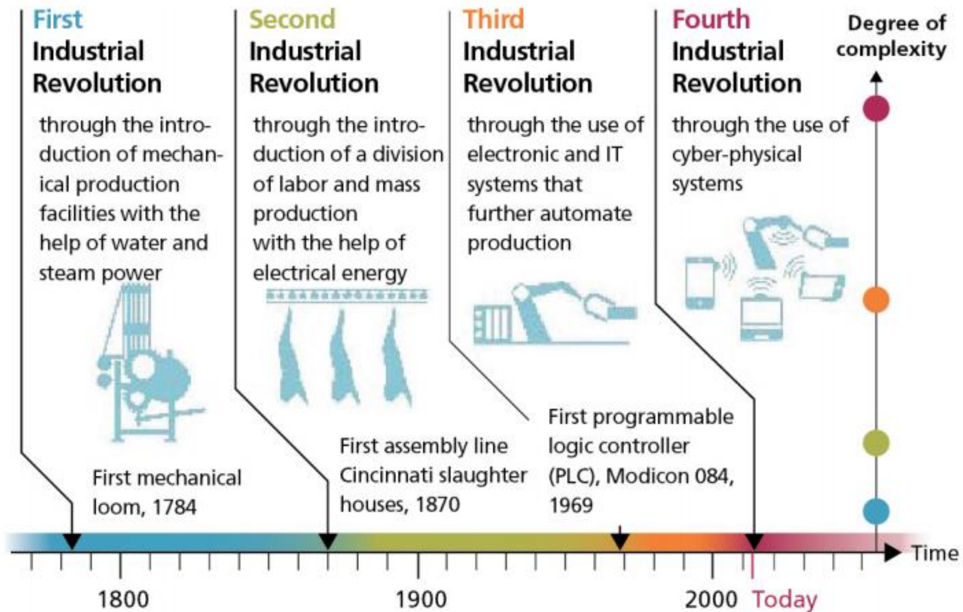
[25] Szostak, R. (1991). *Role of Transportation in the Industrial Revolution: A Comparison of England and France*. McGill-Queen's Press-MQUP.
Albert, B. (1983). *Transport in the industrial revolution*. Manchester University Press.
[26] Bhambra, G. K., & Holmwood, J. (2021). *Colonialism and modern social theory*. John Wiley & Sons.
Manjapra, K. (2020). *Colonialism in global perspective*. Cambridge University Press.
Césaire, A. (2023). Discourse on colonialism. In *Postcolonlsm* (pp. 310-339). Routledge.
[27] Cerdà, I. (2022). *General theory of urbanization 1867*. Actar D, Inc.
Davenport, R. J. (2020). Urbanization and mortality in Britain, c. 1800–50. *The Economic History Review*, *73*(2), 455-485.

took the lead in industrialization, and the effects of these changes were eventually felt globally.



Source: Morrissey M. (2019). Insurance and Fourth Industrial Revolution. Insurance thought leadership (https://www.insurancethoughtleadership.com/emerging-technologies/insurance-and-fourth-industrial-revolution)

Industry 1.0 - The Steam Era. The initial phase of industrialization marked the First Industrial Revolution, characterized by the adoption of new manufacturing processes involving water and steam. This shift significantly increased production capacities and contributed to an improved standard of living for some segments of society.

Industry 2.0 - The Electricity Age. Moving into the 20th century, electricity emerged as the predominant power source, surpassing water and steam. Its versatility allowed businesses to concentrate power for individual machines and eventually led to the development of machines with portable power sources. This period also witnessed the introduction of management programs enhancing manufacturing efficiency and effectiveness.[28]

[28] Yin, Y., Stecke, K. E., & Li, D. (2018). The evolution of production systems from Industry 2.0 through Industry 4.0. *International Journal of Production Research*, *56*(1-2), 848-861.

Industry 3.0 - The Information Age. The advent of the first computer era initiated the Third Industrial Revolution around 1970. Despite the early computers being cumbersome, their groundwork laid the foundation for the modern computer technology. This era involved the integration of electronics and Information Technology (IT) into production processes, fostering automation. Internet access, connectivity, and renewable energy played pivotal roles in advancing manufacturing during Industry 3.0, with the introduction of more automated systems on assembly lines, utilizing Programmable Logic Controllers (PLC) alongside human input.[29]

Industry 4.0. The Fourth Industrial Revolution is characterized by smart machines, storage systems, and production facilities autonomously exchanging information and controlling processes without human intervention.[30] This communication is facilitated by the Industrial Internet of Things (IoT). Key components include cyber-physical systems, the Internet of Things (IoT), cloud computing, and cognitive computing. Cyber-physical systems, such as smart machines, leverage modern control systems, embedded software, and IoT connectivity, enabling enhanced production, value creation, and real-time optimization. Industry 4.0 represents a comprehensive vision with distinct frameworks, predominantly focusing on the convergence of physical industrial assets and digital technologies in cyber-physical systems.[31]

Industry 5.0 aims beyond efficiency and productivity as the sole goals, and reinforces the role and the contribution of industry to society.[32] Central to this vision is prioritizing the well-being and skills development of workers within the production process and leveraging new technologies to foster

---

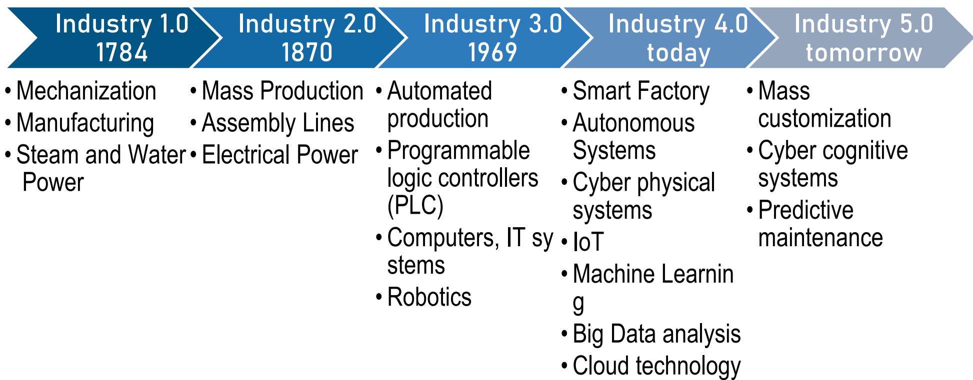
[29] Jiang, Z., Yuan, S., Ma, J., & Wang, Q. (2022). The evolution of production scheduling from Industry 3.0 through Industry 4.0. *International Journal of Production Research*, *60*(11), 3534-3554.

[30] Schwab, K. (2017). *The fourth industrial revolution*. Currency.
Skilton, M., & Hovsepian, F. (2018). *The 4th industrial revolution*. Springer Nature.

[31] Ellitan, L. (2020). Competing in the era of industrial revolution 4.0 and society 5.0. *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship*, *10*(1), 1-12.

[32] Zizic, M. C., Mladineo, M., Gjeldum, N., & Celent, L. (2022). From industry 4.0 towards industry 5.0: A review and analysis of paradigm shift for the people, organization and technology. *Energies*, *15*(14), 5221.
Leng, J., Sha, W., Wang, B., Zheng, P., Zhuang, C., Liu, Q., ... & Wang, L. (2022). Industry 5.0: Prospect and retrospect. *Journal of Manufacturing Systems*, *65*, 279-295.
Huang, S., Wang, B., Li, X., Zheng, P., Mourtzis, D., & Wang, L. (2022). Industry 5.0 and Society 5.0—Comparison, complementation and co-evolution. *Journal of manufacturing systems*, *64*, 424-428.

prosperity beyond mere job creation and economic growth, all while respecting the planet's ecological limits. It marks the next stage of industrialization, building upon the automation and digitization of Industry 4.0. Unlike its predecessor, however, Industry 5.0 emphasizes a collaboration between humans and technology. Upskilling and reskilling initiatives become crucial. Robots handle repetitive and strenuous tasks, while humans leverage their creativity, critical thinking, and problem-solving abilities for complex situations. Smart factories feature self-optimizing production lines, personalized products derived from customer data, and robots collaborating alongside human workers. Predictive maintenance is employed to prevent equipment failures, thus ensuring smooth operations and minimizing downtime. Supply chain transparency is enhanced through real-time tracking of materials and goods, fostering ethical sourcing practices and sustainability.[33]



Source: own compilation of the author

Complementing the existing Industry 4.0 approach, Industry 5.0 specifically emphasizes research and innovation in facilitating the transition toward a sustainable, human-centered, and resilient European industry. The **Industry 5.0 Community of Practice** (CoP 5.0) was officially launched in 2023, followed by the first joint session of CoP 5.0 working groups. During initial phase period, the community divided into two working groups, focus-

[33] Akundi, A., Euresti, D., Luna, S., Ankobiah, W., Lopes, A., & Edinbarough, I. (2022). State of Industry 5.0—Analysis and identification of current research trends. *Applied System Innovation*, *5*(1), 27.

ing on (i) conducting thematic analysis with an emphasis on the learning ecosystem approach, and (ii) developing a prototype for the Industry 5.0 learning and assessment tool.[34]

2.1. Causes of the Industrial Revolution

Several interconnected factors contributed to the onset of The Industrial Revolution. Robert C. **Allen** identified the **structural changes** of the Industrial Revolution as stemming from the combination of relatively high labor costs and the low costs of local energy sources.[35] Joel **Mokyr** attributed the **transformation of elite scientific knowledge** into practical advice and tools for engineers and skilled artisans to the Enlightenment and the scientific revolution in Europe.[36] While wage levels and energy prices could influence the direction of inventions, they are better likened to steering mechanisms than drivers of technological progress, as highlighted by the observations made by various scholars. David **Landes** contended that the **political and cultural characteristics of nations** played a crucial role, asserting that European countries surpassed China due to the latter's excessively strong state that stifled innovation and a cultural preference for stability over change.[37]

Gregory **Clark** and Max **Weber** attributed **Britain's rise** to cultural attributes such as hard work and savings, which were passed down to subsequent generations, forming the key to success associated with the spirit of capitalism. Weber specifically emphasized that the Protestant countries of Northern Europe became the distinctive home of virtues linked to the spirit of capitalism.[38]

Kenneth **Pomeranz** challenged cultural or **institutional explanations** for Europe's post-1800 economic dominance, suggesting that Britain's access

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[34] European Commission (2022). Industry 5.0 (https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/industry-50_en)

[35] Allen, R. C. (2009). *The British industrial revolution in global perspective*. Cambridge University Press.

Allen, R. C. (1983). Collective invention. *Journal of economic behavior & organization*, *4*(1), 1-24.

[36] Mokyr, J. (1992). *The lever of riches: Technological creativity and economic progress*. Oxford University Press.

Mokyr, J. (2005). The intellectual origins of modern economic growth. *The Journal of Economic History*, *65*(2), 285-351.

[37] Landes, D. S. (2015). *Wealth and poverty of nations*. Hachette UK.

[38] Trivellato, F. (2023). The Ghosts of Max Weber in the Economic History of Preindustrial Europe. *Capitalism: A Journal of History and Economics*, *4*(2), 332-376.

to New World colonies and their agricultural production, especially sugar, fueled the expansion of the industrial working class, helping escape the Malthusian trap.[39]

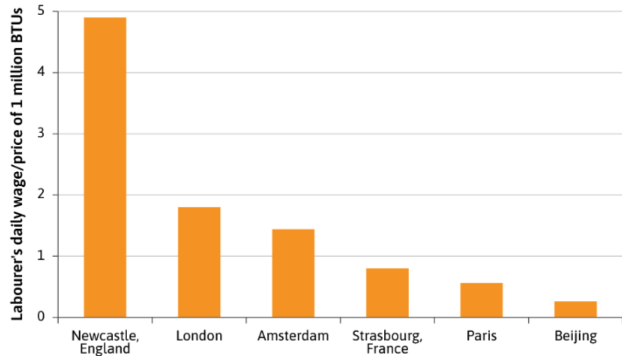
Causes of the Industrial Revolution

Robert C. Allen	Relatively high labour costs and the low cost of local energy sources drove the structural changes of the industrial revolution
Joel Mokyr	The Enlightenment and Europe's scientific revolution brought new ways of transferring elite scientific knowledge and transforming it into practical advice and tools for engineers and skilled craftsmen
	Although wages and energy prices may tilt the direction of invention in one direction or another, they are more like a steering wheel than an engine of technological progress
David Landes	Political and cultural characteristics of nations: European countries pulled ahead of China because the Chinese state was too powerful and stifled innovation, and because Chinese culture at the time favored stability over change
Gregory Clark	Attributes the rise of Britain to its culture; the key to its success was cultural traits such as hard work and savings, which were passed on to future generations
Max Weber	The Protestant countries of northern Europe are a particular home for the virtues associated with the 'spirit of capitalism
Kenneth Pomeranz	The superior growth of Europe after 1800 was due more to the abundance of British coal than to cultural or institutional differences with other countries.
	Britain's access to the agricultural production of the New World colonies (especially sugar and its by-products) fed an expanding class of industrial workers, thus escaping the Malthusian trap

Source: own compilation of the author

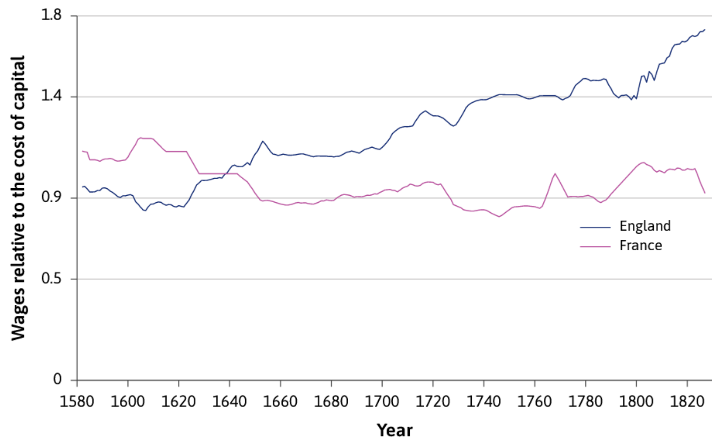
[39] Pomeranz, K. (2000). *The great divergence: China, Europe, and the making of the modern world economy*. Princeton University Press.
Pomeranz, K., & Topik, S. (2014). *The world that trade created: Society, culture and the world economy, 1400 to the present*. Routledge.

Among these reasons we highlight the **wages in comparison to energy costs** in the early 1700s). The increase in labor costs relative to energy costs prompted a shift towards energy-efficient technologies, resulting in innovation benefits. Wage rates in England, relative to energy costs, were high, partly due to the generally higher wages in England compared to other regions, and also because coal, abundant in Great Britain, was more affordable than in other countries.



*BTU (British Thermal Units, equivalent to slightly more than 1000 joules per energy unit)

On the other hand, the **wages relative to the capital costs**. In the eighteenth century, wages relative to both energy and capital costs were higher in Great Britain than in other regions (e.g., France). Undoubtedly, the innovative and inventive environment in Great Britain, featuring numerous skilled workers, engineers, and machinists, played a crucial role in constructing machines designed by inventors.



Source: CoreEcon. (2021). The Economy: A South Asian Perspective. Figure 2.10 Wages relative to the price of energy (early 1700s) (Page 140 of Robert C. Allen. 2008. *The British Industrial Revolution in Global Perspective.* Cambridge: Cambridge University Press.) and Figure 2.11 Wages relative to the cost of capital goods (late sixteenth to the early nineteenth century) (https://www.core-econ.org/the-economy-south-asia/book/text/02.html#26-the-british-industrial-revolution-and-incentives-for-new-technologies)

What explains the introduction of these new technologies in other countries such as France and Germany, and eventually China and India? One

response is continued technological development, where the creation of a new technology surpasses existing ones. Technological progress leads to the invention of an excellent energy-intensive technology. Once this new energy-intensive technology becomes available, both countries using its previous version and those utilizing a different technology would adopt it. The second factor that facilitated the global dissemination of new technologies was the increase in wages and the decrease in energy costs (e.g., due to cheaper transportation enabling countries to import energy inexpensively from abroad).

- **Energy- or Labor-Intensive:** If the relative price of labor is high, an energy-intensive technology is chosen. If the relative price of labor is low, a labor-intensive technology is preferred.
- **Technological Development:** For example, improvement occurs in clothing manufacturing technology, resulting in a new technology with energy-intensive characteristics. This technology uses half as much energy per labor unit to produce 100 meters of fabric. The new technology dominates the current technology.
- **Energy-Intensive Technology is the Least Costly:** The new technology is cheaper than its previous version or another technology, both in countries with relatively high wages and those with low-wage, expensive-energy economies. The new, labor- and energy-efficient technology is within the boundaries of previous cost functions, making it applicable in both economies.

2.2. Improvements in Production

The Industrial Revolution was propelled by **three key factors**: (i) **technological changes**, exemplified by the utilization of iron and steel; (ii) new **energy sources**, such as coal and steam; and (iii) the **factory system**, leading to division of labor and specialization, thereby enhancing efficiency.

Old vs. New technology

Old technology	New technology
Lots of workers	Few workers
Little machinery (spinning wheels)	Lots of capital goods (spinning mules, factory buildings, water wheels or steam engines)
… requiring only human energy	… requiring energy (coal)
Labour-intensive	Labour-saving
Capital-saving	Capital-intensive
Energy-saving	Energy-intensive

Source: CoreEcon. (2021). The Economy: A South Asian Perspective. Figure 2.9 The change in spinning technology during the Industrial Revolution. (https://www.core-econ.org/the-economy-south-asia/book/text/02.html#26-the-british-industrial-revolution-and-incentives-for-new-technologies)

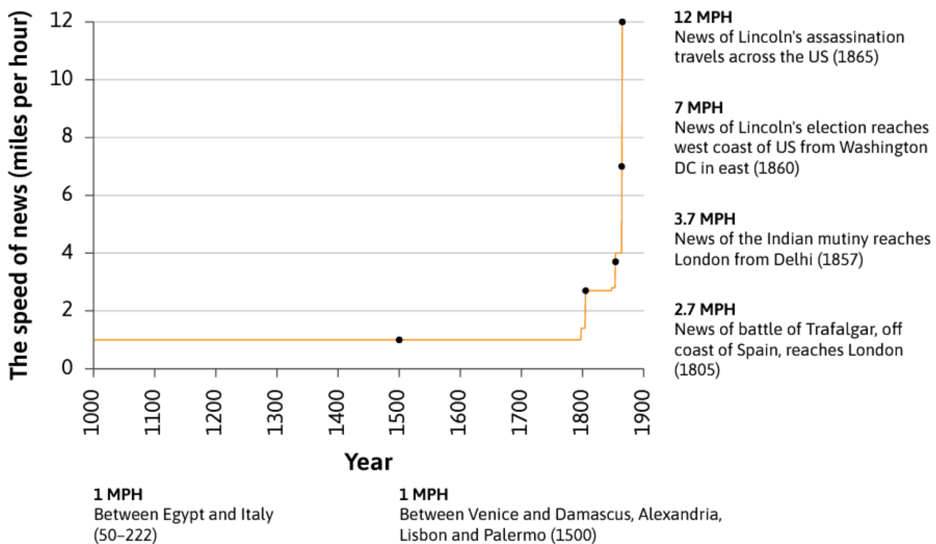
For instance, in the **textile industry** before the industrial revolution, tasks like spinning,[40] weaving, and crafting household garments were time-consuming for most women. Unmarried women in England were referred to as spinsters, as spinning was their primary occupation. Historian Eve Fisher calculated that during this period, producing a shirt required 500 hours of spinning and a total of 579 hours of work – equivalent to $4,197.25 at today's minimum wage in the USA. The **Spinning Jenny**, invented by James Hargreaves in 1764-65 in Stanhill, Oswaldtwistle, Lancashire, England, stands as a pivotal advancement in the industrialization of textile manufacturing during the early stages of the Industrial Revolution.[41] This multi-spindle spinning frame significantly decreased the labor required for cloth production, enabling a single worker to operate eight or more spools simultaneously. By the end of the 19th century a single spinning mule, operated by very few

[40] Spinning: the production of thread or yarn, during which short and thin fibers (elementary fibers) are arranged parallel and twisted together to form a continuous, long, roughly cylindrical strip for further processing. Initially one spindle, then eight, now 120.

[41] Styles, J. (2020). The rise and fall of the Spinning Jenny: Domestic mechanisation in eighteenth-century cotton spinning. *Textile History*, *51*(2), 195-236.
Griffiths, T., Hunt, P. A., & O'Brien, P. K. (1992). Inventive activity in the British textile industry, 1700–1800. *The Journal of Economic History*, *52*(4), 881-906.

people, could replace more than 1,000 spindles.[42] These machines no longer relied on human power, but were initially powered by water wheels and later by coal-fired steam engines. In 1794, Eli Whitney patented the **Cotton Gin**, that significantly accelerated the process of separating seeds from cotton fiber. By slashing the time required for cotton cleaning, southern states generated greater profits from their cotton crops. Consequently, by the mid-19th century, cotton had emerged as the primary export of America.

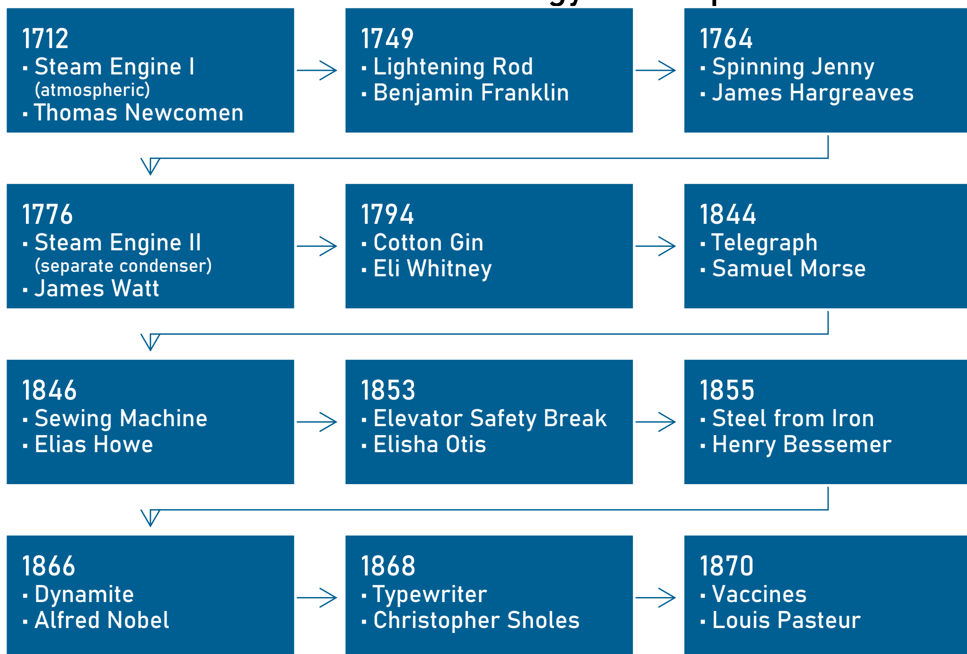
Light production; generating light next to a campfire took approximately 1 hour of work, yielding 17 lumens-hour. Animal fat lamps produced 20 lumens-hour. In ancient Babylon (1750 BCE), sesame oil produced 24 lumens-hour with one hour of labor. In the early 1800s, the most efficient lighting methods (using tallow candles) provided approximately nine times more light. Subsequently, gas and petroleum lamps, incandescent bulbs, and fluorescent tubes were introduced. In contemporary times, the productivity of labor in light production is half a million times greater than that of our ancestors around the campfire.



Source: CORE team (2022). The Economy 1.0, The capitalist revolution, 1.4 The permanent technological revolution (https://www.core-econ.org/the-economy/v1/book/text/01.html#figure-1-4)

[42] Maw, P., Solar, P., Kane, A., & Lyons, J. S. (2022). After the great inventions: technological change in UK cotton spinning, 1780–1835. *The Economic History Review*, *75*(1), 22-55.

The **speed of news transmission**; in ancient Rome and Egypt, news spread at a speed of approximately 1.6 km/h, and 1500 years later, somewhat slower between Venice and other cities around the Mediterranean. For instance, when Abraham Lincoln was elected President of the United States in 1860, the news was transmitted by telegraph from Washington to Fort Kearny, the western end of the telegraph line. From there, the news was carried by the Pony Express, a horse relay, covering 2030 km to Fort Churchill in Nevada, where it was then telegraphed to California. The process took 7 days and 17 hours, and on the Pony Express segment, news traveled at a speed of 11 km/h. A half-ounce (14 grams) letter on this route cost $5, equivalent to 5 days' wages. A year after Lincoln's death, a transatlantic cable reduced the time of news transmission between New York and London to a few minutes.



Source: own compilation of the author

3. Bourgeois Revolutions

The bourgeois revolutions, were pivotal events that brought about significant political and social transformations, ultimately contributing to the establishment and consolidation of capitalist systems. The **first wave of bourgeois revolutions** transpired during the early modern era (17th and 18th centuries) and was primarily characterized by a grassroots movement spearheaded by the petty bourgeoisie against absolutist authorities. The **second wave of bourgeois revolutions** unfolded in the late modern period (mid and second half of the 19th century to the first World War) and was typically characterized by leadership from the upper echelons of the bourgeoisie, known as the haute bourgeoisie.[43]

The **English Civil War** (1642-1649-1651) was a conflict between the supporters of the monarchy (Royalists) and those advocating for parliamentary supremacy (Parliamentarians).[44] It was driven by various factors, including disputes over power, religion, and economic interests. The Parliamentarians, representing the rising bourgeois class, emerged victorious. This led to the execution of King Charles I in 1649 and the establishment of the Commonwealth under Oliver Cromwell.[45] The monarchy was temporarily abolished, and power shifted towards the emerging capitalist class. This revolution dismantled the feudal system, which had been based on a hierarchical social structure and serfdom. It also introduced new ideas about individual liberty and representative government, which laid the groundwork for a more open and fluid society conducive to capitalist development. After the restoration of the monarchy, the economic conditions were not change significantly, bringing a flourish environment for the development.[46]

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[43] Grinin, L. (2022). The European revolutions and revolutionary waves of the 19th century: Their causes and consequences. In *Handbook of revolutions in the 21st century: The new waves of revolutions, and the causes and effects of disruptive political change* (pp. 281-313). Cham: Springer International Publishing.

Grinin, L., Grinin, A., & Korotayev, A. (2022). 20th Century revolutions: characteristics, types, and waves. *Humanities and Social Sciences Communications*, *9*(1), 1-13.

[44] Worden, B. (2009). *The English Civil Wars: 1640-1660*. Hachette UK.

Jones, W. J. (2020). *Politics and the Bench: the Judges and the Origins of the English Civil War*. Routledge.

[45] Buchan, J. (2022). *Oliver Cromwell*. DigiCat.

Firth, C. H. (2023). *Oliver Cromwell and the Rule of the Puritans in England*. Good Press.

[46] Venning, T. (2023). *The Fall of Cromwell's Republic and the Return of the King: From Commonwealth to Stuart Monarchy, 1657–1670*. Pen and Sword History.

The Age of Chivalry is gone. That of sophisters, economists, and calculators has succeeded; and the glory of Europe is extinguished for ever. Never, never more, shall we behold the generous loyalty to rank and sex, that proud submission, that dignified obedience, that subordination of the heart, which kept alive, even in servitude itself, the spirit of an exalted freedom. The unbought grace of life, the cheap defence of nations, the nurse of manly sentiment and heroic enterprize is gone!

Edmund Burke
Reflections on the Revolution in France (1790)

How has French revolution affected world economic growth?
Economists' answer: It's Too early to say.

The **French Revolution** (1789-1799) was fueled by economic inequality, social injustice, and political oppression.[47] The bourgeoisie, comprising the middle class, played a crucial role in challenging the absolutist monarchy and aristocracy. The revolution resulted in the overthrow of the monarchy, the rise of radical political ideologies, and the establishment of the First French Republic. The bourgeoisie gained political power and initiated social and economic reforms that dismantled the feudal order, redistributing land and wealth. It also implemented sweeping reforms, such as the Declaration of the Rights of Man and of the Citizen (1789), which enshrined principles of individual liberty, equality, and property rights. These reforms created a more dynamic and entrepreneurial environment, encouraging economic activity and innovation. The Napoleonic era that followed further spread the revolutionary principles across Europe.

We also mention the **American Revolution** (1775-1783), when the thirteen American colonies successfully gained independence from Great Britain, establishing the United States as a democratic republic. In the Haitian Revolution (1791-1804) the enslaved people in Haiti overthrew French colonial rule, creating the first independent black nation in the Americas. The **19th century** witnessed a wave of bourgeois revolutions, marking a pivotal shift in the European political and social system. In 1848 a series of uprisings across Europe, advocating for democratic reforms and national unification. They achieved varying degrees of success, ultimately contributing to the decline of absolute monarchies and the rise of nation-states. The February Revolution of 1848 in **France** toppled the monarchy of King Louis Philippe and established a short-lived Second Republic. However, the republic eventually

[47] Wollstonecraft, M. (2023). *A historical and moral view of the origin and progress of the French Revolution*. Good Press.
Carlyle, T. (2019). *The French Revolution*. Oxford University Press.
Lefebvre, G. (2005). *The French Revolution: from its origins to 1793*. Routledge.
McPhee, P. (2001). *The French Revolution, 1789-1799*. OUP Oxford.

gave way to the Second French Empire under Napoleon III. Revolutions erupted in various **German states**, demanding unification and democratic reforms. While these efforts ultimately failed, they laid the groundwork for future unification under Bismarck. The **Austrian Empire** faced revolts in Vienna, Hungary, and other regions. While the monarchy managed to suppress most of these uprisings, it was forced to make some concessions, such as abolishing serfdom. **Italian** nationalists attempted to unify the country by overthrowing foreign rule and establishing a republic. However, these efforts were initially unsuccessful, with Austria regaining control of much of northern Italy. The unification of Italy, also known as the **Risorgimento**, was a complex and fascinating period in Italian history spanning roughly from the 1820s to 1871.[48]

In these revolutions, the bourgeoisie (middle class) played the key role and challenged the established order of absolute monarchies and feudal systems. Their primary goals were to break down barriers to economic and political participation, establish representative governments, and secure individual rights and liberties. The bourgeoisie, or the capitalist class, sought to dismantle the feudal structures that restricted economic opportunities and hindered the accumulation of wealth. They championed **individual rights**, equality, and the formation of nation-states based on shared identities and cultural heritage. The rising bourgeoisie sought greater freedom for trade and industry, often restricted by mercantilist policies of the old order. The promoted **national consciousness** shared experiences of revolution and struggles for self-determination fostered a sense of national identity and unity among citizens. In fragmented regions like Italy and Germany, revolutions paved the way for the unification of smaller states into **nation-states**. The concept of the nation-state, emphasizing shared language, culture, and history, gained widespread acceptance, replacing other forms of political organization.

The revolutions brought about changes in political structures, legal systems, and social hierarchies, creating an environment conducive to **capitalist development**. This shift paved the way for the rise of industrial capitalism, as economic activities became more market-oriented, and private property rights were emphasized. The bourgeois revolutions contributed to the rise of

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[48] Gramsci, A. (2023). *Il risorgimento*. BoD-Books on Demand.
Barsotti, E. M. (2021). *At the Roots of Italian Identity:'race'and'nation'in the Italian Risorgimento, 1796-1870*. Routledge.
Banti, A. (2020). *The nation of the Risorgimento: Kinship, sanctity, and honour in the origins of unified Italy*. Routledge.

capitalism by promoting ideas of individual liberty, equality before the law, and free-market capitalism. The transformations in property relations, legal frameworks, and political structures set the stage for the development of capitalist economies in the following centuries. The bourgeois revolutions played a crucial role in promoting the development of **key institutions** that are essential for capitalism. These include:

- **Private property rights:** The revolutions enshrined the right to private property, which is a fundamental tenet of capitalism. Private property ownership provides individuals with the incentive to invest and innovate, as they can reap the rewards of their endeavors.
- **Market economy:** The revolutions promoted the development of market economies, where goods and services are traded freely and prices are determined by supply and demand. This system allows for efficient allocation of resources and encourages competition, which drives down prices and spurs innovation.
- **Banking and finance:** The revolutions facilitated the growth of banking and financial institutions, which play a critical role in channeling capital to productive investments. These institutions provide loans and other financial services that enable businesses to expand and individuals to pursue entrepreneurial opportunities.
- **Legal framework:** The revolutions established a legal framework that protects private property rights, enforces contracts, and promotes fair competition. This framework is essential for ensuring the stability and predictability of the economic system, which is conducive to long-term investment and growth.

In **social** terms capitalism encompassed the restructuring of society into social classes based on **capital ownership** (capital, in other words, businesses or enterprises). Capitalists derived profits from the surplus labor of the working class, which earned only wages. The **industrial tycoons** were the first individuals to amass immense wealth, often surpassing both landed aristocrats and banking families. For the first time in history, the common people, the workers, could aspire to become wealthy (social mobility). New entrepreneurs constructed multiple factories requiring more labor while producing a greater quantity of goods for people to purchase.

4. Capitalist Revolution in Theory

At the heart of this capitalist revolution lies a theoretical framework that seeks to understand, justify, and analyze the dynamics of market economies. The three fundamental concepts underlying capitalism can be elucidated as follows: (i) capitalism and private property, (ii) capitalism and the profit motive, and (iii) the mechanism of voluntary trade.

Central to the capitalist framework is the concept of **private ownership**, denoting the exclusive ownership of resources and means of production by individuals or entities. This principle underlines the importance of property rights in facilitating economic transactions and resource allocation within a market-oriented system. The **tragedy of the commons** arises when resources are not held in private ownership, pertaining to a shared resource accessible to all without restrictions.[49] In such a scenario, where individuals are incentivized to extract as much utility as possible without promoting resource conservation or reinvestment, the privatization of resources emerges as a viable solution. This can be achieved through various voluntary or involuntary collective action approaches.

The **profit motive** is another cornerstone, representing the drive for financial gain inherent in business activities.[50] Within this paradigm, individuals engage in voluntary exchanges of private property when they perceive such transactions as advantageous from psychological or material perspectives. The pursuit of profit fosters economic dynamism, innovation, and competition among businesses. The interplay between capitalism and the profit motive is exemplified by the profit motive, denoting the pursuit of financial gains through business activities. According to the definition, individuals engage in voluntary private property exchanges only when they perceive such exchanges as psychologically or materially advantageous. Both parties involved in such transactions derive surplus (subjective) value or profit from the transaction. Capital accumulation is achieved by capitalists maximizing profit through the efficient utilization of capital goods (machinery, tools, etc.)

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[49] Cebeci, A. F., Ince, H., & Mercan, M. A. (2020). The intrinsic fallacy of market mechanism and private property rights in alleviating the tragedy of the commons. *Applied Economics*, *52*(33), 3629-3636.

Ostrom, E. (2008). Tragedy of the commons. *The New Palgrave Dictionary of Economics*, *2*, 1-4.

[50] Bainbridge, S. M. (2023). *The Profit Motive*. Cambridge University Press.

Ali, A. J. (2006). Profit maximization and capitalism. *Journal of Competitiveness Studies*, *14*(1), I.

Flew, A. (1976). The profit motive. *Ethics*, *86*(4), 312-322.

to produce the highest-value goods or services, thereby creating a competitive environment. Businesses compete to be low-cost producers of a particular good, driving market share acquisition. Profit incentives encourage businesses to switch production if another good becomes more profitable.

The **mechanism of voluntary trade** is a fundamental aspect of capitalism, involving resource owners competing for consumers, who, in turn, compete for goods and services.[51] This competitive dynamic becomes ingrained in the price system, achieving equilibrium between supply and demand. This mechanism ensures the coordination of resource distribution through the voluntary interactions of market participants, establishing the foundation for the functioning of capitalist economies. The mechanism of voluntary trade involves resource owners competing for consumers, who, in turn, compete with other consumers for goods and services. This dynamic becomes embedded in the price system, achieving equilibrium between supply and demand and coordinating the distribution of resources.

Since the 1700s, the sustained increase in average living standards has become a persistent characteristic in numerous countries, coinciding with the emergence of a new economic system, capitalism. In this system, private ownership, market forces, and corporate entities play central roles.

During the reorganization of the economy under this new paradigm, technological advancements and the specialization of products and tasks have contributed to an augmentation in the quantity of output achievable through a day's work. This transformative process, commonly referred to as the **capitalist revolution**, has been accompanied by escalating environmental risks and unprecedented global economic inequalities.

Capitalism vs. Free market

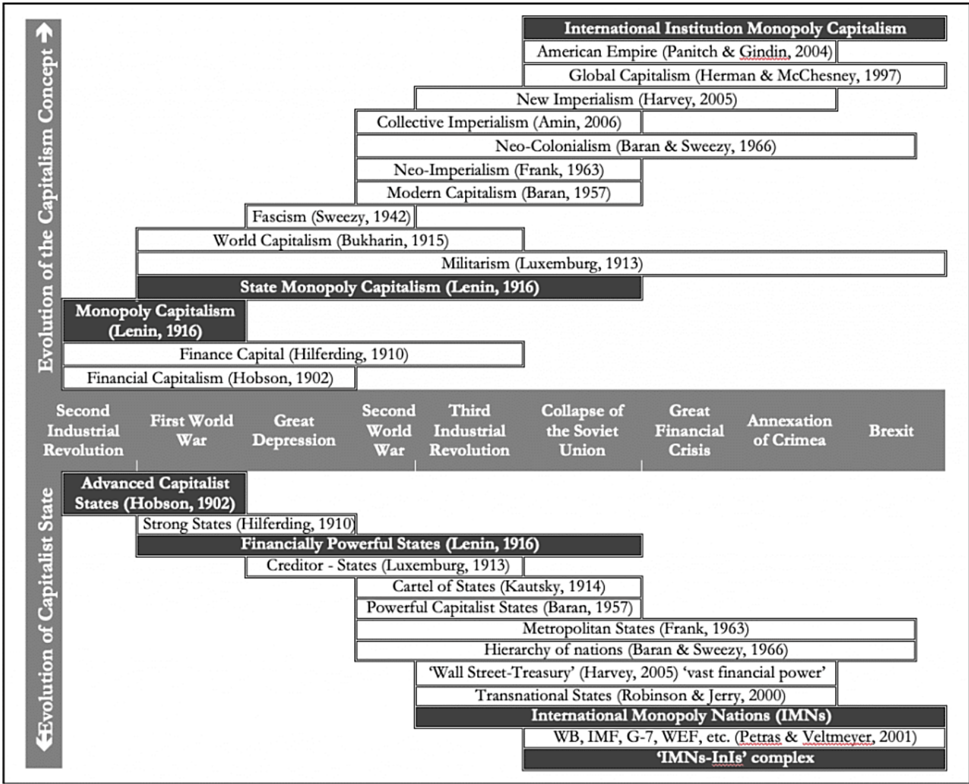
	Capitalism	Free market
Definition	economic system in which a country's trade and industry are controlled by private owners for profit, rather than by the state	an economic system in which prices are determined by unrestricted competition between privately owned businesses
Focus	creation of wealth and ownership of capital and factors of production	exchange of wealth, or goods and services
Competition	can have a monopoly on the market and prevent free competition	leads to free competition in the economy

Source: Parera, G. (2016). Difference Between Free Market and Capitalism (https://pediaa.com/difference-between-free-market-and-capitalism/)

[51] Widerquist, K. (2008). The Basis of Voluntary Trade. Human Rights Review

The juxtaposition of **capitalism vs. free market** and enterprise elucidates closely related yet distinct concepts.[52] It is conceivable to have a capitalist economy without complete free enterprise, just as a free market can exist without adhering strictly to capitalism. Any economy is deemed capitalist as long as private individuals control the means of production, yet government regulations and taxation may shape its dynamics. The notion of a free market and free enterprise implies economic exchanges devoid of coercive governmental influence, emphasizing voluntary transactions within the economic sphere.

The evolution of the conceptualization of capitalism from 1870 to the present



Source: Cuong, Vu Manh (2018). International Institutional Monopoly Capitalism and Its Manifestations (https://mronline.org/2018/12/19/international-institutional-monopoly-capitalism-and-its-manifestations/)

[52] Kuhner, T. K. (2020). *Capitalism v. democracy: Money in politics and the free market constitution*. Stanford University Press.

Monopoly capitalism evolved from laissez-faire capitalism in the late 19th and early 20th centuries, reaching a new stage known as International Institutional Monopoly Capitalism (IIMC) since the late 1970s.[53] In IIMC, powerful nation-states utilize international organizations to assert their interests globally. The graph provides a concise overview of capitalism's conceptualization, emphasizing the development of monopoly capitalism from the 1870s to the present, including IIMC as its latest form. Marx's idea of capitalism's inherent drive for endless accumulation through "surplus value" is highlighted. IIMC represents the pinnacle of capitalism's imperialist stage, characterized by increased coordination between monopoly capital and the state in core nations. As a **state-formed monopoly capitalism**, IIMC compels economies worldwide, whether capitalist or socialist (excluding North Korea), to participate in its system. This aligns with Bukharin's observations a century ago. In the globalization era, advanced capitalist states, under IIMC, strengthen their economic-political reach, controlling international institutions. Within these **core nations**, the state supports the formation of **supercompanies**, benefiting the wealthiest class while providing some advantages to the broader population, designating them as monopoly nations. Through international institutions like the World Bank, International Monetary Fund, and World Trade Organization, monopoly capital and nations extend their influence globally, causing intricate conflicts within globalization and regionalization processes, even impacting remaining socialist strongholds.

4.1. Classical Economics – The Wealth of Nations: 1776

A key pillar of classical economics epitomized the Wealth of Nations. This treatise not only laid the foundation for modern economic thought but also elucidated fundamental principles of market mechanisms, division of labor, and the invisible hand guiding economic interactions. Adam **Smith** (1723-1790), a Scottish economist and philosopher, stands as a pioneering figure in political economy and a key figure of the Scottish Enlightenment, often hailed as the *father of economics* or the *father of capitalism*. His seminal work, **An Inquiry into the Nature and Causes of the Wealth of Nations** (1776), represents the first comprehensive exploration of the factors

[53] Cuong, Vu Manh (2018). International Institutional Monopoly Capitalism and Its Manifestations (https://mronline.org/2018/12/19/international-institutional-monopoly-capitalism-and-its-manifestations/)
Rikap, C. (2021). *Capitalism, power and innovation: Intellectual monopoly capitalism uncovered*. Routledge.

contributing to the wealth of nations and has become a foundational masterpiece in classical economics.[54] He challenged the notion that economic policies devised by traders and then sold to rulers and politicians, as exemplified by the South Sea and Mississippi bubbles in 1720, were beneficial. In the context of the Industrial Revolution, Smith addressed topics such as division of labor, productivity, and free markets.

Smith argued that, when individuals pursue their self-interest within the conditions of justice, they unintentionally contribute to the welfare of society. Self-interested competition in a free market generally serves the overall welfare of society by keeping prices low and incentivizing a broad array of goods and services. He viewed trade as a mutually beneficial, non-zero-sum, rather a positive-sum activity. However, he cautioned against business interests and warned against conspiracies against the public or other manipulations aimed at raising prices.

The Wealth of Nations literary composition is organized into five distinct sections, each dedicated to an in-depth examination of specific facets within the realms of economic and political theory. **Book I:** Of the Causes of Improvement in the productive Powers of Labour, systematically scrutinizes the concept of the division of labor, elucidating its underlying principles. It engages in a scholarly discourse concerning the limitations imposed on market expansion due to the intricacies of the division of labor. An in-depth examination of the origin and utilization of money is undertaken. A meticulous analysis is conducted on the nature of wages, profits, and rent across diverse employment sectors. It addresses the concept of land rent, providing a comprehensive understanding.

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our own necessities, but of their advantages. (Book I, Chapter 2)

This passage can be interpreted in two prevailing ways. The first, and perhaps the more widespread interpretation, posits that in market interactions, individuals engage solely for personal gain, devoid of genuine concern for others. Critics asserting this viewpoint argue that market activities incentivize and promote greed. The second interpretation, viewed through the lens of sympathy as advocated in The Theory of Moral Sentiments, offers an alternative perspective. When considering sympathy, transactions with the butcher, brewer, and baker take on a different complexion. In this context,

[54] Smith, A. (1776, 2002). An inquiry into the nature and causes of the wealth of nations. London.

market actions, akin to morality, necessitate a consideration for others. Achieving our desires entails anticipating the needs and wants of others.

Book II: Of the Nature, Accumulation, and Employment of Stock, initiates a scholarly conversation on the division of capital (stock), delving into its implications. An exhaustive exploration is conducted on money, considered as a specific constituent of society's wealth. The intricacies surrounding the accumulation of capital, both productive and non-productive labor, and the dynamics of interest on borrowed capital are subjected to rigorous analysis. Diverse modes of capital employment are methodically scrutinized in this section. **Book III:** Of the different Progress of Opulence in different Nations, brings an insightful exploration unfolds on long-term economic growth and development. Agricultural work and the consequential decline of agriculture's prominence are meticulously discussed. The rise and development of cities and settlements subsequent to the decline of the Roman Empire are critically examined. The contribution of urban trade to national development is systematically investigated.

Book IV: Of Systems of political Economy engages in a thorough exploration of the foundational principles underpinning commercial systems. A nuanced discussion on import restrictions ensues, featuring a dedicated chapter on constraining the import of domestically producible goods. Extraordinary restrictions, disadvantages, bounties, trade agreements, colonies, and motivations for the establishment of new colonies are comprehensively addressed. The benefits derived from the discovery of America and the passage to the East Indies via the Cape of Good Hope are meticulously explored. This section concludes by drawing comprehensive insights into the mercantile economic system and providing an extensive discourse on agricultural systems. The **invisible hand** is an oft-referenced theme in the book, although Smith specifically mentions it only once.[55]

As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of

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[55] Long, B. (2022). *Adam Smith and the invisible hand of God*. Routledge.
Van der Kooi, C., & Ballor, J. J. (2020). Providence, Divine Power, and the 'Invisible Hand'in Adam Smith. *Journal of Economics, Theology and Religion*, *1*(1), 25-44.
Malakhov, S. (2022). Divine Proportion of Invisible Hand: a new look at Adam Smith's natural theology'. *Journal of Institutional Studies*, *14*(1), 36-54.
Mittermaier, K. (2020). *The hand behind the invisible hand: dogmatic and pragmatic views on free markets and the state of economic theory* (p. 278). Bristol University Press.

foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an *invisible hand* to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest, he frequently promotes that of the society more effectually than when he really intends to promote it. (Book IV, Chapter 2)

In **Book V:** Of the Revenue of the Sovereign or Commonwealth, an exhaustive examination of the expenditures incurred by the sovereign or the Commonwealth is presented. The discourse unfolds on the general sources contributing to societal or public income. The intricate dynamics of war and state debt are systematically explored.

Collectively, the book offers a thorough and comprehensive exploration of a spectrum of economic and political concepts, encompassing diverse facets such as labor, capital, trade systems, international commerce, and the financial intricacies of sovereign entities. **Classical economists**, influenced by Smith, established the fundamental tenet that the basis for a nation's wealth and well-being lies in the division of labor. **Neoclassical economists**, building upon Smith's legacy, emphasized the concept of the invisible hand, highlighting the role of market forces in achieving general equilibrium. Smith criticized mercantilist (and physiocratic) ideas, questioning the necessity of protectionism and the accumulation of large gold or other precious metal reserves for a nation's economic success.

4.2. The Spirit of Capitalism

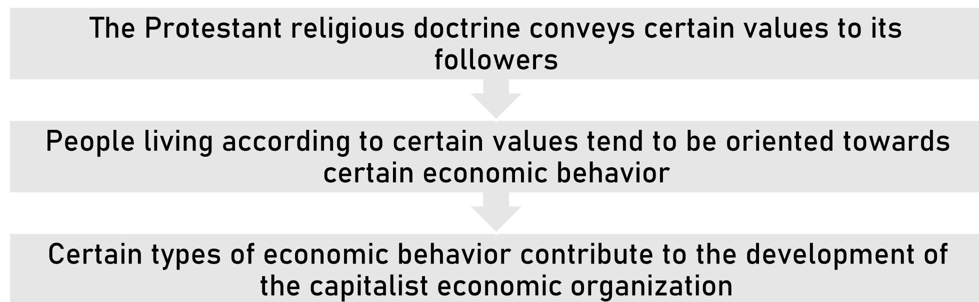
The **spirit of capitalism** has been associated with both Protestant and Catholic roots, and scholars have explored the impact of religious beliefs and cultural values on economic development.[56] While Max Weber focused on the Protestant Reformation and its influence on the development of capitalism, there have been discussions about the role of Catholicism (Salamanca-school, Sombart, Hayek) as well. Some scholars argue for a synthesis, suggesting that the development of capitalism involved a combination of influences from both Protestant and Catholic traditions.[57] They emphasize the im-

[56] Munro, K., & O'Kane, C. (2022). The artisan economy and the new spirit of capitalism. *Critical sociology*, *48*(1), 37-53.
He, Q., Luo, Y., Nie, J., & Zou, H. F. (2023). Money, growth, and welfare in a Schumpeterian model with the spirit of capitalism. *Review of Economic Dynamics*, *47*, 346-372.
[57] Rosario Rodríguez, R. (2021). Christianity and the New Spirit of Capitalism. By Kathryn Tanner.

portance of cultural values, ethics, and social institutions in shaping economic behavior. Others highlight the divergence, noting that while there may be shared values, the specific religious and cultural contexts of Protestantism and Catholicism led to different approaches to economic life.

Protestant Roots

In Max Weber's (1864-1920) work, The Protestant Ethic and the Spirit of Capitalism (1904/5), the concept of Protestant ethic is expounded, rooted in Calvinist predestination teachings.[58] According to this doctrine, salvation is beyond human control, but earthly success signifies inclusion among the saved. The world is conceived as ordained for serving the glory of God, with the chosen believer tasked to contribute to the augmentation of God's worldly glory. It is emphasized that one should consider oneself chosen, as doubt is indicative of insufficient faith.[59]

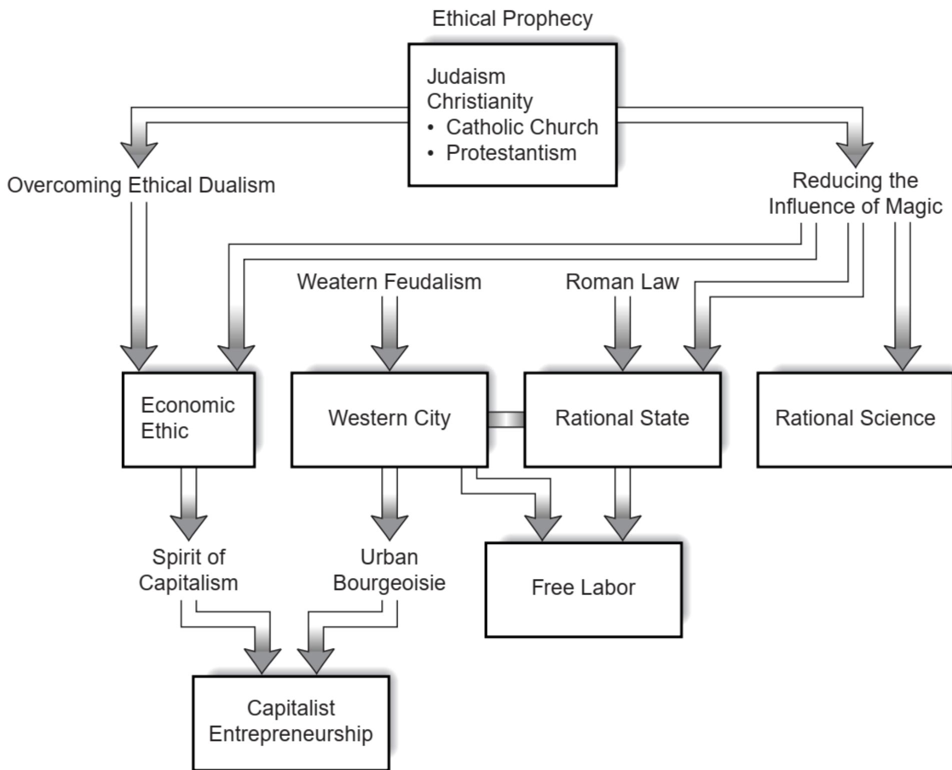


Source: own compilation of the author

Weber further discusses the Protestant ethic's influence on the concept of vocation, asserting that the belief in the protective nature of systematic and methodical work against temptation, and the condemnation of idleness as sinful, led to the widespread adoption of a rationalized way of life based on

[58] Weber, M. (1905, 2013). *Die protestantische Ethik und der Geist des Kapitalismus - The Protestant ethic and the spirit of capitalism*. Routledge.
Giri, P. C. (2022). Protestantism; Spirit of Capitalism and Inequality. *GMMC Journal of Interdisciplinary Studies*, *11*, 23-26.
[59] Stein, S., & Storr, V. H. (2020). Reconsidering Weber’s The Protestant Ethic and the Spirit of Capitalism. *The Independent Review*, *24*(4), 521-532.
Stoicescu, M. (2021, March). The Protestant Ethic and Capitalism. In *Proceedings of the 21st International RAIS Conference on Social Sciences and Humanities* (pp. 139-143). Scientia Moralitas Research Institute.

the notion of vocation. This, ultimately, facilitated the emergence of capitalism. The Protestant work ethic, with its emphasis on hard work, discipline, and the idea of a "calling" in one's vocation, was seen as contributing to the development of a capitalist spirit. The Protestant ethic liberated the acquisition of wealth from the constraints of traditionalist ethics. [60]



Source: Trigilia, C. (2008). *Economic sociology: state, market, and society in modern capitalism*. John Wiley & Sons. 68.

The spirit of capitalism, in its genesis, had to displace traditionalist modes of thinking. In the traditional world, needs were restricted, and once a worker reached the socially acceptable and expected standard of living, motivation to continue working diminished. The idea that work should be approached as a vocation and that high wages could not be achieved merely by executing work was prevalent. The piece-rate wage system, prevalent in

[60] Weber, E. (2020). John Calvin-a pioneer of the spirit of capitalism?. Journal of Religious Culture. No. 275.

the modern economy, serves as a means by which employers can incentivize workers to achieve the highest possible performance. It is crucial to recognize that the spirit of capitalism, as conceptualized by Weber, transcends a mere compilation of business wisdom; rather, it constitutes a set of life rules imbued with ethical considerations.

Catholic Roots

Scholars argue that certain aspects of Catholicism also contributed to the spirit of capitalism.[61] For instance, the School of Salamanca, a group of Scholastic thinkers in the 16th century, made significant contributions to economic thought within a Catholic framework. They discussed just price, fair exchange, and the morality of economic activities. Catholicism, with its emphasis on individual responsibility, private property rights, and ethical conduct in economic affairs, has been seen by some as providing a cultural and ethical foundation for capitalist development.

The 16th century was a period of significant religious and social changes in Europe. The Protestant Reformation, initiated by Martin Luther in 1517, had far-reaching effects on the religion, challenging the authority of the Catholic Church. The Catholic Counter-Reformation was the Catholic Church's response to the Reformation, aiming to address internal issues and counter the spread of Protestantism.

The **School of Salamanca** refers to a group of Scholastic thinkers who were active in the University of Salamanca in Spain during the 16th and 17th centuries. Francisco de Vitoria (1483-1546) and Domingo de Soto (1494–1560) were part of this school, contributing to the development of economic thought, ethics, and law. The School considered the **first economic tradition**, which reshaped economic theory in Europe. The School was pro-market, pro-hard money, anti-state, pro-property, and pro-merchant. They believed private property stimulates economic activity and contributes to general well-being. Diego de Covarrubias y Leyva (1512–1577) asserted that individuals not only possessed the right to own property but, in a distinctly modern notion, also had the exclusive entitlement to benefit from their property, although the community could also derive benefits. However, during times of significant need, all goods would become communal. Luis de Molina contended that individual owners tended to better care for their posses-

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[61] Knäble, D. B. P., & Bete, D. (2023). The catholic ethic and the spirit of capitalism. *Reassessing the Moral Economy: Religion and Economic Ethics from Ancient Greece to the 20th Century*, 155.

sions compared to the management of common property, resembling a version of the tragedy of the commons. Diego de Covarrubias y Leyva (1512–1577) emphasized exclusive benefits from property rights. Scholars like Martín de Azpilcueta (1491-1586) and Luis de Molina (1535–1600) developed a scarcity theory of value, precursor to the quantitative theory of money. They advocated for a subjective theory of value and prices, where the fair price results from mutual decisions in free commerce. The School justified charging interest, departing from medieval views. They considered interest a premium for risk, opportunity cost, and even treated money as merchandise, introducing the concept of time value of money.

The School's ideas influenced economic thought, but their contributions were rediscovered later due to a lack of continuity in their work. Joseph Schumpeter credited them as founders of economics, despite not creating a comprehensive doctrine. Their economic thought, although not directly influencing, bears similarities to the Austrian School. Friedrich Hayek (1899-1992), an Austrian economist and philosopher, is known for his defense of classical liberal principles and free-market capitalism. While Hayek's work is more associated with the 20th century, his ideas on spontaneous order, individualism, and the importance of decentralized decision-making have relevance to discussions on capitalism: "never to the point of realizing that what was relevant was not merely man's relation to a particular thing or a class of things but the position of the thing in the whole...scheme by which men decide how to allocate the resources at their disposal among their different endeavors."[62]

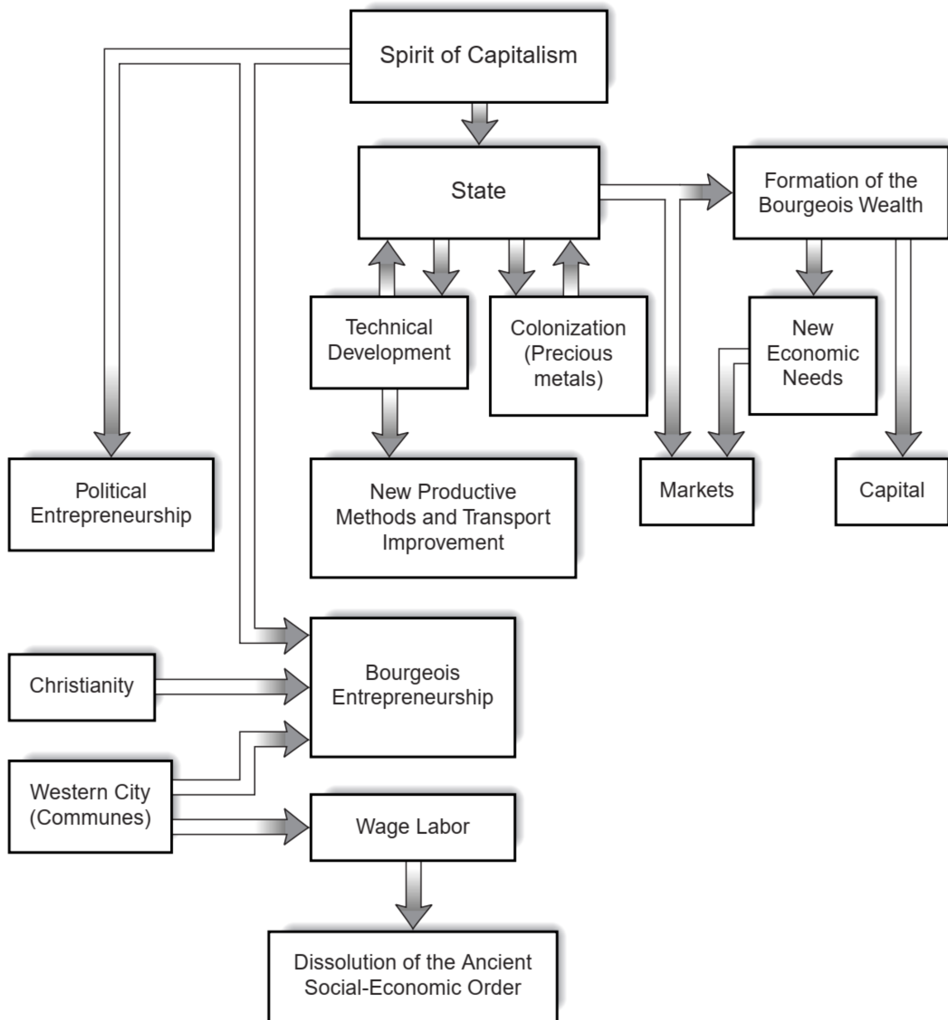
Sombart's Modern Capitalism

Werner Sombart (1863-1941), a German sociologist and economist, wrote extensively on the history of capitalism. His major work, Der moderne Kapitalismus, provides a comprehensive history of economics and the development of the economy across centuries. It distinctly aligns with the principles of the Historical School. The evolution of capitalism is categorized into three phases. The initial volume (1902), delves into proto-capitalism, examining its origins, the transition from feudal society to capitalism, and the era termed as early capitalism (Frühkapitalismus) concluding before the onset of the industrial revolution. The second volume (1916), characterizes the period starting around 1760 as high capitalism (Hochkapitalismus). The final book (1927), focuses on conditions in the 20th century, identifying this stage as late

[62] Hayek, F. (1992). The Austrian School of Economics. The Fortunes of Liberalism: Essays on Austrian Economics and the Ideal of Freedom. Chicago: University of Chicago Press. 43.

capitalism (Spätkapitalismus) which commenced with World War I. He explored the materialistic and rationalizing aspects of capitalism. He was critical of capitalism's impact on society, suggesting that it led to a certain level of soullessness and the reduction of human activities to purely economic considerations.

Sombart's model of capitalist development



Source: Trigilia, C. (2008). *Economic sociology: state, market, and society in modern capitalism*. John Wiley & Sons. 46.

In his another notable work, The Jews and Modern Capitalism (1911), he explored the role of Jewish culture in the development of capitalism. He

emphasized the role of culture and ethics in the development of capitalism, and argued that specific cultural and religious values, particularly those rooted in Protestantism, played a crucial role in shaping the capitalist spirit. While Jewish traders – excluded from medieval guilds – developed a distinct aversion to the system's fixed wages and prices, limited market shares, and controlled production. Jews, excluded from this structure, dismantled it and replaced it with modern capitalism, characterized by unlimited competition and a focus on pleasing the customer. Sombart's work, however, has been criticized for its controversial and sometimes anti-Semitic views.

4.3. Felicitas Publica

The relationship between capitalism and **felicitas publica** (public happiness) is complex and influenced by various factors, but it can be regarded as the **southern spirit of capitalism**.[63] While capitalism offers potential benefits for economic growth and individual freedom, it also poses challenges like inequality and environmental degradation that can negatively impact public happiness. Evaluating its impact requires considering different perspectives and potential solutions for mitigating its downsides and promoting broader well-being. In Bruni's interpretation, Genovesi and other political economists of the Italian 18th century followed Aristotle in stressing the public nature of happiness. The collective rather than individual nature of happiness made the political economy in Italy differ from the tradition that developed in Scotland and England.[64]

All our economists, from whatever regional background, are dealing not so much, like Adam Smith, with the wealth of nations, but with public happiness.

Achille Loria (1893)

Prior to Adam Smith's publication of The Wealth of Nations in 1776, which defined wealth as the central focus of this nascent discipline, a different perspective had gained traction. In the mid-eighteenth century, French and Italian intellectual traditions prioritized the concept of public happiness as the cornerstone of modern economic discourse. The Italian philosopher

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[63] Felicitas publica was, first of all, a motto that appeared on Roman imperial coinage after the Julio-Claudian dynasty.
Bruni, L. (2021). Felicitas publica: the southern spirit of capitalism. *A Modern Guide to the Economics of Happiness*, 67.
D'Onofrio, F. (2015). On the concept of 'felicitas publica'in eighteenth-century political economy. *Journal of the History of Economic Thought*, *37*(3), 449-471.
[64] Bruni, L. (2015). Economics, wealth and happiness in historical perspective. *Economics, wealth and happiness in historical perspective*, 41-56.

Ludovico Antonio **Muratori**, in his 1749 work On Public Happiness, was the first to explicitly use the term *pubblica felicita*.[65] Following Muratori, numerous Italian economists, such as Giuseppe **Palmieri** with his publication Reflections on Public Happiness (1788),[66] and Pietro **Verri** with Discourse on Happiness (1781),[67] incorporated happiness into the titles of their works. Happiness thus became a defining element of Italian classical political economy, as expressed by **Loria** in 1893.[68] Antonio **Genovesi**, influenced by the changing Italian culture, sought to define the concept of public happiness by addressing the societal decline following the Neapolitan golden age. He believed that liberation from this state of obscurity was attainable through studies and practical interventions. This led him to shift his focus from ethics and philosophy to economics, seeing it as a means for governments to enhance their wealth and power.[69] The concept of felicita publica bared centrality in the discourse of eighteenth-century monarchies, before and during the classic age of Enlightened Absolutism.[70]

Capitalism, with its emphasis on innovation, competition, and private ownership, can lead to economic growth and wealth creation, potentially improving living standards and opportunities for many. They promote individual freedom and choice in pursuing economic activities and careers, fostering agency and potentially contributing to individual satisfaction and well-being. The competitive nature of capitalism drives innovation and technological advancements, which can improve various aspects of life, from healthcare and education to communication and entertainment. There are some potential **challenges** of capitalism to felicitas publica. Unequal distribution of wealth and income generated by capitalism can lead to social unrest, exclusion, poverty and a sense of injustice, undermining public happiness. Unregulated markets can incentivize unsustainable practices that harm the environment, impacting the well-being of future generations and potentially limiting future resources and opportunities. The emphasis on individual success and competition in capitalism can create a sense of isolation and stress, impacting

[65] Muratori, L. A. (1749, 2016). *Della pubblica felicità: oggetto de'buoni principi*. Donzelli editore.

[66] Palmieri, G. (1788). *Riflessioni sulla pubblica felicità relativamente al Regno di Napoli*. Per Vincenzo Flauto.

[67] Verri, P. (1781). *Discorsi del conte Pietro Verri...: sull'indole del Piacere e del Dolore; sulla Felicità; e sulla Economia Politica*. presso Giuseppe Marelli.

[68] Loria A. (1893). *Verso la giustizia sociale*. 1904. Societá Editrice Libraria, Milano. 85.

[69] Genovesi, A. (1765, 1769). *Lezione di commercio o sia d'economia civile*. A spese Remondini.

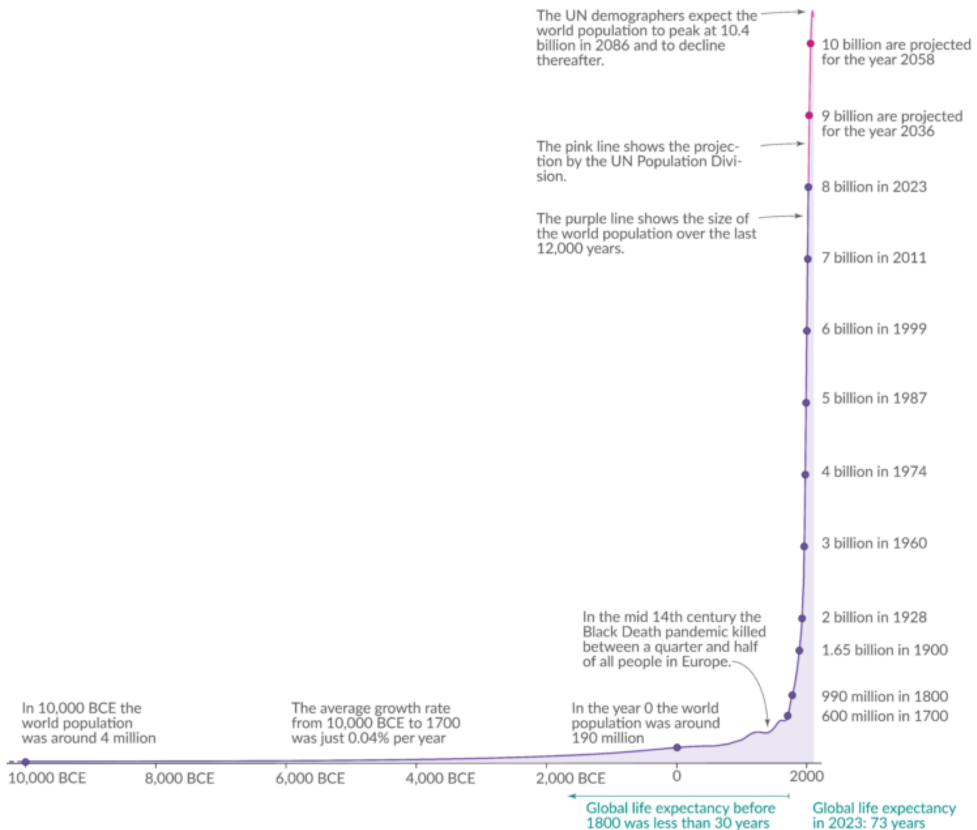
[70] Cremaschi, S. (2020). The Italian Enlightenment and the rehabilitation of moral and political philosophy. *The European Legacy*, *25*(7-8), 743-759.

social cohesion and community well-being. A strong social safety net and regulations are necessary within capitalism to mitigate its negative consequences and ensure broader felicitas publica. This approach seeks to combine the economic dynamism of capitalism with social justice and environmental sustainability. Mixed economies are better suited to achieving public happiness by prioritizing social welfare and collective well-being over individual gain.

5. The Results of Capitalism

The outcomes of capitalism are complex and multifaceted. While capitalism has been a driving force behind significant economic growth and innovation, it also raises challenges related to wealth distribution, inequality, and social mobility. Societal choices, policies, and global dynamics shape the impact of capitalism on different nations and communities. In the context of the **population growth or explosion** the economic development contributed to lower mortality rates and increased life expectancy, it also needs to be managed responsibly to address issues like inequality, resource scarcity, and environmental sustainability. Evaluating its impact requires considering diverse perspectives and promoting solutions that prioritize long-term human well-being and a healthy planet.

The Size of World Population

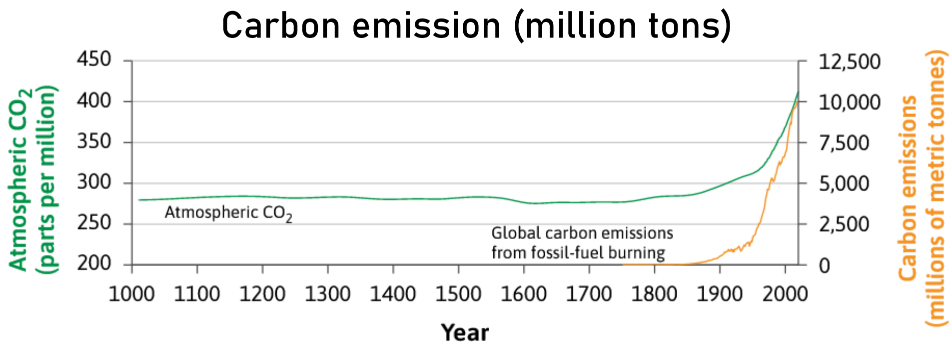


Source: Roser, M. (2023). World population estimate from 10,000 BCE to 2100, by OurWorldInData (https://ourworldindata.org/population-growth?insight=the-world-population-has-increased-rapidly-over-the-last-few-centuries#key-insights)

The pace of **global population** growth throughout recent centuries has been astonishing. For the majority of human history, the global population remained well below one million. Just 12,000 years ago, there were merely 4 million individuals worldwide. The provided chart illustrates the rapid surge in global population figures since 1700. Surpassing the one-billion milestone occurred only in the early 1800s, followed by the two-billion mark just a century ago. Since then, the global population has quadrupled to reach eight billion. It's noteworthy that approximately 108 billion people have inhabited our planet throughout history, meaning that today's population constitutes about 6.5% of the total number of individuals ever born. This remarkable growth can be attributed to advancements in living standards and healthcare, which have lowered mortality rates, particularly among children, and increased life expectancy.

Advancements in **agricultural practices**, machinery, and transportation facilitated larger quantities of cheaper food, particularly grains like wheat, becoming available to larger populations. This reduced malnutrition and famine, leading to lower mortality rates and higher life expectancy. The case of cheaper wheat from the US is illustrative. With increased mechanization and improved transportation, American wheat became substantially cheaper in Europe, allowing for wider access for the poor to a staple food source. This contributed to decreased food insecurity and potentially higher survival rates, but it's important to note that other factors like changing cultural norms and healthcare advancements also played a role in population growth. Industrial advancements and economic growth enabled investments in **public health infrastructure** and medical research, leading to better sanitation measures, hygiene practices, and medical interventions. This further reduced mortality rates, especially among children. Industrialization led to the rise of **urbanization** and new **job opportunities**, attracting rural populations seeking better living conditions and economic opportunities in the cities. This resulted in larger urban populations with higher birth rates compared to rural areas. Demographic shifts due to urbanization and industrialization often resulted in later marriage and smaller families in later generations, but the initial population boom outweighed this trend initially.

While we can list among the **positive impacts** the economic growth, innovation and technological advancement, efficiency and resource allocation, consumer choice, job creation, individual freedom, we can find also **adverses**: income inequality, exploitation and unfair labor practices, environmental degradation, carbon emission, short-term focus and speculation, market failures, social safety nets, cycles of boom and bust.



Source: CORE team (2022). The Economy 1.0, 1.12 Capitalism, growth and environmental sustainability (https://www.core-econ.org/espp/book/text/01.html#112-capitalism-growth-and-environmental-sustainability)

Capitalism, in theory, provides opportunities for **social and economic mobility**. Individuals can theoretically move up the economic ladder through education, innovation, and hard work. However, barriers to entry, such as unequal access to education and capital, can limit mobility, leading to the perpetuation of social and economic disparities.

5.1. Debate on State Intervention

Governments often play a role in mitigating the negative consequences of capitalism. Social safety nets, progressive taxation, and regulations are implemented to address inequalities and ensure a more inclusive society.[71] The effectiveness of these interventions can vary, and debates often revolve around finding the right balance between free-market principles and regulatory measures. The discourse surrounding the appropriate role of **state intervention** in economic affairs has been a subject of enduring debate, featuring two towering economists thought on opposite ends of the spectrum: John Maynard Keynes and Friedrich Hayek. Their respective perspectives offer contrasting paradigms for understanding and addressing economic challenges, shaping policy discussions and ideological divides.

[71] Gamble, A. (2021). The Free Economy and the Strong State. In *After Brexit and other essays* (pp. 91-112). Bristol University Press.
Borre, O., & Viegas, J. M. (1995). Government intervention in the economy. *The scope of government*, *3*, 234.
Michie, J., & Prendergast, R. (1998). Government intervention in a dynamic economy. *New Political Economy*, *3*(3), 391-406.

Keynes and Hayek Perspective on State Intervention

Aspect	Keynesian Perspective	Hayekian Perspective
Role of Government	Advocates government intervention to stabilize economies.	Champions minimal government involvement, favoring free markets.
Economic Stability	Views markets as inherently unstable, requiring government action.	Believes markets possess self-correcting mechanisms, minimizing state intervention.
Fiscal Policy	Supports countercyclical fiscal policies, including deficit spending.	Opposes excessive government spending, emphasizing fiscal discipline.
Monetary Policy	Advocates for monetary interventions to manage economic cycles.	Suggests limited monetary intervention, prioritizing market forces.
Regulatory Oversight	Favors regulations to address market failures and promote welfare.	Prefers minimal regulations to foster free competition and innovation.
Economic Growth	Believes well-timed intervention can stimulate growth.	Argues that free markets lead to sustained prosperity and growth.
Social Justice	Acknowledges need for government action to address inequality.	Argues that free markets ultimately benefit everyone.
Environmental Sustainability	May advocate for regulations to promote sustainability.	Emphasizes market-driven solutions for environmental challenges.

Source: own compilation of the author

The **Keynesian viewpoint** emphasizes the necessity of government intervention to stabilize economies.[72] Keynes (1883-1946) argued that markets are inherently volatile, prone to cycles of booms and busts, necessitating proactive measures from the state to mitigate fluctuations. Advocating for countercyclical fiscal and monetary policies, Keynesians propose interventions such as increased government spending and deficit spending during downturns to stimulate demand and investment. Moreover, they endorse regulatory measures aimed at rectifying market failures and advancing social welfare objectives.[73]

[72] Keynes, J. M. (1936). *The General Theory of Employment, Interest and Money*. Palgrave Macmillan

[73] Terra, F. H. B., Ferrari Filho, F., & Fonseca, P. C. D. (2022). Keynes on state and economic development. In *Development Economics* (pp. 88-102). Routledge.
Stockhammer, E. (2022). Post-Keynesian macroeconomic foundations for comparative political economy. *Politics & society*, *50*(1), 156-187.

Conversely, the **Hayekian school** champions the virtues of free markets and minimal government intervention.[74] Hayek (1899-1992) contended that markets possess inherent self-correcting mechanisms and are efficient in allocating resources. From this perspective, government interference is viewed as distorting market mechanisms and yielding unintended consequences. Hayekians advocate for limited regulations and the promotion of free competition to spur innovation and foster sustainable economic growth, while cautioning against excessive government spending and inflationary policies.[75]

The clash between these perspectives extends across several fundamental issues, including the role of government in managing economic cycles. While Keynesians perceive government as a stabilizing force capable of mitigating economic volatility, Hayekians view excessive intervention as potentially disruptive to market dynamics. Additionally, differences emerge regarding the extent of regulatory oversight, with Keynesians advocating for targeted interventions and Hayekians advocating for minimal interference. Furthermore, debates persist regarding the impact of intervention on economic growth and considerations of equity and social justice, with Keynesians acknowledging the need for government action to address inequality, while Hayekians emphasize the benefits of free markets for overall prosperity.[76]

The enduring **relevance** of this debate is evident, particularly during periods of economic crisis and rising inequality.[77] Keynesian ideas continue

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Chen, Y., & Chen, Y. (2020). The Contributions and Deficiencies of Keynesian Economics. *New Economic Engine: Effective Government and Efficient Market*, 11-21.

[74] Hayek, F. A. (1948). *Individualism and Economic Order*. University of Chicago Press.

[75] Gamble, A. (2016). Hayek and liberty. In *Hayek's Political Theory, Epistemology, and Economics* (pp. 66-87). Routledge.

Kerstenetzky, C. L. (2007). Hayek and Popper on ignorance and intervention. *Journal of Institutional Economics*, *3*(1), 33-53.

Romani, R. (2015). Minimal state theories and democracy in Europe: From the 1880s to Hayek. *History of European Ideas*, *41*(2), 241-263.

[76] Steele, G. R. (2002). *Keynes and Hayek: The money economy*. Routledge.

Gorga, C. (2022). Reconciling Keynes and Hayek Through Concordian Economics. *International Journal of Applied Economics & Econometrics, Forthcoming*.

Pătruți, A. (2023). Keynes and Hayek: some common elements in business cycle theory. *Brazilian Journal of Political Economy*, *43*, 48-66.

Ayres, R. U. (2023). Keynes v. Hayek and the Monetarists. In *The History and Future of Economics* (pp. 259-324). Cham: Springer International Publishing.

[77] Ashraf, B. N. (2020). Economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets. *Journal of behavioral and experimental finance*, *27*, 100371.

to inform policy responses such as quantitative easing and stimulus packages aimed at stabilizing economies during recessions. Meanwhile, Hayekian principles influence efforts towards deregulation and the promotion of free-market initiatives. Balancing the imperatives of economic efficiency with considerations of social justice and environmental sustainability remains a pressing challenge in contemporary economic discourse.[78]

5.2. Answers for the Wealth and Poverty of Nations

Capitalism, as an economic system, has the potential to generate wealth and promote economic growth. In a capitalist society, individuals and businesses are motivated by profit incentives, fostering innovation, investment, and entrepreneurship. However, capitalism doesn't guarantee equal distribution of wealth. Economic disparities can arise due to factors such as unequal access to resources, education, and opportunities. In some cases, systemic issues and barriers may contribute to persistent poverty.

David Landes (1924–2013), historian and economist, in his book, **The Wealth and Poverty of Nations: Why Some are So Rich and Some So Poor?** (1998) examines the divergent economic trajectories of various countries and regions. Landes explores the long-term economic histories of Europe, the United States, Japan, China, the Arab world, and Latin America. In addition to scrutinizing economic and cliometric data, he attributes intangible factors like culture and enterprise to explain economic success or failure. These include Max Weber's cultural thesis regarding the Protestant work ethic, Karl A. Wittfogel's hydraulic thesis on despotic control of water, the climate thesis suggesting tropical climates hinder development, and Adam Smith's theories from the Wealth of Nations. Landes also challenges notions about the Asian miracle, asserting that Europe's economic growth during the Industrial Revolution was influenced by factors such as climate, political competition, economic freedom, and attitudes toward science and religion, primarily in Western European countries like England.

Landes raises the question: "Why Are We So Rich and They So Poor?" and examines the **disparities** between the affluent societies of Europe and North America, denoted as "we," and the comparatively impoverished societies of Africa, Asia, and Latin America, referred to as "they." He addresses this question with a somewhat mischievous tone, providing fundamentally

[78] Costa, K. T. D. (2022). The road to The General Theory: JM Keynes, FA Hayek, and the Genealogy of Macroeconomics. *Brazilian Journal of Political Economy*, *42*, 48-70.

two responses. Firstly, he posits that we are rich and they are poor because we are inherently virtuous, diligent, scholarly, cultured, well-governed, efficient, and productive. The occurrence of the industrial revolution in Europe is attributed to factors such as the Protestant Reformation, the Renaissance, the scientific revolution, the establishment of superior private property rights, and favorable government policies. Conversely, the opposite viewpoint, that we are deficient while they excel. We are characterized as greedy, ruthless, exploitative, and aggressive, while they are portrayed as weak, innocent, virtuous, prone to abuse, and vulnerable. The European development, unfolded due to the requirements of colonization, slavery, or constant warfare.

Why Are We So Rich and They So Poor?

We are so rich and they are so poor because		
We are so good and **they are so bad**	We are industrious, scholarly, educated, well-governed, efficient and productive, They are the opposite	The industrial revolution occurred in Europe due to the protestant reformation, the renaissance, the scientific revolution, the development of higher private property rights or favorable government policies
We are so bad and **they are so good**	We are greedy, ruthless, exploitative, aggressive They are weak, innocent, virtuous, abused and vulnerable	The European development was due to the requirements of colonialism, slavery or constant wars

Source: own compilation of the author based on Landes, D. S. (2015). *Wealth and Poverty of Nations*. Hachette UK.

Dynamic of Capitalism

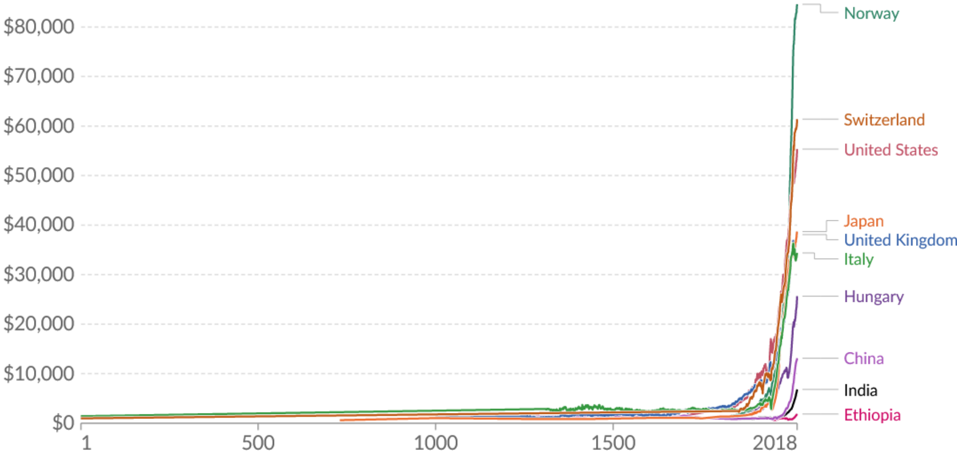
Capitalism can be a dynamic, successful economic system when it combines the following:	Where capitalism is less dynamic, the explanation may be:
• Private incentives for cost-reducing innovation: derived from market competition and secure private property • Management of companies that are proven to be able to produce goods at low cost. • Public policy supporting these conditions: public policy also provides basic goods and services that private enterprises could not provide. • Stable society, (biophysical) environment and resource base	• Private property is not safe: the rule of law and the enforcement of contracts are weak, or the confiscation of property by crime or government agencies (expropriation, nationalization). • Markets are not competitive: they cannot offer the carrots (rewards) and do not apply the sticks (punishments) that make a capitalist economy dynamic. • Companies are owned and managed by people who survive because of their government connections or privileged birth: they did not become owners or managers because they could produce high-quality products and services at competitive prices.

Source: own compilation of the author; carrot and stick[79]

[79] The phrase "carrot and stick" is a 19th century metaphor for using a combination of reward and punishment to elicit desired behaviour. A carrot is (literally) a plant in the parsley family, prized for its edible root; (figuratively) an incentive or reward for achieving a specific result. A Stick is (literally) cut or broken branch of a tree; (figuratively) a punishment or penalty used to encourage cooperation.
"Thus, by every device from the stick to the carrot, the emaciated Austrian donkey is made to pull the Nazi barrow up an ever-steepening hill." (Winston Churchill, July 6, 1938)

5.3. History's Hockey Stick

The hockey stick of history refers to the changes of the GDP per capita.[80] At the time of Ibn Battuta's (14th century) travels, India was no richer than other parts of the world. But India was not much poorer. The metaphor underscores the idea that certain historical periods have witnessed exponential economic growth, but the distribution of benefits from this growth is a critical consideration. The huge differences between the rich and the poor were much more visible than the differences between countries. Currently, on a GDP per capita basis, people live on average six times better in Britain than in India. The Japanese are as rich as the British, but now the Americans live even better than the Japanese, and the Norwegians even better.



Source: History's hockey stick: Worldwide historical real gross domestic product per capita, 1 to 2018 Unit 1 'The capitalist revolution: prosperity, inequality, and planetary limits' in The CORE Team, The Economy 2.0 Microeconomics. Available at: https://tinycose/19274920 [Figure 1.1] https://ourworldindata.org/grapher/historys-hockey-stick-worldwide-historical-gross-domestic-product-percapita-1990

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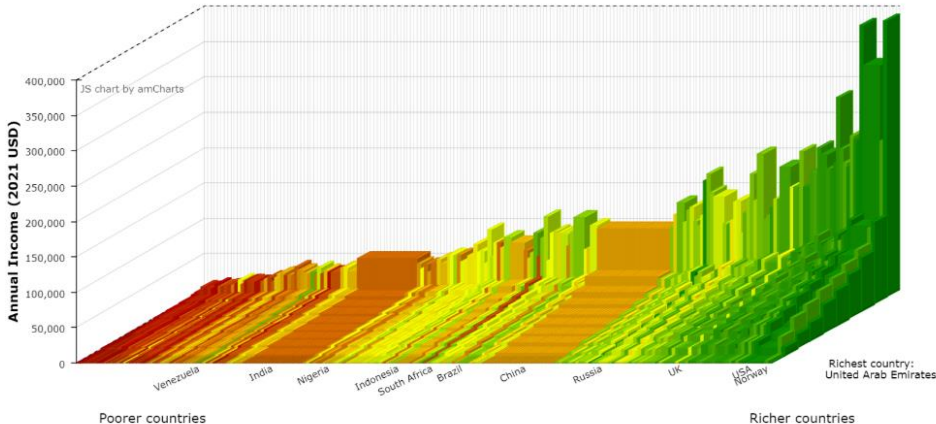
[80] Cortinhas, C. (2023). Rethinking the economics curriculum: strengths and weaknesses of the CORE Econ project. *Advances in Economics Education*, *2*(2), 114-126.
Briggle, A., & Briggle, A. (2021). The Unnatural Growth of the Natural. *Thinking Through Climate Change: A Philosophy of Energy in the Anthropocene*, 11-25.
Snow, N., & Pettus, B. (2020). Poverty in a North American Context.

Capitalism can contribute to **income inequality** as those with capital or unique skills may amass significant wealth.[81] Policies and societal structures play a role in determining the extent of income inequality. Its impact is not uniform globally. Some regions have experienced rapid economic development, while others face persistent poverty. Globalization, trade policies, and geopolitical factors can influence these disparities. Countries are ranked from left to right based on GDP per capita, annual income. For each country, the height of the bands shows the average income of the deciles of the population, from the poorest 10% to the richest 10%. The width of the band indicates the population of the country.

Global Distribution of Income

Global Market Income Distribution 2020



Source: Visualizing global income inequality. https://www.core-econ.org/inequality-skyscrapers/

In every country, the rich own much more than the poor. We can use the ratio of front to back lane heights as a measure of inequality in a country. For obvious reasons, we'll call this the rich/poor ratio. Even in a relatively equal country like Norway, the rich/poor ratio is 5.4; the USA has 16, and Botswana, South Africa has 145. Inequalities within the poorest countries are hard to see on the graph, but they are definitely there: the rich/poor ratio is 22 in Nigeria and 20 in India. Huge income disparity between countries. The

[81] Solt, F. (2020). Measuring income inequality across countries and over time: The standardized world income inequality database. *Social Science Quarterly*, *101*(3), 1183-1199. Heimberger, P. (2020). Does economic globalisation affect income inequality? A meta-analysis. *The World Economy*, *43*(11), 2960-2982.

average income in Norway is 19 times the average income in Nigeria. And in Norway, the poorest 10% earn almost twice as much as the richest 10% in Nigeria.

On of aspects of inequities are the **business magnates**, individuals, who have achieved significant success and prominence in the business world due to their entrepreneurial skills, leadership abilities, and often substantial wealth.[82] These individuals have built or led large, successful enterprises and have had a substantial impact on the global economy. Business magnates can be found across various industries, including technology, finance, manufacturing, and retail. he development of business magnates throughout history can be understood in several stages, marked by economic and technological advancements, changing social structures, and evolving business environments.

The Industrial Revolution marked a significant shift with the mechanization of production, leading to the rise of industrialists and entrepreneurs. The late 19th and early 20th centuries saw the consolidation of industries and the rise of corporate giants, the **Golden Age of Capitalism**.[83] Industrialists expanded into new sectors, creating massive conglomerates. Business magnates emerged in sectors like textiles, coal, iron, and railroads. Notable figures include Andrew Carnegie in steel, John D. Rockefeller in oil, and J.P. Morgan in finance. Technological advancements, such as the development of electricity and the automobile, played a crucial role. Prominent figures include Henry Ford in automobiles, Thomas Edison in electricity, and Cornelius Vanderbilt in transportation.

John Davison Rockefeller (1839 -1937) was an American businessman and oil magnate. As the founder and majority owner of Standard Oil, he monopolized the extraction (90%) and processing of oil in the late 19th and early 20th centuries, amassing a huge fortune (equivalent to 1.5% of US GDP). Rockefeller was the first American billionaire. He donated a significant part of his fortune, mainly to public education (University of Chicago, Rockefeller University) and health (such as the fight against hookworm and yellow fever).
Standard Oil was founded in 1863 by Rockefeller and Henry Flagler. Initially dominating the petroleum products market through horizontal integration of the refining sector, and in later years through vertical integration, the company pioneered the development of the business trust. It was one of the first and largest multinationals in the world. In 1911, the U.S.

[82] Piramal, G. (2000). *Business maharajas*. Penguin Books India.
[83] Bresser-Pereira, L. C. (2020). The Golden Age of Capitalism. *Rentiers Capitalism*.
Levy, J. (2021). *Ages of American Capitalism: A History of the United States*. Random House.
Vidal, M. (2015). Fordism and the golden age of Atlantic capitalism. *The Sage Handbook of Sociology of Work and Employment. Thousand Oaks, CA: Sage Publishing*, 283-303.

Supreme Court declared it an illegal monopoly, and the trust was split into 43 smaller companies (e.g. Exxon, Chevron, BP).

John Pierpont Morgan (1837 - 1913) was an American financier and investment banker who dominated Wall Street corporate finance in the Gilded Age. As the head of the banking firm that would eventually become known as J.P. Morgan and Co., he was the driving force behind the wave of industrial consolidation in the US in the late 19th and early 20th centuries, with 42 companies. During the Panic of 1907, he organized the coalition of financiers that saved the US monetary system from collapse. America's "greatest banker".

Andrew Carnegie (1835-1919) was a Scottish industrialist in the U.S. who built a vast fortune through strategic investments in industries like railroads, steel, and coke.[84] He controlled diverse businesses through vertical integration. Despite controversies, such as the Homestead strike, Carnegie's business acumen made him one of the wealthiest individuals of his time, with a fortune valued at $309 billion in today's terms. In 1901, he sold his steel company to J.P. Morgan for $480 million, beginning his philanthropic phase. Carnegie funded thousands of public libraries, educational institutions like Carnegie Mellon University, Carnegie Institution for Science, Carnegie Trust for the Universities of Scotland, Carnegie Hero Fund, Carnegie Hall (New York) and peace initiatives (Carnegie Endowment for International Peace), aiming to give away his wealth for societal benefit. "*Anything in life worth having is worth working for*."

After World War II, there was a period of **economic recovery** and **globalization**. Multinational corporations and conglomerates expanded their influence globally. Industries like electronics, aviation, and telecommunications witnessed significant growth. The late 20th century saw the rise of technology and the internet (**Tech Boom and Information Age**), leading to the creation of new business empires. Entrepreneurs in the tech sector, such as Steve Jobs, Bill Gates, and Larry Page, became iconic figures. The dot-com boom and subsequent bust marked a period of rapid innovation and speculation. The 21st century has seen the continued globalization of business, with technology, finance, and e-commerce playing pivotal roles. Entrepreneurs like Elon Musk, Jeff Bezos, and Mark Zuckerberg have become influential across multiple industries. Emphasis on sustainability and social responsibility has grown, with some magnates engaging in philanthropy.[85]

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[84] Coke is a grey, hard, and porous coal-based fuel with a high carbon content and few impurities, made by heating coal or oil in the absence of air – a destructive distillation process. It has a dual role in the steelmaking process. First, it provides the heat needed to melt the ore, and second, when it is burnt, it has the effect of 'stealing' the oxygen from the iron ore, leaving only the pure iron behind.

[85] Hersh, E. (2023). The political role of business leaders. *Annual Review of Political Science*, *26*, 97-115.

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Zizic, M. C., Mladineo, M., Gjeldum, N., & Celent, L. (2022). From industry 4.0 towards industry 5.0: A review and analysis of paradigm shift for the people, organization and technology. *Energies*, *15*(14), 5221.

II. INTERNATIONAL TRADE

Commerce is a cure for the most destructive prejudices; for it is almost a general rule, that wherever we find agreeable manners, there commerce flourishes; and that wherever there is commerce, there we meet with agreeable manners.

Montesquieu C. (1748). *The Spirit of Laws*. Book. 20, Chs 1-8.

Trade refers to the buying and selling of goods and services between nations, individuals, or entities. It primarily focuses on the exchange of products or services through buying and selling, involving the movement of goods to meet demand and supply. Examples include importing and exporting goods between countries and buying and selling products within a local market. The term trade originates in Middle English, meaning path or course of conduct. Hanseatic merchants introduced it into English signifying track or course, which is derived from Old Saxon trada, meaning spoor or track. On the other hand, the term commerce finds its roots in Latin, specifically from commercium, formed by combining cum, meaning together, and merx, meaning merchandise.[86]

On the other hand, **commerce** is a broader concept encompassing various business activities beyond trade. It includes not only the buying and selling of goods and services but also activities related to their movement and facilitation. Components of commerce include trade, transportation, banking, insurance, advertising, and warehousing. The objective of commerce is to optimize and manage these diverse business activities to ensure the smooth functioning of trade and related processes. Examples of commerce components range from trade activities to transportation, banking and financial services related to trade, insurance, advertising, and warehousing. While trade is a subset of commerce, commerce covers a wider range of activities associated with the facilitation and management of trade.

[86] Sayers, W. (2023). The Etymology of Bargain and Its Background in Early Medieval Northwest European Trade. *ANQ: A Quarterly Journal of Short Articles, Notes and Reviews*, *36*(1), 7-9.

Trade vs. Commerce

Aspect	Trade	Commerce
Definition	The buying and selling of goods and services between nations, individuals, or entities.	A broader concept encompassing trade along with various business activities, including buying, selling, transporting, and financing goods and services.
Scope	Primarily focuses on the exchange of goods and services.	Encompasses a wider range of business activities, including trade, transportation, banking, insurance, and other related services.
Components	Involves the exchange of products or services through buying and selling.	Encompasses trade as one of its components but also includes activities related to the movement and facilitation of goods and services.
Nature	More specific and often refers to the actual exchange of commodities.	More comprehensive, covering a range of activities associated with the facilitation and management of trade.
Objective	Facilitates the movement of goods and services to meet demand and supply.	Aims to optimize and manage various business activities to ensure the smooth functioning of trade and related processes.
Examples	• Import and export of goods between countries • Buying and selling of products within a local market.	• Trade activities • Transportation of goods • Banking and financial services related to trade.

Source: own compilation of the author

International trade refers to the exchange of goods and services between countries. This economic activity has been a fundamental aspect of human civilization for centuries, as different regions and nations have unique resources, skills, and capabilities. International trade plays a crucial role in promoting economic growth, fostering innovation, and providing consumers with a broader variety of products at competitive prices.[87] However, it also poses challenges, including the potential for job displacement and the need for effective trade policies to ensure fair and mutually beneficial outcomes for all participating countries. International trade is a key driver of globalization, which involves increased interconnectedness and interdependence among countries. Globalization facilitates the movement of goods and services and leads to the exchange of ideas, cultures, and technologies.

[87] Pomeranz, K., & Topik, S. (2014). *The world that trade created: Society, culture and the world economy, 1400 to the present*. Routledge.

International Trade 1.0 to 4.0:

	Time Period	Key Developments
International Trade 1.0	from 2nd - 3rd millennia BC	• Barter system • Localized trade • Limited specialization
International Trade 2.0	16-18th century	• Discoveries and Colonialism and exclusive trading networks • Mercantilist policies for wealth accumulation • Triangular trade involving Europe, Africa, Americas
International Trade 3.0	19-20th century	• Industrial Revolution • Free trade movements (GATT, EEC-EU) • Increased production and transportation capabilities (train, canals)
International Trade 4.0	20-21st century	• Globalization and interconnected economies • Trade liberalization efforts (WTO) • Digital revolution impacting trade (e-commerce, IoT), Supply chain optimization and automation, Advancements like AI, blockchain, and digital platforms

Source: own compilation of the author

International Trade 1.0: Traditional Trade (Pre-Industrial Revolution) means, in ancient times, that trade primarily involved bartering goods and services. Trade was mainly localized, limited to local and regional levels due to transportation constraints, but the marine trade was raised with the caravans and fleets. Economic activities were diverse, but specialization was limited. **International Trade 2.0:** Mercantilism and Colonial Trade (16th to 18th centuries). During and after the great discoveries, European powers established colonies to exploit resources and create exclusive trading networks. Governments introduced the concept of mercantilism, which aimed to accumulate wealth through a favorable balance of trade. The so-called triangular trade refers to a system involving Europe, Africa, and the Americas, exchanging goods, enslaved people, and resources. **International Trade 3.0:** Industrialization and Free Trade (18th to early 20th centuries). As a result of the industrial revolution, technological advancements led to increased production and transportation capabilities. Advocacy for free trade principles can be seen in the works of economists like Smith or Ricardo. After World War II, international initiatives can be found: the General Agreement on Tariffs and Trade (GATT 1947), the European Economic Community (EEC, 1957), and the European Union (EU, 1992). In the 20th century, many colonies gained independence, impacting global trade dynamics. **International**

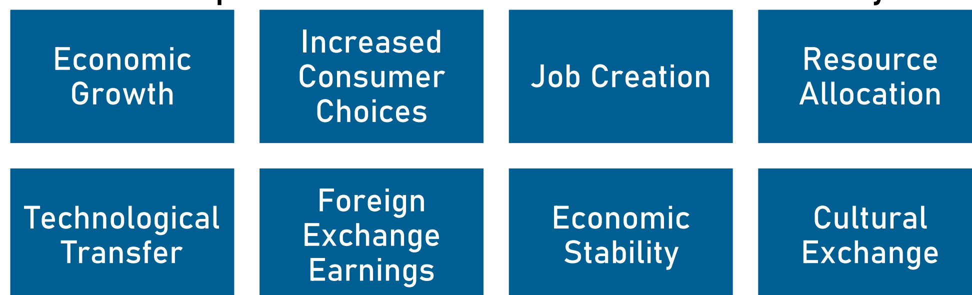
Trade 4.0: Globalization and Technology (late 20th Century onward). Globalization brings increased interconnectedness of economies, facilitated by advancements in communication and transportation. For trade liberalization, there are efforts to reduce barriers to trade through organizations like the World Trade Organization (WTO, 1995). The digital revolution has transformed the nature of trade with e-commerce, electronic payments, and supply chain automation. In the fourth stage context, sometimes called Industry 4.0,[88] technological advancements like artificial intelligence, the Internet of Things (IoT), and automation influence international trade.

[88] Rymarczyk, J. (2021). The impact of industrial revolution 4.0 on international trade. *Entrepreneurial Business and Economics Review*, *9*(1), 105-117.

6. The Concept of International Trade

International trade plays a pivotal role in global economy and economics, fostering connections between nations by exchanging goods and services. This complex web includes the pivotal aspects of world, international, and foreign economics. Examining the directions of trade – exports and imports – reveals nations' strategies and developmental trajectories. The structure of national economies can be open or closed, and the distinction between organic and inorganic openness illuminates the level of integration into the global market. Furthermore, participation in international organizations serves as a strategic move, fostering cooperation and shared economic objectives. As we explore these facets of international trade, the intricate interplay between nations' economic destinies comes to light.

The Impacts of International Trade on Economy



Source: own compilation of the author

Several aspects highlighting the **significance of international trade** in the economy. (i) International trade can boost economic growth by providing access to larger markets and promoting competition. It allows countries to specialize in the production of goods and services in which they have a comparative advantage, leading to increased efficiency and productivity. (ii) Trade allows consumers to access a wider variety of goods and services at competitive prices. This leads to increased consumer choice and can improve living standards by providing access to better-quality products. (iii) International trade can create jobs by stimulating demand for domestic goods and services and creating opportunities in export-oriented industries. While it may lead to job losses in certain sectors, it can also create new employment opportunities in industries that benefit from increased trade. (iv) Trade helps countries allocate their resources more efficiently by allowing them to focus on producing goods and services that they can produce most efficiently and

trade for those they cannot produce as efficiently. This leads to a more optimal use of resources and can increase overall economic welfare. (v) International trade can facilitate the transfer of technology and knowledge between countries. Foreign direct investment (FDI) and trade can help countries acquire new technologies, production methods, and managerial practices, leading to improvements in productivity and innovation. (vi) Exporting goods and services can generate foreign exchange earnings for countries, which can be used to finance imports, service foreign debt, and build foreign exchange reserves. This can help stabilize the economy and provide a buffer against external shocks. (vii) Diversifying the sources of income through international trade can help countries reduce their dependence on domestic markets and stabilize their economies against domestic economic fluctuations. This is particularly important for small and open economies. (viii) Trade can also facilitate cultural exchange between countries, promoting understanding and cooperation among nations. This can have broader implications for diplomatic relations and international peace.

While international trade is a cornerstone of the global economy, driving economic growth, creating jobs, and improving living standards; it also presents challenges such as trade imbalances, protectionism, and distributional impacts, the benefits of international trade often outweigh the costs, making it an essential component of modern economies.

6.1. World, International and Foreign Economics

The **world economy** encompasses a complex and intricate system of global economic relations. At the macro level, it involves the interconnection of national economies, while at the micro level, it intricately links individuals and transnational corporations. This intricate web of connections is fundamentally grounded in the international division of labor, where each participant specializes in producing goods and services in which they possess an absolute, comparative or competitive advantage, contributing to a multifaceted and interdependent global economy.[89] This level is not simply the aggregate of national economies, nor is it the sum of the external relations of these national economies. It is not merely a consequence or result of the linear development of specific national economies. Instead, it is characterized by interdependence. As an organic system, the elements of the global economy extend beyond the mere sum of national economies. It involves the

[89] Maddison, A. (2006). *The world economy*. OECD publishing. 6.

worldwide integration of production processes through an international division of labor, continually expanding and deepening over time. This integration encompasses the movement of goods, services, and capital, supplemented by the international flow of labor, technology, and information. The global economy is marked by a system of mutual and asymmetric dependencies, illustrating the intricate web of connections and interrelationships among its various components. The phenomenon of globalization serves as an expression and manifestation of these interdependencies and interactions described above.

World, International and Foreign Economics

World Economy: a worldwide system of economic relations in which national economies (on the macro level), individuals and transnational corporations (on the micro level) are connected in many ways based on the international division of labor.

International Economics: examines the mutual relations and relational system between individual economic actors, formed through cross-border activities and lastingly valid.

Foreign economics: examining the processes connecting the domestic and foreign economies, the positive and negative effects of international and global economic events on the national economy.

Source: own compilation of the author

As a specialized field within this overarching framework, **international economics** systematically examines enduring and reciprocal relationships that emerge through cross-border activities among various economic entities.[90] This branch delves into international trade, finance, and investment dynamics, exploring how nations, individuals, and corporations engage in economic transactions and collaborations across borders. By understanding these interactions, international economics seeks to elucidate the patterns, trends, and implications for the global economic system.

Furthermore, **foreign economics** extends its focus beyond the immediate bilateral connections between nations. It involves a comprehensive analysis of processes that interlink domestic and foreign economies.[91] This examination is crucial for understanding the multifaceted nature of economic globalization and how international and global economic events impact a nation's economic well-being. Foreign economics delves into the positive and

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[90] Krugman, P. R., & Obstfeld, M. (2022). *International economics: Theory and policy*. Pearson Education. (12th edition) and Salvatore, D. (2019). *International economics*. John Wiley & Sons. 18.
[91] Carbaugh, R. J. (2019). *International economics*. Cengage Learning. 22.

negative repercussions of global economic forces on a national economy. It scrutinizes the effects of international trade agreements, currency exchange rates, and global economic crises, among other factors, to assess their influence on a country's economic performance.

The **reasons** for the emergence of international trade and foreign economics are present in every country. These reasons stem from resources and raw materials that cannot be found domestically or products that can be produced more efficiently and less efficiently. The concept of specialization or division of labor leads to economies of scale, contributing to mutual advantages and interdependence.

Pros and Cons of Foreign Trade

	Advantages	Disadvantages
Static	• more efficient allocation of resources • international division of labor and specialization → (i) cheaper import (lower price); (ii) serial effect: increasing economies of scale; (iii) cost reduction in production; (iv) selection expansion	• disruption of the foreign economic balance • mutual dependence (interdependence) develops between countries (i) unfair abuses (dominance of force) (ii) getting stuck at the lower levels of the production vertical, hindering real competition
Dynamic	• increasing competition and the adaptation of new technologies to growth • makes domestic producers and traders compete for more (comparative effect), → quality • fair trade, honest trade	• a dual economy on an international and national level • children's industries (infant industries) suffocation • deterioration of future growth prospects • exchange rate deterioration, the increase in import prices is more significant than that of exports
Political	the stabilizing role of integration	destabilizing effect, trade disputes

Source: own compilation of the author

The **consequences** of international trade are multifaceted. There is an international flow and circulation of production factors and capital assets. This results in alterations in the domestic supply of a particular product, leading to changes in market prices. The satisfaction of household needs for that particular product is affected, influencing the demand for substitute products and their market prices. Companies within the industry are compelled to adapt to the altered market situation. These changes extend to the markets for inputs used by the industry's companies. The overall economic balance is

affected, impacting national income, interest rates, price levels, and employment levels. The situation of the state budget is also subject to change.

In considering the pros and cons of foreign trade, it becomes evident that there are multifaceted dynamics at play in the global economy. Foreign trade offers static and dynamic **advantages**, as well as political benefits. Static advantages include efficient global resource allocation, cheaper imports leading to lower consumer prices, economies of scale, cost reduction in production, and an expanded product selection.[92] Dynamically, foreign trade promotes competition, encourages technological adaptation, and contributes significantly to overall economic growth. It enhances product quality through competitive pressure on domestic producers and supports fair trade practices, fostering a more equitable global economic environment. On the political front, foreign trade stabilises by promoting economic integration among nations, strengthening economic ties, fostering diplomatic relationships, and contributing to international stability. Despite its numerous advantages, careful consideration is essential to address potential drawbacks and ensure a balanced and mutually beneficial global economy.

Among the **disadvantages**, foreign trade, statically, can upset the economic balance between nations, potentially affecting overall economic stability. Mutual dependence may lead to concerns like unfair abuses and dominance of force, with the risk of nations remaining stuck at lower production levels, hindering genuine competition and impeding progress. On the dynamic front, foreign trade may contribute to a dual economy internationally and nationally, posing a threat to the growth of infant industries and hindering diversification. Exchange rate deterioration and the potential for future growth decline are additional concerns. In the political realm, foreign trade can lead to destabilizing effects, fostering trade disputes that strain diplomatic relationships and jeopardize international stability. Despite its benefits, policymakers and stakeholders must understand and address these drawbacks for a balanced global economic environment.

I do not know much about the tariff, but I know this much, when we buy manufactured goods abroad, we get the goods and the foreigner gets the money. When we buy the manufactured goods at home, we get both the goods and the money.

Abraham Lincoln[93]

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[92] Harley, K. (1994). 12 Foreign trade: comparative advantage and performance. *The Economic History of Britain Since 1700*, *1*, 300.

[93] Reich, R. B. (2010). The work of nations: Preparing ourselves for 21st century capitalis. Vintage Books. 22. Quoted in F. W. Taussig (ed.), State Papers and Speeches on the Tariff, Cambridge: Harvard University Press, 1892, 275. and Taussig, F. W. (1914). Abraham Lincoln on the Tariff: A Myth. *The Quarterly Journal of Economics*, *28*(4), 814-820.

The leading **international (legal) principles** of foreign economic relations are outlined in various documents, notably the United Nations Charter of 1945 and the **Charter of Economic Rights and Duties of States**, adopted in 1974.[94] The United Nations Charter emphasizes the mutual promotion of economic development among states, although concrete measures in this direction were limited during the post-World War II era marked by the Cold War tensions. The Charter was established under the auspices of the United Nations, responding to the pressure exerted by former colonies and developing countries. It formulates international legal principles that promote cooperation and a more equitable global economic order. However, these principles do not exhaust all the significant requirements applicable to international trade relations. Specific international economic principles with practical significance include the principle of most-favored-nation treatment, the principle of national treatment (régime national), and the principle of preferential treatment. These principles are part of the broader international legal framework that governs economic interactions between states.

The Charter addresses the economic, political, and other relationships between nations, emphasizing principles such as state sovereignty, territorial inviolability, and political independence. It underscores the equal sovereignty of all states, national control over assets (including the right to nationalization), and mutual and equal benefits in economic relationships. Key **principles** include peaceful coexistence, resolving disputes, non-aggression, and addressing injustices by force. The Charter highlights the importance of respecting human rights and fundamental freedoms, rejecting the pursuit of domination and influence, and promoting international social justice. Furthermore, it advocates international cooperation for development, ensuring free navigation on the seas for landlocked countries and facilitating the entry and exit of countries without coastlines.

The **international conditions** governing foreign economic relations are part of the international condition system in foreign economic relations. This system includes **multilateral organizations and agreements**, such as the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO), the General Agreement on Trade in Services (GATS), the International Monetary Fund (IMF), the World Bank (WB), and various United Nations bodies such as the Economic and Social

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[94] Boon, K. (2018). Charter of economic rights and duties of states (1974). *Max Planck encyclopedia of public international law (online edition). Oxford University Press, Oxford*.
Weston, B. H. (1981). The Charter of Economic Rights and Duties of States and the Deprivation of Foreign-Owned Wealth. *American Journal of International Law*, *75*(3), 437-475.

Council, UNCTAD, UNIDO, UNCITRAL, UNIDROIT, WIPOM, IGAI, and CSID. In addition to multilateral organizations, **multilateral commodity agreements** coordinate the international order and balance of trade in the production and trade of raw materials. These agreements stabilize prices to ensure equilibrium on the world market for essential goods and raw materials, diverging from the philosophy of economic competition. Examples include the International Dairy Agreement and the International Beef Agreement. These agreements function as both regulatory mechanisms for conduct and operating institutions. **Multilateral agreements** addressing corporate trade contracts are also part of the system. These agreements encompass rules directed at companies (lex mercatoria) involved in international trade. They cover diverse topics such as international sales, air, sea, rail, and road transportation, various payment methods (bills of exchange, checks, bills of lading, documentary credit, etc.), leasing, factoring, intellectual property, and settlement of international trade disputes. The international condition system in foreign economic relations also involves **regional integrations, organizations, and institutions**. **Bilateral agreements** between states are crucial to this system, addressing issues such as friendship and general trade, industrial cooperation, the avoidance of double taxation, payments and credit, consuls, and legal assistance. These agreements reflect the multifaceted nature of the legal principles governing international economic relations.

6.2. Directions of International Trade

Export and import are two fundamental components of international trade, playing crucial roles in the economic interactions between countries. **Export** refers to selling goods and services produced in one country to buyers in another. It is a fundamental driver of economic growth as it allows businesses to tap into international markets and increase their customer base. Countries often export goods and services that they can produce more efficiently or at a lower cost than other nations. Exports contribute to a nation's economic prosperity, job opportunities, and competitiveness. Commonly exported goods include manufactured products, raw materials, agricultural produce, and services like technology, consulting, or tourism. **Import**, on the other hand, involves the purchase of goods and services from foreign countries to meet domestic demand. Nations import items that are not readily available or are more efficiently produced by other countries. Imports play a vital role in ensuring a diverse range of products and services are accessible to consumers, fostering economic development and meeting the needs of industries. Like exports, imports contribute to a nation's economic well-being

by providing access to resources, fostering competition, and enabling the consumption of goods and services that may not be locally produced.

Export and Import

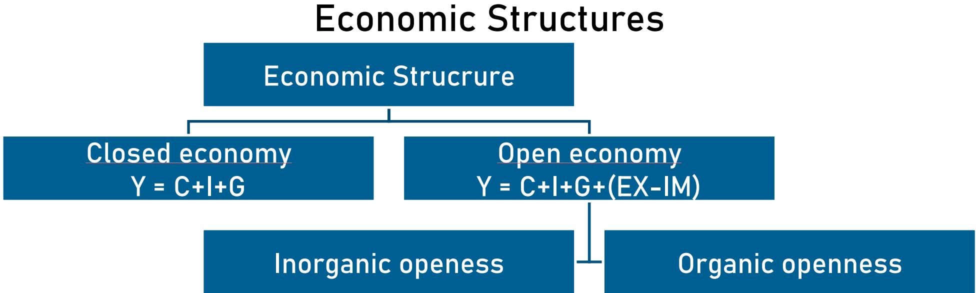
Export	Import
• to convey a commodity from one country or region to another for purposes of trade • a product or service produced in one country but sold to abroad	• to bring a commodity into a country from another country • products or services produced abroad and purchased in the home country
• one of the oldest forms of economic transfer and occurs on a large scale between nations • can increase sales and profits by reaching new markets and even offer the potential to gain significant global market share • facilitate international trade and stimulate domestic economic activity by creating jobs, production and revenues. • heavily exporting companies are typically exposed to a higher degree of financial risk • re-export is a foreign trade transaction whereby an exporter resells goods purchased (imported) from abroad	• imported goods or services are attractive when domestic industries cannot produce similar goods and services cheaply or efficiently • free trade agreements and tariff schedules often specify which goods and materials are cheaper to import • economists and policy analysts disagree on the positive and negative effects of imports

Source: own compilation of the author

The balance of exports and imports contributes to a country's **balance of trade** (BoT). If a country exports more than it imports, it has a trade surplus. Conversely, if it imports more than it exports, it has a trade deficit. Through export and import processes, international trade promotes global economic interdependence and cooperation. Governments often engage in trade policies and agreements to regulate and facilitate these activities, promoting fair competition and addressing issues related to tariffs, quotas, and other trade barriers.

6.3. Structure of National Economies

The **economic structure** can be characterized by two main types: a closed economy and an open economy. To asses an output of an economy in the formulas, Y stands for yield and income, C represents consumption, I denotes investment, G signifies government spending, EX for export and IM for imports.[95]



Source: own compilation of the author

A **closed economy** operates independently, with minimal interaction with foreign markets. It operates self-contained, with limited or no interaction with foreign markets. In the context of economic equations, the closed economy is often represented by the formula $Y = C + I + G$. This equation reflects the fundamental components contributing to the overall economic output in a closed system, emphasizing the internal factors of consumption, investment, and government expenditure.[96] The closed economy can be called **autarky**, which is derived from the Greek word αὐτάρκεια (autárkeia), meaning self-sufficiency.[97] In economies following autarkic principles, there is a persistent desire for self-sufficiency. The advantage lies in the reduced dependence of the domestic economy on international events. However, the drawback is that opening to the global market can entail significant competitive disadvantages. In the contemporary world, true economic autarkies are rarely found. An example is North Korea, where self-sufficiency (juche) is

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[95] Hanson, J. A., & Neher, P. A. (1967). The neoclassical theorem once again: Closed and open economies. *The American Economic Review*, *57*(4), 869-878.
[96] Timberlake, W., & Peden, B. F. (1987). On the distinction between open and closed economies. *Journal of the Experimental Analysis of Behavior*, *48*(1), 35-60.
[97] Occasionally, it is mistakenly conflated with the term αὐταρχία (autarchía), which denotes absolute self-government.
Esposito, F. (2020). Estimating the welfare costs of autarky: a sufficient statistics approach. *Economics Letters*, *194*, 109361.

part of the government's ideological program.[98] Despite this, the country engages in limited foreign trade with China and Japan and acquires technology and components necessary for its nuclear weapons program from Pakistan. In the 20th century, fascist Italy was compelled into autarky when the League of Nations imposed an embargo. Adolf Hitler's aggression during World War II also harbored autarkic goals. The invasion of Poland was driven by the aim of fulfilling Nazi Germany's primary food supply from within the country.[99] The first chapter of the so-called Hossbach Protocol was titled self-sufficiency.

On the other hand, an **open economy** embraces international interactions. It engages with international markets, allowing for the exchange of goods and services across borders. In the context of economic equations, the open economy is represented by the formula $Y = C + I + G + (EX - IM)$. The inclusion of $(EX - IM)$ accounts for the net exports, reflecting the impact of international trade on the overall economic output. This formula highlights the interconnectedness of an open economy with the rest of the world, considering both domestic and international factors in determining the national income.

Organic and Inorganic Openness

Organic Openness	Inorganic Openness
• the direct connection between the internal market and the world market • participation in international factor flows • the possibility of importing and exporting investment capital Total openness: the state does not prevent, moderate or correct foreign market effects on domestic economic actors by any means.	• the state artificially isolates the internal market from the world market • foreign trade is a state monopoly • often the establishment of a so-called free trade zone • no factor flow • a milder degree of this, when there is a circulation of goods and money acting as purchasing power (but no capital flow)
In reality, partially open systems	

Source: own compilation of the author

[98] Choi, S. (2021). The Art of Monument Politics: The North Korean State, Juche and International Politics. *Asian Studies Review*, *45*(3), 435-453.
[99] Ferenczi, T. X. (2021). *The Foreign Policy of the Third Reich: 1933-1939*. Fonthill Media. Geiss, I. (2014). German foreign policy in the Weimar Republic and the Third Reich, 1919–1945. In *Weimar and Nazi Germany* (pp. 134-170). Routledge.

The **openness** can be classified into two forms: inorganic openness and organic openness. Organic openness involves a more integrated and systematic engagement with the international market, reflecting a deeper level of economic interconnectedness. In contrast, inorganic openness refers to a situation where the economy engages with the global market more sporadically.

Organic openness implies a direct connection between the domestic and global markets, actively participating in international factor flows. This includes the possibility of importing and exporting investment capital. It is a part of an economic system where the relationships between the internal and external markets are close, allowing economic entities to participate in international factor flows actively. Furthermore, it enables the import and export of investment capital within this framework. In the case of **total openness**, the state does not use any means to hinder, moderate, or correct the foreign market impacts on domestic economic entities. This approach could be characterized by the highest possible degree of openness to international relations. In reality, however, **partially open systems** often exist where the government regulates foreign market impacts to some extent and only allows partial freedom in international relations.

In **inorganic openness**, the state actively isolates the internal market from the global market through artificial measures. Foreign trade is often subject to a state monopoly, giving the government a central role in regulating and controlling international economic interactions. Governments frequently introduce interventions, such as establishing so-called free-trade zones, which serve as designated areas where specific trade regulations may differ from the rest of the country. Crucially, there is a notable absence of factor flows in this form of openness, indicating a lack of movement of resources such as labor and capital across borders. In milder instances of inorganic openness, there might be a flow of goods and money, representing purchasing power, but without the corresponding flow of capital. This nuanced approach reflects a controlled form of international economic engagement where certain aspects of trade are permitted, but the free flow of factors of production is restricted or absent.

Structural openness illustrates the extent to which domestic economic entities are connected to the external environment, represented by entities in the international market. Economic policy openness refers to the degree to which the state's economic policies influence external conditions and mechanisms in the international market. Economic openness encompasses not only trade openness but also participation in the international flow of production factors such as labor, capital goods, technologies, information, etc.

Trade openness, specifically related to the trade of goods and services, measures the ratio of the nation's overall economic performance (GDP) to the trade activities at its borders. Trade policy involves the state regulating the movement of goods and services across borders through customs, aiming to achieve specific objectives. A free trade policy advocates for minimal state intervention, addressing market failures in international economic relations through limited governmental involvement.

Structural Openness

Economic policy openness: refers to the extent to which the state's economic policy influences foreign economic conditions and the mechanisms of the international market.

(Foreign) Economic openness: in addition to foreign trade openness, it also includes participation in the international flow of production factors (labor, capital goods, technologies, information, etc.).

Trade openness: the ratio of foreign trade in goods and services to the performance (GDP) of the national economy.

Source: own compilation of the author

The openness can be interpreted in the meaning of the economics of international organizations and public choice theory. It is a branch of economics that applies economic reasoning to studying political behavior. It views political actors as self-interested individuals who seek to maximize their well-being rather than as selfless public servants. This approach has been used to analyze various political phenomena, including international organizations. The **public choice approach to international organization**s argues that international organizations are created and shaped by the self-interested behavior of national governments. Governments use international organizations to achieve their goals, such as promoting their economic interests or increasing their power and influence. This can lead to inefficiencies and suboptimal outcomes, as international organizations may not always be able to overcome the conflicting interests of their member states.[100]

In the model proposed by Fratianni and Pattison, each potential member state (i) of an international economic organization seeks to maximize the net gains (g) through membership, defined as benefits (b) minus costs (c).[101] Both b and c are expressed as ratios relative to the total (t), and Q denotes the

[100] Vaubel, R. (1986). A public choice approach to international organization. *Public Choice*, *51*(1), 39-57.
[101] Fratianni, M. and Pattison, J. (1982), The economics of international organizations. *Kyklos*, 35: 244-262.

quantity, representing the international organisation's output. The objective is to maximize the value of gi through this formula.

$$g_i = \frac{b_i}{b_t} Q - \frac{c_i}{c_t} Q$$

One of the key insights of the public choice approach is that special interests can capture international organizations. This can happen when powerful interest groups can exert undue influence on the organization's decision-making process. For example, a trade association may convince an international trade organization to adopt policies that benefit its members, even if these policies are not in the best interests of the public at large. The theory also suggests that international organizations can be subject to bureaucratic inertia. This is because bureaucracies often develop their own interests and goals, which may not always be aligned with the interests of the organization's members or the public at large. For example, an international organization may continue to pursue a particular policy even if it is no longer

in the best interests of its members because the organization's bureaucracy has invested a lot of time and effort in that policy. The public choice approach can also be used to analyze the design of international organizations. For example, public choice theorists argue that international organizations should be designed to make it difficult for special interests to capture them. This could include giving more power to the organization's members, making the organization's decision-making process more transparent, and allowing the organisation to sanction member states that violate its rules.[102]

Among the **critiques**, the approach can be overly cynical and pessimistic. It may underestimate international organizations' ability to overcome their member states' conflicting interests and achieve positive outcomes. The approach does not always consider that international organizations can also serve as a forum for cooperation and coordination among their member states. This can help to promote peace and stability, and it can also lead to the development of mutually beneficial policies. The approach is based on the assumption that national governments are rational actors. However, governments are often influenced by political pressures and bureaucratic inertia, making it difficult for them to act in their long-term interests.

[102] Fratianni, M., & Pattison, J. (2001). International organisations in a world of regional trade agreements: Lessons from club theory. *World Economy*, *24*(3), 333-358.

7. Antiquity: Empires and Trade Routes

In the 19th century BC, historical records indicate the existence of an Assyrian trading colony in Kanesh, situated in **Cappadocia**. An ancient Assyrian cuneiform tablet from the Kanesh trading colony demands the settlement of overdue invoices dating back to approximately 1900-1800 BC.[103] The domestication of camels, caravans allowed Arabian nomads to control long-distance trade in Far Eastern spices and silk.

Goods from Egypt and India were transported on Arab ships to Aden in **Yemen**. Around the 10th century BC, a Tyrian fleet equipped with Ezion Geber, known as the "Tarsis ships," established multiple trade routes to the east, dealing in gold, silver, ivory, and precious stones. In the 8th century BC, III. Tiglath-Pileser attacked Gaza to control trade along the Incense Route.

In **Egypt**, trade activities involved Red Sea commerce, importing spices from the Land of Punt (Somalia) and the Arabian Peninsula. The Ptolemaic dynasty, predating Roman rule, exploited trade opportunities with India. Following the establishment of Roman Egypt, commerce with India was initiated. Noteworthy trade ports in the 1st century BC included Arsinoe, Berenice, and Myos Hormos.[104]

After the decline of the incense trade, **Yemen** utilized the Al-Mocha Red Sea port to export coffee. The aforementioned historical developments underscore the significance of these regions in shaping early international trade networks.

Phoenicia, situated along the Mediterranean coast, thrived on maritime trade as its primary economic activity. Serving as intermediaries, the Phoenicians facilitated exchanges between the diverse civilizations of the Mediterranean and the Near East. The Phoenicians, active traders from 1550 BC to 300 BC, navigated the Mediterranean Sea and Asia Minor, although many details of their routes remain elusive. Artefacts hint at potential Phoenician travels to Britain, and the legendary Queen Dido, as per Virgil's Aeneid, is said to have founded Carthage. This involved exchanging their own and other

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[103] Larsen, M. T. (2015). *Ancient Kanesh: A merchant colony in bronze age Anatolia*. Cambridge University Press.
Kulakoğlu, F. (2014). Kanesh after the Assyrian Colony period: current research at Kültepe and the question of the end of the Bronze Age settlement. *Current Research at Kültepe-Kanesh: An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity*, 85-94.
[104] Moreno García, J. C. (2017). Trade and power in ancient Egypt: Middle Egypt in the late third/early second millennium BC. *Journal of Archaeological Research*, *25*, 87-132.

goods, knowledge, cultures, and religious traditions. They established a **thalassocracy**, wielding power through establishing and operating maritime colonies.[105] Maritime companies, including one contracted by Persian King Darius I in the 5th century BC, played a crucial role. Attributed to their extensive and enduring commercial network, the Phoenicians laid the economic and cultural foundations of the Mediterranean region. The Greeks, especially the Romans, continued this groundwork. Phoenician-Greek relations commenced with the Minoan civilization of Crete around 1950-1450 BC. The Minoans gradually imported Near Eastern goods, artistic styles, and customs from various cultures through the Phoenicians. In their dealings with Egypt, the Phoenicians were sellers of cedarwood logs initially and, starting from the 8th century BC, became suppliers of wine. They, in turn, procured Nubian gold. Maintaining connections with Arabia, Assyria, China, and India, the Phoenicians engaged in overland trade through camel caravans. This intricate trade and cultural exchange web solidified Phoenicia's influence and laid the groundwork for future regional civilizations.

Carthaginian exploration continued with Hanno the Navigator around 500 BC, who boldly explored the Western Coast of Africa, contributing valuable insights into the region's geography.[106] In **China**, the Han dynasty's exploration of Central Asia in the 2nd century BC, particularly Zhang Qian's westward travels, uncovered unknown territories, including regions once conquered by Alexander the Great.

The first written **customs** tariff dates back to **Palmyra** in present-day Syria, established around 136 AD and still preserved in stone. This ancient tariff system exhibits striking similarities to the modern harmonized system. The tariff outlined specific duty rates for various commodities, including camels, enslaved people, fleece, and aromatic oils. For instance, its detailed charges such as seven denarii for a camel-load of aromatic oil in alabaster jars during importation and exportation. The Customs Tariff of Palmyra also specified rates for olive oil, salted provisions, and goods carried by donkeys, reflecting an early form of organized trade regulation.[107]

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[105] Dickson, A. J. (2022). A sea of connectivity and entanglement: Modern mobilities and ancient thalassocracies in the Mediterranean Sea. In *The Sea and International Relations* (pp. 146-169). Manchester University Press.
[106] Martin-Merino, M. (2020). The eternal debate between reality and fiction: the periplus of Hanno “the Navigator”.
[107] Asakura, H. (2003). *World history of the customs and tariffs*. World Customs Organization. 68.

7.1. Greece

The root of the **Greek expansion** can be found in the 7th century BC, when historical sources indicate that the Greeks were acutely aware of the challenges posed by overpopulation.[108] The transition from pastoralism to agriculture revealed a scarcity of suitable arable land among many city-states, with available territories primarily conducive to vegetable, grape, and olive cultivation, yielding meagre and inferior grain crops. City-states found themselves grappling not only with overpopulation but also with the pressing issue of food shortages. In response to these intertwined challenges, the Greeks established colonies, strategically serving as outlets for excess population while concurrently fostering trade. Pytheas, a Greek explorer in the 4th century BC, circumnavigated Great Britain and reached Thule, potentially the Shetland Islands or Iceland.

Greek expansion

Cyme (Cumae - 700 BC), Syracuse (734 BC), Byzantium (Istanbul - 660 BC), Massalia (Marseille - 600 BC), Odessos (Odessa - 570 BC), Neapolis (Naples - 470 BC)
Source: Greek Colonization - World History Encyclopedia

Maritime activities witnessed a notable surge in the 8th century BC, reaching a significant peak by the end of the 9th century BC, spearheaded by sailors hailing from Euboea. However, the Euboean sailors' prominence waned by the close of the 8th century BC, as traders from Corinth assumed

[108] Rihll, T. (2020). War, slavery, and settlement in early Greece. In *War and society in the Greek world* (pp. 77-107). Routledge.

a leading role in maritime trade. The Greek **colonization** effort was concentrated in pivotal regions encompassing the shores of the Black and Aegean Seas, Southern Italy and Sicily, Cilicia and Cyprus, North Africa, Southern France, Iberia, Sardinia, and Corsica.[109] These colonies served as pragmatic solutions to the challenges of overpopulation and food scarcity and played a pivotal role in advancing Greek trade and cultural influence throughout the Mediterranean and beyond.

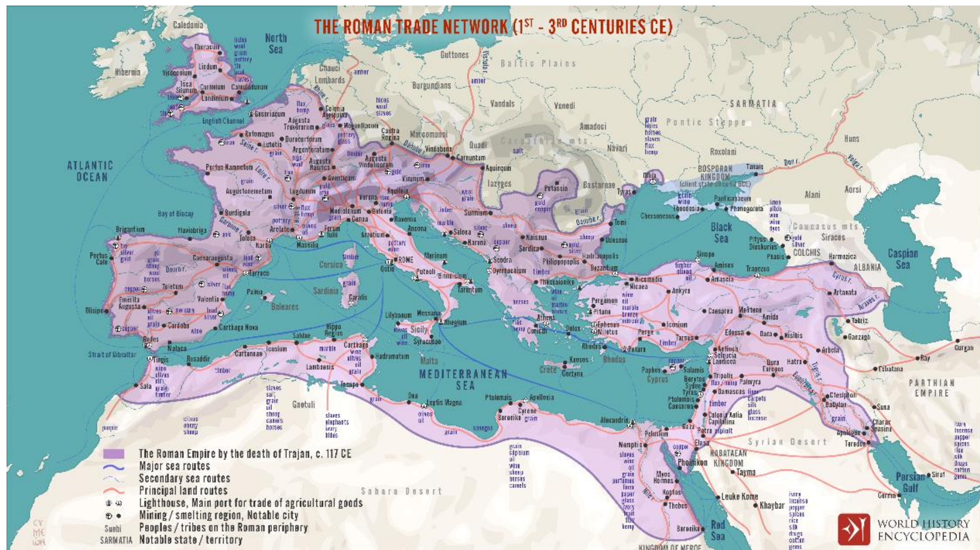
The introduction of **standardized coinage**, attributed to the Lydians and later adopted by the Greeks, further facilitated international trade. Coins, such as the drachma, became widely accepted and contributed to the growth of commerce. Cities like Athens, Corinth, and Miletus emerged as major commercial centers. These cities had well-developed ports, marketplaces (agorae), and financial institutions, contributing to their economic prominence. International trade involved the exchange of goods and facilitated the interchange of cultural ideas, art, and philosophies. Greek colonies, in particular, played a crucial role in spreading Greek culture to different parts of the Mediterranean. The wealth generated from trade often funded powerful navies and armies.

[109] Descœudres, J. P. (2013). Greek Colonization Movement, 8th–6th centuries BCE. *The Encyclopedia of Global Human Migration*.

7.2. Rome

The Romans established a sophisticated network of trade routes that connected their empire with neighboring regions and beyond.[110] These routes were primarily maritime, utilizing the extensive Mediterranean Sea and its network of ports. Major seaports like Ostia, in Italy, served as gateways for goods arriving from North Africa, Egypt, Asia Minor, and the eastern Mediterranean. Overland trade also flourished, with well-maintained roads facilitating the movement of goods and people across the empire.

Roman Trade Network



Source: Netchev. S. (2022): The Roman Trade Network (1st - 3rd centuries CE). World History (https://www.worldhistory.org/image/15641/the-roman-trade-network-1st---3rd-centuries-ce/)

Trade was a pervasive aspect of the Roman world, involving a combination of state control and a free market approach. Cereals, wine, olive oil, precious metals, marble, and spices were among the traded goods. Factors driving trade included an agricultural surplus, urban growth, territorial expansion, technological innovation, taxation, and the need to supply Rome and its army. Although the Roman elite viewed trade less favorably than land ownership and agriculture, it played a crucial role in the economy. The **mercatores**, commonly plebeians or freedmen, operated in various settings, including open-air markets, covered shops, and roadsides, where they managed

[110] Charlesworth, M. P. (2016). *Trade-routes and Commerce of the Roman Empire*. Cambridge University Press.

stalls or promoted goods. They were also found in proximity to Roman military camps during campaigns, supplying soldiers with food and clothing while offering immediate payment for any spoils obtained from military endeavors. Romans, under Augustus, explored Northern Europe and reached all corners of the Baltic Sea. Roman expeditions across Africa from 30 BC to 640 AD, including the Sahara, aimed primarily at commerce and gold acquisition. These ventures extended to the African coasts, the Red Sea, and Northern Europe, with naval commerce playing a crucial role. Sino-Roman relations flourished from 100 to 166 AD, with Roman traders establishing connections with India and gaining direct access to the spice trade. Chinese historical texts allude to Roman embassies, indicating significant trade links. Information on the economy of Roman Palestine in the 3rd century AD is available through Jewish sources, revealing itinerant peddlers (rochel) who brought spices and perfumes to the rural populace.

Goods exchanged in the Roman world ranged from foodstuffs, animal products, and textiles to materials for manufacturing and construction. Large estates, producing regional specialities like wine and olive oil, fueled interregional trade. Towns, primarily centers of consumption, also housed workshops capable of significant production. International trade routes, such as the Silk Road, facilitated the exchange of goods with regions like Arabia, India, Southeast Asia, and China.[111]

Transportation of goods presented challenges, with sea transport being cheaper but riskier due to weather and piracy. The Roman state-controlled trade ensured supply through the annona system and regulated shipowner associations.[112] State expenditure, primarily on the army, constituted a significant portion of the budget. State control is evident in stamped goods, markers indicating origin or manufacturer, and measures to prevent fraud, guaranteeing product quality and authenticity.

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[111] McLaughlin, R. (2010). *Rome and the distant east: Trade routes to the ancient lands of Arabia, India and China*. Bloomsbury Publishing.

[112] During the era of Imperial Rome, Cura Annonae, which translates to care of Annona, referred to the system of importing and distributing grain to the inhabitants of Rome and, following its establishment, Constantinople. This designation paid homage to the goddess Annona.

Ruter III, J. B. (2016). The Seed of Principate: Annona and Imperial Politics.

Erdkamp, P. (2016). Annona (grain). In *Oxford Research Encyclopedia of Classics*.

7.3. Great Trade Routes

Throughout ancient history, networks of trade routes emerged, connecting production centers to commercial hubs. The primary catalysts for these routes were scarce commodities, like salt or spices, exclusive to specific locations. Once established, these pathways facilitated the exchange of goods and served as conduits for cultural interactions, fostering the spread of religion, ideas, knowledge, technology, innovation and even bacteria, diseases.

Great Trade Routes

	Started	Description	Goods
Silk Road	2nd millennium BC	Connecting China and the Roman Empire, facilitated knowledge, technology, and cultural exchanges along its route.	silk, wool, silver, and gold
Incense Route	16th century BC	Developed to transport from the Arabian Peninsula to the Mediterranean.	incense, myrrh, feather, leather. exotic woods
Amber Road	16th century BC	Trade from the Baltic Sea to the rest of Europe. Importance during the crusades in the 12th and 13th centuries.	amber, fur, wood, honey, beeswax
Tin Route	1st millennium BC	Trade route from Cornwall to Greece during the Bronze Age to the Iron Age.	tin, iron, bronze
Salt Road	7th century BC	The Roman Via Salaria (Salt Road) and the Old Salt Road, connecting areas rich in salt to other settlements.	salt
Grand Trunk Road	3rd century BC	Connecting South Asia with Central Asia	general
Trans-Saharan Trade Route	4th century AD	Comprising several routes across the Sahara, it facilitated trade between North Africa and West Africa. Played a role in the spread of Islam.	gold, salt, cloth, and enslaved individuals
Tea Horse Road	7th century	Trade of Chinese tea and Tibetan warhorses.	tea, and warhorses
Spice Routes	15th century	Maritime paths linking the East to the West, played a significant role in the development of faster ships and colonization	pepper, cloves, cinnamon, and nutmeg

Source: own compilation of the author

The **Silk Road**, renowned as the most famous ancient trade route, connected major civilizations like China and the Roman Empire. The road spanned Eastern, Southern, and Western Asia, connecting these regions to Europe and North Africa, covering a distance of 8000 kilometers, flourishing between the 3rd century BC and the 18th century CE. It was, in reality, a network of interconnected trade routes. Ferdinand von Richthofen coined the term Silk Road in 1877 (Seidenstraße).[113] The silk trade from China to the Roman Empire began in the 1st century BC, involving the exchange of goods such as wool, silver, and gold from Europe. Numerous trading centers along the route, including Samarkand in modern-day Uzbekistan, became significant hubs of intellectual exchange. Originating in Xi'an, China, the Silk Road traversed the Great Wall of China, crossed the Pamir Mountains into Afghanistan, and reached the Levant, where goods were loaded onto ships bound for Mediterranean ports. As the Roman Empire declined in the 4th century CE, the Silk Road became unsafe and gradually fell out of use until its revival in the 13th century under the Mongols. Marco Polo, the Italian explorer, explored the Silk Road during the 13th century, marking one of the first instances of medieval Europeans visiting China. Along this route, various goods were traded, including silk, satin, musk, rubies, diamonds, genuine pearls, and rhubarb. However, beyond facilitating trade and cross-cultural connections, some scientists speculate that merchants traveling along the Silk Road may have unintentionally carried Yersinia pestis, the plague bacteria responsible for the Black Death. For modern reflection, Chinese President Xi Jinping officially launched the One Belt, One Road (OBOR) initiative in 2013. Later in 2022, the initiative was renamed the **Belt and Road Initiative** (BRI), is a comprehensive development strategy to promote economic cooperation and connectivity between countries. It consists of two main components: the Silk Road Economic Belt and the 21st Century Maritime Silk Road.[114]

The **Incense Route** emerged to transport frankincense and myrrh, exclusive to the southern end of the Arabian Peninsula (modern Yemen and Oman).[115] These substances, derived from sun-dried tree sap, were used for incense, perfume, and burial rituals. With the domestication of camels around 1000 BC, Arab nomads transported incense to the Mediterranean. Frankincense and myrrh gained significance for Romans, Greeks, and Egyptians,

[113] Hansen, V. (2012). *The Silk Road*. Oxford University Press, USA.
[114] Vértesy, L. (2011). Finance and legal opportunities on the Silk Road. *Jogelméleti Szemle* ISSN:(1588-080X) (1) 1-16.
[115] Ahme, B. J. (2023). Incense Road and its importance in Yemen Trade until the fourth century AD. *Mustansiriyah Journal of Humanities*, *1*

with stories like Emperor Nero burning a year's harvest at his mistress's funeral. At its peak, the trade saw 3000 tons of incense traded annually, taking 62 days to complete the route. Greedy settlements occasionally altered the path, demanding excessive taxes. However, improved ship design by the 1st century CE rendered this ancient overland route largely obsolete.

Amber, a trade commodity around 3000 BC, was discovered in archaeological findings, such as Baltic Sea amber beads reaching Egypt in the 16th century BC.[116] Romans highly valued this stone-like resin for both decorative and medicinal purposes, leading to the development of the **Amber Road** in the 1st century BC, connecting the Baltic states to the rest of Europe. Large amber deposits, formed millions of years ago under the Baltic Sea, wash ashore after storms, enabling local traders to harvest from Baltic beaches. During the 12th and 13th-century crusades, the Baltic became crucial for the Teutonic Knights, who gained control over the amber-producing region, brutally persecuting Prussian opponents.[117] Traces of the ancient Amber Road can still be found in Poland, with one major route known as the Amber Highway.

The **Tin Route**, vital during the Bronze and Iron Ages, supplied early settlements with a key metal-making ingredient. Tin was crucial for alloying with copper to produce bronze, a technological advance around 2800 BCE. This innovation created a demand for tin, making it significant in trade. One prominent Tin Route thrived in the 1st millennium BCE, connecting Cornwall's tin mines to France, then southeast to Greece.[118] The route, evidenced by hillforts, facilitated two-way trade, transporting exotic artifacts like coral and gold. While no written accounts survive, the archaeological record indicates the exchange of technology and art across northern Europe and the Mediterranean alongside tin.

Salt was scarce in antiquity, and it was a valuable commodity for flavoring and preserving food and served as an antiseptic. Regions rich in salt became significant trading centers, leading to the establishment of various routes connecting these areas to settlements. One renowned route was the

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[116] Dulęba, P., & Markiewicz, J. E. (2023). The lords of the Amber Road: amber storage, distribution and processing in the early Iron Age and the La Tène period. *Praehistorische Zeitschrift*, *98*(1), 310-337.
[117] Schüler, C. J. (2020). *Along the Amber Route: St. Petersburg to Venice*. Sandstone Press Ltd.
[118] Schwab, H. (1984). Was there a tin road across Europe 2,500 years ago? From Cornwall to Corinth. (https://policycommons.net/artifacts/10708887/was-there-a-tin-road-across-europe-2500-years-ago-from-cornwall-to-corinth/11617076/)

Roman Via Salaria (**Salt Road**), extending from Ostia near Rome to the Adriatic coast, and salt formed part of a Roman soldier's pay, giving rise to the terms salary and not worth his salt. Herodotus tells of a caravan route that united the salt oases of the Libyan Desert. The ancient trade between the Aegean and the Black Sea coast of southern Russia largely depended on the salt pans (ponds for evaporating seawater to obtain salt). Another crucial salt route, the **Old Salt Road**, covered 100 km from Lüneburg in northern Germany, a major salt source, to Lübeck on the north German coast. During the Middle Ages, it was vital in supplying salt for fishing fleets and preserving herring catches. The journey along the Old Salt Road took about 20 days, contributing to the prosperity of towns by imposing taxes and duties on passing wagons. The **High Salt Road** winds along a dizzying ridge line at an altitude of 2000m between France and Italy. The road used to link Provence and Piedmont.

The **Grand Trunk Road** (formerly known as Uttarapath, Sarak-e-Azam, Shah Rah-e-Azam, Badshahi Sarak, and Long Walk) is one of Asia's oldest and longest (2600 km) major roads, historically connecting South Asia with Central Asia.[119] Initially built by the Mauryan Empire in the 3rd century BC, it extended from the Indian subcontinent to the empire's frontiers. Over the centuries, the road has undergone expansions and renovations under various rulers, including the Mughals and the British. Today, the Grand Trunk Road extends from Bangladesh to Afghanistan through India and Pakistan. It plays a crucial role in trade and transportation, serving as a significant artery for economic activities and cultural exchange across the region. The road passes through major cities and has witnessed the ebb and flow of history, reflecting the rich tapestry of South Asian civilizations.

The **Trans-Saharan Trade Route**, comprising a network of routes, emerged in the 4th century CE, crisscrossing the vast desert expanse from North Africa to West Africa.[120] Caravans, often with over a thousand camels, facilitated trade across the Sahara, dealing in goods such as gold, salt, cloth, enslaved people, ostrich feathers, and European guns. This route was crucial in spreading Islam from North African Berbers into West Africa, bringing Arabic knowledge, education, and language. However, by the 16th century,

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[119] Chalana, M. (2016). 'All the world going and coming': the past and future of the Grand Trunk Road in Punjab, India. In *Cultural Landscapes of South Asia* (pp. 112-130). Routledge.

[120] Ross, E. (2010). A historical geography of the trans-Saharan trade. In *The trans-Saharan book trade* (pp. 1-34). Brill.
Neumark, S. D. (2013). Trans-Saharan Trade in the Middle Ages. In *An economic history of tropical Africa* (pp. 139-143). Routledge.

European interest in African goods led to the overshadowing of the Trans-Saharan trade routes by European-controlled transatlantic trade. As a result, wealth shifted from inland regions to coastal areas, diminishing the attractiveness of the perilous desert routes.

The **Tea Horse Road**, spanning over 2250 km through the Hengduan Mountains, China to Tibet and India, was a perilous trade route known for challenging river crossings.[121] Trading Chinese tea for Tibetan warhorses gained significance around the 7th century CE during the Song dynasty (960–1279). Research suggests that from 960 to 1127, approximately 20,000 Tibetan warhorses were traded annually for 8000 tons of tea. While sea routes grew in popularity, World War II revived the road's importance as Japanese seaport blockades necessitated it for crucial supplies between inland China and India.

Unlike other trade paths, the **Spice Routes** were maritime connections between the East and the West. Before the 15th century, North African and Arab intermediaries monopolized access to Eastern trade, resulting in high costs for sought-after spices like pepper, cloves, cinnamon, and nutmeg in Europe. Between the 15th and 17th centuries, advancements in navigation technology enabled Europeans to sail longer distances. This prompted direct trading ventures with Indonesia, China, and Japan, fostering faster ship development, colonization, and diplomatic ties between the East and West. Notably, the Portuguese, Dutch, and English reaped substantial benefits from controlling the spice trade in the Moluccas or Spice Islands, particularly in modern-day Indonesia, where nutmeg and cloves were exclusively sourced. The spice trade's impact included wars, colonization, and the accumulation of fortunes, establishing it as a globally significant trade route.

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[121] Sigley, G. (2020). *China's route heritage: mobility narratives, modernity and the Ancient Tea Horse Road*. Routledge.
Forbes, A., & Henley, D. (2011). *China's Ancient Tea Horse Road*. Cognoscenti Books.

8. Middle Ages - Distance Trade

The Middle Ages witnessed the emergence and evolution of distinctive trade networks that played a pivotal role in shaping economic dynamics across regions. One notable aspect of medieval commerce was distance trade, connecting distant lands and fostering cultural and economic exchanges. In this context, the Levant, Die Hanse (Hanseatic League), and the Congress of Visegrád stand out as milestones in medieval trading. With its strategic location, the Levant became a crossroads for trade between Europe and the East. The Hanseatic League, a powerful alliance of merchant guilds, dominated trade in Northern Europe, while the Congress of Visegrád, a diplomatic assembly, facilitated cooperation among Central European kingdoms. These entities illuminate the intricate web of trade, diplomacy, and cultural interactions that characterized the medieval period.

8.1. Levant

Why did the trader choose to do business in Levante?
Because they heard the profits there are rising!

The term Levant is more of a cultural-historical concept than a geographical one, deriving from the Italian language where it signifies sunrise or east (elevare – to lift; elevarsi – to rise). Similar linguistic roots are evident in various languages, such as the Greek Ἀνατολή (Anatolē), reflected in Anatolia as the direction of sunrise, the Germanic Morgenland, denoting morning land, the Italian usage in expressions like Riviera di Levante (referring to the Liguria coast east of Genoa), the Hungarian term Kelet, Napkelet meaning east (referring to raise), and the Spanish and Catalan words Levante and Llevant, conveying the place of rising. Notably, the term Orient and its Latin origin oriens, meaning east, are directly related to rising, derived from the Latin verb orior, which means to rise.[122]

Its historical significance spans from the 6th to the 17th century, with Venice coming under Habsburg rule in 1797.[123] In the 13th and 14th centuries, it became associated with Italian maritime trade. Geographically, it encompasses the regions eastward from Italy (specifically from Venice) to the Middle East, extending up to the Euphrates and Nile rivers. The major powers in

[122] Balme, M.; Morwood, J. (2020). Chapter 36. *Oxford Latin Course* Part III (2nd ed.). 19.
[123] Ashtor, E. (2014). *Levant Trade in the Middle Ages* (Vol. 1118). Princeton University Press.

Levantine trade evolved, initially with the Arabs, later the Byzantines, and during the era of the Crusades, the dominance shifted to Italian merchant city-states or maritime republics such as Venice, Genoa, and Pisa, while on the east Damascus, Aleppo, and Jerusalem, were important trade centers. These cities became bustling marketplaces where merchants from various regions converged to exchange goods.

Geographically it was a region of great economic importance, referring to the eastern part of the Mediterranean, including modern-day countries such as Syria, Lebanon, Israel, and parts of Turkey and Jordan. Its location made it a critical crossroads for trade between Europe, Asia, and Africa, serving as a bridge connecting the cultures and economies of the East and the West and an integral part of the Silk Road. The distance trade involved the exchange of a wide array of goods, including spices, silk, precious metals, textiles, ceramics, and cultural items. The Crusades, a series of religious wars fought between the 11th and 13th centuries, profoundly impacted trade in the Levant.[124] While the primary goal of the Crusades was to control holy sites in the region, they also influenced economic and cultural interactions.

Venice played a crucial and influential role in the Levantine trade; the city's strategic location, maritime power, and diplomatic prowess allowed it to become a significant player in commerce.[125] Venice controlled key trade routes, especially those leading to the eastern Mediterranean. The city-state's navy (Armada) ensured the safety of its merchant vessels and allowed it to dominate maritime trade in the region. Venice achieved territorial conquests along the Adriatic Sea, e.g. Furli, Istria, and the western side of the Balkan, and other islands (Crete and Euboea) theoretically amounting to nearly 40% of the Byzantine Empire.[126] The lucrative commerce significantly contributed to the wealth and prosperity of the Venetian Republic. Treaties with Byzantium and other regional entities allowed Venice to maintain its economic interests in the eastern Mediterranean. The city's prominence in trading began to decline after the geographical discoveries when international trade moved from the Mediterranean to the Atlantic and Pacific oceans. However, the legacy of Venice's role in the Levant trade left an indelible mark on

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[124] Goitein, S. D. (1967). Mediterranean trade preceding the Crusades: some facts and problems. *Diogenes*, *15*(59), 47-62.
Ashtor, E. (1985). Investments in Levant Trade in the Period of the Crusades. *Journal of European Economic History*, *14*(3), 427.
[125] Ashtor, E. (2014). *Levant Trade in the Middle Ages* (Vol. 1118). Princeton University Press.
[126] Ashtor, E. (1974). The Venetian supremacy in Levantine trade: monopoly or pre-colonialism?. *Journal of European Economic History*, *3*(1), 5.

the city's history, influencing its art, architecture, and economic institutions. By 1796, the Republic of Venice, weakened and unable to defend itself with only four galleys and seven galiots, faced threats as French forces invaded Piedmont and defeated the Austrians. Napoleon's army crossed into neutral Venice, occupying the territory up to the Adige River by year-end. The Austrians held Vicenza, Cadore, and Friuli. In the following year, during the Peace of Leoben negotiations, later in the Treaty of Campo Formio, the Austrians were slated to take Venice's Balkan possessions in exchange for peace (1797), while France acquired the Lombard part of the Venetian state.

Venice and Venetian Domains

Source: Constatini V. (2022). The Origins of Venice, Trade Treaties. (https://www.venice-thefuture.com/schede/uk/312-aliusid=312.htm)

8.2. Die Hanse

The Hanseatic League, referred to as die Hanse in German, functioned as an alliance of northern trading cities in Northern Europe and the Baltic region during the 13th and 17th centuries.[127] The term Hansa, Hanse denoted an alliance of foreign traders, bands or troops, convoy, or maritime caravan.[128] At first, the term Hansa meant an association of merchants living abroad, but by the end of the 13th century, the Hansas of the cities had become stronger – a severe merchant alliance cities that shared a common political principle. For almost five centuries, the League wielded significant influence over the economy, politics, and culture throughout the Baltic Sea region.

Prerequisites for the establishment of the Hanseatic League included the growth of trade and cities, coupled with the eastward expansion of German merchants along the shores of the Baltic Sea. The symbolic initiation of this era traces back to 1159 when **Lübeck**, the central hub of the alliance, underwent re-establishment. The alliance between Lübeck and Hamburg in 1241 marked a significant early development within the Hanseatic League. Major Hanseatic cities included Lübeck, Hamburg, Bremen, Danzig, and Rostock.[129] It founded trading outposts in various towns and cities throughout Europe, with certain ones, such as the Kontors in London (the Steelyard), Bruges, Bergen, and Novgorod, evolving into extraterritorial entities endowed with significant legal autonomy.

Its primary purpose was to protect and enhance trade in the region. This confederation could exert economic pressure on other cities, utilizing a spectrum of tactics ranging from embargoes to direct warfare as part of their strategic arsenal. The economic activities of the Hanseatic League were characterized by a division between the Western region, which focused on manufacturing and craftsmanship, and the Eastern region, which was concerned with the supply of raw materials and food. The Hanse received numerous trade privileges and monopolies from monarchs and rulers, allowing member

[127] Kirby, E. G., & Kirby, S. L. (2023). Interorganizational relationships in medieval trade: An analysis of the hanseatic league. *Rev. Eur. Stud.*, *15*, 1.
[128] That it originally meant *An-See*, or on the sea, is incorrect. Weststrate, J. (2010). Handel en transport over land en rivieren In Brand, Hanno; Egge, Knol (eds.). Koggen, kooplieden en kantoren: de Hanze, een praktisch netwerk. Hilversum & Groningen: Uitgeverij Verloren & Groninger Museum.
[129] Marczinek, M., Maurer, S., & Rauch, F. (2022). Identity in Trade-Evidence from the Legacy of the Hanseatic League.

cities to enjoy advantages in specific regions and dominate trade. It was pivotal in shaping medieval urban culture in Northern Europe and embodied the saying, Stadtluft macht frei (urban air makes you free).[130]

Die Hanse

Source: Netchev S. (2022). The Hanseatic League - Trade in the North and Baltic Seas c. 1400. World History (https://www.worldhistory.org/image/16368/the-hanseatic-league---trade-in-the-north-and-balt/)

Even during its peak with 220 member cities, the Hanse remained no more than a loosely connected confederation of city-states. It was devoid of a lasting administrative apparatus, a treasury, or a standing military force. They introduced an irregular deliberative assembly, Hanseatic Diets (referred to dachvart, dach, Tagfahrt or Hansetag) that operated based on discussion and consensus. However, by the mid-16th century, these frail connections rendered the Hanseatic League susceptible, and it gradually disintegrated as members assimilated into other domains or withdrew. By the final Hanseatic assembly in 1669, representation was limited to five cities. The definitive

[130] Mitteis, H. (1952). Über den Rechtsgrund des Satzes" Stadtluft macht frei". In: Erika Kunz (Hrsg.): *Festschrift Edmund E. Stengel zum 70. Geburtstag am 24. Dezember 1949 dargebracht von Freunden, Fachgenossen und Schülern.* Böhlau, Münster. and Hühns, E., & Hühns, I. (1963). *Bauer, Bürger, Edelmann: Leben im Mittelalter*. Verlag Neues Leben, Berlin. 123.

dissolution of the Hanseatic League occurred in 1862, with Lübeck, Hamburg, and Bremen being the last remaining members.[131] The Hanse left a cultural legacy (e.g. brick gothic monuments and facades) and shaped the history of trade relations in the Baltic Sea region. Hanseatic traditions and the importance of Hanseatic cities are still evident in many regions today.[132]

8.3. Congress of Visegrád

The Congress of Visegrád (Hungary) was a royal summit in 1335, which convened the monarchs of the Central European kingdoms, including Charles Robert I of Hungary, John of Luxembourg, King of Bohemia, and Casimir III, King of Poland.[133] It addressed issues of mutual military assistance, throne-related matters and established agreements, fostering economic and political collaboration among the participating kingdoms. Notably, an economic treaty was forged in response to Vienna's right to staple port and impose customs duties. The **new trade routes** were delineated to circumvent Vienna, with the Buda–Brno route featuring key stops in Esztergom, Nitra, and Holíč. Buda and Brno were granted complete staple port and customs authority. The Hungarian city of Kassa emerged as a pivotal hub for Polish-Russian trade, which is indicative of the booming economic conditions prevailing in the three kingdoms during this period. Around 1320, around 35 different domestic and foreign currencies circulated in Hungary, including unmarked silver. In 1325, a gold currency system modeled after the Florentine pattern was introduced by minting gold florins. The Nagyszombat Agreement of 1327 stipulated a **currency union** in both Hungary and Czechia and adopted a common mixed gold-silver currency system. A second meeting took place in 1339, and the new king of Poland was chosen.

In the modern era, the Visegrád Cooperation, initiated in 1991, evolved into the Visegrád Group (V4) in 1992, leading to the establishment of the Central European Free Trade Agreement (CEFTA) by the V4 nations in

[131] Zhang, Z. (2020). Trapped Within and Without: A Probe into the Causes of the Decline of the Hanseatic League. *Scientific and Social Research*, *2*(3).
[132] Tillery, L. (2021). Hanse Cultural Geography and Communal Identity in Late-Medieval City Views of Lübeck. *Journal of Urban History*, *47*(6), 1251-1274.
Oliński, P. (2023). On the beneficial effects of storms: Examples from Hanseatic towns. In *Pre-modern Towns at the Times of Catastrophes* (pp. 21-31). Routledge.
[133] Rácz, G. (2013). The Congress of Visegrád in 1335: Diplomacy and Representation. *The Hungarian historical review: new series of Acta Historica Academiae Scientiarum Hungaricae*, *2*(2), 261-287.

1992.[134] The alliance seeks to enhance collaboration in military, economic, cultural, and energy matters and promote further integration with and within the European Union (EU).

[134] Macek, L. (2021). What Left of the―Visegrád Group‖. *Notre Europe. Jacques Delors Institute. Paris*.
Végh, Z. (2018). From Pro-European Alliance to Eurosceptic Protest Group? The case of the Visegrad Group. *SIEPS–2018: 7epa. Sweden: Swedish Institute for European Policy Studies. Stockholm*.

9. Discoveries and International trade

The Age of Discovery, spanning the late 15th to the early 17th centuries, marked a transformative era in world history. Propelled by technological advancements in navigation, European explorers embarked on daring voyages, expanding the known world and initiating unprecedented contact between diverse cultures. This age of exploration also laid the foundations for a new chapter in the history of international trade. As maritime routes were established and connections formed between the Old World and the New, a global commerce network began to emerge. We explore the profound impact of the Age of Discoveries on international trade, tracing the roots of globalization and the exchange of goods, ideas, and cultures that reshaped the economy of the time.

9.1. Age of Discovery

Geographical exploration and discoveries refer to the historical period characterized by expeditions, voyages, and journeys undertaken by explorers to uncover new lands, territories, and routes. From about 800 to 1040, the **Viking Age** witnessed Scandinavian explorations led by figures such as Erik the Red and Leif Erikson.[135] They explored Iceland, Greenland, and parts of North America, contributing significantly to early European interactions with the Western Northern Hemisphere.[136]

The onset of the age of exploration is intricately tied to the pioneering journeys undertaken by the renowned Venetian explorer Marco Polo (1254-1324). Polo's far-reaching travels during the period from 1271 to 1295 traversed the realms of the Far East, leaving an indelible mark on the course of historical exploration. A prevailing consensus among historians suggests that his ventures played a pivotal role in reintroducing China to the European consciousness. Setting forth from Venice, Polo's odyssey took him through the intricacies of Asia Minor, extending into the vast expanses of Mongolia and ultimately reaching various locales in China, notably the imperial cities of Beijing and Hangzhou. His experiences, as chronicled in the literary masterpiece Il Milione or The Travels of Marco Polo, provide a rich tapestry of

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[135] Higgs, P. (2022). European Exploration of the North Atlantic 900-1535.

[136] Ashby, S. P. (2015). What really caused the Viking Age? The social content of raiding and exploration. *Archaeological Dialogues*, *22*(1), 89-106.

Mancini, J. M. (2002). Discovering Viking America. *Critical Inquiry*, *28*(4), 868-907.

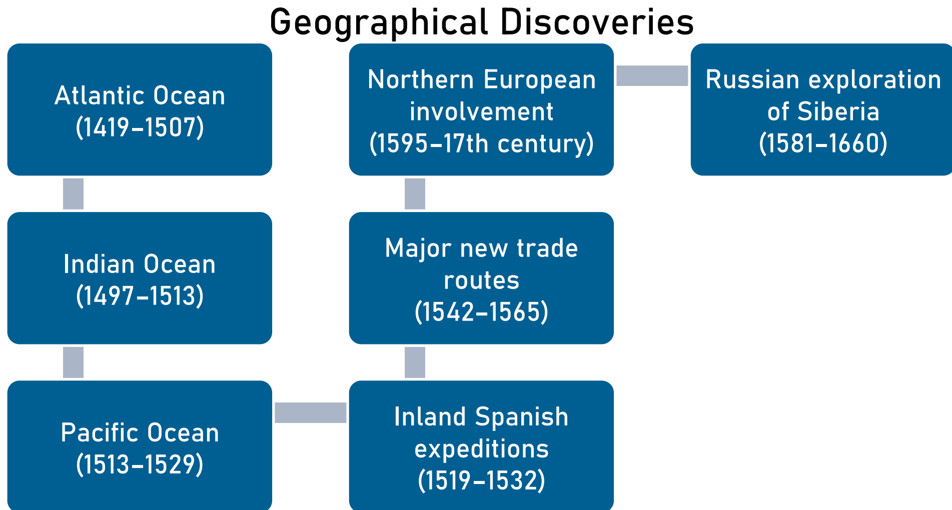
observations on the cultures and societies he encountered during his extensive journey.[137] In addition to reintroducing China to Europe, Polo's accounts contributed significantly to the geographical knowledge of the time, offering insights into the diverse regions, people, and customs.[138] His narratives sparked both fascination and curiosity among contemporaries, influencing subsequent explorers and shaping the evolving understanding of the world. The travels of Marco Polo stand as a testament to the spirit of exploration that characterized the medieval era and laid the groundwork for broader engagements between East and West.

The era of geographical exploration, spanning from the late Middle Ages through the **Age of Discovery** and into the early modern period, saw significant advancements in navigational technology, cartography, and maritime capabilities. Spanning the late 15th to early 17th centuries, this era saw European powers exploring and colonizing various parts of the world: the Americas, Africa, Asia, and the Pacific, including the sea route to Asia.

The discoveries were driven by a confluence of **factors** that shaped the motives and endeavors of explorers. **Economic** considerations played a significant role, fueled by the aspiration for new trade routes and the coveted access to valuable resources in distant lands. With the conquest of Constantinople in 1453, the Ottoman Empire severed and controlled the eastern trade routes, compelling merchants to seek new paths. Concurrently, **technological** advancements emerged as pivotal catalysts, with innovations in navigation, particularly the widespread use of the compass, and improvements in shipbuilding techniques contributing to the feasibility of long-distance voyages. Advancements in mapmaking and cartography, with explorers, contributed to more accurate representations of the world, creating maps, atlases, and the use of latitude and longitude. Moreover, **religious and cultural** factors profoundly influenced the motivations behind exploration. The spread of Christianity served as both a spiritual and geopolitical impetus, prompting European powers to extend their influence and convert indigenous populations in newly discovered territories. Additionally, a broader quest for knowledge and understanding of the world fueled the curiosity of explorers,

[137] Komroff, M. (2011). *The Travels of Marco Polo*. Read Books Ltd. and Benedetto, L. F. (2014). *The Travels of Marco Polo*. Routledge. and Masefield, J. (2002). *The Travels of Marco Polo, the Venetian*. Asian Educational Services.
[138] Xue, Y., & Hu, Y. (2021). Traveling with Marco Polo: Selected Excerpts. *Chinese Literature Today*, *10*(2), 20-26.

driving them to venture into uncharted waters in pursuit of a more comprehensive comprehension of the Earth's geography.[139]



Source: own compilation of the author

Following the **Fall of Constantinople** (1453), Pope Nicholas V issued the Romanus Pontifex bull in 1455,[140] reinforcing the earlier Dum Diversas (1452). This papal decree granted King Afonso V of Portugal and his successors rights to all lands and seas discovered beyond Cape Bojador, endorsing trade and conquest against Muslims and pagans. This marked the initiation of a mare clausum policy in the Atlantic. During this period, King Afonso V, curious about a potential seaway to India, sought information from Genoese experts. In 1459, the Fra Mauro world map, commissioned by the king, arrived in Lisbon.[141] Around these decades, captains in the service of

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[139] Love, R. S. (2006). *Maritime exploration in the age of discovery, 1415-1800*. Bloomsbury Publishing USA.
Pyne, S. J. (2021). *The Great Ages of Discovery: How Western Civilization Learned about a Wider World*. University of Arizona Press.
[140] Romanus Pontifex (The Roman Pontiff) is the designation for at least three papal bulls: (i) The initial issuance occurred in 1436 under the pontificate of Pope Eugenius IV. (ii) A subsequent bull was promulgated in 1451 by Pope Nicholas V. This particular bull absolved the dukes of Austria from potential ecclesiastical censure, specifically in relation to their allowance of Jewish residence in the region. (iii) Another notable issuance in 1455 by Pope Nicholas V commended the Catholic King Afonso V of Portugal for his endeavors against the Muslims. The bull endorsed the king's military campaigns in Western Africa and directed him to capture and subjugate all Saracens, Turks, and other non-Christians, subjecting them to perpetual servitude.
[141] Falchetta, P. (2006). Fra Mauro's world map. *e-Perimetron*, *1*, 2.

Prince Henry explored and discovered the remaining islands, solidifying Portuguese occupation in the 15th century. The Gulf of Guinea was successfully reached during the 1460s, marking a significant expansion of Portuguese exploration.

Embarking upon the vast expanse of the **Atlantic Ocean** between 1419 and 1507, **Portuguese exploration** took center stage under the visionary leadership of Prince Henry the Navigator (1394–1460), son of King John I. In the 1430s, he established a navigation school in Sagres, attracting cartographers, sailors, and explorers.[142] Portuguese navigators started with the West African Coast, Gil Eanes successfully rounded Cape Bojador (1434), dispelling fears and myths about this challenging point on the African coast. This achievement opened the way for further exploration southward. During the 1430s and 1440s, Portuguese navigators explored and colonized the Azores and Madeira archipelagos, strategically positioning Portugal for further exploration. In 1456, Diogo Gomes reached and explored the Cape Verde Islands, contributing to Portugal's expanding influence in the Atlantic. Under the command of Bartholomeu Dias, Portuguese sailors successfully rounded the southern tip of Africa, known as the Cape of Good Hope, in 1488. This achievement opened a sea route to the Indian Ocean. This maritime endeavor sought to unveil new routes to Africa and Asia, a pursuit that eventually paved the way for future global connections. Vasco da Gama's groundbreaking journey to India in 1497-1499, ultimately opened direct maritime trade routes between Europe and Asia.[143]

> They say that Christopher Columbus was the first economist.
> When he left to discover America,
> he didn't know where he was going;
> when he got there he didn't know where he was,
> and it was all done on a government grant.

Simultaneously, **Spanish exploration** was marked by Christopher Columbus's historic voyage in 1492-1493 with three ships: Santa María, Niña, Pinta.[144] The Americas, often referred to as the New World, became a focal point of exploration, encompassing North America, the True Indies, and the

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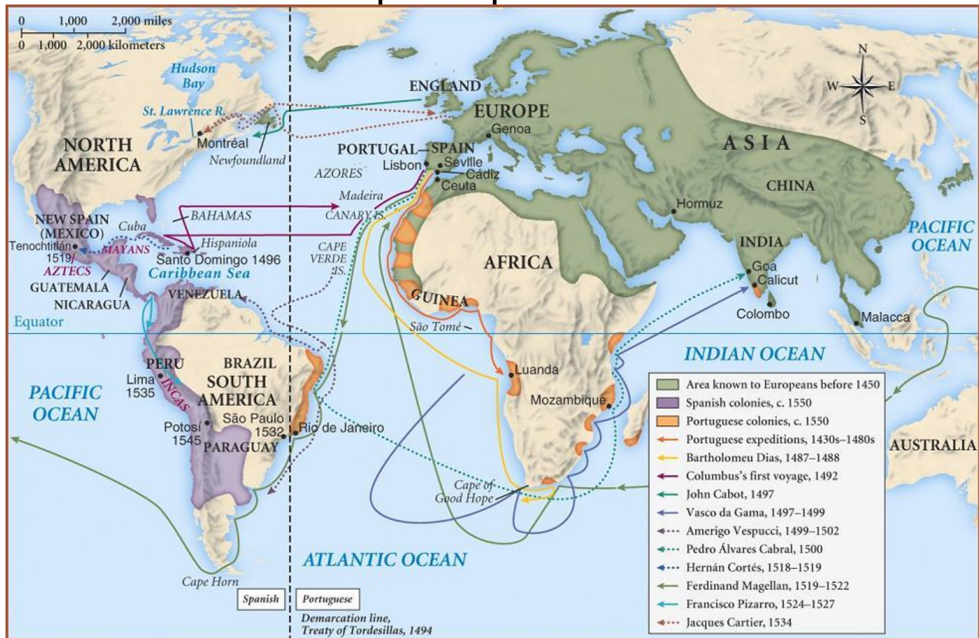
[142] Beazley, C. R. (2022). *Prince Henry the Navigator, the Hero of Portugal and of Modern Discovery, 1394-1460 AD*. DigiCat.

[143] Jayne, K. G. (2023). *Vasco da Gama and his Successors, 1460–1580*. Routledge.
Šehović, A. (2022). Life and Work of Vasco da Gama. *Rostra: Časopis studenata povijesti Sveučilišta u Zadru*, *13*(13), 123-135.

[144] Bembo, P. (2020). Christopher Columbus' First Voyage. *An Anthology of European Neo-Latin Literature*. and Libri, H. Christopher Columbus' First Voyage. *An Anthology of European Neo-Latin Literature*, 77.

momentous discovery of Brazil.[145] Between 1519 and 1532, inland Spanish expeditions left an indelible mark on the map. The conquistadors (conquerors, explorer-soldiers), Hernán Cortés's conquest of Mexico and the Aztec Empire, along with Francisco Pizarro's similar success in Peru against the Inca Empire, and Pedro de Alvarado in Mexico and Central America, exemplified the expansion of Spanish influence in the Americas.[146]

Map of Explorations



Source: Monte world history 2012 (https://monteworldhistory2012.wordpress.com/2012/12/14/map-of-exploration/map-11-06-p468/)

In order to address the conflict stemming from Pope Sixtus IV's bull Aeterni regis, 1481, which upheld Portuguese rights to all non-Christian lands south of the Canary Islands, particularly following Columbus's asser-

[145] Amerigo Vespucci was an Italian explorer and cartographer, in 1499, he participated as the navigator in the expedition led by the Spanish explorer Alonso de Ojeda, accompanying Christopher Columbus on his second journey. In his account titled Four Voyages, published in 1507, Vespucci referred to the newly discovered landmass as the New World (Mundus Novus). From 1507 onwards, the new continent began to be called America, named after him.

[146] Descola, J., & Barnes, M. (2023). *The conquistadors*. Routledge.
Hennessy, A. (1993). The Nature of the Conquest and the Conquistadors. In *proceedings of the British Academy* (Vol. 81, pp. 5-36).

tion of the Antilles for Castile, efforts were made to allocate trading and colonization rights for all territories west of the Canary Islands between Portugal and Castile. This arrangement, later extended to involve the Spanish Crown and Portugal, aimed to exclude any other Christian empires from such claims. The papal bulls issued by Alexander VI in 1493 either affirmed or reaffirmed the Spanish crown's rights in the New World, validating the discoveries made by Christopher Columbus in 1492.[147] Later, it resulted in the **Treaty of Tordesillas** (Tratado de Tordesillas) in 1494, delineating the newly discovered lands between Spain and Portugal.[148] The treaty marked the division of recently discovered lands beyond Europe between Portugal and the Crown of Castile. This division followed a meridian located 370 leagues west of the Cape Verde islands, situated off the west coast of Africa. The demarcation line fell approximately midway between the already Portuguese-controlled Cape Verde islands and the territories Christopher Columbus claimed for Castile and León during his initial voyage, denoted in the treaty as Cipangu and Antillia (corresponding to Cuba and Hispaniola). The treaty was ratifed by Spain and Portugal in 1494, and by Pope Julis II in 1505 or 1506. As per the terms, lands situated to the east of the demarcation line were allocated to Portugal, while those to the west were designated for Castile, effectively modifying a previous decree by Pope Alexander VI.

That, whereas a certain controversy exists between the said lords, their constituents, as to what lands, of all those discovered in the ocean sea up to the present day, the date of this treaty, pertain to each one of the said parts respectively; therefore, for the sake of peace and concord, and for the preservation of the relationship and love of the said King of Portugal for the said King and Queen of Castile, Aragon, etc., it being the pleasure of their Highnesses, they, their said representatives, acting in their name and by virtue of their powers herein described, covenanted and agreed that a boundary or straight line be determined and drawn north and south, from pole to pole, on the said ocean sea, from the Arctic to the Antarctic pole. This boundary or line shall be drawn straight, as aforesaid, at a distance of three hundred and seventy leagues west of the Cape Verde Islands, being calculated by degrees, or by any other manner as may be considered the best and readiest, provided the distance shall be no greater than abovesaid.
And all lands, both islands and mainlands, found and discovered already, or to be found and discovered hereafter, by the said King of Portugal and by his vessels on this side of the said line and bound determined as above, toward the east, in either north or south latitude, on the eastern side of the said bound provided the said bound is not crossed, shall belong to, and

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[147] Sánchez, M. H. (2020). Spanish Theories of Empire: A Catholic and Polycentric Monarchy. In *A Companion to Early Modern Spanish Imperial Political and Social Thought* (pp. 17-52). Brill.
Coben, L. A. (2015). The events that led to the Treaty of Tordesillas. *terrae incognitae*, *47*(2), 142-162.
[148] Duve, T. (2013). Treaty of Tordesillas. *Max Planck Encyclopedia of Public International Law*, 1-9.

remain in the possession of, and pertain forever to, the said King of Portugal and his successors.
And all other lands, both islands and mainlands, found or to be found hereafter, discovered or to be discovered hereafter, which have been discovered or shall be discovered by the said King and Queen of Castile, Aragon, etc., and by their vessels, on the western side of the said bound, determined as above, after having passed the said bound toward the west, in either its north or south latitude, shall belong to, and remain in the possession of, and pertain forever to, the said King and Queen of Castile, Leon, etc., and to their successors.

Treaty of Tordesillas, 1494

Subsequently, the opposite side of the globe underwent further division through the **Treaty of Zaragoza**, signed in 1529. This later agreement specified the antimeridian to the demarcation line established in the Treaty of Tordesillas. The treaty was aimed to address the so-called Moluccas issue, arising from conflicting claims between Castile and Portugal over the lucrative Spice Islands (Indonesia's Malukus). Both nations contended that these islands fell within their respective areas of influence, as outlined in the 1494 Treaty of Tordesillas. The conflict emerged in 1520 when expeditions from both kingdoms reached the Pacific Ocean due to the absence of an agreed-upon meridian of longitude in the far east. The partitioned territories established by the treaty persisted, even during the period of Spain and Portugal's unity under a joint monarch from 1580 to 1640. This arrangement endured until the 1750 **Treaty of Madrid** replaced the earlier agreement.[149]

Venturing into the **Indian Ocean** from 1497 to 1513, Vasco da Gama's groundbreaking route to India established a vital sea connection between Europe and the lucrative trade networks in the Indian Ocean. Exploration extended to the Spice Islands and forged trade connections with China, contributing to the burgeoning global economy.

The **Pacific Ocean**, a vast frontier beckoning exploration from 1513 to 1529, witnessed Vasco Núñez de Balboa's expedition, leading to the revelation of the Pacific.[150] Ferdinand Magellan's historic voyage achieved the first circumnavigation of the globe, underscoring the enormity of the Pacific. The

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[149] Perepiliak, G. (2021). Madrid Treaty of 1750. Repartition of Spain and Portugal's overseas territories. *Latin America*, (3), 79-102.
Zusman, P., & Nunes-Pereira, S. (2022). Borders on Paper, Borders on the Ground: Boundary Commissions Under the Treaty of Madrid and Their Role in the Reinvention of the Rio de la Plata Frontier (1752–1759). In *Beneath the Lines: Borders and Boundary-Making from the 18th to the 20th Century* (pp. 93-108). Cham: Springer International Publishing.
[150] Nagelhout, R. (2016). *Vasco Núñez de Balboa: First European to Reach the Pacific Ocean from the New World*. The Rosen Publishing Group, Inc.
Otfinoski, S. (2005). *Vasco Nuñez de Balboa: explorer of the Pacific*. Marshall Cavendish.

convergence of westward and eastward exploration marked a pivotal juncture in global navigation, opening new horizons for further discovery.

Northern European involvement in the late 16th century and the 17th century brought forth exploration in **North America**, Arctic expeditions in search of a northern trade route (Willem Barentsz),[151] and Dutch exploration and influence in **Australia** and **New Zealand** (James Cook voyages between 1768-1779).[152] The Russian exploration of **Siberia** from 1581 to 1660 showcased the vastness of the Russian expansion. The conquest of the Khanate of Sibir, exploration and utilization of Siberian river routes, and the ultimate Russian reach to the Pacific Ocean underscored the significance of Siberia in the global narrative of exploration and expansion.

The European overseas expansion led to the **Columbian Exchange**, facilitating global trade and influencing economic shifts.[153] It initiated the silver trade, European participation in the Chinese porcelain trade, and the transfer of unique goods between hemispheres. Europeans brought livestock to the New World, receiving tobacco, potatoes, tomatoes, and maize in return. The Age of Imperialism ensued, marked by colonial powers colonizing most of the planet. European demand for trade and resources had profound effects on indigenous cultures, leading to colonization, conversions, and cultural assimilation. In Africa, the slave trade altered coastal states and affected societies inland. In North America, conflicts between Europeans and indigenous peoples ensued, with introduced diseases causing significant population declines. New crops from the Americas, introduced to Asia, contributed to population growth. The global silver trade involving Ming China impacted the world economy. Chinese demand for silver, primarily from the Americas, led to economic challenges in Ming China. European markets for luxury goods transformed as global commodities entered, while the economic center shifted to Western Europe. Antwerp became a hub of international trade, and the Dutch Golden Age, linked to the Age of Discovery, flourished. The Portuguese established trade with China, culminating in the establishment of

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[151] Haartsen, T., & Hacquebord, L. (1996). 400th anniversary of the discovery of Spitsbergen by the Dutch explorer Willem Barentsz. In *exhibition of the discovery and the early Dutch exploration and exploitation of Spitsbergen, 1996*.

[152] Cook, J., & King, J. (2021). Voyage to the Pacific Ocean. In *Travels, Explorations and Empires, 1770-1835, Part I Vol 1* (pp. 87-95). Routledge.

Short, B. H. (2020). James Cook's first Pacific voyage: alleged scurvy-freedom unmasked. *Internal Medicine Journal*, *50*(3), 378-380.

[153] Boivin, N., Fuller, D. Q., & Crowther, A. (2012). Old World globalization and the Columbian exchange: comparison and contrast. *World Archaeology*, *44*(3), 452-469.

Macau. China's major exports included silk and porcelain, influencing European tastes. The influx of gold and silver from the New World contributed to inflation in Spain, influencing the rise of the bourgeoisie and impacting local economies. The economic changes triggered by the Columbian Exchange and global trade were complex and far-reaching.[154]

9.2. Mercantilism and Prices

The center of European trade and economic activity shifted from the Mediterranean and the North Sea region to the Atlantic coastline. This marked the beginning of the interconnection of trade within and outside Europe, leading to a unified capitalist system in global trade. Long-distance trade initially focused on luxury goods and spices, characterized by a small quantity of high-profit items with feudal features. Later, there was an influx of mass-produced goods from the colonies, particularly by the English, French, and Dutch. The predominant shift was towards state-supervised and primarily protected private trade. Private traders and their companies directly involved in trade organization and execution took on the responsibility, with the state ensuring the conditions and security of these activities (e.g., East India Company, Muscovy Company, London Stock Exchange).

Mercantilism

Western Europe reinvested the profits derived from trade, adhering to mercantilist principles, thus reinforcing its economic position, while the Spaniards and Portuguese spend on extravagance. The **essence of mercantilism** lies in the state control or support of trade,[155] and create wealth for the nation with the pre-modern industrialization by the homo manufacturabilis.[156] It represents the first theory of the trade balance, asserting that a country's wealth depends on its trade surplus. The exclusive form of money, namely precious metals like gold and silver, is attracted into the country while preventing their outflow, accumulating gold reserves. According to this theory, the proponents believe that this leads to an increase in the price

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[154] Nunn, N., & Qian, N. (2010). The Columbian exchange: A history of disease, food, and ideas. *Journal of Economic Perspectives*, *24*(2), 163-188.
[155] Biju, H., Jaheer Mukthar, K. P., Ramírez-Asís, N., Castillo-Picon, J., Pelaez-Diaz, G., & Silva-Gonzales, L. (2024). A Systematic Literature Review on Mercantilism. *Artificial Intelligence and Transforming Digital Marketing*, 739-749.
[156] Rössner, P. R. (2023). Creating Wealth: Homo Manufacturabilis and the Wealth of Nations. In *Managing the Wealth of Nations* (pp. 148-163). Bristol University Press.

level and production while interest rates decrease, ultimately increasing industrialists' profits.[157] Importantly, the inflow of precious metals is considered crucial for the overall economic health. Subsequently, they advocate for imports, preferably from colonies, and emphasize protectionism through protective tariffs to shield the domestic industry. In the late 18th century, Adam Smith criticized many aspects of the mercantilist theory, marking a shift in economic thought.[158]

The **Spanish mercantilism** was characterized by a focus on wars and geographical conquests, resulting in the acquisition of gold and silver.[159] However, these precious resources were not directed towards development. The absence of a bourgeoisie in Spain meant a lack of spontaneously developing industry and trade. The enforcement of prohibitions on imports, an export ban on precious metals, and the imposition of fiscal tariffs were primarily geared toward defense. From 1550 onwards, Spain lifted the bans on imports and money exports, leading to its later status as one of Europe's poorest countries.

On the other hand, **English mercantilism** demonstrated a focus on intelligent laws that served the wealth of the bourgeoisie. This era witnessed the formation of trade capital and venture companies. Cromwell's Navigation Act (1651) was implemented, prohibiting the transportation of goods to English ports on foreign ships.[160] The Navigation Acts were a series of English laws enacted from 1651 to 1849, regulating and promoting English shipping, trade, and commerce domestically and with colonies. Initially established under the Commonwealth, these laws were reenacted during the Restoration and further expanded in 1660, 1663, 1673, and 1696.[161] However, the devel-

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[157] Magnusson, L. (2019). Mercantilism. In *The Elgar Companion to John Maynard Keynes* (pp. 296-301). Edward Elgar Publishing.
[158] Nissa, R. A., Septiyani, D. A., Qolby, M. H., & Salam, I. A. (2023, December). History of mercantilist and classical economic tought (Adam Smith). In *Conference on Linguistic, History & Geography* (p. 30).
[159] Smith, R. S. (1971). Spanish Mercantilism: A Hardy Perennial. *Southern Economic Journal*, 1-11. and Hamilton, E. J. (1932). Spanish mercantilism before 1700. In *Facts and Factors in Economic History: Articles by former Students of Edwin Francis Gay* (pp. 214-239). Harvard University Press.
[160] Zwierlein, C. (2022, November). Navigation Act (1651) und British Empire: Cromwells Vermächtnis. In *Oliver Cromwell und das Commonwealth* (pp. 145-184). Nomos Verlagsgesellschaft mbH & Co. KG.
[161] Clément, A. (2020). English Mercantilist Thought and the Matter of Colonies from the 17th to the First Half of the 18th Century. In *Colonial Adventures: Commercial Law and Practice in the Making* (pp. 127-164). Brill Nijhoff.

opment of free trade led to their repeal in 1849. Modernization efforts in Indian ports and production facilities resulted in an increasing flow of valuable raw materials suitable for processing back in England.[162] Among the prominent figures Thomas **Mun** (1571-1641) focused on the concept of balance of trade, where exports should exceed imports to bring in more gold and silver.[163] Believed in invisible exports, where services like shipping could contribute to the balance of trade. Gerard **Malynes** (1586-1641) advocated for government intervention in trade, and championed bullionism, emphasizing the importance of accumulating gold and silver as a measure of national wealth.[164] Josiah **Child** (1630-1699) influenced the development of British imperialism, and argued for aggressive expansion of colonies to secure raw materials and markets for manufactured goods.[165] As the director an later the governor of the East India Company, he supported its monopoly on trade with India. William **Petty** (1623-1687) introduced quantitative methods to economic analysis, considered an early pioneer of statistics and econometrics; defined wealth as labor embodied in land, highlighting the importance of productivity.[166]

In the context of **French mercantilism**, Barthélemy de Laffemas (1545-1612)[167] and Jean-Baptiste Colbert (1619-1683) played a key role by

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[162] Kearney, H. F. (1959). The political background to English mercantilism, 1695-1700. *The Economic History Review*, *11*(3), 484-496.

[163] Mun, T. (1621). *A Discourse of Trade from England Unto the East Indies* and Mun, T. (1628). *England's Treasure by Foreign Trade*. His son published after his death, Mun, T. (1664). *England's Treasure by Forraign Trade* or *the Balance of Forraign Trade is the Rule of Our Treasure*

Hinton, R. W. (1955). The mercantile system in the time of Thomas Mun. *The Economic History Review*, *7*(3), 277-290.

[164] Malynes, G. (1601): The Canker of England's Commonwealth

De Ruysscher, D. (2020). Conceptualizing Lex Mercatoria: Malynes, Schmitthoff and Goldman compared. *Maastricht Journal of European and Comparative Law*, *27*(4), 465-483.

Harris, J. G. (1999). 'The canker of England's Commonwealth': Gerard de Malynes and the origins of economic pathology. *Textual Practice*, *13*(2), 311-327.

[165] Child, J. (1668). *Brief Observations concerning Trade and the Interest of Money* (1668), and Child, J. (1668, 1690). *A New Discourse of Trade*

Jessen, M. H. (2016). Trade is a Kind of Warfare: Mercantilism and Corporations in the Thought of Josiah Child. *Intellectual History of Economic Normativities*, 41-55.

[166] Petty, W. (1662). *Treatise of Taxes and Contributions*.

Aspromourgos, T. (1995). *On the origins of classical economics: distribution and value from William Petty to Adam Smith*. Routledge.

Ullmer, J. H. (2004). The macroeconomic thought of Sir William Petty. *Journal of the History of Economic Thought*, *26*(3), 401-413.

[167] Perrotta, C. (2022). Laffemas, founder of French mercantilism. *Revue d'histoire de la pensée économique*, *2022*(14), 207-230.

implementing economic measures and fostering the development of new industries such as carpets, tapestries, mirrors, and silk.[168] Colbert's policies contributed to France's economic growth and prosperity during the reign of Louis XIV, while the country saw an increase in manufacturing, trade, and naval power. He implemented various policies to achieve these goals: (i) established tariffs and restrictions on imports to protect domestic industries; (ii) provided subsidies and other incentives to encourage domestic production and exports; (iii) developed infrastructure projects like canals and roads to improve trade and commerce; and (iv) established trading companies to expand French overseas trade. With the support of export trading, customs fined imports, which can be regarded as the first form of protectionism.[169] The population policy included encouraging population growth, prohibiting emigration, and providing tax incentives for raising more children. Despite these efforts, a fully developed bourgeoisie did not emerge. State-run manufactories existed but were not particularly efficient.

In the **German and Austrian lands**,[170] Philipp Wilhelm von Hörnigk (1640-1714) advocated for an economic philosophy encapsulated in his book, 1684, Oesterreich über alles, wann es nur will (Austria above all, if it only wills).[171] He formulated nine principles of mercantilism, which are as follows:

- Cultivate all cultivable land and uncover all gold and silver mines.
- Process all processable raw materials domestically.
- Ensure a workforce for the implementation of these measures.
- Do not hoard gold and silver; instead, circulate them.
- Encourage the population to suffice with domestic products.
- Acquire necessary foreign goods through barter, not with money.
- Import raw materials, process them domestically, and pay wages domestically.

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[168] Al-Bashayreh, A. I. (2023). The French Minister Colbert and His Economic Policy and Reforms under the Reign of Louis XIV 1661-1683. *Journal of Namibian Studies: History Politics Culture*, *33*, 227-247.

[169] Asakura, H. (2003). *World history of the customs and tariffs*. World Customs Organization. 46.

[170] Magnusson, L. (2021). Cameralism as Sonderweg of German Mercantilism?. *History of Political Economy*, *53*(3), 389-405.

[171] von Hörnigk, P. W. (1684). *Oesterreich Uber alles wann es nur will. Das ist wohlmeinender Fürschlag wie mittelst einer wolbestellten Lands-Oeconomie, die Kayserl. Erbland in kurzem über alle andere Staat von Europa zu erheben / und mehr als einiger derselben / von denen andern Independent zu machen.*
Von Hörnigk, P. W. (1965). Austria over all if she only will. *Early Economic Thought*.

- Strive to increase the export of finished goods rather than raw materials; export goods for gold and silver.
- Lastly, avoid importing what can be produced domestically, as paying two coins for a domestic product is preferable than one coin for a foreign one.

Smith articulated several crucial **critiques** of mercantilist principles. Firstly, he illustrated that mutually initiated trade benefits both participating parties. Secondly, he contended that specialization in production facilitates economies of scale, leading to enhanced efficiency and growth. Lastly, Smith argued against the detrimental impact of the collusive relationship between government and industry on the general population. While mercantilist policies aimed to favor the government and commercial class, the laissez-faire doctrines, originating from Smith, construed economic well-being in a broader context, encompassing the entire populace.[172] He questioned whether protectionism and large reserves of gold or other precious metals are necessary for a country's economic success. This economic policy, devised by traders, was then sold to kings and politicians who lacked understanding of economic affairs, as exemplified by the South Sea and Mississippi bubbles in 1720. The publication of Smith's The Wealth of Nations (1776) is commonly viewed as marking the conclusion of the mercantilist era.[173] Additionally, the laissez-faire principles of free-market economics mirror a broader disillusionment with the imperialistic policies of nation-states. The Napoleonic Wars in Europe and the Revolutionary War in the United States signaled the conclusion of the era of military confrontation in Europe and the mercantilist policies that underpinned it.

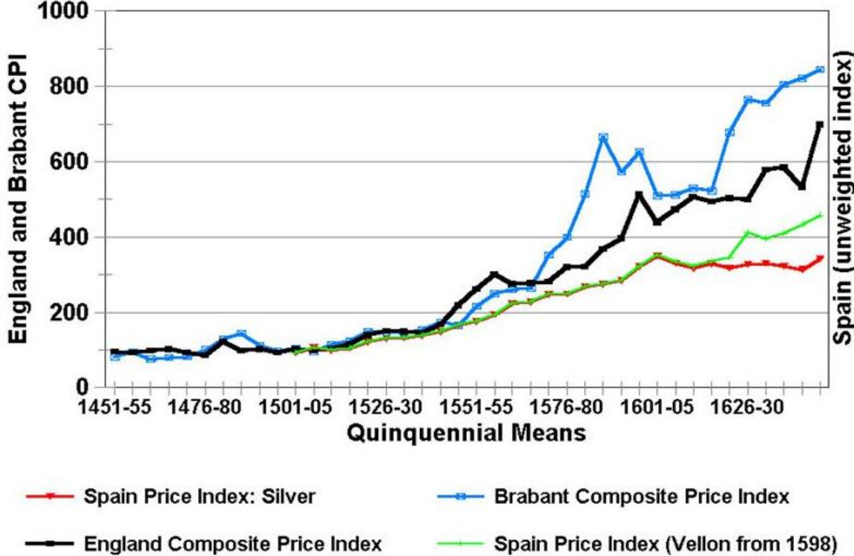
[172] Hanley, R., & Paganelli, M. P. (2014). Adam Smith on money, mercantilism, and the system of natural liberty. *Money and Political Economy in the Enlightenment, Oxford University Studies in the Enlightenment. D. Carey (ed.), Oxford, Voltaire Foundation, Forthcoming*.

[173] Tame, C. R. (1978). Against the New Mercantilism: The Relevance of Adam Smith. *Il Politico*, 766-775.

Price Revolution

The **Price Revolution** in Western Europe, spanning from the late 15th century to the early 17th century, marked a significant inflationary cycle.[174] During this period, average prices surged sixfold over the course of 150 years. Several interconnected factors notably influenced this economic phenomenon. One key contributing factor was the **influx of precious metals** from the New World, particularly gold and silver. The Habsburg-Spanish Empire, in particular, experienced a substantial flow of these metals from the Americas, mitigating the prior scarcity of currency in Europe. This increased availability of precious metals, especially silver, was pivotal in shaping the global economy and contributing to rising prices.

Price Revolution, price indexes: England, Brabant, Spain (1451-1650, 1500=100)



Source: The General Crisis - Price Revolution of 17th century (https://www.teacherspayteachers.com/Product/The-General-Crisis-Price-Revolution-of-17th-c-8642158)

Additionally, the Price Revolution coincided with a period of **population growth** in Europe. The Black Death (1347-1353) had previously devastated the population, but a demographic recovery ensued in the aftermath of

[174] Fisher, D. (1989). The price revolution: a monetary interpretation. *The Journal of Economic History*, *49*(4), 883-902.
Hammarström, I. (1957). The 'price revolution'of the sixteenth century: some Swedish evidence. *Scandinavian Economic History Review*, *5*(2), 118-154.

these plague epidemics. The increased population, combined with the arrival of precious metals from the New World, likely contributed to the initiation and perpetuation of the inflationary process. The consequences of the Price Revolution were multifaceted, impacting various aspects of society, including commerce, agriculture, and social structures. The economic dynamics of Western Europe underwent significant transformations during this period, setting the stage for subsequent developments in the early modern era.

9.3. International Trading Countries and Companies

During the 16th to 18th centuries, international trade underwent significant transformations, with various countries and companies emerging as key players in global commerce. England, France, the Netherlands, and Japan each played unique roles in shaping the international trade during this period. While England and France expanded their overseas colonies and established vast trading networks, the Netherlands became a dominant force in maritime trade, thanks to its strategic location and innovative trading practices. Meanwhile, Japan adopted a policy of isolation, known as Sakoku, limiting foreign trade and contact with the outside world.

England

The primary purpose of establishing and separating the Church of England from the papal authority in 1534 by the Act of Supremacy was to annul Henry VIII's marriage. There is no unambiguous evidence, but the English Reformation could also be a ground to reconsider other papal approvals e.g. the Treaty of Tordesillas (1494) and other treaties which made new opportunities in international relations and trading.[175] The **defeat of the Spanish Armada** by Sir Francis Drake in 1588 was a pivotal event in the history of naval warfare. It marked a significant turning point in the Anglo-Spanish conflict,[176] which had deep-rooted causes, including religious differences, economic competition, and political tensions. King Philip II of Spain sought to restore Catholicism in England and eliminate the Protestant influence of

[175] Branch, L. (2017). Introduction: Mercantile Institutions and Individuals during the English Reformation. In *Faith and Fraternity* (pp. 1-17). Brill.
Higman, F. M. (2017). Ideas for Export: Translations in the Early Reformation. In *Renaissance Culture in Context* (pp. 100-113). Routledge.
[176] Ruiz Mas, J. (2023). The propagandistic narration of the defeat of the Spanish Armada and the mythical construction of sir Francis Drake in Romantic Britain.
Cuevas, A. (2021). Anglo-Spanish Relations in the Sixteenth Century: The Twisted Road to the Spanish Armada. *The UC Santa Barbara Undergraduate Journal of History*, *1*(2).

Queen Elizabeth I. The Spanish Armada suffered significant losses during the retreat due to storms and attacks by the English. The defeat of the Armada marked a triumph for England, boosting national pride. This event is often seen as a turning point in naval history, highlighting the effectiveness of naval tactics and strategy. This event introduced England to the international maritime trade. Richard Hakluyt (1552-1616), the English geographer, noted for his political influence, his voluminous writings, promoted the Elizabethan overseas expansion, especially the colonization of North America. His major publication, The Principall Navigations, Voiages and Discoveries of the English Nation (1589), provides almost everything known about the early English voyages to North America.[177]

Trade is the channel through which prosperity flows into our country
James I (1622)

Who rules the sea rules the trade;
who rules the world's trade, rules the world's treasures,
consequently the whole world.
Walter Raleigh (1615, 1650)

It is not our conquest, but our commerce; it is not our swords but our sails that first spread the English name in Barbary, and thence came to Turkey, Armenia, Muscovy, Arabia, Persia, India, China and over and about the world; it is the traffic of their merchants, and the boundless desires of that nation to eternize the English honor and name, that have induced them to sail, and seek into all the corners of the earth.
Lewes Roberts, Treasure of Traffic, 1641

The **Navigation Act** of 1651 imposed restrictions on foreign vessels participating in coastal trade within England. It mandated that all goods imported from the continent of Europe had to be transported on either an English vessel or a vessel registered in the country of origin of the goods. Additionally, any trade between England and its colonies was mandated to occur exclusively through English or colonial vessels. The Staple Act of 1663 expanded upon the Navigation Act's provisions by stipulating that all colonial exports to Europe must first be landed through an English port before being re-exported to Europe.[178] The **navigation policies** implemented by France,

[177] Hakluyt, R. (1589), Quinn, D. B., Skelton, R. A., & Quinn, A. M. (1965). The principall navigations, voiages and discoveries of the English nation.
[178] Pollio, G. (2022). Trade and Navigation Acts. In *The Rise and Fall of Britain's North American Empire: The Political Economy of Colonial America* (pp. 113-125). Cham: Springer International Publishing.

England, and other nations were primarily targeted at countering the dominance of the Dutch in commercial maritime activities during the sixteenth and seventeenth centuries.

When Britain first, at Heaven's command
Arose from out the azure main;
This was the charter of the land,
And guardian angels sung this strain:
"Rule, Britannia! rule the waves:
"Britons never will be slaves."
James Thomson (1740)

During the 16th and 17th centuries, England established several prominent **merchant companies** that played a crucial role in shaping its economic and colonial expansion.[179] Adopting a phrase from Francis Bacon (1561-1626), these businessmen were the merchants of the light, who brought not only money but also enlightenment to the corruptions of an Old World; and ruled the oceans of wealth.[180]

The **Company of Merchant Adventurers to New Lands**, initially established as a joint stock association, originated from private exploration and enterprise. Although intended for incorporation by King Edward VI in 1553, the company eventually secured its full royal charter in 1555. This development marked the inception of English trade with Russia, Persia, and other regions.[181] Over time, the company acquired the informal and later formal designation of the Muscovy Company. Founded in 1555, the **Muscovy Company** was chartered by the English Crown to trade with Russia, Ivan IV, the Terrible. The company played a significant role in developing trade routes between England and Russia, focusing on commodities such as fur, timber, and Russian goods. Upon Thomas Gresham's proposal from 1565 (modelled on the Antwerp bourse[182]), the **Royal Exchange** was officially opened in 1571 by Queen Elizabeth I, who awarded the building its royal title and a

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[179] Smith, E. J. (2020). English trading companies and the sea, 1550–1650. *The Routledge Companion to Marine and Maritime Worlds 1400-1800.*

[180] Bacon, F. (1626). The Advancement of Learning and New Atlantis. Oxford, 1974. 288, 296.

Howarth, D. (2023). *Adventurers: The Improbable Rise of the East India Company: 1550-1650*. Yale University Press.

[181] Arel, M. S. (2019). *English Trade and Adventure to Russia in the Early Modern Era: The Muscovy Company, 1603–1649*. Rowman & Littlefield.

[182] The bourse at Antwerp, Belgium, was first opened in 1531 as the world's first purpose-built commodity exchange. The bourse has been described as "the mother of all stock exchanges"

licence to sell alcohol and valuable goods.[183] Until the 17th century, the Royal Exchange primarily served as a venue for exchanging goods. Chartered in 1579, the **Eastland Company** focused on trade with the Baltic region, including countries like Denmark, Sweden, and Poland. Its primary commodities included grain, timber, and naval stores, supporting England's naval and economic interests.[184] Founded in 1581, the **Turkey Company** (later merged with the Levant Company) concentrated on trade with the Ottoman Empire, including Constantinople. The company exchanged goods such as woolen cloth, lead, and tin for Eastern commodities. When the Venice Company (1583) and the Turkey Company (1581) merged (because their charters had expired) the **Levant Company** was established in 1592 and granted a monopoly on English trade with the Ottoman Empire and other Eastern Mediterranean regions.[185] The company facilitated trade in goods like spices, silk, and textiles, contributing to England's commercial presence in the Levant.

Chartered in 1600, the **Honourable East India Company** (HEIC) became one of the era's most influential and powerful trading companies.[186] Initially focused on trade with the Indian subcontinent, the HEIC later expanded its influence across Southeast Asia and played a pivotal role in British colonial expansion.[187] The company, established by Queen Elizabeth I's royal charter on December 31, 1600, secured trading privileges in India and other Far Eastern countries. The charter granted a 15-year monopoly on trade in the East Indies. By 1612, the company had acquired the lucrative trading rights of the Mogul Empire, the wealthiest power in the region. However, by the mid-18th century, the empire's influence waned, prompting the company to defend its interests with a private army of 260,000. Between 1757 and 1858, the organization transitioned from a classic trading company to the ruler of India, gaining necessary governmental and military privileges. In the Allahabad Treaty of 1765, the Mogul Empire ceded tax collection and judicial authority over Bengal and Bihar to the Company, leading to plundering

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[183] Michie, R. (2001). *The London stock exchange: A history*. OUP Oxford.

[184] Fisher, F. J. (2023). London's Export Trade in the Early Seventeenth Century 1. In *The Growth of English Overseas Trade in the Seventeenth and Eighteenth Centuries* (pp. 64-77). Routledge.

[185] Vlami, D. (2014). *Trading with the Ottomans: The Levant Company in the Middle East*. Bloomsbury Publishing.

[186] Howarth, D. (2023). *Adventurers: The Improbable Rise of the East India Company: 1550-1650*. Yale University Press.

[187] Keay, J., & Blethen, H. T. (1995). The honourable company: a history of the English East India Company. *History: Reviews of New Books*, *24*(1), 21-22.

and famine.[188] At its zenith, the Company not only supervised Asian trade but also governed territories larger than those directly controlled by the United Kingdom. In 1813, the Company's Indian trade monopoly was abolished. Following the Indian uprisings of 1857/58, known as the Sepoy Mutiny, it lost its governing rights. In 1874, the British East India Company was completely dissolved, and the United Kingdom absorbed all its assets.

The **Virginia Company** was one of the earliest joint-stock companies in England, chartered in 1606. The company faced numerous challenges, including harsh conditions, conflicts with Native Americans, and economic struggles.[189] In 1624, due to financial difficulties and the failure of the Jamestown settlement to generate expected profits, the Virginia Company's charter was revoked and dissolved. The **Massachusetts Bay Company** was established in 1629 by Puritan businessmen seeking religious freedom and economic opportunities.[190] Chartered in 1660, the **Royal African Company** was a British mercantile company focused on the Atlantic slave trade. The company faced competition and controversies, and its monopoly was eventually broken in the early 18th century. The company played a significant role in the transatlantic slave trade during a period when the demand for labor in the American colonies was high.[191] Founded in 1670, the **Hudson's Bay Company** focused on fur trading in North America, particularly around the Hudson Bay region. The company played a vital role in exploring and establishing trade relationships in the northern parts of the American continent. The **South Sea Company** was established in 1711 to exploit trade with Spanish South America.[192] It gained notoriety during the South Sea Bubble in 1720

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[188] Gilding, B. J. (2020). *British Politics, Imperial Ideology, and East India Company Reform, 1773-1784* (Doctoral dissertation, University of Cambridge).
[189] Leng, T. (2020). *Fellowship and Freedom: The Merchant Adventurers and the Restructuring of English Commerce, 1582-1700*. Oxford University Press.
[190] Rose-Troup, F. (2009). *The Massachusetts Bay company and its predecessors*. Genealogical Publishing Com.
Robbins, W. G. (1969). The Massachusetts Bay Company: An Analysis of Motives. *The Historian*, *32*(1), 83-98.
[191] Svalastog, J. M. (2021). *Mastering the Worst of Trades: England's Early Africa Companies and their Traders, 1618–1672* (Vol. 39). Brill.
[192] Morgan, W. T. (1929). The Origins of the South Sea Company. *Political Science Quarterly*, *44*(1), 16-38.
Price, G., & Whatley, W. (2021). Did profitable slave trading enable the expansion of empire?: The Asiento de Negros, the South Sea Company and the financial revolution in Great Britain. *Cliometrica*, *15*, 675-718.
Williams, G. (2023). 'The Inexhaustible Fountain of Gold'1: English Projects and Ventures in the South Seas, 1670-1750. In *Buccaneers, Explorers and Settlers* (pp. I27-I53). Routledge.

when its stock prices soared to unsustainable levels before collapsing. The episode led to significant financial losses for investors and damaged public trust in joint-stock companies. The South Sea Company's failure is often cited as one of the earliest examples of an economic bubble and speculative excess.[193] These merchant companies were instrumental in establishing England's presence in various parts of the world, contributing to the growth of its overseas trade and laying the foundation for later colonial endeavors.[194]

English Merchant Companies

Year	Company	Merchant
1319	**The Company of Merchants of the Staple of England**	Wool export
1407	**Company of Merchant Adventurers of London**	Raw cloth monopoly
1553	**Company of Merchant Adventurers to New Lands**	The exploration of a new, northern trade route towards India and the Spice Islands (Indonesia).
1555-1917	**Muscovy Company** or Russia Co.	Fur, timber, and Russian goods
1579-1672	**Eastland Company**	Scandinavian and Baltic states
1581	**Turkey Company**	Monopoly in the region following the Anglo-Ottoman agreement
1583	**Venice Company**	English-made goods, woollen fabrics, eastern commodities, spices, currants, wine, and silk cloth
1585	**Barbary Company**	N-West Africa (Berbers) and the Caribbean region
1588 defeat of the Spanish Armada		
1592-1825	**Levant Company**	Merger between Turkey Co. And Venice Co; the establishment of commercial colonies, as well as political contact with the sultan
1600-1874	**Honourable East India Company**	
1606-1624	**Virginia Company**	First North American trading company, founding of Jamestown, later a colony

[193] Braggion, F., Frehen, R., & Jerphanion, E. (2020). *Does credit affect stock trading? Evidence from the South Sea Bubble* (No. 14532). CEPR Discussion Papers.
[194] Davis, R. (2022). English foreign trade, 1700–1774. In *The Atlantic Staple Trade* (pp. 145-163). Routledge.

1629-1692	**Massachusetts Bay Company**	Founding of Boston, later a colony
1660-1752	**Royal African Company**	West Africa - slaves
1670	**Hudson's Bay Company**	Rural Canada
1711-1720	**South Sea Company**	It was a notable financial bubble

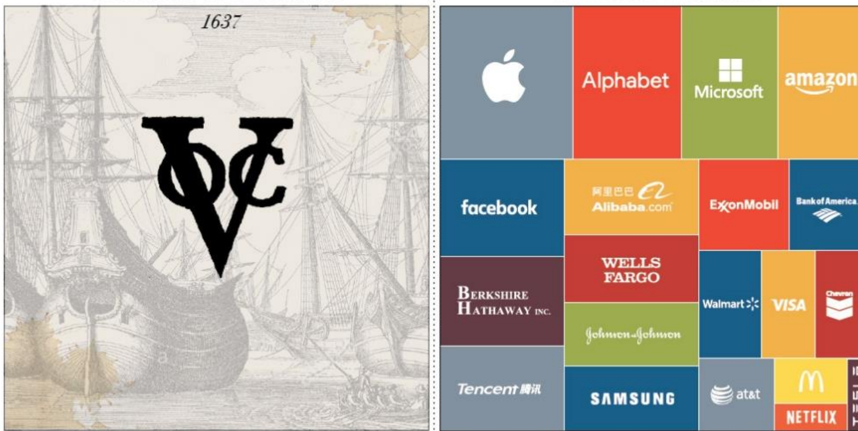
Source: own compilation of the author

Netherlands

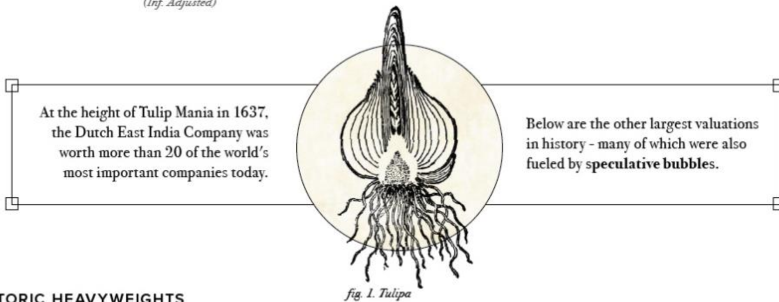
By the end of the 1500s, the Dutch were pushed out of the spice market in Lisbon, prompting them to seek direct sources. In the early 1600s, the Netherlands became a key player in global trade. The Dutch involvement in global trade commenced with the first expedition from Amsterdam to Southeast Asia in 1595. In 1598-99, a significant shipment carrying 600,000 pounds of spices and other East Indian goods arrived in Amsterdam, showcasing the economic potential of these ventures.

Vereenigde Oost-Indische Compagnie

DUTCH EAST INDIA COMPANY | 20 MODERN COMPANIES



$7.9 trillion (Inf. Adjusted) | *$7.9 trillion*



HISTORIC HEAVYWEIGHTS
Peak value (adj. for inflation)

Source: Fool, M., Ritholtz B., Titman S. (2017): The Most Valuable Companies of All-Time. (https://www.visualcapitalist.com/most-valuable-companies-all-time/)

The **United East India Company** (Vereenigde Oost-Indische Compagnie, VOC), established in 1602, played a dominant role in Dutch trade in the East until its dissolution in 1798. The company is associated with the inception of the first corporate logo (trademark). It also became the first multinational and publicly traded company and conducted their first initial public offering (IPO). It was granted with a 21-year state monopoly, which was later extended. The establishment of Jakarta (Batavia, Indonesia) is attributed to the VOC. Profits were notable, with the first ships loaded with pepper yielding a 400% return. Price differentials for cloves were 240 times; for nutmeg, goods acquired for 1 penny in Europe could be sold for 840 pennies.[195] In 1634, VOC ships transporting tulip bulbs contributed to the presumed stock market collapse, later called the Tulip Mania in 1637.

Along with the VOC, in the same year, 1602, the **Royal Exchange**, Amsterdam's stock exchange, was founded.[196] This is regarded as the first – and still functioning – real stock exchange with the securities market. The Dutch legacy in North America included the establishment of Nieuw Amsterdam (later New York) from 1609 to 1620, and this settlement endured until 1664.

France

France began establishing its colonial presence in North America with the foundation of Port Royal in 1605, marking the early phases of New France's development. Samuel De Champlain's founding of Quebec in 1608 was pivotal in French colonization efforts in the region. The **French East India Company** (Compagnie française pour le commerce des Indes orientales) was a trading company established in 1664 during the reign of Louis XIV. It was granted a monopoly on French overseas trade, particularly in the Indian Ocean region.[197] The company aimed to compete with the Dutch and British East India Companies in the lucrative spice and silk trade. The French East India Company played a significant role in French colonial expansion, with trading posts and settlements in India, Madagascar, and other regions. Despite facing financial challenges, conflicts with rivals, and changes in

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[195] Findlay, R., & O'Rourke, K. H. (2007). Preface to Power and Plenty: Trade, War, and the World Economy in the Second Millennium. *Introductory Chapters*. 179.

[196] Petram, L. O. (2011). *The world's first stock exchange: how the Amsterdam market for Dutch East India Company shares became a modern securities market, 1602-1700* (Doctoral dissertation, Universiteit van Amsterdam

Silber, K. (2014). The World's First Stock Exchange. *Financial History*, (110), 38.

[197] Wade, L. (2023). Privilege, Economy and State in Old Regime France: Marine Insurance, War and the Atlantic Empire under Louis XIV.

French politics, the company operated until 1794, when it was dissolved during the French Revolution.[198] The colonial influence extended beyond North America, with France engaging in Louisiana from 1682 to 1762 and the scope of French colonization further expanding in Africa from the 1830s.

The **maritime trade ordonnances** of Louis XIV were a series of laws and regulations governing the French merchant marine. Promulgated in 1681, they were designed to promote French maritime trade and commerce. The ordonnances covered a wide range of topics, including (i) the construction and maintenance of ships; (ii) the recruitment and training of seamen; (iii) the regulation of maritime trade; and (iv) the protection of French merchant ships from piracy and other threats.[199]

Other East India Companies

The **Danish East India Company** was established in 1612 based on the charter of King Christian IV. Its operations were the region of Tranquebar. The first company operated between 1616 and 1650. The second company existed between 1670 and 1729, however, in 1730 it was re-founded as the Asiatic Company and ceased operations in 1807.

Inspired by the successful Dutch and English companies, **Sweden** founded their first East India Company in 1626. However, it had to be reorganized in 1731 as the second Swedish East India Company, and in 1732, its first ship set sail for China. The company's headquarters were in Gothenburg. Its operation was short-lived as English competition soon forced it out of the market.

Under Emperor Charles VI (1711-1740), the **Austrian East Company** was established in Trieste in 1719, operating in the geographically disadvantageous Adriatic Sea, far from major global trade routes. Therefore, in 1722, Charles founded the **Austrian East India Company**, also known as the Ostend Company (Oostendse Compagnie), in Oostende, Southern Netherlands, which was part of Austria.[200] However, in 1731, during diplomatic negotia-

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[198] Cross, E. H. (2017). *The French East India Company and the Politics of Commerce in the Revolutionary Era* (Doctoral dissertation, Harvard University).

[199] Wade, L. (2023). 'The Honour of Giving My Opinion': General Average, Insurance and the Compilation of the Ordonnance de la marine of 1681. In *General Average and Risk Management in Medieval and Early Modern Maritime Business* (pp. 415-430). Cham: Springer International Publishing.

[200] Parmentier, J. (1993): The Private East India Ventures from Ostend: The Maritime and Commercial Aspects, 1715–1722. International Journal of Maritime History, 5 [2], 75–102.;

tions for the recognition of the Pragmatica Sanctio (Habsburg hereditary possessions were allowed to pass to a woman, Maria Theresa), Charles agreed to renounce Oostend and dismantle the company, seen as a competitor by England and the Netherlands. To enhance their strategic importance and economic potential, Charles VI began developing Trieste and Fiume (Rijeka) from1717.[201] The Austrian East India Company continued nominally, with a few private traders operating under its name. After the French Revolution, Austrian Netherlands fell under French occupation, and the company ceased to exist entirely. The Adriatic company operating in Trieste was granted new privileges by Emperor Joseph II in 1781 but went bankrupt in 1785.

Japan

Japan's engagement in international trade saw the introduction of a foreign trade licensing system in 1592 aimed at curbing smuggling and piracy. The **Closed-Door Policy** was implemented in 1639, known as Sakoku (鎖国 / 鎖國), which translates to locked or chained country.[202] This policy was enforced by the Tokugawa shogunate, led by Tokugawa Iemitsu, and it aimed to isolate Japan from the outside world, particularly Western influence. One of the key elements of the closed-door policy included the (i) prohibition of foreigners, especially European missionaries and traders, being expelled. (ii) The Japanese citizens were prohibited from traveling abroad. This measure aimed to prevent the exchange of ideas and technologies with other nations and maintain domestic stability. (iii) The limited foreign contacts were allowed through designated ports. Nagasaki, in particular, became a hub for limited trade and diplomatic interactions with the Dutch and Chinese. The Dutch East India Company was granted permission to maintain a trading post on Dejima, a small artificial island in Nagasaki Bay.[203] The shogunate (iv)

Parmentier, J. (2008): In the Eye of the storm: The influence of Maritime and Trade Networks on the Development of Ostend and Vice Versa during the Eighteenth Century. Research in Maritime History NO. 38. 67–80.

[201] Pelles M. - Zsigmond G. (2021): *A fiumei magyar kereskedelmi tengerészet története (1868-1921)*. Szülőföld Kiadó, Szombathely. 45.

Dubrovic, E. (2022): *A fiumei kereskedelmi társaságok története*. In: Pelles M. (ed.): *Pro minoritate folyóirat* 2022 ősz. 3-18.

[202] The term sakoku originates from the manuscript work Sakoku-ron (鎖國論) written by Japanese astronomer and translator Shizuki Tadao in 1801. Shizuki invented the word while translating the works of the 17th-century German traveller Engelbert Kaempfer concerning Japan

[203] Van Tan, N., & Hoa, D. T. T. (2023). Japan in relations with Portugal and the Netherlands under Tokugawa-A comparative perspective. *GLS KALP–Journal of Multidisciplinary Studies*, *3*(3), 1-11.

strictly controlled the flow of information by censoring foreign books and prohibiting the construction of large ships suitable for overseas travel. The policy was also motivated by the desire to (v) suppress the spread of Christianity in Japan. Christianity was seen as a potential threat to the shogunate's authority, and the government took measures to eradicate it.

This policy marked a significant shift in Japan's approach to international commerce. Japan's closed-door policy remained mainly in place for over two centuries until the mid-19th century when external pressures, particularly from the United States under Commodore Matthew Perry, led to the opening of Japan to the outside world with the signing of the Treaty of Kanagawa in 1854.[204] The policy profoundly affected Japan's internal development, preserving a unique cultural and social identity during this period of isolation.

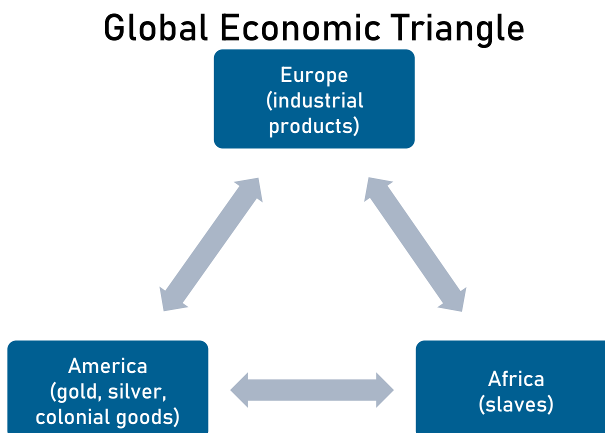
[204] McOmie, W. (2021). *The Opening of Japan, 1853–1855: A Comparative Study of the American, British, Dutch and Russian Naval Expedition to Compel the Tokugawa Shogunate to Conclude Treaties and Open Ports to Their Ships in the Years 1853-55*. Brill. Lengerer, H. (2020). The Kanghwa Affair and Treaty. *Warship International*, *57*(2), 110-131.

10. World Trade I.

The history of world trade unfolds through distinct phases, from commercial capitalism and classical liberalism to industrial capitalism, imperialism, and monopoly capitalism. In this exploration, we trace the evolution of world trade from commercial capitalism through the lens of classical liberalism, acknowledging objections to these principles. Industrial capitalism revolutionizes production, setting the stage for global economic transformations. The era of imperialism, marked by the scramble for Africa, emphasizes the dominance of monopoly capitalism. This period's consequences lay the groundwork for discussions on unequal development. Exploring theories like the product life cycle theory, Dutch disease, and immiserizing growth, we unravel the complexities of global economic disparities and challenges associated with unequal development. These theories provide insights into the mechanisms influencing international trade and resource distribution.

10.1. Commercial Capitalism, the Rise of Advantages

The era of **commercial capitalism** (1640-1780) marks the breakdown of the European feudal economy. This period is characterized by a significant surge in population across Europe, soaring from 40-50 million to 100 million. The physiocrats advocate for increased demand for agricultural products, contributing to the transformation of Western Europe into a hub for the capitalist mode of production and the establishment of a capitalist national economy.



Source: own compilation of the author

Within this epoch, a distinctive **global economic triangle** takes shape. As a major economic hub, Europe engaged in exporting and importing various manufactured goods (industrial products).[205] European nations explored and established colonies in Africa and the Americas to secure valuable resources and expand trade routes. Africa's role in the global triangle is to provide the supply of labor in the form of the transatlantic slave trade. Millions of Africans were forcibly transported to the Americas to work on plantations and contribute to economic activities. The Americas, particularly during the colonial era, were rich sources of precious metals like gold, silver, and other valuable colonial goods. The colonies in the Americas produced commodities like sugar, tobacco, and cotton, which were sent back to Europe for processing and trade. This triangular trade network formed a complex and exploitative economic system during the era of exploration and colonization, shaping the destinies of the nations and regions involved. Capital begins to accumulate within European territories, driving economic shifts and transformations. The international division of labor is a system based on both absolute and comparative advantages that emerges, guiding production to areas rich in raw materials and resources. The period witnessed the flourishing of commodity production and the rise of factories, shaping the economy and production of the time.

Classical Liberalism

The **classical liberalism**, spanning from the second half of the 18th century to the last third of the 19th century, was an ideological framework that emerged in countries successful in colonization, accompanied by the enrichment of a trading bourgeois class. It marked the second phase of the global economy. Key Principles of Adm **Smith** include the recognition of exchange and use **values**, emphasizing the importance of foreign trade and domestic production, thus synthesizing the ideas of preceding economic theories. The **labor theory of value** was a central concept, asserting that prices are determined by the labor invested, considering both direct labor and the capital involved.[206] The primary objective was to enhance labor efficiency, and the means involved the emphasis on exchange and the **specialization** of labor.

[205] Josipović, I., & Vujeva, M. (2021). Economic Aspects of Slavery in the Triangular Trade in the Early Modern Period. *Gazi Akademik Bakış*, *14*(28), 179-197.
Findlay, R. (1990). *The" triangular trade" and the Atlantic economy of the eighteenth century: a simple general-equilibrium model*. Princeton, NJ, USA: International Finance Section, Department of Economics, Princeton University.
[206] Peach, T. (2020). Adam Smith's Labor Theory of (Real) Value: The Case of a Misfiring Critique. *History of Political Economy*, *52*(1), 171-190.

The philosophy of **laissez faire** encapsulated the pursuit of self-interest, relying on market mechanisms and mutual benefits, advocating for non-intervention. Additionally, **laissez passer** argued that tariffs are detrimental unless they compensate for taxes. This ideology criticized mercantilist and physiocratic ideals, questioned the need for protectionism, and accumulated vast reserves of precious metals for a nation's economic success. Furthermore, they argue against the idea that these economic policies developed by traders were sold to incompetent monarchs and politicians, and later, e.g., in 1720, bubbles also appeared.

Absolute vs. Comparative Advantages

Absolute advantage	Comparative advantage
Adam Smith	David Ricardo
the ability to produce more or better products and services than someone else	the ability to produce goods and services at a lower opportunity cost; it is not necessary that in larger quantities

Source: own compilation of the author

Within specialization, the **absolute advantage** refers to the capacity of an economic actor – whether it be an individual, a company, or a country – to generate a greater quantity of goods, products, or services while utilizing the same amount of resources.[207] Alternatively, it can mean producing goods and services at a lower unit cost, requiring fewer input expenses. A country has an absolute advantage if it can produce a good using fewer resources than another country. First introduced by Adam **Smith** in 1776 within the context of international trade, this concept is based on the presumption that labor is the sole input. In essence, absolute advantage is an international trade theory suggesting that certain countries can produce more efficiently than others. Countries with an absolute advantage can opt to specialize in producing and selling specific products or services. The surplus generated from this specialization can then be utilized to procure other goods and services. The determination of absolute advantage hinges on a straightforward comparison of labor productivity. The country or entity demonstrating higher labor productivity in producing a particular good or service is said to have an absolute advantage. This advantage plays a pivotal role in guiding strategic decisions in international trade.

[207] Schumacher, R. (2012). Adam Smith's theory of absolute advantage and the use of doxography in the history of economics. *Erasmus Journal for Philosophy and Economics*, *5*(2), 54-80.

If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it off them with some part of the produce of our own industry employed in a way in which we have some advantage. The general industry of the country, being always in proportion to the capital which employs it, will not thereby be diminished [...] but only left to find out the way in which it can be employed with the greatest advantage.

Adam Smith

Absolute Advantage

Number of working hours per unit				Opportunity cost of alternative production	
		Cloth	**Wine**	cloth production instead of wine	wine production instead of cloth
England		**80**	100	**100/80 = 1.25**	80/100 = 0.8
Portugal		120	**90**	90/120 = 0.75	**120/90 = 1.33**
Adv.	England	**120/80=1.5**	90/100=0.9		
	Portugal	80/120=0.66	**100/90=1.11**		
Number of working hours after specialization and production					
England		**80 + 100**	**0**	production (80+100)÷80 = 2.25 units of cloth	
Portugal		0	**90 + 120**	production (90+120)÷90 = 2.33 units of wine	
				SUM: 4.58 units	

Source: own compilation of the author

This table illustrates the concept of absolute advantage, which states that a country can produce a good more efficiently than another country if it requires fewer resources to produce a unit of that good. In this example, England has an absolute advantage in producing cloth, as it takes 80 hours to produce one unit of cloth, while Portugal requires 120 hours. Similarly, Portugal has an absolute advantage in producing wine, requiring 90 hours to produce one unit of wine, while England requires 100 hours. The table also demonstrates the concept of opportunity cost, which refers to the value of the following best alternative that must be forgone when making a decision. For each country, the opportunity cost of producing one unit of cloth is the number of units of wine that could have been produced instead. Finally, by specializing in the production of the goods in which they have an absolute advantage, England can produce 2.25 units of cloth, and Portugal can produce 2.33 units of wine. By trading with each other, they can consume more than they could have produced on their own. In total, they can produce 4.58 units of goods, an increase of 1.58 units compared to the situation without trade. A country has an absolute advantage if it can produce a good using fewer resources than another country.

Observing the countries, it is possible that neither party possesses any absolute advantage; in this case, according to his theory, they should not engage in trade but do trade anyway. The answer was given by David Ricardo, in 1817,[208] with the concept of comparative advantages.

According to **Ricardo**, within specialization, **comparative advantage** refers to the ability of an economic actor (individual, company, or country) to produce goods and services at a lower opportunity cost (or marginal cost) than other economic actors.[209] It explains why countries engage in international trade even if the labor force of another country is more efficient in producing each (or both) goods. Suppose two countries capable of producing two goods participate in the free market. In that case, each can increase overall consumption by exporting the goods in which it has a comparative advantage and importing the other goods, assuming differences in labor productivity between the two countries. The majority of international trade is based on comparative advantage rather than absolute advantage. In free trade, one actor will produce more (and consume less) of the product in which it has a comparative advantage.[210]

Comparative Advantage

Number of working hours per unit				Opportunity cost of alternative production	
		Cloth	**Wine**	cloth production instead of wine	wine production instead of cloth
England		100	120	**120/100 = 1.2**	100/120 = 0.83
Portugal		**90**	**80**	80/90 = 0.88	**90/80 = 1.125**
Adv.	England	90/100=0.9	80/120=0.66		
	Portugal	**100/90=1.11**	**120/80=1.5**		
Number of working hours after specialization and production					
England		**100 + 120**	**0**	production (100 +1 2 0)÷ 10 0 = 2.2 units of cloth	
Portugal		0	**90 + 80**	production (90+ 80) ÷ 8 0 = 2.125 units of wine	
				SUM: 4.325 units	

Source: own compilation of the author

[208] Ricardo, D. (1817). On the Principles of Political Economy and Taxation. John Murray, 1817. and Ricardo, D. (1895). *The first six chapters of the principles of political economy and taxation of David Ricardo, 1817*. Macmillan and Company.
[209] Maneschi, A. (2008). How would David Ricardo have taught the principle of comparative advantage?. *Southern economic journal*, *74*(4), 1167-1176.
[210] Irwin, D. A. (2017). Ricardo and comparative advantage at 200. *Cloth for Wine? The Relevance of Ricardo's Comparative Advantage in the 21st Century*, 7-13.

In this case, Portugal has absolute advantages both for clot and wine. However, the two countries still have different opportunity costs for the alternative production; therefore, they have different comparative advantages in producing cloth and wine. The opportunity cost of producing one unit of cloth in England is 1.2 units of wine, while the opportunity cost of producing one unit of cloth in Portugal is 0.88 units of wine. In England, within domestic trade, 100/120 = 0.83 wine, is given for one cloth, but in Portugal, 90/80 = 1.125 wine, therefore, the English should take cloth to Portugal for wine. This means England has a comparative advantage in producing cloth because it can produce cloth at a lower opportunity cost than Portugal. Comparative advantage is the ability of a country to produce a good or service at a lower opportunity cost than another country. When countries specialize in producing goods they have a comparative advantage in, they can produce more of each good and trade with each other to get the goods they need. In this example, England should specialize in producing cloth, while Portugal should specialize in producing wine. So, if each country specializes, it increases the total global production of both products; England can produce 2.2 units of cloth, while Portugal can produce 2.125 units of wine. Furthermore, if both countries specialize and England trades 1.2 units of wine for 1.125 units of wine, then both countries consume at least one unit of wine and wine, leaving an additional 0-0.2 units of wine and 0-0.125 units of wine for consumption/export. for purpose. As a result, both England and Portugal can consume more cloth and wine due to free trade than in autarky (closed economy). By specializing and trading, the two countries can produce a total of 4.325 units of cloth and wine, which is more than they could produce if they tried to produce both goods. This theory suggests that countries should specialize in producing and exporting goods and services in which they have a comparative advantage, meaning they can produce more efficiently than other nations.

Objections

The model's **limitations** include focusing on only two goods and two countries, reflecting a bilateral perspective.[211] Additionally, the labor theory of value, suggesting that value is expressed according to labor content, may not align with real-world scenarios where value is often measured in monetary terms or prices. Another assumption is full employment, which deviates

[211] Schumacher, R. (2012). *Free trade and absolute and comparative advantage: a critical comparison of two major theories of international trade* (Vol. 16). Universitätsverlag Potsdam.

from the actual state of many economies. The model also overlooks trade costs, neglecting the impact of shipping costs and the role of infrastructure development. The supply-side theory, emphasizing the supply perspective and treating demand as fixed, fails to consider the elasticity of demand. The assumption of perfect mobility for production factors, such as labor and capital, might not hold true in all situations. While the model assumes free trade with unrestricted movement of goods between countries, it acknowledges the potential for governments to limit trade through protectionist policies. Furthermore, the model assumes full specialization and disregards the costs and benefits associated with specialization, such as economies of scale. It presents a static view by assuming fixed quantities and qualities of resources, overlooking the dynamic nature of growth and development. Finally, the model may not directly apply to developing countries, where factors like full employment, changing labor and capital qualities, technological advancements, and resource exploration are more prevalent.

The concept of **international economic balance** involves several mechanisms to maintain equilibrium. The automatic equilibrium mechanism, often referred to as the "gold flow mechanism, and the flexible price level mechanism play crucial roles in this context. Regarding **international specialization**, historical perspectives on the division of labor vary. Initially characterized by a **colonial-type division of labor**, the evolution of this concept includes discussions on absolute advantages (as outlined by Smith) and comparative advantages (as proposed by Ricardo). The latter involved analyzing the Portugal-England trade dynamics, particularly in wine and cloth.

However, this approach faced criticism, notably from Germany and Austria. Georg Friedrich **List** (1789-1846), a prominent figure in economic thought, argued that the principles of free trade predominantly serve the interests of developed countries. This perspective was influential in shaping economic policies. List was a proponent of **economic nationalism**, emphasizing the importance of protecting domestic industries through tariffs and other trade barriers.[212] He argued that this approach was necessary for developing a nation's economy. List is known for the **infant industry** argument, which suggests that young and developing industries need protection from foreign competition until they become strong and competitive on their own. He recognized the significance of railway infrastructure for economic development and advocated for the construction of railways as a means to connect

[212] List, F. (1841). *Das nationale System der politischen Ökonomie*. Stuttgart/Tübingen
List, F. (1841). *National system of political economy*. Longmans, Green, and Company

regions, facilitate trade, and spur industrialization. The theoretical framework of English classical economics, rooted in economic freedom, expresses England's global dominance. His core economic principle posits that free trade is only beneficial when partner countries are roughly equally developed. In cases of imbalance, the economically stronger exploits the weaker, necessitating protective tariffs to shield the less developed industry until it reaches parity with its partner. List strongly criticized labor theory-based economics, asserting its focus on exchange value from the traders' perspective. His primary focus was on industrial development, advocating for the abolition of tariffs between German provinces and introducing common external protective tariffs. He viewed economics as a national science, marked by strong nationalism, contrasting with his perception of Adam Smith's system as cosmopolitan. While List did not consider protective tariffs as an eternal development condition, he argued that once an underdeveloped country catches up, the protective tariff system should transition to free competition.

In the context of Hungary, Lajos Kossuth (1802-1894), influenced by List's insights, realized that "*without industry, the nation is a one-armed giant*." This recognition emphasized the imperative of establishing an independent national industry. However, contrary to the liberal principles of free trade, List and others advocated for protective tariffs. Their concern stemmed from the fear that competition from Czech and Austrian industries might stifle Hungarian initiatives within a common customs territory. This stance reflects the complex and evolving nature of international economic theories and policies. The development of the port of Fiume in Hungary between 1870-1913 can be mentioned as a positive example.[213] It was carried out exactly according to List's principles.

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[213] Pelles M. – Zsigmond G. (2018): *The Hungarian maritime trade history of Fiume (1868–1918)*. Pécs. Pro Pannonia.; Pelles M. (2022): The Austrian Lloyd's Marine Trade in Fiume (1871–1913) In: Kaposi, Zoltán; Rab, Virág (szerk.) *Different Approaches to Economic and Social Changes: New Research Issues, Sources and Results* Pécs, Magyarország: Working Group of Economic and Social History Regional Committee of the Hungarian Academy of Sciences. 112-120. Pelles M. (2016): Az Adria Magyar Királyi Tengerhajózási Rt. szerepe Fiume hajó- és áruforgalmában (1874–1914). In: *Közgazdasági Szemle*, LXIII. évf. 188–208.; Pelles M. (2020): La storia e il ruolo nel trasporto merci di Fiume della Adria Regia Ungarica Società anonima di Navigazione Marittima [1874–1914]. *Fiume – Rivista di Studi Adriatici*. 42. 8–10. (Luglio-Ottobre). Roma, Societá di Studi Fiumani. 43–58. Pelles, M. (2020): A magyar kereskedelmi tengerhajózási vállalatok hajó- és áruforgalmi hálózatai (1870–1914). In: Kövér, György et al. [szerk.]: *Hálózatok és hierarchia*. Magyar Gazdaságtörténeti Évkönyv 2020. Budapest, MTA BTK TTI. 487–506.; Pelles M. (2022): A fiumei kikötő szerepe Magyarország külkereskedelmének vámtarifaosztályok szerinti elemzésében 1896–1914. *Területi Statisztika* 62 : 1 pp. 113-130.

Improvement

In the 1920s, the **Heckscher-Ohlin model**, or Heckscher-Ohlin (H-O) theorem developed by Swedish economists Eli Heckscher and Bertil Ohlin (the latter received the Nobel Prize in 1977), posits that differences in relative resource endowments – such as labor, land, capital, and mineral resources – affect international trade.[214] The model focuses on relative factor endowments and production technology's impact on trade patterns. According to this model, a country gains an advantage by specializing in the production of goods that intensively use the country's relatively abundant production factors. For this specialization, essential data include the quantities of labor and capital and the factor intensities of the two goods. Specifically, countries with a higher labor-to-capital ratio should specialize in labor-intensive products, while those with a higher capital-to-labor ratio should focus on capital-intensive goods.

While the Heckscher-Ohlin model advances the theory of comparative advantage by considering multiple production factors beyond just labor (e.g. capital), it has several limitations. The model remains limited to two countries and two products. It assumes an "ideal" state where the economy is perfectly balanced, with no surplus capacity or unemployment, free trade without monopolies or government intervention, and complete mobility of factors within the national economy. The model overlooks infrastructural and consumption differences. It ignores international capital flows and the dynamic nature of production conditions. It fails to differentiate between types of labor (skilled vs. unskilled) and types of capital (equipment vs. machinery).

In 1953, American economist Wassily Leontief (Nobel laureate in 1973) empirically tested the H-O theorem using data from the U.S. economy.[215] His findings contradicted the model (so called **Leontief paradox**): the U.S., despite being relatively capital-rich, exported fewer capital-intensive goods than it imported. Several explanations have been proposed for this paradox. First, there was a significant increase in the U.S. demand for capital-intensive products. Additionally, the U.S. had import restrictions in place,

[214] Heckscher, E. F. (1919). Utrikeshandelns verkan på inkomstfördelningen. Några teoretiska grundlinjer. *Ekonomisk tidskrift*, 1-32.
Ohlin, B. (1924). *Handelns Teori*. Doctoral Dissertation. Stockholm: AB Nordiska Bokhandeln; Ohlin, B. (1933). *Interregional and International Trade*. Cambridge, MA: Harvard University Press.
[215] Leontief, W. (1953). Domestic production and foreign trade; the American capital position re-examined. *Proceedings of the American Philosophical Society*, *97*(4), 332-349.

and it had relatively scarce natural resources. Moreover, the U.S. had a relative abundance of skilled labor, or human capital, and a significant comparative advantage in technology-intensive industries. Further tests by Harry P. Bowen, Edward E. Leamer, and Leo Sveikauskas used data from 27 countries and 12 production factors.[216] Their study found that, for two-thirds of the production factors, the direction of trade matched the factor proportions model in less than 70% of the cases across the years studied. This reinforced the Leontief Paradox, showing that international trade patterns often do not align with the predictions of the H-O model.

The **Heckscher-Ohlin-Samuelson** theorem posits that if countries specialize according to the Heckscher-Ohlin (H-O) model, the prices of production factors and the incomes of their owners will equalize internationally.[217] This specialization reaches a point where the differences that initially prompted specialization disappear, leading to the international equalization of factor prices. As countries specialize, the relative scarcity and abundance of production factors (such as labor and capital) converge to the same level globally. This convergence implies that all countries will reach the same level of economic development, assuming the conditions of the model hold true. Consequently, the distinction between developing and developed countries becomes irrelevant, as the equalization process ensures uniform economic development.

10.2. Industrial Capitalism: Core and Peripheries

The era of industrial capitalism (1792-1880) marked the emergence of **classical laissez-faire capitalism**, coinciding with the establishment of nation-states and national economies. This era coincided with the establishment of nation-states and the consolidation of national economies. A key catalyst for these transformative changes was the rise of the modern large-scale factory industry, propelled by the revolutionary impact of steam power during the First Industrial Revolution. Central to this epoch was the phenomenon of **original capital accumulation**, laying the groundwork for sustained and protracted economic growth in Europe. Although marked by periodic setbacks, including recessions and economic crises, this period witnessed the

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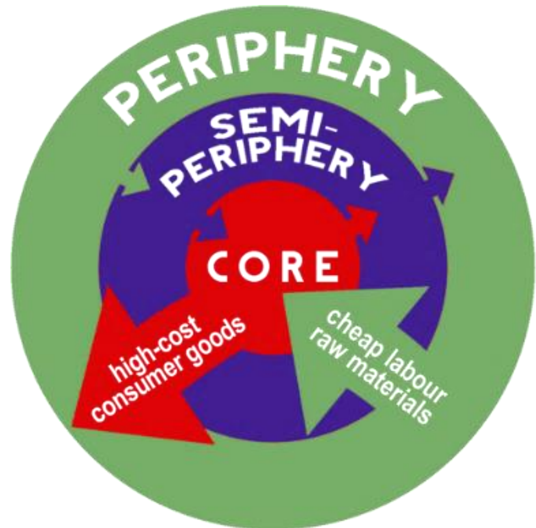
[216] Bowen, H. P., Leamer, E. E., & Sveikauskas, L. A. (1986). Multicountry, multifactor tests of the factor abundance theory. National Bureau of Economic Research, Working Paper 1918

[217] Mussa, M. (1978). Dynamic adjustment in the Heckscher-Ohlin-Samuelson model. *Journal of Political Economy*, *86*(5), 775-791. Marjit, S., & Das, G. (2022). Finance, Trade, Man and Machines: A New-Ricardian Heckscher-Ohlin-Samuelson Model.

emergence of a **unipolar global economy**, with Great Britain at its core. London, in particular, rose to prominence as the epicenter for institutions governing international economic relations.

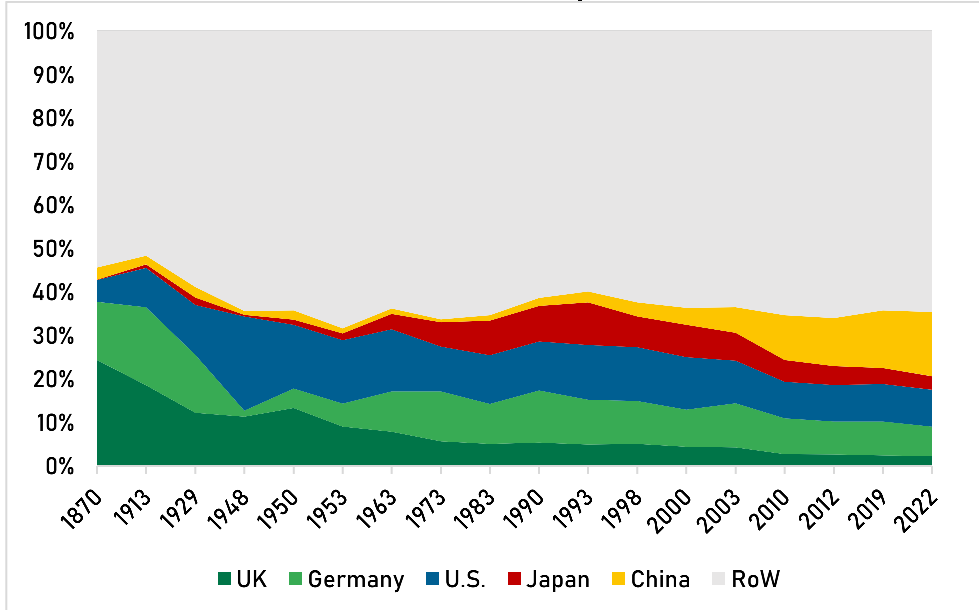
The prevailing economic policies of the time embraced liberal free trade principles, fostering the development of Frank's and Wallerstein's **core-periphery model** or **center-periphery system** in the global economy.[218] Core nations, comprising the center, specialized in the production of finished goods, which were then exported to the periphery. In contrast, the periphery functioned as an external resource, producing raw materials and food products through cost-effective labor to supply the center. This dynamic interaction between the center and periphery became a driving force, sustaining the capital accumulation in the center while simultaneously supporting the center's growth by providing essential resources. Notably, the colonies played a crucial role in the periphery, primarily involved in producing primary goods with limited development in the secondary sector. The interplay between these economic forces defined the world economy during the era of industrial capitalism.



Source: Wallerstein's Core-periphery model. Smith, A. M. (2013). Continuing the legacy of david livingstone: the contribution of fair trade to international development. *The Expository Times*, *125*(2), 53-66.

[218] Wallerstein, I. (1974). *The Modern World-System I Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York, Acedmic Press. and (1980). *The Modern World-System, vol. II: Mercantilism and the Consolidation of the European World-Economy, 1600–1750* New York, Acedmic Press. (1989). *The Modern World-System, vol. III: The Second Great Expansion of the Capitalist World-Economy, 1730-1840s*. San Diego: Academic Press. *and The Modern World-System, vol. IV: Centrist Liberalism Triumphant, 1789–1914.* Berkeley: University of California Press

150 Years of Exports



Source: Conte, N. (2024). Visualizing 150 Years of Exports for Top Economic Superpowers. Visualcapitalist (https://www.visualcapitalist.com/visualizing-150-years-of-exports-economic-superpowers/) based on data from Peterson Institute for International Economics (PIIE) and the World Trade Organization. RoW: Rest of the World

In the 19th century, **Britain** held the position of the world's wealthiest and most advanced economy, boasting global industrial dominance with one-third of its population engaged in manufacturing. This economic prowess facilitated the efficient and cost-effective production of finished goods, leading to widespread international trade and accessibility in nearly every market. Furthermore, the British Empire leveraged its colonies, with India constituting 42% of its exports by the century's end. Britain emerged as the primary force in merchandise exports during this era, followed by Germany. Post-World War II, the United States surpassed British and German export leadership. In contrast to the devastation experienced by Europe and other regions, the U.S. emerged relatively unscathed, fortified by a significantly strengthened industrial base. The 1980s and 1990s witnessed Japan's rapid export growth, particularly in electronics, establishing itself as one of the United States' major trading partners. Presently, China holds a dominant position in the trade market, contributing nearly 15% of global merchandise. China's manufacturing sector excels in producing diverse items, from everyday household goods to crucial components in automotive manufacturing.

This includes precision instruments, semiconductors, and industrial machinery for computers and smartphones. Since 1948, there has been extraordinary growth in global merchandise exports, surging from $59 billion to an impressive $24.3 trillion in 2022.[219]

10.3. Imperialism and Monopoly Capitalism

The era of monopoly capitalism and imperialist colonization was a period from 1880 to World War I, which marked a pivotal shift in global economic and geopolitical dynamics. A significant **precursor** to this phase was the First Opium War (1839-1842), during which the export of opium from Britain to **China** continued unabated. The Second Opium War (1856-1860) further deepened the inequitable treaties, resulting in China acquiring a semi-colonial status.[220] In the 1858 Treaty of Tientsin (Tianjin), China agreed to pay war reparations, open ten additional ports to European commerce, legalize the opium trade, and grant foreign traders and missionaries rights to travel within the country, and additionally adopt Western diplomatic practices instead of its traditional tribute system for conducting business. This treaty marked the beginning of the Century of Humiliation, signifying the loss of territories and the imposition of unfair treaties. Subsequently, a second phase of the conflict, including the sack of the Old Summer Palace and the occupation of the Forbidden City palace complex in Beijing, solidified the treaty's terms through the Convention of Peking in 1860. Soon, Japan underwent a transformative phase known as the Meiji Restoration in 1868. The country embraced free trade during this period, marking a significant departure from its previous isolationist stance after more than 200 years.

Source: own compilation of the author

[219] Conte, N. (2024). Visualizing 150 Years of Exports for Top Economic Superpowers. Visualcapitalist (https://www.visualcapitalist.com/visualizing-150-years-of-exports-economic-superpowers/) based on data from Peterson Institute for International Economics (PIIE) and the World Trade Organization. ROW: Rest of the World

[220] Keller, W., & Shiue, C. H. (2021). *The economic consequences of the opium war* (No. w29404). National Bureau of Economic Research.

The colonial-type division of labor, international capital flows, monopolization, and colonial capital export constitute pivotal aspects of the discourse on economic dynamics. Within the realm of capitalism, a pronounced intensification of capital accumulation and the pursuit of profits emerge.[221] This phenomenon gives rise to far-reaching consequences, notably the exacerbation of societal inequalities and an augmented sense of community vulnerability. Furthermore, the expansion of production faces challenges when confronted with issues related to the behavior, or lack thereof, of effective demand in markets.

Simultaneously, new **industrial powers** emerged globally, with Germany and the United States becoming key players.[222] The economic center of gravity shifted gradually toward the United States, signaling Europe's relative decline. Major corporations, including monopolies and oligopolies, rose to prominence, adopting innovative mass production techniques such as assembly lines, pioneered by engineers like Henry Ford, Henri Fayol, and Frederick Winslow Taylor.[223]

In the framework of **neoclassical liberalism**, particular attention is directed towards the colonial powers, examining their role and impact in shaping economic structures. On the other hand, within the lens of **Marxist** analysis, the focus shifted to those individuals or regions that find themselves either excluded from or marginalized within the intricate dynamics of the colonization process. This perspective delves into the power relations, exploitation, and broader socioeconomic implications associated with the colonialist endeavors of certain nations.

The great **intersea canals** represent key components of the global maritime infrastructure, each with distinct geographical locations and strategic importance.[224] These canals serve as critical conduits for international trade, contributing to the efficient movement of goods, reduction of transportation costs, and overall economic prosperity for the regions they traverse. Their strategic locations and functions underscore their significance in the global maritime. The **Suez Canal** (193.3) in Egypt is strategically positioned to link

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[221] Gallman, R. E., & Rhode, P. W. (2022). *Capital in the Nineteenth Century*. University of Chicago Press.

[222] Veblen, T., & Mayer, O. G. (2022). *Imperial Germany and the industrial revolution*. Routledge.

[223] Valeri, M., & Valeri, M. (2021). Origins and Development of Management. *Organizational Studies: Implications for the Strategic Management*, 19-38.

[224] López Martín, A. G., & Martín, A. G. L. (2010). The Definition of the 'Undefined' Straits Used for International Navigation. *International Straits: Concept, Classification and Rules of Passage*, 41-64.

the Mediterranean Sea with the Red Sea. Since its opening in 1869, it has played a crucial role in facilitating international trade by providing a direct route for ships traveling between Europe and Asia. The canal has become a linchpin in global shipping networks by avoiding the lengthy and perilous journey around the southern tip of Africa. In Northern Europe, the **Kiel Canal** (98.2 km) in Germany contributes to regional maritime connectivity by connecting the North Sea to the Baltic Sea. This artificial waterway, established in 1895 to streamline navigation, allows ships to avoid the longer and more hazardous route around the northern tip of Denmark. By enhancing efficiency and reducing travel distances, the Kiel Canal plays a pivotal role in fostering trade and economic development in the surrounding regions. The **Panama Canal** (82 km), situated in Central America, serves as a vital link connecting the Atlantic and Pacific Oceans. Completed in 1914, it offers a critical shortcut for vessels traveling between the Americas, Europe, and Asia. The economic effects of the increased maritime connectivity are multifaceted, encompassing benefits such as improved trade efficiency, cost reduction, regional development, job creation, and the expansion of markets.

Scramble for Africa

From 1881 to 1914, the world witnessed the **Scramble for Africa** (Race for Africa, or Partition of Africa), a period of intense competition among European powers to establish dominance in the continent.[225] This era saw the classical colonial system evolving into **imperialist colonial empires**, characterized by the export of operational capital. Driven by a confluence of economic, political, and strategic motives, European powers engaged in a complex web of diplomatic negotiations, treaties, and, in some instances, military conflicts. The colonial ambitions of nations such as Britain, France, Germany, Belgium, Italy, and Portugal resulted in the arbitrary drawing of borders and the imposition of foreign rule across the African continent.[226] Economic considerations played a significant role in the scramble, with European powers seeking to secure valuable resources such as minerals, rubber, timber, and agricultural products. The expansion of empires also provided markets for manufactured goods, creating a symbiotic relationship between colonial powers and their African territories.

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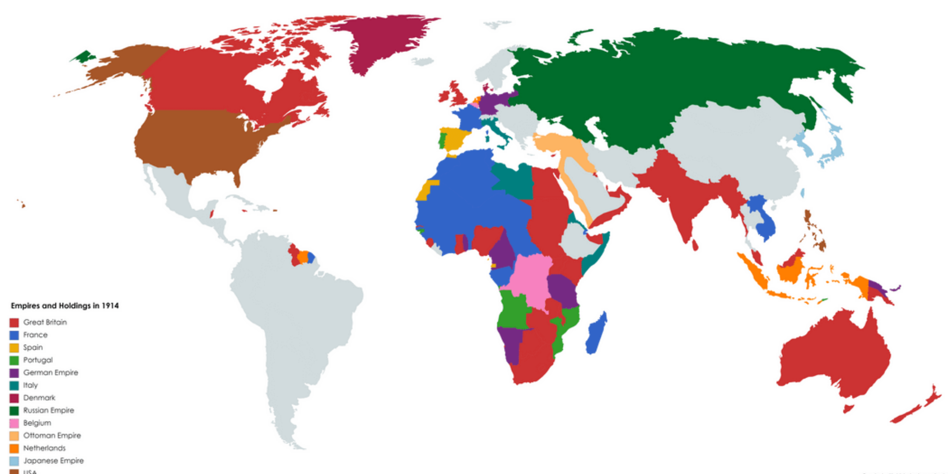
[225] Chamberlain, M. E. (2014). *The scramble for Africa*. Routledge. and Pakenham, T. (2015). *The Scramble for Africa*. Hachette UK.
[226] Porter, B. (1980). Imperialism and the Scramble. *The Journal of Imperial and Commonwealth History*, *9*(1), 76-81.

Colonial countries (1914)



Source: Barraclough G. (1993). Times Atlas of World History. Times Books Division of Harper Collins Publishers. 241.

The **Berlin Conference** of 1884-1885 (Congo Conference, Kongokonferenz, or West Africa Conference) aimed to regulate and legitimize their claims in Africa while minimizing conflicts among themselves.[227] These decisions often disregarded existing African societies and cultural boundaries. The arbitrary drawing of borders disrupted traditional African societies and led to ethnic and cultural tensions that persist today. The exploitation of resources and the imposition of European rule had profound social, economic, and political implications for the indigenous populations. In addition to territorial control, the Scramble for Africa contributed to the rise of nationalist movements and resistance against colonial rule. Over time, the exploitation and oppression faced by Africans fueled movements for independence and self-determination, ultimately reshaping the continent's politics in the mid-20th century.

Africa's status is still as one of the world's wealthiest continents, and the ongoing phenomenon of the scramble for its resources. In the 21st century, the **new scramble** involves traditional players like European and American nations and emerging economies such as China, India, South Korea,

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[227] Yao, J. (2022). The power of geographical imaginaries in the European international order: Colonialism, the 1884–85 Berlin conference, and model international organizations. *International Organization*, *76*(4), 901-928.
Craven, M. (2015). Between law and history: the Berlin Conference of 1884-1885 and the logic of free trade. *London Review of International Law*, *3*(1), 31-59.

Brazil, and Malaysia. The current world economic order is enabling developed nations to pursue imperialistic goals. We call for promoting development-informed pan-Africanism to address development challenges and asymmetric relations between developed nations and Africa.[228]

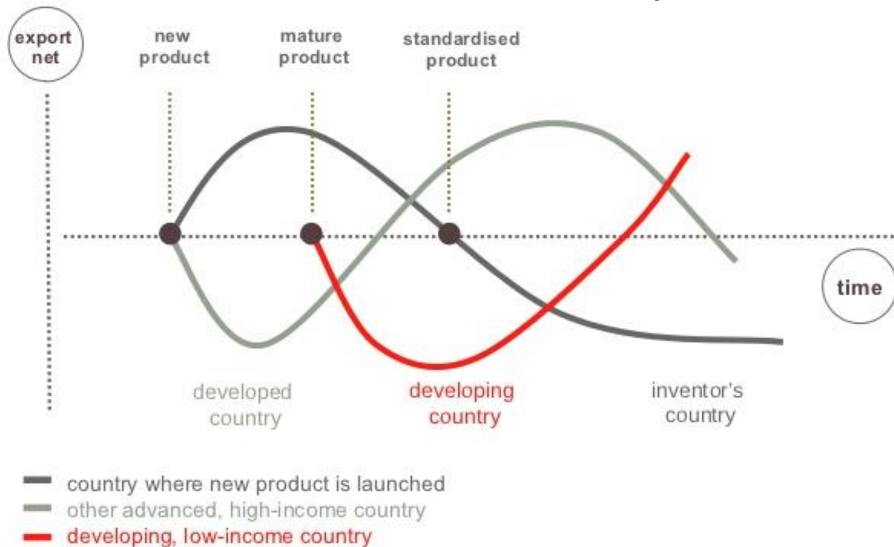
Unequal development

Posner's **Technology Gap Theory** posits an enduring disparity in technological capabilities between innovative nations equipped with advanced technologies and follower nations.[229] The strategic advantage of innovative countries lies in their ability to continually reinvest the benefits derived from cutting-edge products into further research and development, solidifying their monopoly through temporal advantages, patent protection, and industrial safeguards. This perpetuates a dynamic where nations prioritizing R&D maintain a constant lead in technological advancements, creating a challenging environment for follower countries to bridge the ever-expanding technology gap.

Vernon's **Product Life Cycle Theory** or international product lifecycle (IPL) has five stages: introduction, growth, maturity, saturation and decline.[230] The product is considered innovative during the introduction phase, and its demand experiences slow growth. The country introducing the product and the parent company often enjoy an export monopoly. As demand dynamically increases, subsidiary companies are established in the growth, and other countries begin to emulate the product (copy) as the technology becomes relatively outdated. The comparative advantage based on innovation diminishes. The product transitions into a mass-market commodity in maturity, with subsidiaries handling production. In the saturation, the production is ceased at the parent company, leading to intra-firm imports, and production is relocated to developing countries, intensifying price and cost competition. The export share of the country introducing the product gradually decreases. Finally, in the decline, domestic demand for the product diminishes as it no longer holds novelty. The country initially introducing the

[228] Ewalefoh, J. (2022). The New Scramble for Africa. *The Palgrave Handbook of Africa and the Changing Global Order*, 309-322.
Nwachukwu, J. N., & Ogundiwin, A. O. (2020). The Second Scramble for Africa: A Cause for Afro-Pessimism. *Mediterranean Journal of Social Sciences*, *11*(1), 50-50.
[229] Posner, M. V. (1961). International trade and technical change. *Oxford economic papers*, *13*(3), 323-341.
[230] Vernon R. (1966). International investment and international trade in the product cycle. The Ouarlerty Journal of Economics. 80(2). 190-207.

product loses its comparative advantage, making it more economically viable to import the product.



Source: TheIntactOne. (2018). International trade product life cycle (https://theintactone.com/2018/12/08/im-u2-topic-4-international-trade-product-life-cycle/) based on Vernon R. (1966). International investment and international trade in the product cycle. The Ouarlerty Journal of Economics. 80(2). 190-207.

The **Prebisch-Singer thesis**, concerned with primary commodity specialization, argues that nations relying heavily on producing raw materials face inherent challenges in global trade.[231] The prolonged deterioration in terms of trade for these countries can be attributed to the inelastic demand for primary commodities and structural issues related to labor organization, limiting their overall developmental potential. This hypothesis asserts that over an extended period, the prices of primary commodities experience a decline in comparison to the prices of manufactured goods. This phenomenon leads to a deterioration in the terms of trade for economies primarily dependent on the production of primary products.[232]

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[231] Prebisch, R. *The Economic Development of Latin America and Its Principal Problems.* New York: United Nations, 1950.
Singer, H. W. (1950). The distribution of gains between investing and borrowing countries. In *Milestones and Turning Points in Development Thinking* (pp. 265-277). London: Palgrave Macmillan UK.
[232] Toye, J. F., & Toye, R. (2003). The origins and interpretation of the Prebisch-Singer thesis. *History of political Economy*, *35*(3), 437-467.

One indication of this is that the PST is now incorporated, both implicitly and explicitly, in the advice given by the Bretton Woods Institutions to developing countries. They are warned to be prudent even when export prices are temporarily favourable and to guard against currency overvaluation and Dutch Disease, with all the unfavourable impact on the rest of the economy and all the dangers of macroeconomic instability which a sudden boom in a major export sector could imply. They are warned to remember that the outlook for commodity prices is not favourable and that windfalls will tend to be temporary, with the subsequent relapse likely to be greater than the temporary windfall. This is exactly the warning which the PST would give.

Singer, Hans. (1998). The South Letter (30).
The Terms of Trade Fifty Years Later - Convergence and Divergence.

The **Dutch disease** refers to a paradoxical economic concept that denotes the adverse effects stemming from a rapid increase in the value of a country's currency.[233] It is predominantly linked to the newfound exploration or utilization of a valuable natural resource and encompasses the unanticipated repercussions that such a discovery can impose on a nation's overall economic condition. Positive developments, such as identifying substantial oil reserves, can negatively impact a country's economy. It often involves a significant influx of foreign capital directed towards exploiting newly discovered resources. They include an appreciating currency, leading to a decline in exports and a consequential loss of jobs to other countries.

Bhagwati's concept of **Immiserizing Growth** refers to a scenario where a country's economic growth, typically driven by specialization in specific sectors, worsens its overall welfare and standard of living.[234] The term immiserizing indicates that, despite economic expansion, the populace becomes increasingly impoverished. This phenomenon occurs when a country, in pursuing specialization in a particular product or industry, experiences a

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Harvey, D. I., Kellard, N. M., Madsen, J. B., & Wohar, M. E. (2010). The Prebisch-Singer hypothesis: four centuries of evidence. *The review of Economics and Statistics*, *92*(2), 367-377.

[233] The Economist magazine introduced the term Dutch disease in November 26, 1977 while examining a crisis in the Netherlands triggered by the discovery of extensive natural gas reserves in the North Sea in 1959. The sudden wealth and substantial oil exports led to a significant appreciation of the Dutch guilder, rendering Dutch exports of non-oil products less competitive globally. Consequently, unemployment surged from 1.1% to 5.1%, and capital investment in the country declined.

Mien, E., & Goujon, M. (2022). 40 years of Dutch Disease literature: lessons for developing countries. *Comparative Economic Studies*, *64*(3), 351-383.

[234] Bhagwati, J. (1958). Immiserizing growth: A geometrical note. *The Review of Economic Studies*, *25*(3), 201-205.

Bhagwati, J. N. (2018). The Theory of Immiserizing Growth: Further Applications 1. In *International trade and money* (pp. 45-54). Routledge.

decline in terms of trade to the extent that the negative impact on real income outweighs the positive effects of economic growth. It could be due to factors such as deteriorating international prices for the specialized product, causing the country to experience declining terms of trade, reduced purchasing power, and a consequent decline in overall welfare. As these nations increase production to compensate for price differentials arising from market fluctuations, the global market price of these commodities tends to decline. This scenario leads to immiserizing growth, exacerbating poverty due to a lack of diversification in the export portfolio, and a persistent inflexibility in the global demand for these commodities.[235]

The consequence of this unequal development was a widening gap between the developed and underdeveloped regions of the world.[236] The core countries engaged in fierce competition for territorial and economic dominance, setting the stage for geopolitical tensions and conflicts that ultimately erupted in the cataclysmic event of World War I.

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[235] Pryor, F. L. (2007). Immiserizing growth as seen by Bhagwati, Samuelson, and others. *The Journal of Economic Education*, *38*(2), 208-214.
[236] Bagi, S. K. (1990). A Synthesis of the Theories of Immiserizing Growth. *The Indian Economic Journal*, *37*(3), 12-27.

11. World Trade II.

The emergence of a multipolar world has reshaped international trade and cooperation dynamics. Key institutions like the General Agreement on Tariffs and Trade and its successor, the World Trade Organization, have played pivotal roles in regulating global commerce. Meanwhile, regional blocs such as the Council for Mutual Economic Assistance and the European Economic Community have significantly influenced regional integrations, later evolving into the European Union. Beyond these, international organizations like the United Nations Economic and Social Council, the United Nations Conference on Trade and Development, the World Customs Organization, the International Chamber of Commerce, and the TIR Convention contribute to the intricate web of global economic governance. Establishing preferential zones, free trade areas, customs unions, common markets, economic unions, and political unions reflects the diverse strategies nations employ to foster collaboration and economic growth. This phenomenon is not limited to any particular continent, as regional integrations and cooperations span across Europe, America, Asia, and Africa. Furthermore, the concepts of internationalization and globalization underscore the interconnectedness of economies on a global scale. This intricate interplay of institutions, agreements, and collaborative efforts defines the contemporary narrative of the global economy, shaping the course of international trade and cooperation in the 21st century.

11.1. Multipolar World Economy

Following the end of World War I, the global economy underwent profound transformations that redefined the contours of international relations and economic structures. The ascendancy of the United States as the world's leading economic power played a pivotal role in shaping new dynamics in international trade and finance. This period saw a notable surge in protectionist policies, fundamentally altering the nature of economic interactions between nations. Simultaneously, the appearance of the Soviet Union (1922) and the planned economies contributed to the fragmentation of the once-unified world economy, marking a significant departure from previous geopolitical configurations. The collapse of the Ottoman Empire in 1922 added a layer of complexity to the global geopolitical map, influencing the political and economic trajectories in the Middle East. The subsequent period, from 1929 to 1933, witnessed the Great Depression, prompting nations to adopt Keynesian economic principles and advocate for increased state intervention as a response to the crisis. President Roosevelt's implementation of the New

Deal in the United States from 1933 to 1936 represented a comprehensive effort to spur economic recovery through a series of social and economic reforms. Concurrently, Europe experienced the rise of Nazism in Germany and the adoption of fascism in Italy, contributing to the politics of interwar Europe.

The aftermath of World War II reshaped the global economy in several significant ways. The United States emerged as a strengthened economic power, while Europe underwent a relative decline. A **bipolar world order** emerged, characterized by the dominance of the United States and its allies juxtaposed against the Soviet Union and its bloc, called the Cold War.[237] The global economic system transformed into a **tripolar structure** with the United States as the anchor, Western countries (European Economic Community) forming the capitalist bloc (Bretton Woods), and socialist countries aligning under the Council for Mutual Economic Assistance (COMECON). The era of the Cold War unfolded, defining geopolitical and economic alignments for several decades.[238] A **new bipolar system** is emerging between the U.S. and China.

The **collapse of the colonial system** became a prominent feature, leading to the disintegration of established imperial structures. The unraveling of the colonial imperial system post-World War II introduced a period of increased geopolitical and economic volatility. Movements towards independence in North African colonies during the 1930s marked a crucial phase in the decolonization process, setting the stage for further changes in the global order. The attainment of independence by India in 1947 became a significant milestone in the broader decolonization movement in Asia. The 1950s witnessed the acceleration of independence movements in French colonies, reshaping the political map of Africa and Southeast Asia. Subsequently, the 1960s saw the achievement of independence by African colonies formerly under British rule, further altering global geopolitics.

The **mass production** paradigm was transformed during the post-Fordist era, as traditional industries engaging in mass production became crisis-prone. Economic expansion shifted from the industrial sector to the **tertiary sector**, marking the onset of the post-industrial phase. The developmental trajectory encountered disruptions, exemplified by the two oil crises in the 1970s. In the global South (developing countries), the anticipated economic

[237] Fenglin, H. (2020). *Theory of Bipolar World: The Road to Communism Found in the Evolutionary Structure of World History*. Huang Fenglin.
[238] Peters, M. A. (2023). The emerging multipolar world order: A preliminary analysis. *Educational Philosophy and Theory*, *55*(14), 1653-1663.

transformation did not materialize, leading to persistent disparities. The 1980s witnessed the collapse of the socialist system, contributing to an intensification of developmental lag. A process of increasing indebtedness commenced, leading to a debt crisis and entrapment.

11.2. GATT – WTO

In 1944, amidst a devastated global economy, representatives from 44 nations convened at Bretton Woods to address the aftermath of the depression and World Wars. While the proposed International Trade Organization (ITO) did not materialize, its core provisions found expression in the 1947 General Agreement on Tariffs and Trade (GATT), signed by 23 countries, accounting for 80% of global trade at the time. It was initially conceived as a temporary arrangement. It remained in force until the World Trade Organization (WTO) was established in 1995. GATT was not an organization but an agreement, later supplemented by additional agreements. Its objective was to dismantle barriers to international trade, as stipulated in Article 35. The primary focus included the multilateral application of the Most Favored Nation treatment (MFN) principle, extending to bi- and plurilateral agreements. The permissible regulations were limited to tariffs. Furthermore, GATT aimed to encourage consultation in trade-related matters.[239]

GATT Rounds

Round	Dates	Value of Trade	No. of Countries	Notable Outcomes
Geneva	1947	$10 billion	23	45,000 tariff cuts -- average 35 percent cut
Annecy (France)	1949	n/a	13	tariff reductions
Torquauy (England)	1950-51	n/a	38	tariff reductions
Geneva	1956	$2.5 billion	26	tariff reductions
Dillon Round	1960-61	$4.9 billion	26	tariff reductions
Kennedy Round	1962-67	$40 billion	62	35 percent average cut on industrial goods; commitments on use of anti-dumping laws

[239] O'Hara, C. (2021). Consensus decision-making and democratic discourse in the General Agreement on Tariffs and Trade 1947 and World Trade Organisation. *London Review of International Law*, *9*(1), 37-68.

Tokyo Round	1973-79	$155 billion	102	34 percent average cut on industrial goods; commitments on non-tariff measures
Uruguay Round	1986-93	$3.7 trillion	123	services trade and intellectual property included; "built-in agenda" on agriculture, WTO institution created
Doha Round	2001-	n/a	148+	fully incorporates services and agriculture, trade facilitation, development agenda

Source: Unger, M. (2017). GATT rounds: Who, what, when. Hinrich Foundation (https://www.hinrichfoundation.com/research/tradevistas/wto/gatt-rounds/)

During its existence, there were several rounds of negotiations aimed at reducing tariffs and other trade barriers among participating countries. These **rounds** played a crucial role in shaping the global trading system and addressing various issues related to international trade.[240] The **Geneva Round** (1947) was the first round of GATT; the participating countries aimed to reduce tariffs and trade barriers and establish a framework for international trade. **Annecy Round** (1949): Named after the French town where the negotiations took place, this round focused on further tariff reductions. **Torquay Round** (1950-1951): The third round, held in Torquay, England, resulted in the signing of the Torquay Protocol and marked substantial tariff reductions. **Geneva II** (1956): This round focused on extending tariff reductions and addressing other trade-related issues. **Dillon Round** (1960-1961): Named after U.S. Secretary of the Treasury Douglas Dillon, this round aimed at further tariff reductions and included discussions on antidumping measures. **Kennedy Round** (1964-1967): Named after U.S. President John F. Kennedy, this round focused on reducing tariffs on industrial goods and included discussions on anti-dumping measures and subsidies. **Tokyo Round** (1973-1979): Held in Tokyo, Japan, this round addressed non-tariff barriers to trade, including subsidies, technical barriers, and customs valuation. **Uruguay Round** (1986-1994): The Uruguay Round was the most significant and comprehensive GATT negotiation. It led to the creation of the **World Trade Organization** (WTO) in 1995, replacing the GATT. The Uruguay Round addressed various issues, including agriculture, intellectual property, services, and dispute resolution mechanisms.

[240] Goldstein, J., & Gulotty, R. (2022). Trading away tariffs: The operations of the GATT system. *World Trade Review*, *21*(2), 135-158.

GATT vs. WTO

Aspect	GATT	WTO
Establishment	1947	1995
Purpose	Tariff reduction	Comprehensive trade rules, including services, intellectual property, and dispute resolution
Nature	Agreement	International Organization
Legal status	Temporary	Permanent
Coverage	Limited to trade in goods	Broader scope covering not only trade in goods but also services, intellectual, property, and more
Decision-making	Consensus	Consensus and voting (some cases)
Dispute resolution	Limited	More robust dispute settlement mechanism
Most Favored Nation (MFN) treatment	Yes	Yes
Specific agreements	Several	Numerous agreements covering various aspects of trade
Secretariat	No	Yes (WTO Secretariat)

Source: own compilation of the author

The **World Trade Organization** (WTO) was established in 1995 as the successor to the General Agreement on Tariffs and Trade (GATT) through the Marrakesh Agreement. It is headquartered in Geneva, and currently, 164 countries are members; the European Union is also a separate member. The primary objective of the WTO is to liberalize international trade by gradually reducing or eliminating both tariff and non-tariff trade barriers. Its goals include raising the standard of living, achieving full employment, continually increasing incomes and demand, and expanding production and international trade. The organization operates based on several core principles:[241]

- Reciprocity Principle: The principle of reciprocity forms the basis for trade facilitation, making it easier to break down market protection barriers for countries, politicians, and society alike.
- Institutionalization of Concessions: The WTO formalizes trade facilitations achieved among the world's countries through written agreements. These agreements become accountable and obligatory, as they are recorded in written contracts.

[241] Hoekman, B. (2002). The WTO: functions and basic principles. *Development, Trade, and the WTO: A Handbook. Washington, DC: World Bank*, 41-50.

- Principle of Consultation: Disputes are resolved through negotiations, emphasizing the importance of resolving contentious issues through dialogue.[242]
- Transparency: The conditions for market access in export markets are transparent, ensuring clear visibility into the terms and conditions for entering these markets.

Agreements

GATT	1947	General Agreement on Tariffs and Trade
GATS	1995	General Agreement on Trade in Services
TRIPS	1995	The Agreement on Trade-Related Aspects of Intellectual Property Rights
TRIMs	1995	Agreement on Trade-Related Investment Measures
DSS	1995	Dispute Settlement System

Source: own compilation of the author

The General Agreement on Tariffs and Trade (GATT) was established in 1947 as a comprehensive treaty addressing global trade issues. The General Agreement on Trade in Services (GATS) began in 1995, focusing specifically on the liberalization and regulation of international trade in services. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was also established in 1995, providing a framework for regulating intellectual property rights within the context of international trade.[243] The Agreement on Trade-Related Investment Measures (TRIMs) was introduced in 1995, aiming to address and regulate trade-related investment measures among member countries. In 1995, the Dispute Settlement System (DSS) was established as a mechanism within the international trading system to address and resolve disputes arising between member countries.

11.3. COMECON

The **Council for Mutual Economic Assistance** (COMECON) was initiated in 1949, through a Soviet proposal, representing a framework for economic collaboration among socialist countries. Notably, the Marshall Plan did not extend to the Soviet Union. The organization aimed to foster planned

[242] Palmeter, D., Mavroidis, P. C., & Meagher, N. (2022). *Dispute Settlement in the World Trade Organization*. Cambridge University Press.
[243] Davey, W. J., & Zdouc, W. (2010, April). The Triangle of TRIPs, GATT and GATS. In *Intellectual Property: Trade, Competition, and Sustainable Development The World Trade Forum, Volume 3* (Vol. 3). University of Michigan Press.

economies and mutual dependence among its member states, with a focus on supporting the weaker states in catching up, primarily through strategies of the division of labor and specialization. Founding members of Comecon included the Soviet Union, Bulgaria, Czechoslovakia, Poland, Hungary, and Romania. Albania joined in 1949, followed by the German Democratic Republic (1950), Mongolia (1962), Cuba (1972), and the Democratic Republic of Vietnam (1978).[244] Yugoslavia participated as an associated member. The organization played a significant role in coordinating economic policies among socialist states until its dissolution in 1991 in Budapest. The structure and objectives of Comecon bore some resemblance to the European Economic Community.[245] Additionally, Comecon's counterpart in the socialist bloc mirrored the North Atlantic Treaty Organization (NATO) in the capitalist bloc, known as the Warsaw Pact.

EEC vs. COMECON

Feature	European Economic Community (EEC)	Council for Mutual Economic Assistance (COMECON)
Formation	1957	1949
Initiators	France, Italy, West Germany, Belgium, Luxembourg, Netherlands	Soviet Union, Bulgaria, Czechoslovakia, Poland, Hungary, Romania
Objective	Economic integration among member states, forming a common market	Economic collaboration among socialist countries with a focus on planned economies
Primary Focus	Promoting free movement of goods, services, capital, and people among member states	Coordination of economic policies and mutual dependence among member socialist states
Approach to Economy	Capitalist, market-oriented economy	Socialist, planned economy
Key Principles	Four Freedoms: Free movement of goods, services, capital, and people	Mutual assistance, planned economies, division of labor
Members	Evolved into the European Union (EU) with multiple member states (27 members)	Included the Soviet Union, Bulgaria, Czechoslovakia, Poland, Hungary, Romania, and other socialist states (Yugoslavia participated as an associated member)

[244] Pelzman, J. (1977). Trade creation and trade diversion in the Council of Mutual Economic Assistance 1954-70. *The American Economic Review*, *67*(4), 713-722.
[245] Godard, S. (2018). The Council for Mutual Economic Assistance and the failed Coordination of Planning in the Socialist Bloc in the 1960s.

Dissolution	Transformed into the European Union in 1992/39	Dissolved in 1991
Military Component	Primarily an economic organization	Focused on economic collaboration but lacked a military component; countries had separate military alliances (e.g., Warsaw Pact)

Source: own compilation of the author

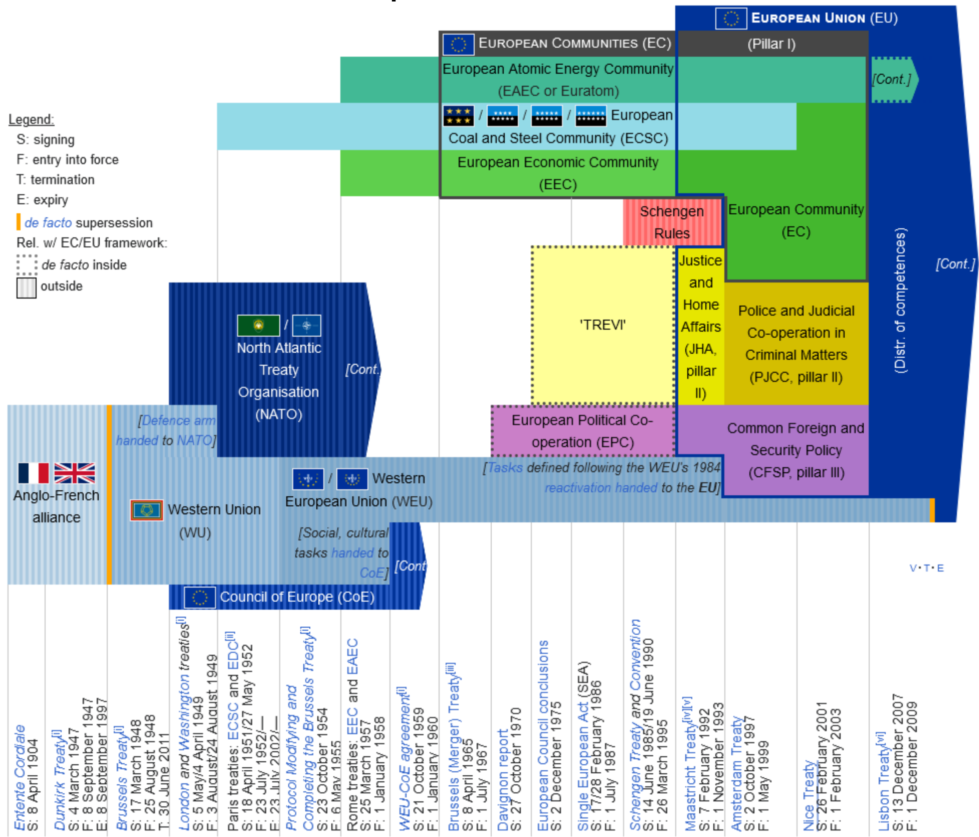
11.4. EEC – EU

In 1951/52, the signing of the Paris Treaty marked a seminal moment in European integration, giving rise to the **European Coal and Steel Community** (ECSC).[246] This historic agreement involved the collaboration of the Benelux countries, France, West Germany, and Italy, with the overarching objective of integrating the coal and steel industries among these nations. Spearheaded by visionaries Jean Monnet and Robert Schuman, this initiative, known as the **Schuman Plan**, laid the foundation for supranational cooperation and played a pivotal role in the broader European integration process.[247]

Building upon the momentum generated by the ECSC, the Treaty of Rome I, signed in 1957/58, led to the establishment of the **European Economic Community** (EEC). Emphasizing economic integration, the EEC aimed to create a common market, promoting the free movement of goods, services, capital, and labor among its member states. Simultaneously, the Treaty of Rome II brought into existence the European Atomic Energy Community (Euratom), fostering collaborative efforts in developing and utilizing nuclear energy for peaceful purposes.

[246] Mason, H. L. (2013). *The European coal and steel community: experiment in supranationalism*. Springer.
[247] Bullen, R. J. (2024). An Idea Enters Diplomacy: The Schuman Plan, May 1950. In *Ideas into Politics* (pp. 193-204). Routledge.
Ciappi, E. (2023). A Reappraisal of the Origins of European Integration: From Wartime Planning to the Schuman Plan. *Journal of Contemporary History*, *58*(4), 676-696.

Development of EEC to EU



Source: https://en.wikipedia.org/wiki/European_Union

The EEC was also known as the European Common Market in English-speaking countries and was sometimes referred to as the European Community even before it was officially renamed as such in 1993. By the **Maastricht Treaty** in 1992/93, the EEC transformed into the **European Union** (EU).[248]

The Union establishes a **customs union**, which encompasses total trade in goods and includes the prohibition of import and export duties and charges having equivalent effects among the member states. Moreover, it introduces a common customs tariff in its relations with third countries. The Council determines the tariff rates of this common customs tariff based on proposals from the Commission. The elimination of quantitative restrictions among

[248] Dubinka-Hushcha, L. (2020). An Overview of Denmark and Its Integration with Europe: 1940s to the Maastricht Treaty in 1993.
Tizzano, A. (2022). Thirty years since the Maastricht Treaty. *Yearbook of European Law*, *41*, 3-10.

member states is also a part of this arrangement. The abolishment of internal customs borders was a gradual process initiated by the Rome Treaty, aiming to reduce and eventually eliminate customs duties. During the initial reduction, member states introduced duty rates for all products that were 10% lower than the basic duty. Member states and their authorities found themselves in an ambivalent position, as they sought to protect their producers while justifying their existence. In 1988, the Unified Administrative Document was introduced, and since, 1993, there have been no customs formalities when crossing borders within the EU. This was facilitated by Regulation 2913/92/EEC establishing the Community Customs Code. The introduction of the EU Customs Code in 1993 streamlined and simplified customs procedures, rendering 60 million forms obsolete.[249] The EU Customs Code is regulated by Regulation (EU) No 952/2013 of the European Parliament and the Council.[250]

Common Market, Internal Market and Single Market

Aspect	Common Market	Internal Market	Single Market
Objective	Economic cooperation and integration	Elimination of trade barriers	Harmonization of laws and regulations
Scope	Limited to economic aspects	Broader, includes economic cooperation	Comprehensive, covers goods, services, capital, and labor
Trade Barriers	Reduces tariffs and quotas	Focuses on eliminating trade barriers	Seeks to eliminate all barriers to trade
Regulatory Harmony	Limited harmonization of regulations	Emphasizes regulatory alignment	Aims for a high degree of harmonization
Movement of Factors	Limited freedom of movement of labor	Expands freedom of movement of labor	Encourages free movement of goods, services, capital, and labor
Legal Framework	Generally relies on intergovernmental agreements	Gradual shift towards supranational laws	Strong reliance on supranational laws and institutions
Example	European Economic Community (EEC)	European Single Market (EU)	European Single Market (EU)

Source: own compilation of the author

[249] Dür, A., Moser, C., & Spilker, G. (2020). The political economy of the European Union. *The Review of International Organizations*, *15*, 561-572.

[250] Fabio, M. (2020). *Customs law of the European Union*. Kluwer Law International BV.

The **common market** is seen as an initial step in the progression toward establishing a single market. They are typically emerging from a free trade area characterized by the absence of tariffs on goods and a relatively unrestricted flow of capital, workers, and services; a common market is characterized by progress in these areas but may not be as advanced in addressing other impediments to trade. The **single market** is a specific term referring to the EU's internal market, emphasizing eliminating all non-tariff barriers and creating a harmonized regulatory framework.[251] The single market goes beyond the physical removal of borders; it seeks to standardize regulations, product standards, and other aspects of economic activity across member states. It involves developing and implementing common policies and regulations to ensure a level playing field and fair competition among businesses operating in the EU. The single market concept aims for deeper integration, striving for a uniform and consistent application of rules and standards across the entire EU territory. The Intra-EU trade operates on the principle of the **four freedoms**, which are fundamental pillars of the internal market, fostering the free movement of goods, services, capital, and people.[252] The free movement of goods ensures the unrestricted movement of goods within the EU member states. Barriers to trade, such as customs duties and quantitative restrictions, are eliminated to create a single market for goods. The free movement of services allows service providers to operate across EU borders without facing discriminatory barriers. It aims to create a seamless market for services, promoting competition and choice for consumers. The free movement of capital facilitates the flow of capital between EU member states without restrictions. It promotes financial integration and efficient capital allocation across borders (Europen Banking Union and the Capital Markets Union).[253] The free movement of persons enables EU citizens to live, work, study, and retire in any EU member state. It includes the right to enter, reside, and move freely within the EU, fostering cultural exchange and labor mobility. These four freedoms are enshrined in the foundational treaties of the EU and are essential for the functioning of the internal market. They contribute to the development of a common economic space, ensuring that individuals, businesses, and investors can benefit from the advantages of a unified and integrated European market.

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[251] Mortelmans, K. (1998). The common market, the internal market and the single market, what's in a market?. *Common Market Law Review*, *35*(1).
[252] Barnard, C. (2022). *The substantive law of the EU: the four freedoms*. Oxford university press.
[253] Vértesy, L. (2019). The legal and regulatory aspects of the free movement of capital - towards the Capital Markets Union. *Jogelméleti Szemle* 20 (4) 110-126.

In response to these developments, 1960 witnessed the creation of the **European Free Trade Association** (EFTA) by the United Kingdom, Austria, Denmark, Portugal, Sweden, and Norway. Designed as an alternative for countries either unwilling or unable to join the EEC, EFTA provided a platform for economic collaboration without the full integration commitments of the EEC.[254] Over time, EFTA expanded its membership to include Switzerland, Iceland, and Liechtenstein, offering flexibility for nations in their unique paths in the evolving European economic cooperation.

11.5. Other International Organizations

The United Nations (UN) was founded in 1945, with its headquarters in New York. Its primary objective is to prevent wars and provide a platform for countries to discuss and address their problems. The **United Nations Economic and Social Council** (ECOSOC) is a central organization within the UN, established to develop world trade and improve international trade conditions. Its work is carried out through regional economic commissions organized by continents, such as the UN Economic Commission for Europe (ECE), UN Economic Commission for Africa (ECA), UN Economic Commission for Latin America and the Caribbean (ECLAC), UN Economic and Social Commission for Asia and the Pacific (ESCAP), and UN Economic and Social Commission for Western Asia (ESCWA). The **United Nations Conference on Trade and Development** (UNCTAD) aims to assist developing countries' economies through international trade relations. It prepares comprehensive international agreements, focusing on international commodity agreements, agreements on transit trade for landlocked countries, the general system of preferences achieved in the GATT, and a technology transfer code specifically emphasizing the interests of developing countries.[255] The **United Nations Commission for International Trade Law** (UNCITRAL), initiated at the behest of Hungary, focuses on developing and harmonizing international trade law. It revises international agreements based on the interest model of developed industrial countries to ensure the representation of the interests of developing nations, including the creation of model laws.[256]

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[254] Kaiser, W. (1997). Challenge to the community: the creation, crisis and consolidation of the European Free Trade Association, 1958-72. *Journal of European Integration History*, *3*(1), 7-33.

[255] Mingst, K. A., Karns, M. P., & Lyon, A. J. (2022). *The United Nations in the 21st century*. Routledge.

[256] Bermann, G. A. (2023). The uncitral model law at the US state level. *Arbitration International*, *39*(2), 172-190.

Its areas of expertise include bank guarantees, letters of credit, arbitration, transportation, and, notably, the 1980 Vienna International Sales Convention.

The **Organization of Economic Co-operation and Development** (OECD) traces its origins to the Organisation for European Economic Cooperation (OEEC), which coordinated the Marshall Plan in Europe. Established in 1961 with its headquarters in Paris, the OECD's primary objective is to assist member countries' governments in formulating and evaluating the most effective economic and social policies, as detailed in its extensive publications. The organization engages in various research areas, including combating aging, addressing issues of corruption, exploring new corporate governance methods, focusing on education and training, analyzing electronic commerce, promoting job creation, formulating macroeconomic policies, implementing regulatory reforms, fostering sustainable development, examining tax policies, and studying international trade.[257] Currently, the OECD has 35 member countries, and within its organizational structure, it includes the Council, whose members are represented by delegations led by ambassadors, and the Secretariat, led by the Secretary-General. The organization operates through eight important directorates and five additional centers, including the International Energy Agency (IEA) and the Nuclear Energy Agency (NEA). Additionally, approximately 200 committees, working groups, and expert groups function within the OECD, contributing to its extensive work in shaping global economic cooperation and development policies.

The **World Customs Organization** (WCO), established in 1952 as an intergovernmental organization with its headquarters in Brussels, comprises 165 customs authorities representing 99% of global trade. Functioning in tandem with the World Trade Organization (WTO), the WCO addresses the technical aspects of agreements concerning Customs Valuation and Rules of Origin. Key thematic areas within the WCO include the development of international conventions, classification and valuation of goods, rules of origin, collection of customs revenues, supply chain security, facilitation of international trade, customs enforcement activities, support for intellectual property rights, combating drug trafficking, addressing illegal arms trade, promoting integrity, supporting sustainable capacity building, and undertaking customs

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Rodrigues, B. S. (2021). UNCITRAL and the Governance of International Investments. *Transnational Actors in International Investment Law*, 1-18.

[257] Canton, H. (2021). Organisation for Economic Co-Operation and Development—OECD. In *The Europa Directory of International Organizations 2021* (pp. 677-687). Routledge.

reforms and modernization efforts.[258] The **International Convention on the Harmonized Commodity Description and Coding System** (Harmonized System, HS) was adopted in 1983, providing a unified classification for approximately 5,000 products with a six-digit standardized coding system.[259] The WCO plays a pivotal role in harmonizing and facilitating global customs procedures, ensuring the efficient management of international trade activities.

The **International Chamber of Commerce** (ICC), founded in 1919 with its headquarters in Paris, represents the interests of thousands of businesses from over 130 countries.[260] It actively promotes and facilitates international activities and relationships, convening its World Congress every three years. The primary objective of the ICC is to support global trade and globalization, fostering the development of the world economy and international trade under conditions of fair international competition. One of its key functions is the development of international trade standards, which, while not mandatory norms, gain validity based on contractual agreements between parties. The ICC is responsible for formulating **Incoterms**, including the 2020 edition (International Commercial Terms), using three-letter codes primarily related to freight parities.[261]

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[258] Sosnow, C. (2021). Forward: The OECD, World Customs Organization, and Member Country Leadership in Combatting Customs & Border Corruption. *Global Trade and Customs Journal*, *16*(9).

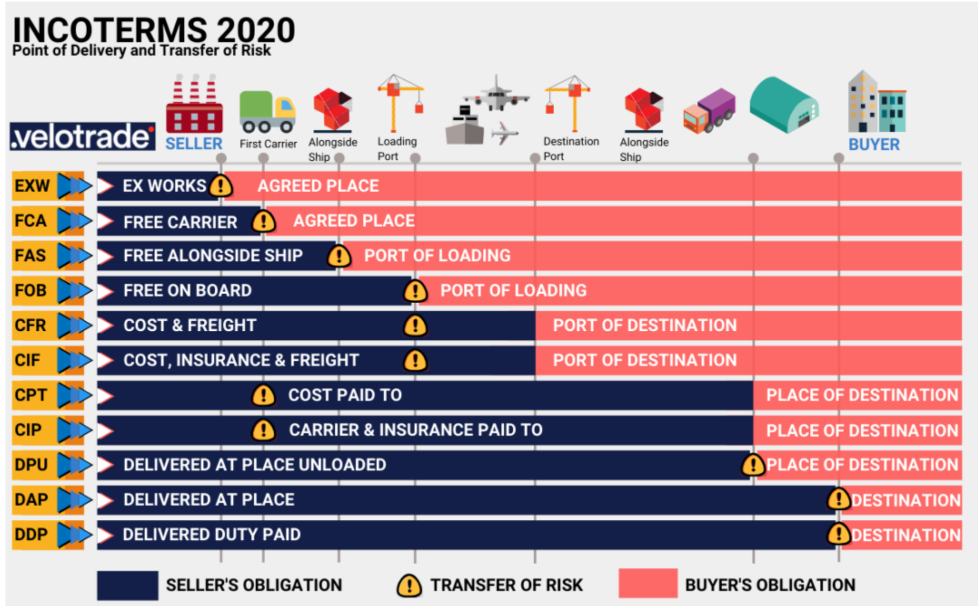
[259] Du, S., Wu, Z., Wan, H., & Lin, Y. (2021, May). HScodeNet: Combining Hierarchical Sequential and Global Spatial Information of Text for Commodity HS Code Classification. In *Pacific-Asia Conference on Knowledge Discovery and Data Mining* (pp. 676-689). Cham: Springer International Publishing.

[260] David, T., & Eichenberger, P. (2023). 'A world parliament of business'? The International Chamber of Commerce and its presidents in the twentieth century. *Business History*, *65*(2), 260-283.

[261] Ağaoğlu, C. (2020). Incoterms® 2020. *Public and Private International Law Bulletin*, *40*(2), 1113-1149.

Davis, J., & Vogt, J. (2022). Incoterms® 2020 and the missed opportunities for the next version. *International Journal of Logistics Research and Applications*, *25*(9), 1263-1286.

Incoterms 2020



Source: Velotrade (2023). What are InCoTerms? (https://www.velotrade.com/blog/what-is-incoterms-2020/)

These terms cover various aspects of international trade, such as international shipment, sales, transportation, electronic data exchange, insurance contracts, delivery of goods, assumption of risk, notification, inspection, costs, and more. Freight parity refers to the geographical point where transportation-related costs transfer from the seller to the buyer. One-point clauses (E, F, D groups) signify that the cost and risk shift at the same geographical point, while two-point clauses (C group) indicate that the cost and risk transfer at different geographical points. The ICC also plays a crucial role in the **Uniform Customs and Practice for Documentary Credits** (UCP 600), providing standardized rules for documentary credits. Additionally, the ICC provides model contracts to assist businesses in creating reliable and standardized agreements.[262]

The **TIR Convention** (1975), which stands for Transports Internationaux Routiers or International Road Transport, constitutes a system for transporting goods and customs items applicable to the road freight traffic between contracting countries. Established in 1975, this convention succeeded the 1959 TIR Convention, which replaced the 1949 TIR Agreement

[262] Yen Low, H. (2010). UCP 600: the new rules on documentary compliance. *International Journal of Law and Management*, *52*(3), 193-210.

among several European countries.[263] Adopted under the auspices of the United Nations Economic Commission for Europe (UNECE), it currently has 68 member countries. The TIR Convention ensures the relatively smooth operation of east-west international road freight transport across the continent. Under its jurisdiction, goods carried by road transport are exempted from the obligation to pay duties, taxes, and other fees (ancillary costs) in intermediary countries, thanks to the TIR Carnet (international customs document). A vehicle or vehicle-train suitable for international road freight transport operating under the coverage of the TIR Convention is exempt from adhering to the formalities of different customs regulations in various states. This exemption applies when the transportation activities are conducted with the TIR document and fall under the coverage of the TIR Convention. Implementing the TIR Convention within member countries is overseen by the **International Road Transport Union** (IRU), operating under the United Nations Economic Commission for Europe (UNECE) mandate. The IRU ensures the enforcement of decisions and provisions that are binding on member countries.

The **World Economic Forum** (WEF), established in 1971 in Geneva and headquartered in Cologny, Switzerland, is an international organization operating in foundation form as a non-profit, non-governmental entity. It is not affiliated with national or political interest groups. One of its most renowned events is the annual economic summit held in Davos, Switzerland, where influential politicians, business leaders, intellectuals, and scholars discuss significant global challenges.[264] The WEF is best known for its Global Competitiveness Report (GCR), an annual publication that assesses the competitiveness of individual national economies in the global marketplace. The countries in the report are ranked based on their competitiveness using the Global Competitiveness Index (GCI) values.

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[263] Macedonia, N., & Arabia, S. (2021). Amendments to the Customs Convention on the International Transport of goods under cover of TIR carnets (TIR Convention 1975) According to UN Depositary Notification CN. 370.2021. TREATIES-XI. A. 16 the following amendments to the TIR Convention enter into force on 4 February 2022 for all Contracting Parties.
[264] Friesen, E. (2020). *The World Economic Forum and Transnational Networking*. Emerald Publishing Limited.

12. Regional Integrations and Cooperation

Regional integrations have played a significant role in the post-World War II development of the global economy. The theoretical foundations were laid by Béla Balassa in 1961 with his work The Theory of Economic Integration.[265] In the 1950s and 1960s, regional integrations often aimed to protect against external economic impacts, such as tariffs, but these attempts were unsuccessful. Cooperation among countries with similar levels of development was a common goal during this period, and there was a notable anti-USA sentiment. The 1990s marked the era of open or new regionalism, promoting the world market integration of member countries. This phase also involved harmonizing internal regulations among member countries to create common policies. The objectives of new regionalism extended beyond trade, encompassing the free flow of technologies, incentivizing investments, and ensuring freedom in the services sector. Various regional integrations emerged, bringing together countries with different levels of development, sizes, and economic strengths. The strengthening of competitors influenced the change in the USA's behavior towards regionalization efforts. In contemporary times, regionalization and globalization trends coexist, reflecting the complex dynamics of the international economy.

Inter-governmental vs. Supranational integration

Aspect	Inter-governmental Cooperation	Supranational Cooperation
Decision-making authority	In the hands of representatives of member states	Certain organs or organizations vested with decision-making authority
Binding decisions	Decisions do not bind individual member states	Decisions are binding on member states
Approval requirement	Approval of all member states may be required	Not all states' consent is necessary for mandatory decisions
Enforcement	Decisions are not directly enforceable by international organizations	Decisions can be directly enforced within member states' territories
Financial support	Supported by membership fees paid by member states	May autonomously access certain financial resources of member states

Source: own compilation of the author

[265] Balassa, B. (1961). *The Theory of Economic Integration*. Routledge Revivals. Balassa, B. (1966). Toward a theory of economic integration. *Toward a theory of economic integration.*

The **international cooperation** can be inter-governmental or supranational. In **inter-governmental cooperation**, the decision-making authority lies in the hands of representatives of member states. Even in important matters, decisions made by bodies consisting of representatives of states do not bind individual member states. Furthermore, even mandatory decisions adopted by such bodies cannot be directly enforced by international organizations. The financial support for the organization's activities is ensured through the membership fees paid by member states. The **supranational cooperation** involves organizations or certain organs of organizations being vested with the authority to make decisions binding on member states.[266] Unlike in inter-governmental cooperation, not all states' consent is necessary for mandatory decisions. The organization can make decisions that can be directly enforced within the territories of member states without the need for internal legal transformations. The organization may also autonomously access certain financial resources of member states.

Integration Types

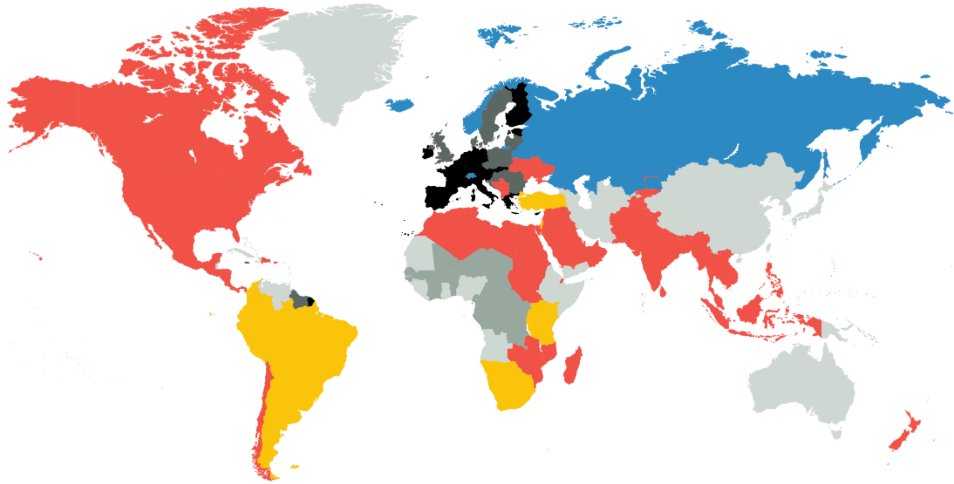
Type	Description
Preferential zone	The participating countries give each other trade concessions (lower tariffs)
Free trade area	Members break down trade barriers between themselves (liberalization), but independent trade policy with 3rd countries
Customs union	Free trade between the member countries and common foreign trade policy with third countries
Common Market	In addition to goods, the flow of services, capital and labor is also liberalized, customs and quantitative barriers are eliminated, but not fully
	An improved version of this is the single market: harmonization of physical, (borders), technical (standards) and financial (tax rules) rules
Economic union	Integration is the coordination of national economic policies
	Full economic integration: unified monetary and exchange rate policy → introduction of a common currency (monetary union) + budgetary and fiscal union as well...
Political union	Also achieves the unification of the political institutional system (legislation, governance); establishment of a supranational authority

Source: own compilation of the author based on Balassa, B. (1961). *The Theory of Economic Integration*. Routledge Revivals. Balassa, B. (1966). Toward a theory of economic integration. *Toward a theory of economic integration.*

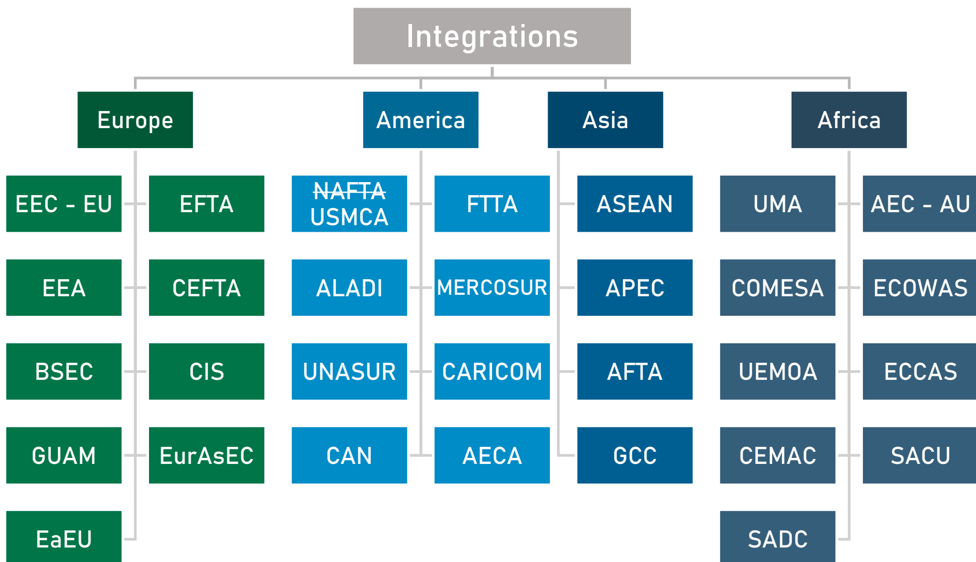
[266] Beck, T., Silva Buston, C., & Wagner, W. (2022). Supranational cooperation and regulatory arbitrage.

In Balassa's systematization, the **preferential zone** involves participating countries providing each other with trade concessions, typically in the form of lower tariffs. Moving a step further, the Free Trade Area is characterized by member states breaking down trade barriers among themselves through liberalization. However, they maintain independent trade policies when dealing with third countries. On the other hand, a **customs union** not only fosters free trade among member countries but also adopts a unified external trade policy towards third nations.[267] Progressing towards deeper integration, the **common market** not only liberalizes the flow of goods but extends this approach to services, capital, and labor. This level of integration aims to remove tariff and quantitative barriers but does not achieve complete harmonization. An advanced form of the common market is the **single market**, which goes beyond liberalizing goods and includes harmonization of regulations, covering physical (borders), technical (standards), and financial (taxation rules) aspects. Taking integration to a higher level, the **economic union**, or complete economic integration, involves the coordination of national economic policies. This might include a unified monetary and exchange rate policy leading to the introduction of a common currency (monetary union). There may also be discussions of fiscal and budgetary union. Finally, a **political union** represents the highest degree of integration, where the harmonization extends to the political-institutional framework, encompassing legislation and governance. Often, this involves the establishment of supranational authorities to oversee and coordinate policies among member states.

[267] Lipsey, R. G. (1960). The theory of customs unions: A general survey. *The economic journal*, *70*(279), 496-513.



Source: Regional economic groups / blocs. Triple A Learning topic pack for business organisation and environment. (https://textbook.stpauls.br/Business_Organization/page_145.htm)



Source: own compilation of the author

12.1. Europe

In 1960, the **European Free Trade Association** (EFTA) was initiated and organized by the British as a counterbalance to the influence of the European Community (EC). It served as an alternative for countries that either did not want or could not join the European Economic Community (EEC). In 1966, the free trade of industrial products was realized. EFTA's members include Norway, Switzerland, Iceland, and Liechtenstein (earlier along with Austria, Denmark, the United Kingdom, Portugal, and Sweden which are already EU members).[268] Although its significance is relatively small, the integration within EFTA has been strengthening over time. In 2001, during the Vaduz Convention, agreements were reached on the free flow of services, capital, and the movement of people. Economic and social cooperation in various areas also solidified the ties between EFTA member states. The true significance of EFTA can be understood in the context of its relationship with the EU.

In 1977, the free trade of industrial products was realized between the European Free Trade Association (EFTA) member countries and the European Economic Community (EEC). The **European Economic Area** (EEA) was established in 1992, becoming effective in 1994. Currently, it encompasses the 27 EU member states and three EFTA member states. Notably, Switzerland is not a member of the European Economic Area but engages in bilateral agreements with the EU. The EEA facilitates the free movement of goods, services, persons, and capital between the EU and the three EFTA member states. Furthermore, it extends the regulatory framework of the EU's single internal market. However, it is essential to note that the EFTA countries maintain independent trade policies with third countries, as they do not form a customs union with the EU.

The **Central European Free Trade Agreement** (CEFTA), established in 1992 and effective from 1993, stands as the most significant integration initiative in the Central European region. The founding countries include the Czech Republic, Slovakia, Poland, and Hungary. The primary objective of CEFTA is to create industrial free trade and facilitate the European integration process.[269] To achieve this, a categorization of manufactured goods was implemented, comprising three groups: the acceleration list,

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[268] Kaiser, W. (1997). Challenge to the community: the creation, crisis and consolidation of the European Free Trade Association, 1958-72. *Journal of European Integration History*, *3*(1), 7-33.

[269] Crudu, R., Sirbu, O., & Ignatov, A. (2018). Central European Free Trade Agreement: did the initiative prove its commitments?. *Eastern Journal of European Studies*, *9*(1), 45-62.

which immediately liberalized the trade of these products; the normal group, which reduced tariffs to zero by 1997; and sensitive products, for which trade barriers were dismantled by 2001. Agricultural product liberalization progressed slowly. The conditions established after the 2005 conference in Zagreb included requirements such as World Trade Organization (WTO) membership or adherence to WTO rules, any EU association agreement, and a free trade agreement with current CEFTA member countries. CEFTA currently comprises seven members: Macedonia, Albania, Bosnia and Herzegovina, Kosovo, Moldova, Montenegro, and Serbia. Several countries opted for EU accession, leading to their withdrawal from CEFTA (Croatia, Romania, Bulgaria, Czech Republic, Poland, Hungary, Slovakia, and Slovenia).[270]

The **Organization of the Black Sea Economic Cooperation** (BSEC) was established in 1992 with 11 member countries: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey, Ukraine, and Serbia.[271] Its objectives include fostering increased trade and investments among member states, with a long-term goal of establishing a free trade zone. The organization also seeks cooperation in various areas such as energy policy, tourism, and aims to reduce tariffs and other trade barriers. Additionally, BSEC aims to simplify border procedures. However, political differences among member countries pose challenges to its objectives.

The **Commonwealth of Independent States** (CIS) was established in 1991 by 11 former Soviet republics, including Russia, Belarus, Ukraine, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan (as an associate member), Uzbekistan, Moldova, and Georgia. Its goal is to create a common market, but economic integration progresses slowly, and there is clear Russian dominance within the political alliance. There are some integration attempts within the CIS.[272] The **Organization for Democracy and Economic Development** (GUAM) was formed in 1997 to weaken Russian influence. Members include Georgia, Ukraine, Azerbaijan, and Moldova (Uzbekistan withdrew). The **Common Economic Space** (2003) aimed to establish a common market with members Russia, Ukraine, Belarus, and Kazakhstan. The **Eurasian Economic Community** (EurAsEC, 2000-2014) focused on a customs union with members Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan. The **Eurasian Economic Union** (EEU, 2015) aims

[270] Feruni, N., & Hysa, E. (2020). Free trade and gravity model: Albania as part of central European free trade agreement (CEFTA). In *Theoretical and Applied Mathematics in International Business* (pp. 60-90). IGI Global.
[271] Sabanci, E. (2013). *Organization of the Black Sea economic cooperation*. Engin Sabancı.
[272] Sodikovich, T. K. (2021). Europe and the Commonwealth of Independent States. *Наука, техника и образование*, (6 (81)), 42-44.

to facilitate the free flow of capital and services, with members Russia, Kazakhstan, Belarus, Armenia, and Kyrgyzstan. The integration efforts were inspired by the European Union, but the CIS denies adherence to EU principles.[273]

In the case of **Russia and Belarus**, since 1999, the two countries have an agreement for closer cooperation. The establishment of the Russia-Belarus Union State signifies their ongoing collaboration. In 2021, a 28-point agreement on economic integration was reached, aiming for a federal program to harmonize legislation across various economic areas. Key aspects include integrating and harmonizing monetary and payment systems, principles of indirect tax collection, mutual access to public procurement, general macroeconomic policies, and creating joint oil and gas markets (scheduled). The program also addresses counterterrorism efforts, migration, and joint military exercises. While general information has been provided, specific details of the implementation of the 28 cooperation programs are not yet known, with major components expected to materialize between 2021 and 2023.[274]

The **Baltic Free Trade Area** (BAFTA) operated from 1994 to 2004, with its members being the Baltic countries of Latvia, Estonia, and Lithuania. Initially focused on industrial free trade, it expanded the scope in 1997 to include agricultural products.[275] All three member countries joined the European Union in 2004.[276]

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[273] Yarashevich, V. (2021). The Eurasian Economic Union as a regional development project: expectations and realities. *Area Development and Policy*, *6*(1), 82-105.
Dragneva, R., & Hartwell, C. A. (2021). The Eurasian Economic Union: Integration without Liberalisation?. *Post-Communist Economies*, *33*(2-3), 200-221.

[274] Kazharski, A., & Makarychev, A. (2021). Belarus, Russia, and the escape from geopolitics. *Political Geography*, *89*, 1-3.

[275] Kazlauskiene, N., & Meyers, W. H. (1999). The Baltic Free Trade Agreement In Agriculture: Early Results Of The Experiment. *MOST: Economic Policy in Transitional Economies*, *9*(3), 291-305.

[276] Liargovas, P., & Papageorgiou, C. (2024). From the Inception of the EU to the Treaty of Amsterdam (1993–1999). In *The European Integration, Vol. 1: History* (pp. 205-235). Cham: Springer Nature Switzerland.

12.2. America

Until the 1980s, the United States did not see the need for regional agreements, influenced by the Monroe Doctrine's principle of "America for the Americans," articulated by James Monroe in 1823.[277] However, escalating global competition, European Union expansion, and East Asian integration processes prompted the U.S. to take steps to integrate. In 1988, a free trade agreement was signed between the USA and Canada, which was eventually expanded in 1994 to include Mexico, leading to the establishment of the **North American Free Trade Agreement** (NAFTA) with Canada, Mexico, and the USA as members. NAFTA aimed to gradually remove trade barriers, reducing tariffs on industrial goods, though certain areas like agricultural and energy sectors remained sensitive. The member countries, each with differing levels of development and size, sought diverse objectives. For the USA, it meant gaining new markets, establishing investments, and securing raw material supplies.[278] Meanwhile, for Canada and Mexico, which conducted three-quarters of their foreign trade with the USA, and with a growing influx of American operating capital, dependence on the U.S. became a defining factor.[279]

Subsequently, NAFTA was renegotiated and replaced by the **United States–Mexico–Canada Agreement** (USMCA), which took effect in 2020, lasting for 16 years with the possibility of renewal.[280] This agreement, one of the world's largest free-trade areas covering 500 million people and a $26 trillion GDP, focused on automobile exports, steel and aluminum tariffs, and the dairy, egg, and poultry markets. It incorporated intellectual property and digital trade provisions, and adopted language from the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Key changes included enhanced environmental and labor regulations, increased U.S. auto manufacturing incentives, expanded Canadian dairy market access, and raised duty-free limits for Canadians purchasing U.S. goods online. According to the IMF, the expected impact of USMCA is modest, projecting a

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[277] *"Monroe Doctrine"*. Oxford English Dictionary (3rd ed.). 2002.
Sexton, J. (2011). *The Monroe doctrine: empire and nation in nineteenth-century America*. Hill and Wang. and Henry, M. (2012). "America for the Americans": Revisiting Monroe's Message.
[278] Villareal, M., & Fergusson, I. F. (2017). The North American Free Trade Agreement (NAFTA).
[279] Villarreal, A. M., & Fergusson, I. F. (2020). NAFTA and the United States-Mexico-Canada Agreement (USMCA). *Congressional Research Service Report*.
[280] Komkova, E. G. (2020). United States-Mexico-Canada Agreement at the Finish Line. *USA & Canada: ekonomika, politika, kultura*, (4), 43-57.

0.35% increase in the U.S. real GDP and a 0.12% rise (176,000 jobs) in total U.S. employment.

The **Free Trade Area of the Americas** (FTAA) remains unrealized, with the United States aspiring to extend the integration process to the entire American continent, excluding Cuba. In 1994, the Miami Declaration, signed by 34 American states, laid the foundation, gaining prominence after the 2001 Summit in Quebec.[281] Despite negotiations ending in failure and an unmet 2005 deadline, the initiative holds promise for the USA as a 900 million market with access to natural resources, inexpensive labor, and political influence. However, challenges such as significant development disparities, varied sectoral interests, and anti-U.S. sentiments in Latin American countries cast doubt on its realization.[282]

On the other hand, various South American integration efforts have seen both successes and challenges. The South American Common Market or **Mercado Común del Sur** (MERCOSUR), established in 1991 by the Asuncion Treaty, operates as a customs union with members Argentina, Brazil, Uruguay, Paraguay, and Venezuela (since 2007), while associate members Chile, Colombia, Ecuador, Peru, and Bolivia engage in a free trade agreement.[283] Despite successful trade expansion in the 1990s, trade disputes arose in subsequent years.

The **Union of South American Nations** (USAN or UNASUR) originated from the 2004 Cusco Declaration to establish a regional union. 2008 the founding charter was adopted, but not all member states have ratified it. Modeled after the European Union, it seeks to create an intergovernmental community that includes a common currency, parliament, and passport, possibly by 2019. The heads of state of member countries convene annually, while foreign ministers hold meetings every six months. The organization features a permanent secretariat, a South American Parliament, and a central bank known as the South Bank. The Executive Committee is responsible for implementing political decisions made during meetings.[284]

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[281] Schott, J. J. (2002). Challenges to the Free Trade Area of the Americas. *Electronic Journal of the US Department of State*.
[282] Stump, C. (1995). Free Trade Area of the Americas (FTAA). *J. Int'l L. & Prac.*, *4*, 153.
[283] Botto, M. (2022). The challenges of economic integration in Latin America: searching for consensus in contexts of globalization. The case of MERCOSUR (1991–2019). *Globalizations*, *19*(4), 555-570.
[284] Comini, N. M., & Frenkel, A. (2020). UNASUR on the edge. In *Regionalism under stress* (pp. 133-149). Routledge.

The **Latin American Integration Association** (LAIA or ALADI), formed in 1980 under the Montevideo Agreement, has struggled to achieve its goal of a common market functioning as a slow-moving free-trade zone. Originating from the 1969 Andean Common Market, the Andean Community (CAN) aspires to be a customs union, although a common market is yet to materialize.[285]

The **Caribbean Community and Common Market** (CARICOM), founded in 1973, seeks to create a common market in the Caribbean region, comprising 15 full members and five associate members. It focuses on agricultural, educational, energy, mining and natural resource-related, financial and foreign affairs, science and technology, tourism and transport, and environmental protection issues.[286] The **Organisation of Eastern Caribbean States** (OECS), established in 1981, focuses on economic harmonization and integration in the Eastern Caribbean. The **Association of Caribbean States** (ACS or AEC), formed in 1994, emphasizes regionalism for political and economic benefits across four main areas: trade, transportation, sustainability, and natural resource management.

12.3. Asia

The **Flying Geese Paradigm** (FGP) is a model developed by Japanese scholars to describe Southeast Asia's economic and technological development. Originating in the 1930s, it gained popularity in the 1960s by Kaname Akamatsu.[287] Notably, the model is based on dynamic comparative advantages and represents an international division of labor in East Asia. Japan's growth and economic policies influenced other countries in the region, leading to a wave-like pattern of development spanning the entire area. The paradigm identifies three waves of development:

Barros, P. S., & Gonçalves, J. D. S. B. (2021). Crisis in South American regionalism and Brazilian protagonism in Unasur, the Lima Group and Prosur. *Revista Brasileira de Política Internacional*, *64*, e009.

[285] Villarreal, J. F., Portugal Jesus, L. H., Carrion Loyola, A. A., & Quispe Robles, J. L. (2023). A Review of Latin American Integration: From LAFTA to LAIA. *Apuntes del Cenes*, *42*(76), 227-256.

[286] Hassanali, K. (2022). Examining Institutional Arrangements toward Coordinated Regional Ocean Governance and Blue Economy Policy Development in the Caribbean Community (CARICOM). *Coastal Management*, *50*(5), 385-407.

[287] Akamatsu, K. (1962). A historical pattern of economic growth in developing countries. *The developing economies*, *1*, 3-25.

Source: own compilation of the author

These waves symbolize the sequential development of countries in the region, with each succeeding wave following the economic growth and policies of the leading countries in the previous wave. The Flying Geese Paradigm captures the idea of a dynamic and evolving regional economic structure.

The **Association of Southeast Asian Nations** (ASEAN) was established in 1967 through the Bangkok Declaration. It comprises 10 member states: Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar, and Cambodia (1999). Initially, it had security policy goals, countering the communist threat from China and the growing influence of Japan in the region. From 1977 onwards, ASEAN started providing trade preferences, and in 1992, it decided to establish the ASEAN Free Trade Area (AFTA) along with an industrial free trade agreement with China. By 1997, the goal was set for the free flow of capital and services alongside goods by 2020. The liberalization process was faster between the founding members and Brunei, while it progressed more slowly for Cambodia, Laos, Myanmar, and Vietnam. The initiative is considered successful as trade barriers decreased and intra-regional trade volume increased despite China not being a member.[288] The **ASEAN Economic Community** (AEC) has been subject to scrutiny, with some studies, like Louangrath and Sutanapong (2018), suggesting that it has not been entirely successful, showing negative

[288] Haosheng, D., & Canyu, L. (2022). The role, achievements and challenges of the association of southeast Asian nations (ASEAN). *International Organizations: Serbia and Contemporary World*, *2*(4), 73-85.

impacts of -0.88 ± 1.36 percentage points on GDP and -1.70 ± 4.33 percentage points on exports. The **ASEAN Free Trade Area** (AFTA) was established in 1992 in Singapore; currently, all 10 ASEAN member countries are part of it.

The **Arab Free-Trade Area** (AFTA) has its roots in the Arab League (1945) and the Arab Economic Unity Council (1962). The Arab Common Market (ACM) was formed in 1965 by Egypt, Iraq, Jordan, and Syria, later joined by Yemen, Libya, and Mauritania. It aimed to eliminate industrial and agricultural tariffs and facilitate the free movement of goods and capital. In 1971, member countries removed their mutual tariffs, but trade barriers persist. In 1998 the Greater Arab Free-Trade Area (GAFTA) was established to remove trade barriers among member states. During the period from 1988 to 2005, engagements occurred within the GAFTA area and with 35 other reference countries.[289] By 2008, the AFTA currently has 22 member states.

The **Gulf Cooperation Council** (GCC) was established in 1981 as its own economic community, and in 2007, it evolved into a genuine common market during the Doha Summit. It achieved a customs union, allowing free movement of capital, and citizens could freely work, settle, own property, establish companies, study, and access healthcare. In 2012, the cooperation expanded into other economic areas, aiming for a political union within the Council. Its members include Kuwait, Qatar, the United Arab Emirates, Bahrain, Oman, and Saudi Arabia (KSA). The GCC has been successful due to the similarity in development, small populations, high per capita GDP, geographical proximity, and similar interests in global politics.[290]

The **Organization of the Petroleum Exporting Countries** (OPEC) was founded in 1960, with its headquarters in Vienna since 1965. It is not a real regional organization but rather a sectorial one.[291] Its member states collectively own about two-thirds of the world's oil reserves and contribute 40% to global oil production and half of the world's oil exports. The primary goal of OPEC was to enhance its ability to counter the pressure from global com-

[289] Abedini, J., & Péridy, N. (2008). The Greater Arab Free Trade Area (GAFTA): an estimation of its trade effects. *Journal of Economic Integration*, 848-872.
[290] Al-Naser, M., & Hamdan, A. (2021). The impact of public governance on economic growth: Evidence from gulf cooperation council countries. *Economics & Sociology*, *14*(2), 85-110.
[291] Wagner, H. L. (2009). *The Organization of the Petroleum Exporting Countries*. Infobase Publishing.

panies, particularly American, British, and Dutch corporations seeking to reduce oil prices during that time.[292] OPEC's 12 member states primarily consist of Arab and developing countries, including Algeria, Angola, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, Venezuela, and Ecuador. In 1967, during the six-day war (Arab-Israeli conflict), the **Organization of Arab Petroleum Exporting Countries** (OAPEC) was formed. The **Petrodollar system** emerged during the 1960s and 1970s when Saudi Arabia began pricing oil in U.S. dollars. In return, the USA provided security guarantees. Other oil-exporting countries adopted this practice, conducting oil transactions in U.S. dollars, as the dollar remained the most widely used currency. Export revenues were also invested in dollars, primarily in U.S. Treasury bonds. Despite the system's continued strength, the 1980s saw many countries accumulating debt in dollars due to the availability of cheap dollar loans. The Petrodollar system still stands strong today, although the market has witnessed the emergence of Indian and Chinese imports.[293]

12.4. Africa

The **Arab Maghreb Union** (AMU, or Union du Maghreb Arabe, UMA), originated from initiatives by the Arab League in 1945. The term maghrib as a toponym refers to the geographical region designated by Muslim Arabs, stretching from Alexandria in the east to the Atlantic Ocean in the west. Etymologically, it conveys the dual meanings of the western place/land and the place where the sun sets. The idea for collaboration emerged in 1956 when Tunisia and Morocco gained independence. The AMU was officially established in 1989 with the initial goal of forming a customs union, but its current status is that of a free trade area. Its members include Algeria, Libya,

[292] Karamelikli, H., Akalin, G., & Arslan, U. (2017). Oil exports and non-oil exports: Dutch disease effects in the Organization of Petroleum Exporting Countries (OPEC). *Journal of Economic Studies*, *44*(4), 540-551.

[293] Wagdi, O., Elnahrawy, A., & Habib, A. F. (2023, November). Petrodollar and De-dollarization: A Survey from OAPEC Countries. In *Wagdi O., Elnahrawy A., Fathi A.,(2023), Petrodollar and De-dollarization: A Survey from OAPEC Countries, International Scientific and Practical Conference "Priority Directions of Complex Socio-Economic Development of the Region"(PDSED 2023), Section: Foreign Experience of Integrated Socio-econom*.
Wagdi, O., & Habib, A. F. (2022). The Petrodollar after February 2022: A Survey from AOPEC Countries. *Journal of Management Research*, *41*(4).

Morocco, Mauritania, Tunisia, and (Western Sahara).[294] Despite the strong support for regional cooperation from the European Union (EU) and the United States, the AMU has faced challenges and is almost non-functional due to conflicts related to Western Sahara. The ongoing disputes in the Western Sahara have significantly hindered the union's effectiveness.[295]

The **African Economic Community** (AEC) traces its origins back to establishing the **Organization of African Unity** (OUA) in 1963, which consolidated the existing African regional blocs. The Lagos Action Plan of 1980 set the ambitious goal of realizing a common African market by 2028 and signing a pan-African agreement. In 1991, the Abuja Summit formalized the establishment of the AEC. Later, in 2002, the **African Union** (AU) emerged in Durban, succeeding both the AEC and the OAU, boasting 54 member states. The AU's mission encompasses creating an economically integrated area spanning the entire African continent. It seeks to connect and harmonize the activities of all regional communities, fostering sustainable economic development. A prospective plan, set for 2023/28, involves the establishment of the African Monetary Union with a unified currency. Despite challenges, the AU has been recognized as successful, emphasizing the complementary nature of continental and global integrations.[296]

The **Economic Community of West African States** (ECOWAS) was formed in 1975 in Lagos.[297] ECOWAS aimed to eliminate internal taxes, customs duties, and levies, introducing common tariff frameworks and a shared trade policy. With 15 member countries, including Benin, Guinea-Bissau, Burkina Faso, Ivory Coast, and others, ECOWAS strives for a common market and economic and monetary union. Within ECOWAS, the **West African Economic and Monetary Union** (UEMOA) has eight member countries that share a common currency. These countries, including Benin, Burkina Faso, Guinea-Bissau, and others, use the West African CFA franc (XOF), pegged to the euro at an exchange rate of 1 euro = 655.957 XOF.[298]

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[294] Hadili, A., Raab, R., & Wenzelburger, J. (2020). Trade liberalisation, governance, and the balance of payments: evidence from the Arab Maghreb Union. *Middle East Development Journal*, *12*(1), 101-130.

[295] Dursun, H. R. (2021). Understanding the failure of the Arab Maghreb Union: A critical constructivits account. *Journal of History Culture and Art Research*, *10*(2), 26-38.

[296] Shumba, W. (2023). Towards the African Economic Community: Legal and Historical Perspectives. *Potchefstroom Electronic Law Journal*, *26*, Published-on.

[297] Zouri, S. (2020). Business cycles, bilateral trade and financial integration: Evidence from Economic Community of West African States (ECOWAS). *International Economics*, *163*, 25-43.

[298] The CFA franc, which stands for Franc of the Financial Community of Africa, originally known as Franc of the French Colonies in Africa, is the term used for two currencies: the

The integration efforts in the region aim to enhance economic collaboration and monetary cooperation. The eco is the proposed common currency of the ECOWAS from 2019. Originally, the plan was for the West African Monetary Zone (WAMZ) to introduce the currency first, merging it later with the Euro-pegged CFA franc used in the French-speaking West African region under the UEMOA. This transition would grant UEMOA states complete fiscal and monetary independence from France. Alternatively, there is a proposal to initially reform the CFA franc into the eco, with the potential for extension to all ECOWAS states.[299] In September 2023, the countries reiterated its commitment to launch the common Eco currency by 2027.

The **West African Economic Community** (WAEC), established in 1972, consists of member countries such as Benin, Burkina Faso, Ivory Coast, Mali, Mauritania, Niger, and Senegal, with Guinea and Togo as observers. Initially aimed at creating a common market, WAEC faced challenges, particularly in the agriculture and raw material sectors. In 1994, the **West African Economic and Monetary Union** (UEMOA) was formed as part of a six-step integration plan, including the establishment of a preference zone, a free trade zone, a customs union with a standard external tariff policy, a common market, economic policy, and economic and monetary union. UEMOA's membership includes Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Cape Verde, Mali, Niger, Senegal, and Togo, focusing on customs and financial union.[300]

The **Central African Customs and Economic Union** (Union douanière et économique de l'Afrique centrale, UDEAC), founded in 1966 in Brazzaville, sought to create a customs union transformable into an economic and financial union. UDEAC includes members such as Cameroon, Central African Republic, Chad, Congo, Gabon, and Equatorial Guinea, all part of

West African CFA franc, utilized in eight West African nations, and the Central African CFA franc, used in six Central African countries. Despite being distinct, the two CFA franc currencies have always been pegged at parity and are essentially interchangeable. The ISO currency codes are XAF for the Central African CFA franc and XOF for the West African CFA franc. In 2019, it was announced that the West African currency would undergo reform and be replaced by an independent currency named Eco.

[299] Magu, S. M. (2023). Economic Community of West African States (ECOWAS). In *Towards Pan-Africanism: Africa's Cooperation through Regional Economic Communities (RECs), Ubuntu and Communitarianism* (pp. 183-211). Singapore: Springer Nature Singapore.

[300] Tete, K. H., Soro, Y. M., Sidibé, S. S., & Jones, R. V. (2023). Assessing energy security within the electricity sector in the West African economic and monetary union: Inter-country performances and trends analysis with policy implications. *Energy Policy*, *173*, 113336.

the franc zone, contributing to monetary cooperation within the ECCAS – CEMAC framework.

The **Economic Community of Central African States** (ECCAS), established in 1983, aims to create a free trade zone among its 11 member countries, including Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, São Tomé and Príncipe, and Rwanda. The slow implementation of this goal is attributed to the low economic development of member countries. The **Economic and Monetary Community of Central Africa** (CEMAC), formed to promote closer monetary cooperation among ECCAS members, consists of Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, and Gabon. These countries use a common currency, the Central African CFA franc (XAF).[301]

The **East African Community** (EAC) originated with establishing a customs union between Kenya and Uganda in 1917. Founded in 1967, it was dissolved in 1977 and re-established in 2000. The six member states are Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda. It serves as a precursor to a potential East African Federation, envisioning the member states forming a new state. In 2010, the EAC initiated efforts towards common capital, labor, currency, and complete political integration. The 2013 agreement set forth substantial measures towards a monetary union within a decade. The Customs Union, officially implemented in 2005 but signed in 2004, includes common external tariffs for imports from non-member countries, facilitating duty-free trade among member states, and harmonized customs procedures. Concerning business trends, business leaders exhibit more optimism than economists regarding the benefits of integration. Regionally, there is a proposed division of labor, with the manufacturing industry relocating to the coastline and transporting finished products to the hinterland countries (Uganda, Rwanda, and Burundi).[302]

The **Common Market for Eastern and Southern Africa** (COMESA) was established in 1981 as the preferential trade area. It was expanded in 1994 to become a preferential trade zone. Eleven member countries eliminated mutual tariffs, and efforts are ongoing to remove non-tariff barriers.

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[301] Kangami, D. N., & Akinkugbe, O. F. (2021). Common currency and intra-regional trade in the Central African Monetary Community (CEMAC). *Journal of African Trade*, *8*(1), 13-22.

[302] Lwesya, F. (2022). Integration into regional or global value chains and economic upgrading prospects: an analysis of the East African Community (EAC) bloc. *Future Business Journal*, *8*(1), 33.

The success is evident in creating various common institutions, including banks and courts, to achieve their goals. The objective is complete trade liberalization and the integration of macroeconomic and monetary policies, with the aim of establishing a monetary union by 2025. Currently, COMESA has 20 member states, and nine of them, along with Rwanda and Burundi, have formed a free trade zone.

The **Southern African Customs Union** (SACU) is the world's oldest customs union and the only successfully functioning one in Africa. Established in 1910, the union renewed its agreement in 1969/70. Member countries convene annually to discuss agreement-related issues and collectively distribute the revenue generated from customs duties. As a separate legal entity, the organization negotiates with third countries and organizations. The current five members are the Republic of South Africa, Lesotho, Swaziland, Botswana, and Namibia, with South Africa playing a leading role due to the smaller or weaker economies of the other members.[303]

The **Southern African Development Community** (SADC) traces its origins back to the 1960s and 1970s, when southern countries united against colonialism; the Southern African Development Coordination Conference (SADCC) served as a precursor to SADC. Formed in 1992, SADC focuses on economic and political cooperation, aligning its efforts with the goals of the African Union. The objective is to achieve a free trade zone. Currently, SADC has 16 member states, including the SACU members, along with Angola, Comoros, Congo, Madagascar, Malawi, Mauritius, Mozambique, Seychelles, Tanzania, Zambia, and Zimbabwe, where South Africa maintains a dominant role.[304]

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[303] Mlipha, S. S. B. (2021). *The Impact of Risk on Regional Economic Integration in the Southern African Customs Union (SACU)* (Doctoral dissertation, University of Pretoria).
[304] Moyo, I. (2020). On decolonising borders and regional integration in the Southern African Development Community (SADC) region. *Social Sciences*, *9*(4), 32.
Muwanzi, J., & Makura, E. S. (2022). The Southern African Development Community (SADC), A Bright Light in Southern Africa. *Journal of Social Science and Humanities ISSN*, *1811*, 1564.

Regional Economic Integrations

Integration	Geographic Scope	Economic Integration	Political Cooperation	Key Members
European Integrations				
EEC - EU	Europe	Customs Union, Common Market Monetary Union for 20	Political Cooperation	EU Member States
EFTA	Europe	Free Trade Agreement	Limited	Iceland, Liechtenstein, Norway, Switzerland
EEA	Europe	Single Market	Limited	EU Member States + EFTA countries
CEFTA	Central and Southeast Europe	Free Trade Agreement	Limited	Western Balkan countries
BSEC	Black Sea region	Economic Cooperation	Limited	Black Sea countries
CIS	Commonwealth of Independent States (former USSR)	Economic Cooperation	Limited	Post-Soviet states
GUAM	Caspian region	Economic Cooperation	Political and Security Cooperation	Georgia, Ukraine, Azerbaijan, Moldova
EurAsEC	Eurasia	Economic Integration	Limited	Russia, Kazakhstan, Belarus, Kyrgyzstan
EaEU	Eurasia	Economic Integration	Limited	Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia
Americas Integrations				
NAFTA	North America	Free Trade Agreement	Limited	United States, Canada, Mexico
USMCA	North America	Free Trade Agreement	Limited	United States, Canada, Mexico
FTTA	Free Trade Area of the Americas	Free Trade Agreement	Limited	Multiple countries in the Americas
ALADI	Latin America	Economic Integration	Limited	Multiple countries in Latin America

Integration	Geographic Scope	Economic Integration	Political Cooperation	Key Members
MERCOSUR	South America	Economic Integration	Political Cooperation	Argentina, Brazil, Paraguay, Uruguay, Venezuela (suspended)
UNASUR	South America	Economic and Political Integration	Political Cooperation	Multiple South American countries
CARICOM	Caribbean	Economic Integration	Limited	Multiple Caribbean countries
CAN	Andean region	Economic Integration	Limited	Bolivia, Colombia, Ecuador, Peru
AECA	Central America	Economic Integration	Limited	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua
Asia-Pacific Integrations				
ASEAN	Southeast Asia	Economic Integration	Political and Security Cooperation	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
APEC	Asia-Pacific	Economic Cooperation	Limited	Multiple Asia-Pacific economies
AFTA	ASEAN and other Asia-Pacific countries	Free Trade Agreement	Limited	ASEAN Member States + Other Asia-Pacific countries
GCC	Gulf Cooperation Council	Economic Integration	Limited	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE
Africa Integrations				
UMA	Maghreb (North Africa)	Economic Cooperation	Limited	Algeria, Libya, Mauritania, Morocco, Tunisia
AEC - AU	Africa	Economic Integration	Political Cooperation	All African Union member states
COMESA	Eastern and Southern Africa	Economic Integration	Limited	Multiple countries in Eastern and Southern Africa
ECOWAS	West Africa	Economic Integration	Political Cooperation	Multiple West African countries
UEMOA	West Africa	Economic Integration (Monetary	Political Cooperation	Benin, Burkina Faso, Ivory Coast, Guinea-

Integration	Geographic Scope	Economic Integration	Political Cooperation	Key Members
		Union)		Bissau, Mali, Niger, Senegal, Togo
ECCAS	Central Africa	Economic Cooperation	Limited	Multiple Central African countries
CEMAC	Central Africa	Economic Integration (Monetary Community)	Limited	Cameroon, Chad, Equatorial Guinea, Gabon, Republic of Congo, Central African Republic
SACU	Southern Africa Customs Union	Customs Union	Limited	Botswana, Eswatini, Lesotho, Namibia, South Africa
SADC	Southern Africa Development Community	Economic Integration	Political Cooperation	Multiple Southern African countries

Source: own compilation of the author

13. Globalization – Global trade

The period of **internationalization**, spanning 1976 to 1990, marked with the dissolution of the Bretton Woods system precipitated lower economic growth and persistent imbalances, ultimately leading to a protracted debt crisis. During this epoch, there was a discernible assault on the welfare state, marking the ascendancy of neoliberal ideologies. Despite altered power dynamics within the triad, global trade and capital flows continued to expand, with oil crises in 1973 and 1979 and simultaneous worldwide challenges of inflation and stagflation characterizing the era.

Internationalization vs. Globalization

Aspect	Internationalization	Globalization
Definition	The process of increasing involvement in international markets.	The broader process of integration and interdependence on a global scale.
Scope	Primarily involves expanding activities beyond national borders.	Encompasses a comprehensive interconnected approach on a worldwide scale.
Degree of Integration	Gradual expansion into international markets.	Higher degree of integration, interdependence, and interconnectedness.
Focus	Adapting products or strategies to individual foreign markets.	Emphasizes a unified global strategy and consistency across markets.
Business Strategy	Tailors products and strategies to cater to specific market needs.	Requires a more standardized approach with global consistency.
Movement of Factors	May involve limited freedom of movement of labor and resources.	Encourages the free movement of goods, services, capital, and labor.
Cultural Adaptation	Adapts to local cultures to varying extents in different countries.	Balances global identity with adaptation to local cultures.
Timeframe	Can be a stepping stone towards globalization.	Represents a more advanced and interconnected stage of global engagement.
Examples	Companies gradually expanding into international markets.	A global company operating seamlessly on a worldwide scale.

Source: own compilation of the author

Internationalization and globalization are interconnected concepts, but they represent different stages in the expansion of businesses or activities beyond national borders. Internationalization typically refers to the process of increasing involvement in international markets. This involves activities such as exporting products, establishing foreign subsidiaries, or forming international partnerships. It is a more gradual and localized approach to expanding operations across borders. Globalization**,** on the other hand, goes beyond internationalization. It involves a more comprehensive and interconnected global approach, where businesses or activities operate on a worldwide scale. Globalization often implies a higher degree of integration, interdependence, and interconnectedness among economies, societies, and cultures.[305]

13.1. Globalization

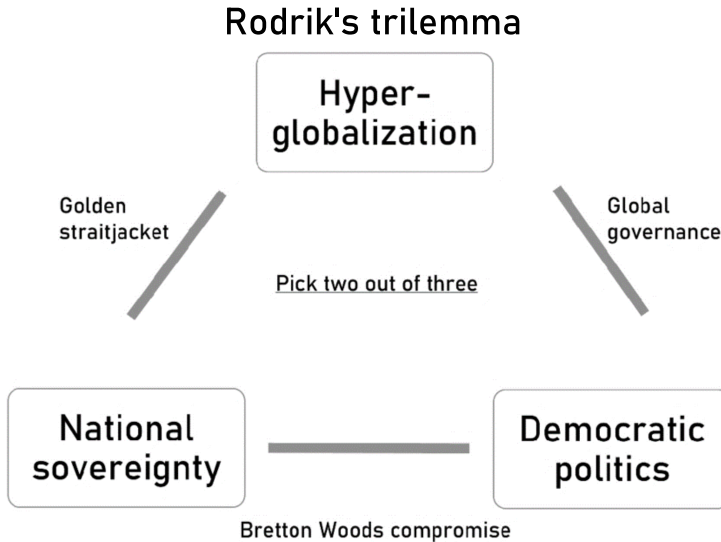
Globalization today is not working for many of the world's poor. It is not working for much of the environment. It is not working for the stability of the global economy. The transition from communism to a market economy has been so badly managed that, with the exception of China, Vietnam, and a few Eastern European countries, poverty has soared as incomes have plummeted. To some, there is an easy answer: Abandon globalization. That is neither feasible nor desirable. Globalization has also brought huge benefits – Asia's success was based on globalization, especially on the opportunities for trade, and increased access to markets and technology. Globalization has brought better health, as well as an active global civil society fighting for more democracy and greater social justice. The problem is not with globalization, but with how it has been managed.

Stiglitz, J. E. (2002). *Globalization and Its Discontents*.
WW Norton & Company. 214.

Globalization refers to worldwide processes of interaction and integration among individuals, businesses, and governments. It involves the intensification of global social connections, with roots in initiatives for global unity and universalization led by Western civilization. The term was first used in the 1930s but gained economic significance from the 1980s onwards. Commonly accepted **perspectives** on globalization include cultural globalization, characterized by the free flow of cultural phenomena and the internationalization of popular culture; information globalization, allowing the free flow of thoughts and ideas with worldwide communication opportunities

[305] Kostiuk, Y., Kalinová, E., & Kučera, J. (2021). Impact of Globalization and Internationalization Processes on Added Value in EU Countries. In *SHS Web of Conferences* (Vol. 92, p. 09008). EDP Sciences.

provided by the internet; and lifestyle globalization, encompassing globally emerging lifestyles, linguistic globalization, and professional globalization.



Source: Vlados, C., & Chatzinikolaou, D. (2022). Mutations of the emerging new globalization in the post-COVID-19 era: Beyond Rodrik's trilemma. *Territory, Politics, Governance*, *10*(6), 855-875. based on Rodrik, D. (2011). *The globalization paradox: Democracy and the future of the world economy*. W.W Norton & Company.

Dani Rodrik introduces the concept of the political **trilemma of the global economy**, highlighting the challenges arising from the simultaneous pursuit of three fundamental goals: the nation-state, hyper-globalization, and democracy.[306]

- **Nation-State + Hyper-Globalization = Golden Straitjacket**: In this scenario, the nation-state attempts to cater to international investors, even at the expense of societal demands. The metaphorical "straitjacket" represents the adoption of uniform rules (Washington Consensus), which might be one-size-fits-all. Some argue that these rules contribute to national prosperity.
- **Hyper-Globalization + Democracy = Global Governance**: This configuration involves the transfer of decision-making to the global level, necessitating a compromise on the nation-state's sovereignty. However, democracy can persist within the framework of hyper-

[306] Rodrik, D. (2011). *The globalization paradox: Democracy and the future of the world economy*. W.W Norton & Company.

globalization, ensuring the representative and legitimate representation of the world's people.

- **Nation-State + Democracy = Bretton Woods**: This setup involves sacrificing hyper-globalization to reinforce the nation-state, complemented by a necessary international regulatory framework. This approach seeks to strike a balance between maintaining the strength of the nation-state and incorporating essential international rules.

In a narrower sense, **economic globalization** predates the broader concepts in time. It refers to the economic integration processes that precede globalization's cultural and information aspects. The global world economy, an economic system encompassing the entire world, traces back to the age of great geographical discoveries and colonialism but evolved into a truly global economic system only in the late 20th century. This has resulted in global products, companies, business networks, and a global consumer society. The interpretation of economic globalization involves continuously expanding the world economy into an increasingly interconnected system involving more countries. Economic relationships and processes become more diverse and extend to more nations. There is a heightened intensity of mutual, asymmetric interdependencies among individual countries and global economic actors. In this context, true economic independence or sovereignty ceases to exist in a narrow sense, leading to dominant positions for some countries and persistent subordinate, vulnerable positions for others. The main driving forces behind globalization include the development of communication and information technology, leading to the death of distance; the activities of transnational corporations (multinationals) shaping global business policies; the opening up of previously isolated countries to the global economy; the international spread of liberal economic policies encompassing trade and capital movements; and the increasing interconnection of international financial markets.[307]

The evolution of a **globalized world economy** in the 1980s marked a transformative era characterized by unprecedented global interconnectedness. The overarching trend was a shift towards heightened openness across the entirety of the global economy. This period witnessed a fundamental restructuring of production dynamics, clearly emphasizing locating production where market demand was most robust. This realignment underscored the

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[307] Kihombo, S., Vaseer, A. I., Ahmed, Z., Chen, S., Kirikkaleli, D., & Adebayo, T. S. (2022). Is there a tradeoff between financial globalization, economic growth, and environmental sustainability? An advanced panel analysis. *Environmental Science and Pollution Research*, *29*, 3983-3993.

critical role played by intellectual property in international trade, encompassing patents, cutting-edge technological processes, licenses, and a highly skilled workforce. An integral aspect of this era was the remarkable expansion of the international trade of services. Sectors such as transportation, finance, banking, insurance, and tourism experienced dynamic growth, reflecting a broader trend of increased globalization in traditionally non-tangible sectors. Furthermore, the emergence of the **quaternary sector**, focusing on the trade of information technology, exemplified the diversification of economic activities in response to technological advancements. These processes were characterized by nations' increasing interconnectivity and interdependence in various economic activities, marking a paradigm shift towards more integrated and globally interconnected economies. The main variations of **mutual but asymmetric dependencies** can be outlined in different spheres.[308]

Mutual but Asymmetric Dependencies

International ownership relations	Arising from flows of operating capital, this form of dependency manifests between countries exporting capital and those receiving it.
International trade, service flows, and International division of labor	The asymmetry in relational structures leads to widening trade relationships and export diversification, encompassing the structural asymmetry of commodity flows.
International financial relations	Financial dependency is observed in the context of financing, along with asymmetries in international monetary relations.
Technological interdependencies	These interdependencies exist between countries developing and adapting technology. Overcoming such dependencies requires a lengthy and challenging process, often involving educational development.
Labor flow structure	Asymmetry in the structure of labor flows is evident between countries emitting and receiving labor.
Information flow	Asymmetric dependencies in information flow may occur, reflecting the uneven distribution of information between countries.

Source: own compilation of the author

Within and as an answer to globalization new **theories** has emerged. Samuelson and Jones proposed the **specific production factors and income distribution** economic model where a country produces two goods and can

[308] Winnebeck, J., Sutter, O., Hermann, A., Antweiler, C., & Conermann, S. (2021). On asymmetrical dependency. *BCDSS Concept Paper*, *1*.

reallocate its labor force between them.[309] Labor is considered a mobile production factor, while land and capital are industry-specific. The speed of reallocating production factors depends on their adaptability, with more specialized factors being less mobile. This specificity affects the combination of production factors and shifts the production possibilities frontier. International trade benefits arise from countries specializing in goods they can produce at a lower opportunity cost.

In the 1960s Staffan Linder proposed his hypothesis to address shortcomings in the Heckscher-Ohlin theory, which asserts that countries export goods that intensively utilize their abundant factors of production (labor or capital).[310] As an opposition, he suggests that trade is more likely to occur between countries with similar income levels and demand structures. The **country similarity theory** states that companies, prior to producing for export, primarily understand domestic demand, referred to as representative demand. As a result, they tend to enter markets abroad that are similar to their domestic markets. The smaller the difference in economic development between two countries, the more similar their domestic demand structures are, leading to more intense trade relationships. In countries with high per capita income, consumers demand a broader and more varied range of products. The theory concludes that international trade is most intense between countries with similar markets and populations with similar high-income levels. The basis for similarity between countries can be: (i) development level (countries with similar stages of economic development), (ii) cultural similarity (shared cultural traits and preferences), (iii) geographical proximity (close geographical locations), (iv) political similarity (similar political systems or policies), (v) economic structure (comparable economic systems or structures), and (vi) industry structure (similar industrial compositions or sectors).

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[309] Jones, R. W. (1975). Income distribution and effective protection in a multicommodity trade model. *Journal of Economic Theory*, *11*(1), 1-15. Jones, R. W. (1996). International trade, real wages, and technical progress: the specific-factors model. *International Review of Economics & Finance*, *5*(2), 113-124.
Samuelson, P. A. (1971). Ohlin was right. *The Swedish Journal of Economics*, *73*(4), 365-384.

[310] According to the Heckscher-Ohlin theory, countries with differing income levels should engage in trade, as capital-intensive goods, typically linked to higher income levels, would be exported by capital-rich countries, while labor-intensive goods would be exported by labor-rich countries.

Michael Porter introduced the concept of **competitive advantages** to replace comparative advantages.[311] Competitiveness is applicable to industries and firms, rather than entire national economies. Porter categorizes international manufacturing firms into three groups: (i) exporting domestic firms; (ii) multi-domestic firms, which are managed country by country with minimal central coordination; (iii) global firms, which have extensive central control. The five forces are competition, the threat of new entrants to the industry, supplier bargaining power, customer bargaining power, and the ability of customers to find substitutes for the sector's products. Porter later applied this concept to national economies, suggesting that macroeconomic competitiveness relies on the success of a few internationally competitive industries. International markets allow industries to measure their efficiency against those of other countries. They also eliminate the need for a country to produce all products domestically. Resources shift from less productive to more competitive industries, raising input costs and further disadvantaging lower competitiveness sectors. International trade enables a country to specialize in its most efficient industries.

The classical Newtonian physics principle, particularly the concept of gravity, is significant in the study of international economics. The **gravity model in international trade** emphasizes the importance of the size of countries and the distances between them. It forms the basis of a relational theory that examines spatial interactions between two or more points, similar to the gravitational interactions known in physics. This model is primarily used in areas where geographical distance is crucial, and it can also be applied to analyze social phenomena such as population migration, the flow of goods or money, the movement of information, and traffic patterns. Walter Isard introduced this model to economics in 1954, and Jan Tinbergen first applied it to international trade in 1962.[312] Rose and Wincoop (2001) developed a corrected model for Eurozone countries, finding that joining the currency union doubles trade among its members.[313] Subramanian and Wei showed

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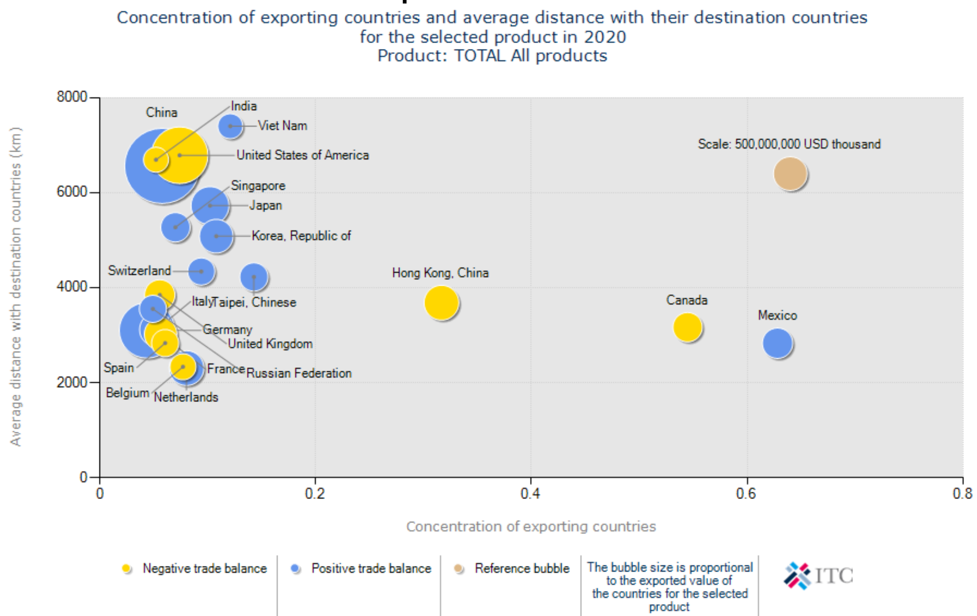
[311] Porter, M. E. (1985). Technology and competitive advantage. *Journal of business strategy*, *5*(3), 60-78. Porter, M. E. (1997). Competitive strategy. *Measuring business excellence*, *1*(2), 12-17. Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard business review*, *86*(1), 78.

[312] Tinbergen, J. (1962). *Shaping the World Economy*. New York: Twentieth Century Fund. Dekker, E. (2022). An "Ordo-Thinker" on the Left: Jan Tinbergen on the National and International Economic Order. *History of Political Economy*, *54*(4), 689-718.

[313] Rose, A. K. (2001). Common currency areas in practice. *Revisiting the Case for Flexible Exchange Rates. Bank of Canada.*; Rose, A. K., & Van Wincoop, E. (2001). National money as a barrier to international trade: The real case for currency union. *American economic review*, *91*(2), 386-390.

that new WTO members since the Uruguay Round have significantly benefited, with their imports increasing by 30% compared to non-members.[314] Souleymane Coulibaly demonstrated using gravity models that seven regional agreements increased trade among developing regions such as Central Saharan Africa (ECOWAS and SADC), Asia (AFTA and SAPTA), and Latin America (CACM, CAN, and MERCOSUR) between 1960 and 1990, with AFTA proving most successful.[315] Marimoutou (2009) proved that distance determines the relationship between export-import and volume change.[316]



Source: https://www.trademap.org/Index.aspx

Helpman and Paul Krugman (Nobel Prize winners in 2008) developed the **new trade theory** in the 1980s, which comprises economic models app-

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[314] Subramanian, A., & Wei, S. J. (2007). The WTO promotes trade, strongly but unevenly. *Journal of international Economics*, *72*(1), 151-175.

[315] Coulibaly, S. (2009). Evaluating the trade effect of developing regional trade agreements: a semi-parametric approach. *Journal of Economic Integration*, 709-743. Coulibaly, S. (2022). Comparative Analysis of AGOA and EBA Impacts: Evidence from West Africa. *Africa in the New Trade Environment: Market Access in Troubled Times*, 1861.

[316] Marimoutou, V., Peguin, D., & Peguin-Feissolle, A. (2009). The" distance-varying" gravity model in international economics: is the distance an obstacle to trade?. *Economics Bulletin*, *29*(2), pp-1157.

lied in international trade. Competitiveness essentially equates to productivity. The structure of international trade is increasingly polarized. The theory is based on two fundamental assumptions: economies of scale and imperfect competition. Larger quantities can be produced more efficiently (increasing returns to scale): (i) internal economies of scale depend on the size of the firm; (ii) external economies of scale depend on the size of the industry.[317] Decisions take into account the behavior of other countries or firms (imperfect competition). Thus, it explains how economies benefit from specialization driven by economies of scale and how imperfect competition shapes decision-making in international trade contexts.

In the 1980s, Paul Krugman and Kevin Lancaster introduced the **global strategic rivalry theory**, which explores the impact of global strategic competition among multinational corporations on international trade.[318] To maintain viability, companies must leverage their global competitive advantages and sustain them through: (i) ownership of intellectual property rights; (ii) investments in research and development; (iii) achieving economies of scale or scope; (iv) leveraging the learning curve; (v) forming strategic alliances; (vi) engaging in mergers and acquisitions. These decisions also influence international trade and investment flows. Globally, companies engage in continuous strategic games, leveraging their strengths while neutralizing rivals. They strive to develop sustainable competitive advantages that they can then exploit to dominate global markets.

Glocalization, a portmanteau of globalization and localization, refers to adapting globally distributed goods and services to local markets.[319] The

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[317] Helpman, E. and Krugman, P. (1985). *Market structure and foreign trade*: Increasing returns, imperfect competition and the international economy, Cambridge, MA: MIT Press. Krugman, P. (1979). Increasing returns, monopolistic competition, and international trade. *Journal of International Economics*, 9, 469–479.; Krugman, P. (1980). Scale economies, product differentiation, and the pattern of trade. *American Economic Review*, 70, 950–959.; Krugman, P. (1981). Intraindustry specialization and the gains from trade. *Journal of Political Economy*, 89, 959–973.

[318] Krugman, P. (1983). New theories of trade among industrial countries. *The American Economic Review*, *73*(2), 343-347.; Lancaster, K. (1990). The economics of product variety: A survey. *Marketing science*, *9*(3), 189-206.; Mutuku, A. M. (2022). *Internationalization Strategies Adopted by Jambojet Airline to Gain Competitive Advantage* (Doctoral dissertation, University of Nairobi); Chijioke, O. C., Aloysius, A., & Obi, D. O. (2021). Mercantilism in perspective: A historic review. *Global economy journal*, *21*(01), 2150001.; Orinya, S. (2023). Liberalism and Protectionism in International Trade. *African Political Economy in the Twenty-First Century: Theories, Perspectives, and Issues*, 213.

[319] Roudometof, V. (2016). *Glocalization: A critical introduction*. Routledge.
The idea originates from the Japanese term dochakuka, translating to global localization. Initially, it denoted the adjustment of farming techniques to suit local conditions.

term appeared in the 1980s, mainly raised in the 1990s.[320] As globally disseminated products and ways of life spread, they readjust to the local cultural context, resulting in the re-emergence of localized characteristics. This phenomenon leads to the integration of local markets into the global marketplace. Glocalization encompasses the simultaneous presence of universalizing and particularizing tendencies. It finds practical application in marketing strategies, as exemplified by the case of McDonald's restaurants offering region-specific menu items, Coca-Cola adjusting flavors based on local tastes, and global brands incorporating cultural nuances in advertising. The concept is employed when adapting menu offerings to local tastes in different countries, demonstrating the integration of foreign products with local preferences to enhance acceptance within the local audience. The process can be expensive and resource-intensive, but it pays off for companies that practice it. Various analogies describe glocalization, such as the analogy of an octopus and its tentacles, emphasizing the interconnectedness of global and local elements. It can also be likened to a node in a social network or the concept of encircling the world, emphasizing the intricate relationship between global and local dynamics.

13.2. MNCs and TNCs

An **international company** refers to an entity jointly owned by natural or legal persons under the jurisdiction of at least two states. The term **multinational** originated in the 1960s, often attributed to IBM. An MNC operates in at least two countries or has subsidiaries in different nations. The company's ownership may involve individuals of diverse nationalities, although this ownership diversity may not directly manifest in the operational aspects of the company. It may have multiple management centers in various countries, resulting in the absence of a global strategy. MNCs typically operate with branches and facilities. The term **transnational** traces its origin to the establishment of the United Nations Center on Transnational Corporations (UNCTC) in 1974. A transnational company engages in activities spanning multiple national economies, and its capital ownership is often, though not necessarily, multinational. The interests of the controlling group in the material economy primarily determine its business policies. A centralized deci-

[320] Robertson, R. (1995). Glocalization: Time-space and homogeneity-heterogeneity. *Global modernities*, *2*(1), 25-44.

sion-making system and a global strategy characterize transnational companies. They operate with subsidiaries. In theory, these terms may have distinct meanings, but they are often used interchangeably in practice.[321]

MNC vs. TNC

Aspect	Multinational Corporation (MNC)	Transnational Corporation (TNC)
Scope of Operations	Operates in multiple countries, but may not have a centralized global strategy.	Operates globally with a coordinated strategy across borders.
Management Structure	Management decisions often made on a country-by-country basis.	Centralized management with decision-making at the global level.
National Affiliation	Typically has a home country where it is headquartered, but operates in various host countries.	May not have a clear home country and operates as a global entity.
Resource Allocation	Resources may be allocated based on individual country needs and opportunities.	Resources are allocated globally based on a unified strategy.
Risk Management	Risks may be managed independently in each country of operation.	Centralized risk management to address global challenges.
Cultural Adaptation	May adapt to local cultures to varying extents in different countries.	Balances global identity with adaptation to local cultures.
Economic Impact	May contribute to economic development in host countries.	Can influence global economic trends and contribute significantly to host and home economies.
Technology Transfer	May transfer technology selectively based on individual market requirements.	Engages in extensive technology transfer across borders for a global competitive advantage.
Example	Coca-Cola, which operates globally but may have different marketing strategies in various countries.	Toyota, known for a centralized global strategy and uniform quality standards across the world.

Source: own compilation of the author

The **evolution** of international companies spans distinct phases, each reflecting the prevailing economy and geopolitics of its time. The **colonial-type international companies** (late 18th Century – World War I) primarily aimed at cost optimization and leveraging relative factor endowments. They had a significant impact on generating international trade, often connecting

[321] Zamfir, P. B. (2012). The expansion of the transnational and multinational corporations in the global economy. *Annals-Economy Series*, *4*, 248-251.

economies with differing levels of development. The **parallel-structured international companies** (interwar period) operate in multiple national economies, such companies like IBM, Nestlé, Siemens, and Philips pursued a unified market strategy. While unified in market strategy, their production activities were not fully integrated. These entities had a substitutive effect on international trade and generally operated in countries with similar levels of development. The **internationally integrated (complex) companies** (post-World War II) emerged following a radical reduction in transportation and communication costs. Implementing a unified market strategy across multiple countries, they typically operated in nations with similar levels of development and comparable consumption patterns. The relative freedom of goods and capital movement facilitated their operations. The **global companies** (from the 1980s) pursue complete internationalization, positioning themselves based on value chain elements such as market, production, R&D, marketing, etc. They contribute significantly to international trade, often connecting economies with differing development levels. These entities adopt a unified international decision-making mechanism.

Multinational and transnational corporations were central to this transformative period, which assumed pivotal roles in the international division of labor. These corporations not only orchestrated their business policies and expansion strategies globally but also created extensive networks that spanned the entire globe. The result was the establishment of corporate empires, with multinational corporations contributing significantly—accounting for 75% of the world's industrial exports. Consequently, this period witnessed a diminishing emphasis on bilateral economic relations between individual national economies. **Foreign direct investments** (FDI) are categorized into four types according to Dunning's framework:[322]

- Resource-seeking involves seeking the host country's natural resources, including raw materials and energy sources, and access to a skilled workforce. It also entails acquiring and continuously providing the corporate group's intellectual and/or physical infrastructure.
- Strategic asset/capability-seeking investments aim to control various capacities and activities for long-term competitiveness. This type of investment may involve appropriating assets from acquired

[322] Dunning, J. H. (1981). Explaining the international direct investment position of countries: towards a dynamic or developmental approach. *Weltwirtschaftliches Archiv*, *117*, 30-64.
Dunning, J. H. (2001). *Studies in international investment* (Vol. 6). Taylor & Francis.

companies to strengthen the acquiring company's strategic assets and capabilities.

- Market-seeking investment focuses on local production (and/or services) to supply foreign markets previously served through exports. Motivating factors include expected growth in the size of previously exported markets, similarity in consumption patterns to the home country, a desire to reduce transportation costs, and circumventing trade barriers.
- Efficiency-seeking investment aims to enhance efficiency through factors such as resource endowment, product differentiation, and economies of scale. Efficiency gains may be achieved by exploiting relative factor endowments and factor prices, particularly in economies with different levels of development, and by increasing production.

13.3. Global Integrations

The **Transatlantic Trade and Investment Partnership** (TTIP) was a proposed trade agreement between the European Union (EU) and the United States, designed to boost trade and foster global economic growth. European Commissioner for Trade, Karel de Gucht, emphasized its significance as the most extensive bilateral trade initiative ever, not only due to involving the two largest economic entities but also for its potential global impact in shaping future partnerships and agreements. Analyses indicated that over a period of 10-15 years, there would have been an overall economic growth increment ranging between 0.5% and 1%. The anticipation was that both economies would have benefited from reduced transaction costs and specialization based on comparative advantages. Key topics included improving access to American public procurement for European small and medium-sized enterprises (SMEs), with the European automotive industry expected to have been a significant beneficiary of the agreement. Challenges in the agricultural sector, such as disputes over genetically modified organisms (GMOs), were part of the negotiations. The Investor-State Dispute Settlement (ISDS) mechanism, addressing conflicts between investors and states, was a notable aspect of the discussions. There were concerns about Europe's ability to compete with the United States in terms of cheap energy in the foreseeable future, posing a threat to energy-intensive industries in Europe. However, negotiations came to a halt under the presidency of Donald Trump, who subsequently initiated a trade conflict with the EU. Despite a truce declared in July

2018, resembling TTIP, the European Commission declared the negotiations obsolete and no longer relevant in 2019.[323]

Negotiations for the **Comprehensive Economic and Trade Agreement** (CETA) commenced in 2004 during the Canada-EU Summit in Ottawa. It temporarily came into effect in 2017. The agreement eliminates 98% of tariffs between the member states of the European Union (including Hungary) and Canada. This expansion of the range of available goods ensures that current European standards are not compromised. Only products and services that fully comply with all EU regulations are permitted to enter the EU market under this agreement.[324]

The **Comprehensive and Progressive Agreement for Trans-Pacific Partnership** (CPTPP) originally stemmed from the Trans-Pacific Strategic Economic Partnership (TPSEP or P4), which was initially comprised of four countries. Negotiations began in 2008, and the final version, named the Trans-Pacific Partnership Agreement (TPPA or TPP), was signed in 2015/2016. In 2017, the United States withdrew from the agreement, leading to adopting the CPTPP name from 2018 onwards. The agreement includes 11 member countries: Australia, Brunei, Chile, Japan, Canada, Malaysia, Mexico, Peru, Singapore, New Zealand, and Vietnam, all of which are members of the Asia-Pacific Economic Cooperation (APEC). The CPTPP aims to implement measures for reducing both tariff and non-tariff trade barriers and strives to establish a unified dispute resolution mechanism between investors and states known as Investor-State Dispute Settlement (ISDS).[325]

Negotiations for the **Regional Comprehensive Economic Partnership** (RCEP) originated during the 2011 ASEAN Summit in Bali, and commenced in 2012. Considered an alternative to the Trans-Pacific Partnership (TPP), the RCEP does not include China and India. With a population of 3.5 billion and covering 40% of the world's GDP, it stands as the largest economic bloc globally, encompassing nearly half of the world economy. It has 16 members: Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar, Cambodia, China, Japan, South Korea, India,

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[323] De Ville, F., & Gheyle, N. (2024). How TTIP split the social-democrats: Reacting to the politicisation of EU trade policy in the European parliament. *Journal of European Public Policy*, *31*(1), 54-78.

[324] Qirjo, D., Pascalau, R., & Krichevskiy, D. (2021). Comprehensive Economic and Trade Agreement (CETA) and air pollution. *Journal of Environmental Economics and Policy*, *10*(3), 293-323.

[325] Wu, T., & Chadee, D. (2022). Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP): Implications for the Asia-Pacific Region. *International Business in the New Asia-Pacific: Strategies, Opportunities and Threats*, 53-74.

Australia, and New Zealand. Given the United States' withdrawal from the TPP, the chances of RCEP's success have increased. The treaty was officially signed in 2020, during the virtual ASEAN Summit hosted by Vietnam. The trade pact took effect in 2022, for the first ten ratifying countries.[326]

TTP – CPTPP vs. RCEP

Aspect	TPP	CPTPP	RCEP
Initiation Year	2005	2008	2012
Signing Year	2016	2018	2020
Original Members	12	11	16
Initial Objectives	Broad trade liberalization	Comprehensive trade agreement	Broad economic integration
U.S. Involvement	Originally involved	Withdrew in 2017, before CPTPP signing	Not part of RCEP
Asia-Pacific Coverage	Yes	Yes	Yes
Largest Economies Included	U.S., Japan, Canada	Japan, Canada	China, Japan, India, South Korea
Cumulative GDP of Participating Nations	High	High	Extremely High
Incorporation of ISDS Mechanism	Yes	Yes	No
Flexible Accession for Other Nations	Yes	Yes	Yes (From July 1, 2023 onward)
Ratification and Entry into Force	Long process, not yet in force	Effective from December 30, 2018	Effective from January 1, 2022
Trade Bloc Status	Original TPP: Asia-Pacific	CPTPP: Asia-Pacific	RCEP: Asia-Pacific
China's Role	Excluded	Not included in original TPP, but later signed	Central role in RCEP

Source: own compilation of the author

Established in 1989 in Canberra, the **Asia-Pacific Economic Cooperation** (APEC) is a loosely formed grouping distinct from other integrations. Its decisions lack mandatory force, and annual deliberations occur at the "APEC Economic Leaders' Meeting," organized by one of the member states, with leaders donning the national attire of the host country. Comprising 21

[326] Altin, F. G., & Yalçinkaya, M. (2023). Regional Comprehensive Economic Partnership (RCEP): Evaluation of Trade Relations Between Member Countries Using the Social Network Analysis Method. *International Journal of Business and Economic Studies*, *5*(4), 259-271.

members, including Australia, New Zealand, the USA, Canada, Japan, South Korea, Singapore, Malaysia, Indonesia, the Philippines, Brunei, Thailand (1989), Hong Kong, China, Taiwan (1991), Mexico, Papua New Guinea (1993), Chile (1994), Vietnam, Peru, and Russia (1998), APEC aims to establish free trade and capital flow by 2010 for developed and 2020 for developing nations. Challenges include significant economic development disparities among members and rivalry between the U.S. and Japan, with the former advocating rapid liberalization and the latter preferring a more gradual approach.[327]

BRICS, composed of Brazil, Russia, India, China, and South Africa, constitutes five significant emerging economies, each being a member of the G20. All are swiftly developing and recently industrialized nations, collectively representing 3 billion people (40% of the world's population) and contributing 20% to the aggregated nominal GDP. Initially referred to as BRIC before the inclusion of South Africa in 2010, the BRICS Forum, established in 2011, serves as an independent international organization encouraging trade, political, and cultural cooperation among its members. In 2014, the New Development Bank (NDB) was founded in Shanghai, serving as a development bank challenging the Western-dominated IMF and World Bank. Each member country contributes $10 billion to the bank's capital, later raised from $50 billion to $100 billion. In 2022, there was a proposal for a new global reserve currency based on a basket of BRICS currencies as an alternative to the dollar. Furthermore, Iran and Argentina expressed interest in joining the BRICS group.[328]

[327] Vu, V. H., Soong, J. J., & Nguyen, K. N. (2022). The political economy of China’s rising role in the Asia-Pacific Economic Cooperation (APEC): Strategies and instruments of the Chinese way. *The Chinese Economy*, *55*(4), 255-267.
[328] Sawal, J., & Anjum, R. (2023). BRICS the Major Emerging Economies: Prospects for a Multi-Polar World. *Global International Relations Review, VI*, 72-82.
Justo Lins, J. (2022). The performance of BRICS on the global political-economic scenario: Analyzing Brazil participation from 2010 to 2020.

The Emerging Acronyms

Aspect	BRICS	MINTs	EAGLEs	CIVETS	Fragile 5
Countries	Brazil, Russia, India, China, South Africa	Mexico, Indonesia, Nigeria, Turkey	Brazil, China, Eqypt, India, Indonesia, Mexico, Russia, South Korea, Taiwan, Turkey	Colombia, Indonesia, Vietnam, Egypt, Turkey	Brazil, India, Indonesia, South Africa, Turkey
Economic Focus	Emerging economies with substantial influence.	Rapidly growing and diverse economies.	Economies with significant potential and growth.	Countries with potential for investment.	Economies facing economic challenges and vulnerabilities.
Political Cooperation	Collaboration on global economic issues.	Diverse politics and alignments.	Varies among the member countries.	Limited political alliance.	Economic challenges often lead to political instability.
Economic Indicators	Considerable GDP and global influence.	Varied economic strengths and prospects.	Potential for robust economic growth.	Emerging markets with growth potential.	Economically fragile with high vulnerability.
Investment Attractiveness	Attracts global investments.	Increasingly attractive for investments.	Emerging as attractive investment destinations.	Varies among member countries.	Investment attractiveness may be limited due to economic challenges.
Global Impact	Significant global players with influence.	Rising influence in the global economy.	Emerging as contributors to global dynamics.	Varied impact on global affairs.	Economic challenges may contribute to global economic instability.
Challenges	Varying economic challenges among member countries.	Challenges in political stability and governance.	Balancing economic growth and political stability.	Addressing economic disparities and governance issues.	Economic vulnerabilities leading to challenges and instability.

Source: own compilation of the author

Among the **emerging acronyms**, the **MINTs**, comprised of Mexico, Indonesia, Nigeria, and Turkey, represent a group of emerging market economies identified for their favorable demographic trends, strategic geographic locations, and economic potential. These nations have garnered attention for their robust growth prospects and are seen as key players in shaping the global economy.[329] The **EAGLEs** (Emerging and Growth-Leading Economies), a diverse coalition including Brazil, China, Egypt, India, Indonesia, South Korea, Mexico, Russia, Taiwan, and Turkey, comprises major economies significantly influencing regional and international affairs. Recognized for their substantial contributions to global economic growth, the EAGLEs nations are often characterized by their dynamic markets and strategic geopolitical positions.[330] **CIVETS**, consisting of Colombia, Indonesia, Vietnam, Egypt, Turkey, and South Africa, represents another group of emerging economies characterized by their economic dynamism and potential for sustained growth. These nations are often identified for their favorable demographics, expanding middle class, and strategic importance in regional and global economic contexts. The **Fragile Five**, which includes Turkey, South Africa, India, Indonesia, and Brazil, refers to a group of nations facing economic challenges such as currency depreciation, high inflation, and fiscal deficits. These countries have been identified for their vulnerability to external economic shocks and are closely monitored for potential impacts on global economic stability.[331]

13.4. World Trade

From 1990 to 2008, **Eastern Europe** witnessed a notable trend of international integration, accompanied by a reduced incidence of equilibrium challenges. The United States played a pivotal role as a locomotive, steering an unusually prolonged and favorable economic cycle. Japan grappled with

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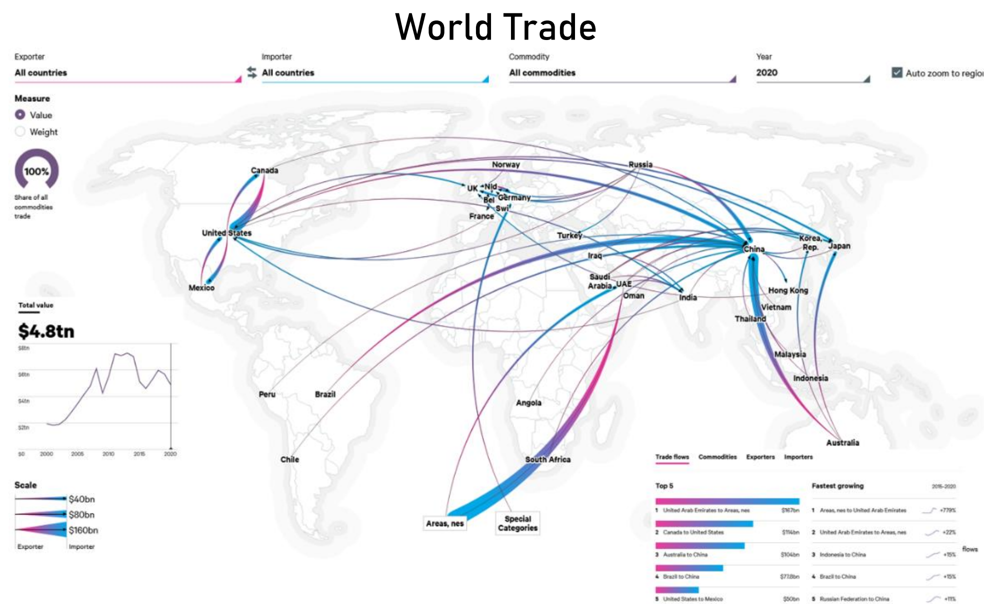
[329] Dutta, K. (2020). Empirical Analysis of Economic Cooperation: An Evidence From MINT Economies. In *Regional Trade and Development Strategies in the Era of Globalization* (pp. 213-225). IGI Global.

[330] Tabash, M. I., Farooq, U., Anagreh, S., & Al-Faryan, M. A. S. (2023). Contributing to sustainable development goals (SDGs) in environmental sustainability through public-private investment in energy: empirical evidence from EAGLE economies. *International Journal of Innovation Science*.

[331] Bingöl, U. (2020). The Macroeconomic Determinants of NEET: A Panel Data Analysis for Fragile Five Countries and Russia. *Journal of management and economics research*, *18*(4), 173-189.

a persistent recession, while the international community experienced a dramatic surge in capital flows, encompassing both portfolio investments and foreign direct investment (FDI). The role of transnational corporations (TNCs) expanded, and the influence of China and India on the global economic stage grew significantly.



Source: Resourcetrade.earth. (2023). World Trade. Chatham House (https://resourcetrade.earth/?year=2020&units=value&autozoom=1)

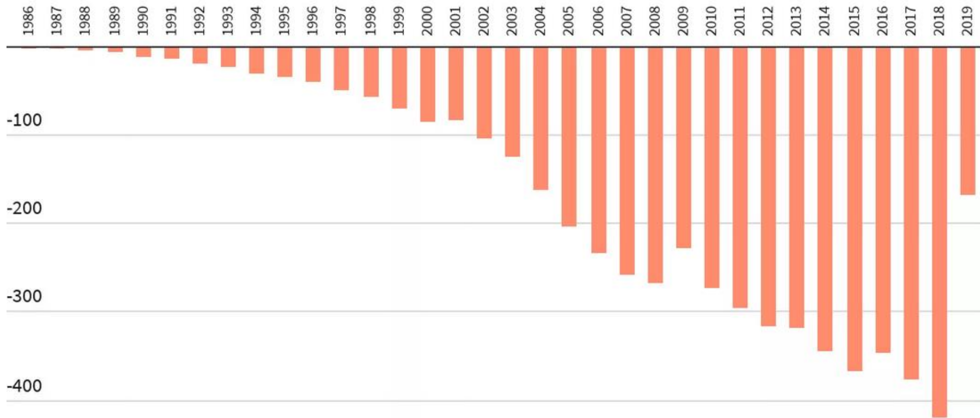
The **China – United States trade war** refers to a series of trade tensions and retaliatory measures between the two countries that escalated significantly in the early 21st century.[332] Both countries' imposition of tariffs, trade barriers, and various other restrictive measures has marked this economic conflict. Trade imbalances, intellectual property concerns, and allegations of unfair trade practices had been longstanding issues in Sino-American economic relations. The trade war gained momentum with the Trump administration's initiation of tariff measures against Chinese goods in 2018, citing the need to address trade deficits and protect American industries. Both countries engaged in a series of tariff escalations, with the U.S. imposing tariffs on a wide range of Chinese imports, and China responding with retaliatory

[332] Zhao, S. (2022). The US–China rivalry in the emerging bipolar world: Hostility, alignment, and power balance. *Journal of Contemporary China*, *31*(134), 169-185.
Fajgelbaum, P., Goldberg, P. K., Kennedy, P. J., Khandelwal, A., & Taglioni, D. (2023). *The US-China trade war and global reallocations*. National Bureau of Economic Research.

tariffs on American goods. The trade conflict covered various sectors, including technology, agriculture, and manufacturing.

US-China Trade balance ($ billions)

Goods only, nominal terms



Source: Chen J. (2022). Trade Wars: History, Pros & Cons, and U.S.-China Example. Investopedia (https://www.investopedia.com/terms/t/trade-war.asp)

2020 the United States and China reached a Phase One trade agreement. China committed to purchasing additional U.S. goods and addressing certain intellectual property issues as part of the deal. Tariffs on some Chinese imports were reduced, providing a temporary respite in the trade tensions. Tensions persisted despite the Phase One agreement, and both countries continued to impose additional tariffs and trade restrictions. Issues such as technology transfer, cybersecurity, and human rights further fueled the dispute. The Biden administration inherited the trade war and maintained a tough stance on certain issues while seeking multilateral cooperation to address shared concerns about China's economic practices. The trade war has had widespread implications for global supply chains, financial markets, and economic growth. Both countries continue to engage in diplomatic discussions and negotiations, with the trajectory of the trade relationship remaining a focal point in international economic relations.

The China–United States trade war has impacted the economic relations between the two largest economies and prompted a broader reevaluation of global trade dynamics, with potential implications for multilateral trade agreements and global economic stability.

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Al-Bashayreh, A. I. (2023). The French Minister Colbert and His Economic Policy and Reforms under the Reign of Louis XIV 1661-1683. *Journal of Namibian Studies: History Politics Culture*, *33*, 227-247.

Al-Naser, M., & Hamdan, A. (2021). The impact of public governance on economic growth: Evidence from gulf cooperation council countries. *Economics & Sociology*, *14*(2), 85-110.

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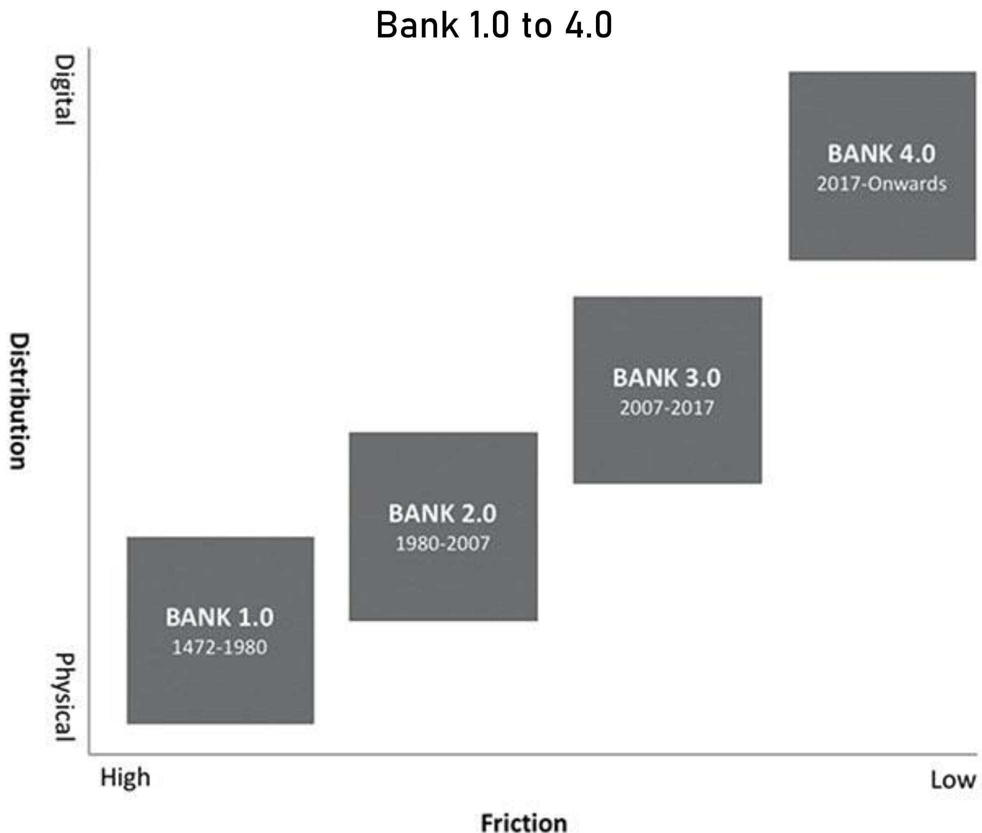
The history of international banking can be traced back to ancient times, followed by the Middle Ages and the era of central banks. In the second half of the 19th century, the modern banking system – excluding the opportunities provided by electronics and IT – was half of the current standard.[333]

Bank 1.0 to 4.0



Source: King, B. (2018). *Bank 4.0: Banking everywhere, never at a bank*. John Wiley & Sons.

In a development concept – parallel to Industry 1.0 to 4.0 – **Bank 1.0** represents historical and traditional banking, focusing on physical branches as the primary access point, tracing its origins back to the 12th century and later in the 14-15th century with the Italian and German banker families. The era revolved around physical branches as the sole access point. Transactions

[333] Finel-Honigman, I., & Sotelino, F. (2015). *International banking for a new century*. Routledge.

were labor-intensive and time-consuming, necessitating personal visits. The date 1472 reflects the establishment of the Banca Monte dei Paschi di Siena S.p.A, which can be considered the world's oldest and still operating bank. **Bank 2.0** signifies the advent of self-service banking, characterized by the initial efforts to offer access beyond regular banking hours. The arrival of ATMs in the 1960s marked a turning point, offering 24/7 self-service for basic transactions. The era's defining feature was increased accessibility beyond branch hours. The commercial internet's emergence in 1995 further propelled this progress, enabling online banking through clunky desktops. **Bank 3.0** introduces a paradigm shift in banking, emphasizing accessibility at the user's convenience, mainly catalyzed by the emergence of smartphones in 2007. This evolution accelerated with IoT and mobile banking apps, which transformed convenience, allowing on-the-go access to accounts, payments, and information. Peer-to-peer (P2P) transactions gained traction, and challenger banks leveraged mobile platforms, challenging traditional models with a channel-agnostic approach. This era witnessed a 61% global internet penetration rate by 2022, driving rapid adoption. Finally, **Bank 4.0** embodies embedded and omnipresent banking services delivered in real-time through advanced technological layers. Real-time, context-driven experiences, seamless interactions, and intelligent, AI-driven advisory layers mark this phase.[334] It predominantly operates as a digital omnichannel model, eliminating the need for physical distribution channels, automatic bill payments, context-aware financial recommendations, and automated fraud detection. The global smartphone user base is projected to reach 6.6 billion by 2025, further fueling this evolution. ATM installations grew from 60,000 in 1980 to over 3 million globally by 2023. Mobile banking transactions accounted for 47% of all retail banking transactions in 2021. Investments in FinTech reached a record $210 billion in 2021, showcasing the industry's dynamism.

To be clear, Banks 1.0, 2.0, and 3.0 still exist today.[335] Some banks fundamentally maintain a Bank 1.0 nature in operations and customer interaction. Others, falling within the Bank 2.0 category, still lack a mobile app

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[334] Kaur, D. N., Sahdev, S. L., Sharma, D. M., & Siddiqui, L. (2020). Banking 4.0:'the influence of artificial intelligence on the banking industry & how ai is changing the face of modern day banks'. *International Journal of Management*, *11*(6).
Mehdiabadi, A., Tabatabeinasab, M., Spulbar, C., Karbassi Yazdi, A., & Birau, R. (2020). Are we ready for the challenge of Banks 4.0? Designing a roadmap for banking systems in Industry 4.0. *International Journal of Financial Studies*, *8*(2), 32.
[335] King, B. (2018). *Bank 4.0: Banking everywhere, never at a bank*. John Wiley & Sons. 277-278. and Bhatia, M. (2022). Banking 4.0. *Springer Books*.

and have limited online capabilities. The majority of banks not offering mobile account openings would only marginally meet the criteria for Bank 3.0—akin to a Bank 2.5 status. Globally, only a limited number of banks are genuinely omni-digital today, striving to transition to Bank 4.0, possibly numbering in the dozens. Notably, a significant portion, including certain challenger banks, may never achieve this transformation.[336]

According to John **Hicks** there are **three distinct stages in the evolution of banking**, of which the first, in which the bank is no more than a financial intermediary. People lend to the banker, altogether he pays a lower rate of interest than that which he charges (his 'in-rate' must be lower than his 'out-rate' if he is to make a profit) because they do not have the knowledge, which he has acquired in building up his business, by which they can find for themselves such safe and profitable investments as he is finding. The second stage of banking evolution comes when the banker realizes that it is safe for him, or usually safe for him, to accept money on deposit, subject to withdrawal on demand or at short notice. Though he is exposed to the danger of a 'run', means that are more or less effective can be taken to guard against it. It is often represented that this reliance upon the insurance principle is the essence of banking. The importance of this second stage is largely that it leads (and often very rapidly leads) to the third, which nevertheless is logically distinguishable from it. This is the point at which deposits in banks, withdrawable deposits, are made transferable: either by cheque, which is an instruction to a bank to transfer an existing deposit, or by note – which is in effect a cheque payable to bearer, having the guarantee of the bank behind it, without reference to the depositor against whose deposit it was originally issued. The money which it lends is money that it itself creates.[337]

[336] Vértesy, L. (2020). Ab ovo... Banktörténet dióhéjban. *Jog és pénzügyek a bankszektorban*. Akadémiai Kiadó.
[337] Hicks, J. R. (1969). A theory of economic history. Oxford University Press, 94-96.

14. The Concept of Banking

For a country, everything will be lost when the jobs of an economist and a banker become highly respected professions.

Charles-Louis de Secondat, La Brède és Montesquieu

The term banking refers to the business of a bank or a banker.[338] This is rather tautologic, so the bank is an establishment within the financial industries for the custody, loan, exchange, or issue of money, for the extension of credit, and for facilitating the transmission of funds.[339] On one hand, the bank (banked; banking; banks) can be an intransitive verb; in this sense it means to manage a bank or to deposit money or have an account in a bank (choosing where to bank), on the other hand it is a transitive verb: to deposit or store in a bank (bank a check).[340]

There are basically three approaches to the question of why **internal financial institutions** exist in the financial market. Each approachcenters upon a specific portionof the bank's activity. (i) The first relates to the role played by these institutions as asset transformers.Here, interest centers upon diversification potential and asset evaluationas a reason for these financial firms. (ii) The second refers to the nature of the liabilities issued and their central function in a monetary economy. Indeed, the existence of a medium of exchange creates an opportunity for its issuer to gain some form of seigniorage. (iii) Finally, some have emphasized the two-sided nature of these financial firms as critical in any explanationof their behavior. Pyle developed a model of the maximizing firm in a financial market with uncertainrates of return.[341] He concluded that covariance between the return on loans and deposits fosters intermediationby encouraging the risk-averse maximizer to transform deposits into loans.[342]

Banking faces with a **trilemma** among profitability, liquidity and solvency. Profitability (return on equity) refers to the ability of a bank to operate profitably over the long term, optimizing its operations to generate the high-

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[338] "Banking." *Merriam-Webster.com Dictionary*, Merriam-Webster, https://www.merriam-webster.com/dictionary/banking.

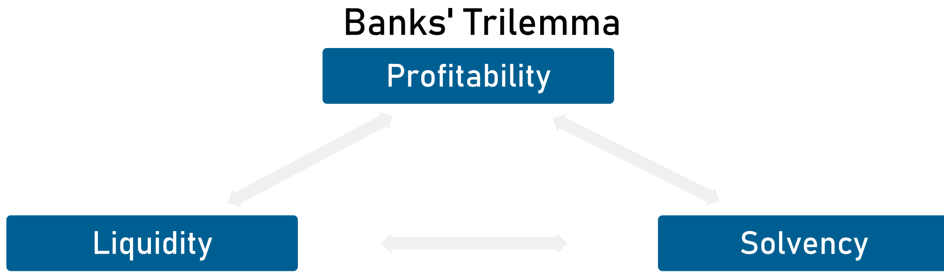
[339] Vértesy, L. (2015). *Financial Industries*. Budapesti Corvinus Egyetem

[340] "Bank." *Merriam-Webster.com Dictionary*, Merriam-Webster, https://www.merriam-webster.com/dictionary/bank.

[341] Pyle, D. H. (1971). On the theory of financial intermediation. *The Journal of Finance*, *26*(3), 737-747.

[342] Santomero, A. M. (1984). Modeling the banking firm: A survey. *Journal of money, credit and banking*, *16*(4), 576-602.

est possible profits while also distributing dividends to its shareholders. Liquidity represents a bank's capacity to meet its current obligations with sufficient and appropriate liquid assets, ensuring that it has the necessary resources readily available to satisfy its immediate liabilities. Solvency pertains to a bank's long-term ability to meet its obligations, whereby the market value of its assets exceeds the market value of its liabilities, indicating positive equity and ensuring long-term financial stability.



Source: own compilation of the author

Balancing Financial Objectives. Finding, establishing, and maintaining an optimal balance among the three financial objectives is crucial for financial institutions. In the case of excessive profitability, in pursuit of higher yields, banks may increasingly undertake higher risks, engaging in riskier transactions and associating with riskier clients. Consequently, this can compromise the institution's safety, jeopardizing its solvency over time. At excessive liquidity, holding excessive cash or liquid assets, while safe, may yield low profitability. This surplus liquidity can limit the bank's lending capacity, thereby moderating its profitability. The excessive Solvency means maintaining excessive solvency or having a perfectly matched maturity structure and conservative risk-taking can constrain the bank. In an attempt to minimize risk, profitability may decrease. Risk manifests itself in each of these scenarios.

14.1. Characteristics of Banking

The acquisition by dishonest means and cunning,' said Levin, feeling that he was incapable of clearly defining the borderline between honesty and dishonesty. 'Like the profits made by banks,' he went on. 'This is evil, I mean, the acquisition of enormous fortunes without work, as it used to be with the spirit monopolists. Only the form has changed. *Le roi est mort, vive le roi!* Hardly were the monopolies abolished before railways and banks appeared: just another way of making money without work.

Leo Tolstoy, Anna Karenina

The **economy's financing can essentially be realized through two main channels:** the money market (banking sector) or the capital market (stock exchange) became the predominant form of financial intermediation.[343] Thus, Intermediation occurs either through the banking system or the so-called shadow banking system via non-bank institutional and non-institutional actors. In the **Anglo-Saxon countries**, free capital was available scattered, and the stock exchange most effectively facilitated the collection of savings. In continental **European** countries, however, the concentration of capital (as a feudal remnant) favored the prosperity of banks. It can be observed that as a country's economy becomes more developed, the capital market gains greater priority. In contrast, in less developed countries, the role of the banking intermediary becomes decisive (during transitional periods, these institutions can initially be established for stability and coordination purposes), and this intermediary primarily facilitates capital accumulation.[344]

Three **trends** have strengthened in the operation of the financial system: (i) the emergence of universal banking systems, which integrate a wide range of financial activities into one institution; (ii) financial globalization, the continuous expansion of financial activities across borders; and (iii) competition among financial institutions. The regulatory reforms that increased bank competition reduced corporate risk by increasing liquidity access.[345] The supervisory enforcement actions lead to a reduction in credit to small borrowers, but this only has limited effects on large borrowers.[346] Banks reallocate lending toward lower risk firms and to industry sectors where they have a high market share.[347]

Functions

Economic actors require financial intermediaries, whose primary task is to establish and maintain continuous connections between savers and those in need of funds. Direct money and capital flows alone are not sufficiently

[343] Berger, A. N., Molyneux, P., & Wilson, J. O. (2020). Banks and the real economy: An assessment of the research. *Journal of Corporate Finance*, *62*, 101513.
[344] de Fiore, F. – Uhlig, H. (2005). Bank finance versus bond finance: what explains the differences between US and Europe?, Working Paper Series 547, European Central Bank
[345] Jiang, T., Levine, R., Lin, C., & Wei, L. (2020). Bank deregulation and corporate risk. *Journal of Corporate Finance*, *60*, 101520.
[346] Roman, R. A. (2020). Winners and losers from supervisory enforcement actions against banks. *Journal of Corporate Finance*, *60*, 101516.
[347] De Jonghe, O., Dewachter, H., & Ongena, S. (2020). Bank capital (requirements) and credit supply: Evidence from pillar 2 decisions. *Journal of Corporate Finance*, *60*, 101518.

efficient. Financial markets, including the banking sector, promote economic growth, monitoring and evaluation (delegated observation), and risk management. Financial intermediaries expedite matching money and capital demand and supply, reduce risk, and increase security. An advanced financial system not only enhances economic growth but can also mitigate fluctuations in growth. In terms of its **macroeconomic role**, a bank is a financial intermediary that (i) coordinates various saving and financing needs, (ii) performs and carries out maturity and volume transformations, (iii) reduces transaction costs of financing, (iv) processes part of the payment flow, and (v) creates claims on itself, which can function as money.[348]

Joseph Alois **Schumpeter** posited that **entrepreneurial credit finances innovation**, leading to the realization of new combinations of production resources, which holds significant importance for economic growth. According to his theory, banks play a crucial role in selecting entrepreneurs worthy of credit, thereby supporting economic growth and innovation through their lending activities. *The banker, therefore, is not so much primarily a middleman ... He authorizes people in the name of society ... (to innovate).*[349] However, this perspective has faced criticism over time. Empirical evidence and subsequent theoretical literature have not consistently supported Schumpeter's assertions. While banks do play a role in selection, they often do so conservatively, preferring to finance established business ideas or entities with a proven operational history. Additionally, capital market mechanisms are deemed more suitable for financing innovation.

Despite this, economic theories paid relatively little attention to this relationship until the 1980s and generally assumed that the financial system did not play an important role in the real economy. According to a survey conducted by King and Levin in 80 countries between 1960 and 1989, the development of the financial intermediary system clearly predicts the level of economic growth.[350] The credit view theory emphasized the significant role played by lending in monetary transmission in such a way that, in addition to bank interest rates, the monetary authority affects the real economy

[348] Dia, E., & VanHoose, D. (2017). Banking in macroeconomic theory and policy. *Journal of Macroeconomics*, *54*, 149-160.
[349] Schumpeter, J. (1912). *Theorie der Wirtschaftlichen Entwicklung*. Duncker und Humblot.
[350] King, R. G. – Levine, R. (1993). Finance, Entrepreneurship and Growth. *Journal of Monetary Economics*, 32. and King, R. G. – Levine, R. (1993): Finance and Growth: Schumpeter might be Right. *Quartrly Journal of Economics*, CVIII.

by influencing the quantity and quality of bank loans.[351] Levin and Zervos repeated the same test in 1998 and again proved the statement's validity. However, following empirical research and methodological development, economic thinking took a new direction: the development of **information economics** drew attention to the imperfections of the credit market: there is not necessarily a market-clearing price on the credit market, the price does not balance the supply and demand for credit.[352] Therefore, the evolution of bank lending is explained significantly by non-price factors, by which we mean the banks' creditworthiness standards and lending conditions. Today, we can find several – complementary theories – about how the different characteristics of the credit market deviate the supply from the demand. According to the procyclicality theory, the accounting for credit losses is strongly related to the economic cycle, however, bank income and capital position, collaterals and the willingness to grant loans can also be procyclical. If the changes in the loan supply are the determining factor in the development of the loan portfolio or new disbursements, we can be sure of the consequences of negative macroeconomic and financial stability.

Douglas W. **Diamond** discussed the **delegated monitoring** role of financial intermediation. He suggests that the financial intermediary system minimizes the cost of acquiring information necessary to evaluate credit placements continuously. Similar to Schumpeter's perspective, Diamond's analysis extends beyond the traditional intermediary role of banks. However, he emphasizes bank monitoring to mitigate free-rider problems and moral hazards.[353] Diamond argues that the functioning of the financial intermediary system facilitates the more efficient allocation of society's available resources. This aligns with Schumpeter's view of innovation and economic growth but emphasizes the role of monitoring and information acquisition in achieving this efficiency.

Richard **Werner** stated three theories of banking: (i) financial intermediary, (ii) fraction reserves, (iii) credit creation.[354] The currently prevalent **financial intermediation** theory of banking says that banks collect deposits

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[351] Bernanke, B. S. – Blinder, A. S. (1988). Credit, Money and Aggregate Demand, *American Economic Review*, Vol. 78. No. 2., Papers and Proceedings of the One-Hundredth Annual Meeting of the American Economic Association. 435-439.
[352] Levine, R. – Zervos, S. (1998). Stock Markets, Banks and Economic Growth. *American Economic Rewiev*, 88,3, 537-538.
[353] Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The review of economic studies*, *51*(3), 393-414.
[354] Werner, R. A. (2016). A lost century in economics: Three theories of banking and the conclusive evidence. International Review of Financial Analysis, 46, 361–379.

and then lend these out, just like other non-bank financial intermediaries. The older **fractional reserve** banking theory says that each individual bank is a financial intermediary without the power to create money. However, the banking system collectively is able to create money through the process of multiple deposit expansion (money multiplier). The **credit creation** theory of banking, predominant a century ago, does not consider banks as financial intermediaries that gather deposits to lend out but instead argues that each bank creates credit and money newly when granting a bank loan.[355]

The **credit rationing theory** posits that at a given market price, demand can persistently exceed supply (demand ≠ supply). Unlike other markets where a market-clearing price might exist, the credit market lacks such a mechanism. Here, non-price factors in credit supply play a primary role in determining the availability of credit. The phenomenon often manifests as excess demand, partly due to the consequences of credit rating and risk assessment. Even with rising interest rates, lenders may offer less credit, even if borrowers are willing to pay higher interest rates for loans. This has three reasons and aspects:[356]

- Rationing and the customer relation. This model, proposed by Santomero and Blackwell,[357] associates credit rationing with the relationship between banks and their clients. In this model, during potential credit restrictions, preferred clients of banks receive more favorable treatment, while smaller clients face credit rationing.
- Rationing and partial price discrimination. This second model, presented by Jaffee and Modigliani,[358] focuses on quantity rationing or credit crunch. In this scenario, banks are unable to set individual interest rates for each client, leading to the application of a uniform interest rate across a heterogeneous group of clients. This uniform

[355] Werner, R. A. (2014). Can banks individually create money out of nothing? – The theories and the empirical evidence. *International Review of Financial Analysis*, 36. 1–19. Werner, R. A. (2014). How do banks create money, and why can other firms not do the same? An explanation for the coexistence of lending and deposit-taking. *International Review of Financial Analysis*, 36. 71–77.

[356] Santomero, A. M. (1984). Modeling the banking firm: A survey. *Journal of money, credit and banking*, *16*(4), 576-602.

[357] Blackwell, N. R., & Santomero, A. M. (1982). Bank credit rationing and the customer relation. *Journal of Monetary Economics*, *9*(1), 121-129.

[358] Jaffee, D. M., & Modigliani, F. (1969). A theory and test of credit rationing. *The American Economic Review*, *59*(5), 850-872.; Jaffee, D. M., & Modigliani, F. (1976). A theory and test of credit rationing: reply. *The American Economic Review*, *66*(5), 918-920.

rate results in credit rationing, especially for clients who would require interest rates higher than the maximum set rate. Risk-free clients, however, are always exempt from credit rationing.

- Rationing and information problems. In the third model, introduced by Jaffee and Russell,[359] considers credit rationing arising from ex-ante quality differences among borrowers. Before lending, borrowers cannot be distinguished by lenders. Consequently, market interest rates include a "lemons" premium, which rewards riskier borrowers with a premium compared to well-rated borrowers.

The theory of credit rationing posits that, at a given market price, demand can persistently exceed supply. Several reasons can explain this phenomenon. Borrowers may not secure as much credit as they desire at the prevailing interest rate, leading to standard pricing rationing. Lenders might perceive an investment as riskier than the borrower does, resulting in a higher interest rate and failed credit contracts. Some lenders may exclude lower-income groups from lending, a practice known as redlining or blacklisting. Similarly, borrowers with similar characteristics might experience differential access to credit, with some denied credit even if they are willing to accept higher interest rates. The credit market lacks a market-clearing price primarily because non-price factors in credit supply play a dominant role. Credit rationing often emerges in the market's equilibrium state. This phenomenon can be explained by asymmetric information regarding borrowers' ability and willingness to repay. There exists a demand for credit willing to pay rates above the equilibrium interest rate that goes unsatisfied due to lenders' risk perception. Additionally, the moral hazard arises, where higher interest rates incentivize borrowers to deviate from their commitments and engage in riskier investments. The expected profit for banks is not a monotonically increasing function of interest rates. Beyond a certain interest rate level, credit rationing coupled with excessive risks can lead to a decrease in a bank's expected profit (credit rationing + excessive risks).

On the other hand, the **pro-cyclical theory** delves into specific credit market characteristics to understand how credit supply fluctuates relative to credit demand. This analysis aims to determine the extent to which these fluctuations reinforce economic cyclicality, thus influencing the overall economic cycle. The theory examines the relationship between credit market indicators and the overall economic situation, specifically the real economic

[359] Jaffee, D. M., & Russell, T. (1976). Imperfect information, uncertainty, and credit rationing. *The Quarterly Journal of Economics*, *90*(4), 651-666.

cycle. Broadly defined, pro-cyclicality refers to a credit market indicator, such as loss provisioning, bank income and capital position, collateral, or lending willingness, that closely mirrors the state of the entire economy. For instance, these indicators increase during economic booms and decline during downturns, moving in tandem with production, consumption, investment, and exports. Narrowly defined, pro-cyclicality goes beyond mere co-movement to amplify economic cyclicality. It focuses on how credit supply strengthens the economic cycle. Two extreme cases illustrate the credit cycle's impact. The **credit crunch** occurs during economic downturns when the default rate rises due to deteriorating income or profitability, exacerbated by higher interest rates and refinancing and capital issues. Consequently, banks are prompted to curtail lending rapidly and broadly. A credit crunch occurs when there is a lack of funds available in the credit market, making it difficult for borrowers to obtain financing. This happens in one of three scenarios: (i) when lenders have limited funds available to lend, (ii) when they are unwilling to lend additional funds, or (iii) when they've increased the cost of borrowing to a rate unaffordable for most borrowers.[360] Conversely, a **credit boom** can aise during economic upswings, where is an increased willingness to lend.[361] This leads to an extensive access to credit, even for less creditworthy borrowers. Such situations are often associated with overly optimistic lending and can be accompanied by asset bubbles. The prevention of these extremes is crucial because they can result in significant economic downturns. Credit loss provisioning is closely related to the economic cycle, and the bank's income and capital position, collateral, and lending willingness can also exhibit pro-cyclicality. Thus, understanding and managing pro-cyclicality in the credit market is essential for stabilizing the economic cycle and preventing financial instability.

[360] Bernanke, B. S., Lown, C. S., & Friedman, B. M. (1991). The credit crunch. *Brookings papers on economic activity*, *1991*(2), 205-247.
Buera, F. J., & Nicolini, J. P. (2020). Liquidity traps and monetary policy: Managing a credit crunch. *American Economic Journal: Macroeconomics*, *12*(3), 110-138.
https://www.investopedia.com/ask/answers/credit-crunch.asp
[361] Dell'Ariccia, M. G., Ebrahimy, M. E., Igan, M. D. O., & Puy, M. D. (2020). *Discerning good from bad credit booms: the role of construction*. International Monetary Fund.
Gertler, M., Kiyotaki, N., & Prestipino, A. (2020). Credit booms, financial crises, and macroprudential policy. *Review of Economic Dynamics*, *37*, S8-S33.

Financial Instability Hypothesis (FIH)

Hyman Minsky proposed the **Financial Instability Hypothesis** which provides an insightful perspective on the inherent instability of financial markets and the banking sector.[362] It challenges the traditional view of the banking sector as a source of stability in the economy. The stability in financial systems often breeds instability, as periods of prolonged economic stability encourage excessive risk-taking and leverage. Minsky categorized borrowers into three categories: hedge finance (stable cash flows), speculative finance (variable cash flows), and Ponzi finance (cash flow insufficient to cover interest payments). As economies boom, the share of speculative and Ponzi borrowers increases, making the system more vulnerable to downturns.

Three Phases of Financial Markets

Phase	Hedge Phase	Speculative Phase	Ponzi Phase
Borrowers	Make debt payments from their cash flow	Rely on the appreciation of asset prices to refinance their debt	Rely on continuous appreciation of asset prices to meet debt obligations
Lenders	Cautious	Become less cautious, leading to increased leverage	Become overly optimistic, leading to excessive leverage
Economy	Stable	Optimism grows	Speculative bubbles

Source: own compilation of the author

There are **three phases of financial markets**. In the hedge phase, borrowers can make debt payments from their cash flows. The economy is stable, and lenders are cautious. While in the speculative phase, borrowers rely on the appreciation of asset prices to refinance their debt. As optimism grows, lenders become less cautious, leading to increased leverage. Banks loosen lending standards, and businesses and individuals take on more debt. This increases **financial fragility** across the system. At the end, in the Ponzi phase, borrowers rely on continuous appreciation of asset prices to meet debt obligations. Lenders become overly optimistic, leading to excessive leverage and speculative bubbles.

Over time, the financial system transitions from the hedge phase to the speculative and Ponzi phases, increasing its fragility, therefore stability breeds instability. As borrowers take on more debt, even a small shock can

[362] Minsky, H. P. (1970). Financial instability revisited: The economics of disaster. (1977). Banking and a fragile financial environment. *Journal of Portfolio Management*, *3*(4), 16-22. (1994). Financial Instability and the Decline (?) of Banking: Public Policy Implications.

trigger a crisis, leading to a rapid unwinding of debt and a financial meltdown. The **banking sector** plays a crucial role in the Minsky framework by providing the necessary leverage for borrowers. During the speculative and ponzi phases, banks tend to relax lending standards, leading to a surge in credit creation. According to the **procyclical lending**, banks tend to be more willing to lend during good times and tighten credit during recessions. This amplifies economic cycles - more credit fuels booms, and credit scarcity worsens slumps. As the economy booms and asset prices rise, banks may engage in riskier lending practices, such as subprime lending or excessive exposure to speculative assets, amplifying financial vulnerabilities. The banking sector's interconnected nature can exacerbate financial instability. A shock to one bank or financial institution can spread quickly throughout the system, leading to a broader financial crisis. Minsky viewed banks as profit-seeking entities that innovate new financial instruments. These innovations can introduce new risks into the system, which may not be fully understood until a crisis hits.

The financial instability hypothesis suggests that **financial regulation** is essential to prevent the build-up of systemic risks and financial instability. Effective regulation can help constrain excessive risk-taking, promote prudent lending practices, and ensure the resilience of the banking sector against shocks. The 2008 financial crisis is often seen as a validation of FIH. The easy credit environment and complex financial products like mortgage-backed securities contributed to the instability that eventually led to the crash.

Criticisms of FIH include the difficulty in categorizing borrowers and the lack of a clear mechanism for predicting crises. However, FIH offers valuable insights into the inherent risks within the banking sector and how seemingly stable periods can sow the seeds for future financial troubles.

Money creation

The essence of **money creation** lies in the ability of financial institutions to generate new money supply, effectively multiplying the value of the fiat money issued by the central bank. Given that central banks hold a monopoly on cash issuance, commercial banks can create money either by (i) extending credit (including securities purchases) or (ii) purchasing foreign currency. Consequently, contemporary money represents a claim on the banking system, with both the central and commercial banks ensuring the necessary quantity of money for the economy. This mechanism challenges financial intermediation, as commercial banks can create money themselves, thus not necessarily requiring prior savings when extending credit. Central

to this issue is determining whose claim is at stake: while credit represents the lender's claim against the debtor, deposits represent the depositor's claim against the bank. The created money can be eliminated through loan repayment or selling foreign currency.

Money creation also entails **money multiplication**, or money multiplier effect, as the financial circulation process leads to the re-deposit of issued credit back into the banking system, enabling banks to lend it out again. This circular process naturally results in the multiplication of recorded deposits and loans, as borrowed funds typically return to banks in various forms.[363] The multiplier effect depends on two factors: (i) the reserve requirement ratio, indicating the percentage of deposits commercial banks must hold with the central bank; and (ii) the reserve ratio determined by the liquidity reserve. Additional constraints come from prudential rules and capital adequacy requirements set by supervisory authorities. The theoretical upper limit of this process, if extrapolated to an infinite number of transactions, for an initial 1000 €, the money creation results in € 50,000t with a 2% reserve ratio, and 12,500 € with an 8% capital adequacy ratio. In practice, however, there is no infinite number of transactions, as banks can choose to hold reserves exceeding the required amount, and they are not obliged to extend credit despite increasing the monetary base or reducing reserve requirements. Nowadays, mandatory reserve ratios imposed by central banks are typically low; nevertheless, many banks, in line with their post-crisis pessimism, refrain from increasing lending activity, not due to reserve requirements but rather due to limited business opportunities. In addition to low reserve ratios, central banks may incentivize lending through other means, such as quantitative easing, where they purchase assets from commercial banks, paying with central bank money, or through refinancing credit schemes targeting various lending programs for the corporate sector. Thus, commercial banks' money creation is influenced by various factors, including economic conditions, business opportunities, and central bank interest rate policies.[364] Furthermore, prudential regulation limits banks' money creation capacity by requiring them to hold sufficient equity capital proportional to the risk of each loan, set aside reserves for unexpected losses, and establish general or individual capital buffers to strengthen macroprudential resilience.

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[363] Lampert, M. (1986). Knowing, doing, and teaching multiplication. *Cognition and instruction*, *3*(4), 305-342.
[364] Željana, V., Marko, B., & Snežana, K. (2017). Multiplication of money in the contemporary trends of doing business. *Banja Luka, 2017.*, 411.

Transformations

Banks proceed with different **transformations**, which means they covert and change the deposits of various amounts, maturities, currencies, regions, and economic entities into loans provided to various amounts, maturities, currencies, regions, and economic entities. The **maturity transformation** means that the financial institutions provide longer-term loans utilizing short-term sources of funding. This practice helps match the varying maturity preferences of savers and borrowers, facilitating smoother capital allocation within the economy.[365] The **liquidity transformation** converts the less liquid assets are converted into more liquid and easily convertible ones. This process ensures that funds remain accessible when needed, reducing the risk of illiquidity for both savers and borrowers.[366] The **volume or amount transformation** involves converting small savings into larger loans. By aggregating numerous small deposits, financial intermediaries can extend substantial loans to borrowers, thus channeling savings into productive investments. The **asset transformation** occurs when financial institutions convert savings and investments into different forms of assets through diversified placements. This diversification helps manage risk and optimize returns by spreading investments across various assets and sectors. The **risk transformation** is pivotal, involving the redistribution of risk between savers and borrowers. Financial intermediaries assume some of the risk associated with lending, thereby enabling savers to invest their funds securely while borrowers gain access to financing even if their creditworthiness is uncertain. Finally, the **payment system** represents a fundamental transformation wherein financial intermediaries facilitate settlements and money movements between parties. This process ensures the smooth flow of funds within the economy, supporting transactions and economic activity. Together, these transformations performed by financial intermediaries contribute to efficient capital allocation, risk management, and overall stability in the financial system, ultimately fostering economic growth and development.

The central task of **maturity and liquidity transformation** is to ensure proper coordination between deposits and loans since their maturity dates differ; thus, maintaining harmony between the two, i.e., long-term loans should adequately cover short-term deposits. Both are interest-bearing

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[365] Paul, P. (2023). Banks, maturity transformation, and monetary policy. *Journal of Financial Intermediation*, *53*, 101011.
[366] Chen, Q., Goldstein, I., Huang, Z., & Vashishtha, R. (2020). *Liquidity transformation and fragility in the US banking sector* (No. w27815). National Bureau of Economic Research.

products, and the gap between the two interest rates is called the interest margin (the difference between the technical interest rate and the investment yield), which is the cost or price of money intermediation and the main source of bank income. This is otherwise known as **prudent operation**: financial institutions are required to manage entrusted foreign (deposit) and own (loan) resources in a way that continuously maintains immediate liquidity (liquidity) and solvency (solvency).

The various transformations can result in discrepancies and inconsistencies (**mismatches**), most commonly associated with the asset and liability sides. A maturity mismatch often refers to situations when a company's short-term liabilities exceed its short-term assets. It signifies a company's inefficient use of its assets. In the case of maturity transformation, the **maturity mismatch** (or maturity gap) relates to a specific period, leading to the derived cumulative mismatch, which is the sum of differences across individual time intervals.[367] If the cumulative mismatch compared to the bank's balance sheet is significant, exceeding 15-20% of it, the bank faces a high liquidity risk. Exchange rate (and related interest rate) disparities can also exist among the bank's balance sheet items denominated in different currencies: **currency mismatch**.[368]

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[367] Yang, L., Yi, Y., & Wang, S. (2021). Banks' maturity mismatch, financial stability, and macroeconomic dynamics. *Economic research-Ekonomska istraživanja*, *34*(1), 3038-3063. Wang, X. (2023). A macro-financial perspective to analyse maturity mismatch and default. *Journal of Banking & Finance*, *151*, 106468.
[368] Abbassi, P., & Bräuning, F. (2023). Exchange rate risk, banks' currency mismatches, and credit supply. *Journal of International Economics*, *141*, 103725.

Micro- and Macroprudence

Quidquid agis, *prudenter* agas, et respice finem.
Whatever you do, do it *wisely* and consider the end.

Microprudence and macroprudence are two complementary approaches to financial regulation aimed at ensuring the stability and soundness of the financial system.

Micro- and Macroprudence

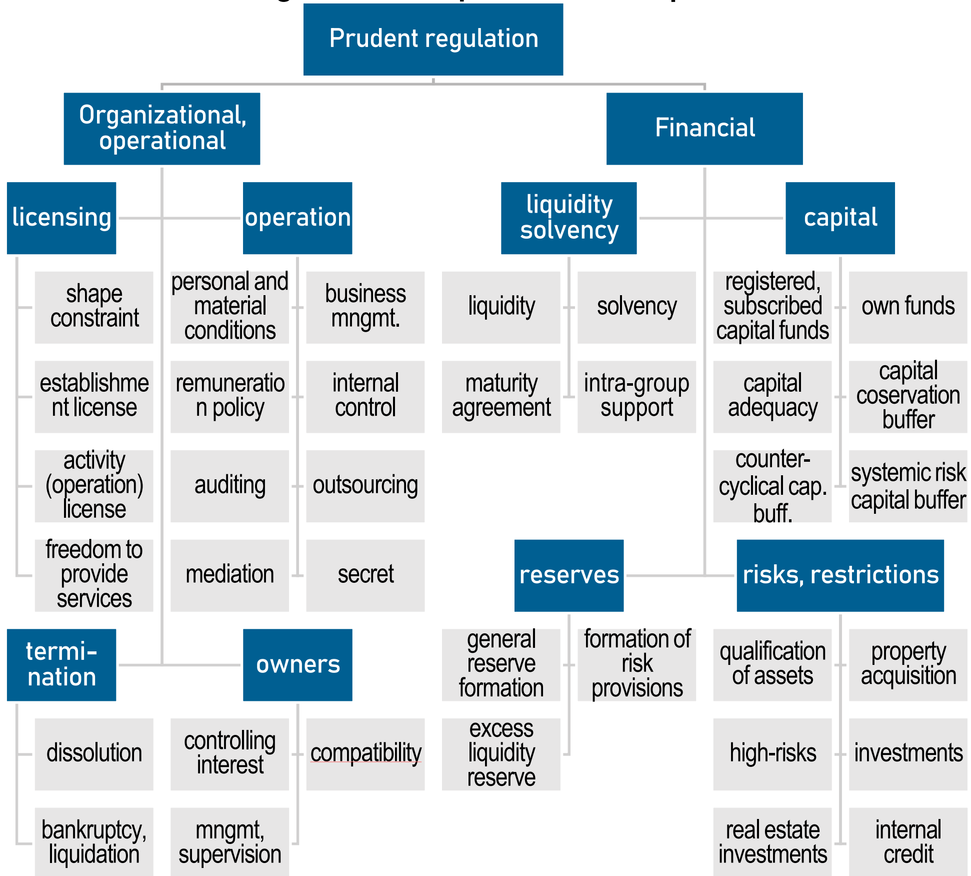
	Microprudence	Macroprudence
Objectives	Limit distress of individual institutions Final: consumer protection	Limit financial system-wide distress and decrease systemic risk Final: reduction of output or social costs
Characterisation of risk	Exogenous: they can be considered given in relation to individual institutions	(partially) endogenous: the result of the collective behavior of individual institutions
Correlations and common exposures across institutions	Irrelevant	Important
Calibration of prudential controls	In terms of risks of individual institutions; bottom-up	In terms of system-wide risk; top-down

Source: own compilation of the author

The national and EU, micro- and macroprudential regulations heavily related to the **Basel Accords** (Basel I-IV) from the **Basel Committee on Banking Supervision** (BCBS). Established in 1974, the BCBS aims to ensure banks' solvency, promote common standards, and prevent foreign banks from evading national supervision.[369]

Microprudence focuses on the individual institutions within the financial system, emphasizing the need for robust risk management practices at the firm level. It involves supervising and regulating banks and other financial institutions to prevent excessive risk-taking, ensuring they maintain adequate capital buffers, manage their liquidity effectively, and adhere to prudent lending practices. Microprudential topics can be devided into two main lines: (i) organizational, operational aspects; and (ii) financial aspects.

[369] http://www.bis.org/speeches/sp121115.pdf (15.04.2024).



Source: own compilation of the author, Vértesy, L. (2020). *Jog és pénzügyek a bankszektorban*. Akadémiai Kiadó.

Within the **organizational and operational aspects**, the regulatory framework encompasses various formal requirements, including establishment permits and operational permits, ensuring the freedom to provide financial services. further more it encompasses personnel and material prerequisites, management structures, compensation policies, internal control mechanisms, auditing procedures, outsourcing practices, intermediation activities, and confidentiality protocols. The regulatory framework also addresses the procedures for liquidation and dissolution of financial institutions. The guidelines outline rules regarding controlling interests, incompatibility issues, and governance and supervision mechanisms within financial institutions. The **financial aspects** focus on the liqid and solvent capacity; the financial stability is ensured through measures such as maintaining liquidity, solvency ratios, maturity matching, and intra-group financial support. The

regulatory framework stipulates requirements for various types of capital, including registered capital, initial capital, own funds, and capital adequacy ratios. Additionally, buffers such as capital conservation buffers, countercyclical capital buffers, and systemic risk capital buffers are mandated to enhance financial resilience. Financial institutions are required to maintain reserves, including general reserve funds, risk-specific reserves, and liquidity surplus reserves, to safeguard against potential risks and uncertainties. Regulatory guidelines focus on risk management practices, including asset classification, ownership acquisition rules, identification of high-risk exposures, investment guidelines, real estate investment limits, and internal loan policies, to mitigate risks and ensure prudent financial practices.

Macroprudence, on the other hand, takes a systemic view of the financial system, focusing on the interconnectedness and vulnerabilities that can lead to systemic risks. It aims to identify and address systemic risks that could threaten the stability of the entire financial system, such as asset bubbles, excessive credit growth, or interconnectedness among financial institutions. The concept of "*too big to fail*" underscores the idea that the failure of a systemically significant financial institution could trigger a domino effect, jeopardizing the entire financial sector. Therefore, it is crucial for society and governance to ensure the rescue of such institutions. One questionable competitive advantage of being considered "too big to fail" is that these institutions can operate with the assurance that potential losses from risky activities will ultimately be covered by governments using taxpayer money, enabling them to build market positions and take on excessive risks to boost profitability. The term "*too interconnected to fail*" highlights the notion that certain institutions are so interlinked that their failure could have systemic repercussions. This interconnectedness creates a *moral hazard*, as analysts and investment bankers, along with corporate executives, are perceived to be rowing in the same boat. This moral hazard is further exemplified by the issuance of credit default swaps (CDS) at the time of own (!) product launches without adequate oversight.

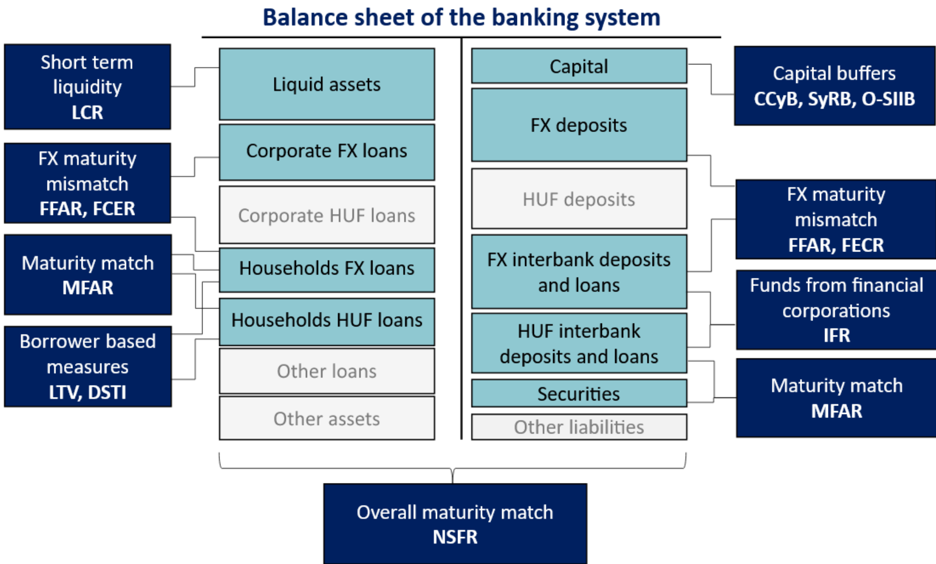
EU and National Macroprudential Toolkit

<table>
<tr><th></th><th>EU-level instruments</th><th>National instruments</th></tr>
<tr><td>Prevention of excessive loan growth and leverage</td><td>• Anticyclical capital buffer
• Determination of risk weight and default rate of exposures secured by real estate (mortgage)</td><td>• Debt cap rules (debt brake rules
• Debt-to-income (DTI) ratio, Payment-to-income (PTI) ratio, Installment-to-income ratio
• Loan-to-value (LTV) ratio, Loan coverage ratio</td></tr>
<tr><td>Excessive liquidity risks and maturity , foreign exchange discrepancy management</td><td>• Short and long-term liquidity requirements
• Maturity and denomination consistency
• Liquidity Coverage Ratio (LCR)
• Net Stable Funding Ratio (NSFR)</td><td>• Foreign exchange Funding Adequacy Ratio (FFAR),
• Foreign Exchange Coverage Ratio (FECR),
• Mortgage Funding Adequacy Ratio (MFAR)</td></tr>
<tr><td>Limitation of excessive concentration
too big, too interconnected</td><td rowspan="2">• Limitation of large open positions
• Systemic risk capital buffer (global)
• other systemically important institutions (SIFIs) and the additional capital requirements applicable to them
• Remuneration (payment of bonuses, rewards)</td><td rowspan="2">• Interbank Funding Ratio (IFR)
• System risk capital buffer (national - OSII s)
• Managing the risks of non-banking institutions</td></tr>
<tr><td>Bad mitigating the impact of incentives and limiting concentrated exposures
moral hazard</td></tr>
<tr><td>Strengthening the resilience and adaptability of the financial sector</td><td colspan="2">• Deposit insurance
• Enhanced system and institutional information disclosure
• Strengthening institutions serving financial infrastructure
• Compensation policies
• Supervision, resolution, monitoring of payment and settlement systems</td></tr>
<tr><td>Any intermediate can be used to achieve a goal</td><td>Tightening of requirements: minimum regulatory capital requirements; large exposure limits; capital conservation buffer; liquidity reserves; net stable funding requirements; risk weights for residential and commercial real estate exposures</td><td>Restriction or prohibition of the performance of certain activities for maximum 90 days</td></tr>
</table>

Source: own compilation of the author

The financial supervisors introduced different indicators to measure the macroprudential stability, like Net Stable Funding Ratio (NSFR), Liquidity Coverage Ratio (LCR), Foreign exchange Funding Adequacy Ratio (FFAR), Foreign Exchange Coverage Ratio (FECR), Interbank Funding Ratio (IFR), Mortgage Funding Adequacy Ratio (MFAR). To revent excessive loan growth and leverage in the economy the government and banks can introduce other limitations like: Debt cap rules (debt brake rules, Debt-to-income (DTI) ratio,[370] Payment-to-income (PTI) ratio, Installment-to-income ratio, Loan-to-value (LTV) ratio, Loan coverage ratio, which bear even a consumer protection attitude.

Impact of Macroprudential Instruments on the Balance Sheet of the Banking System



Source: https://www.mnb.hu/en/financial-stability/macroprudential-policy/the-macroprudential-toolkit

[370] Wells Fargo: What is a Good Debt-to-Income Ratio? 35% or less is generally viewed as favorable, and your debt is manageable. You likely have money remaining after paying monthly bills. 36% to 49% means your DTI ratio is adequate, but you have room for improvement. Lenders might ask for other eligibility requirements. 50% or higher DTI ratio means you have limited money to save or spend. As a result, you won't likely have money to handle an unforeseen event and will have limited borrowing options. https://www.wellsfargo.com/goals-credit/smarter-credit/credit-101/debt-to-income-ratio/understanding-dti/

14.2. Banks and the Banking System

The banking system comprises various types of banks operating across different tiers, each providing specialized services to meet diverse customer needs. As the financial sector evolves, banks continue to innovate, offering a complexity of services tailored to individual and institutional clients. The banking system is segmented into sectors such as retail, corporate, and investment banking, reflecting the multifaceted nature of financial services.

Types of Banks

The **central bank** serves as the apex monetary authority within a country's financial system. Its primary functions include issuing currency, ensuring price stability and exchange rate equilibrium, and utilizing monetary tools such as the benchmark interest rate to regulate economic activity. Additionally, central banks maintain direct relationships with commercial banks, overseeing their operations and providing liquidity support when necessary. Furthermore, central banks play a crucial role in supporting government economic policies by implementing monetary strategies that align with broader fiscal objectives, thereby contributing to overall economic stability and growth. Within the monetary policy, central banks set the benchmark interest rate and utilize open market operations and reserve requirements to control the money supply and influence credit levels.[371] To promote the financial system's stability, they act as lenders of last resort to commercial banks during times of financial stress, maintaining systemic stability. Furthermore, they oversee and regulate commercial banks to ensure compliance with financial regulations and consumer protection laws. Central banks collaborate with international institutions like the IMF and Bank for International Settlements to promote global financial stability and address international financial crises.

On the other hand, **commercial banks** are the primary intermediaries within the financial system, facilitating financial transactions between households, businesses, and other entities. Their services include deposit collection, account management, processing interbank transfers, extending credit facilities, and providing investment opportunities. One of the significant functions of commercial banks is creating new money through the lending process, effectively expanding the money supply within the economy. With

[371] Vértesy, L. (2014). *Monetary Policy - Central Banks and Financial Crises*. Nemzeti Közszolgálati Egyetem.

the treasury, they provide cash management, trade finance, and foreign exchange services to businesses. Moreover, commercial banks engage in investment activities and provide cash management, trade finance, and foreign exchange services to businesses, catering to the diverse financial needs of their clientele. They operate competently with other commercial banks and alternative financial institutions like fintech companies.

In contrast, **investment banks** specialize in providing financial services tailored to the needs of corporations, institutional investors, and high-net-worth individuals.[372] These services often include organizing corporate bond and equity issuances, managing assets and liabilities, and offering investment-related advisory services such as financial analysis and strategic guidance.[373] Investment banks typically maintain client relationships with governments, major investors, and participants in the stock market. While they may engage in limited lending activities, their primary focus lies in investment banking operations and other specialized financial services. They assist companies in raising capital through IPOs, secondary offerings, and bond issuances, trade securities such as stocks, bonds, and derivatives for their clients. They advise clients on mergers, acquisitions, and other strategic transactions; offer risk management solutions and advise clients on hedging strategies. Investment banks are known for their high-pressure work environment and competitive compensation packages.

The **division** between commercial and investment banks is primarily prominent in specialized banking systems. However, in recent decades, the boundary between these two categories has become increasingly blurred, with significant relaxation of regulations separating their activities even in Anglo-Saxon countries. Overall, each type of bank plays a distinct yet interconnected role within the financial ecosystem, collectively contributing to the efficient functioning of the economy and the management of financial resources. Central banks' policies impact interest rates, affecting commercial and investment banks' borrowing and lending decisions. Commercial banks deposit their excess reserves with the central bank, influencing the money supply and credit creation. Investment banks may participate in government bond auctions, affecting the cost of government borrowing and interest rates.

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[372] Liaw, K. T. (2011). *The Business of Investment Banking*: A comprehensive overview. John Wiley & Sons.

[373] Rosenbaum, J., & Pearl, J. (2021). *Investment banking: valuation, LBOs, M&A, and IPOs*. John Wiley & Sons.

With their established network of branches, traditional or **brick-and-mortar banks** have adapted to the digital age by offering robust online banking platforms and mobile apps. However, the early 2010s saw the emergence of **online banks**, leveraging the internet to offer competitive interest rates, lower fees, and a streamlined user experience.[374] Initially viewed as niche players, online-only banks have disrupted the traditional banking model, forcing established institutions to invest heavily in their own digital offerings. This competition has ultimately benefited consumers by driving innovation and providing more choice. As technology continues to evolve, it will be interesting to see how both traditional and online-only banks adapt and compete in the evolving financial system.

Tiers in the Banking Systems

In a unitary, one-tier, **single-tier banking system**, the central bank directly interacts with economic agents, managing their accounts and providing them with credit. Typical examples of this model emerged in socialist countries, where this highly centralized, easily controllable model served the centrally planned economic system. Companies held their sole accounts with the central bank, allowing all financial transactions to be tracked in one place. The central bank made decisions regarding credit allocation and could monitor the use of funds.

By the turn of the 19th and 20th centuries, the classical **two-tier banking system** had become prevalent. The central bank represents the upper tier of this system. Operating without explicit commercial banking functions, the central bank functions as a nonprofit financial institution and serves as the bankers' or the banks' bank, providing it with the authority to supervise private banks in certain areas. Its primary responsibilities include ensuring price stability, maintaining the value of the national currency, and regulating the money supply. The central bank is the exclusive issuer of banknotes, which hold legal tender status. Typically, cash as a bank note is increasingly losing its importance, and bills of exchange and checks will become increasingly popular as money substitutes. At the same time, clearing is closely connected to the giro-system. It is important to note that private individuals are not eligible to seek credit directly from the central bank. Banks at the second

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[374] Kim, M. (2022). *Does the Internet Replace Brick-and-Mortar Bank Branches?*. Working paper. Stillwater: Oklahoma State University.
Cooke, A. N. (2021). The Brick-and-Mortar Bank Is Dead-COVID-19 Killed It: Analyzing the" New Normal" for Data Security in the Increasingly Digital Financial Services Industry. *NC Bank. Inst.*, *25*, 419.

level of the banking system directly serve the economy's participants, hence they are called commercial (business) banks.[375] While commercial banks are profit-oriented financial institutions, the central bank operates on a non-profit basis driven by other considerations. The independence of the banking sector and ensuring fair competition are guaranteed by the **prohibition of privileged access** found in the Treaty on the Functioning of the European Union.[376] This provision states that any measure, not based on prudential considerations, establishing privileged access by Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States to financial institutions, shall be prohibited.[377]

Complexity of Services

Based on the **complexity of services**, we refer to a banking system or financial institution as **specialized** when commercial banks are excluded from engaging in financial service activities that deviate from traditional commercial banking functions. This type of system was historically present in the Anglo-Saxon and U.S. capital market model until recent times. Specialization among banks (and other financial service providers) continues to exist, primarily driven by the advantages of economies of scale and specialization. In this system, commercial banks are restricted from engaging in investment activities. The separation is characteristic of the U.S., mandated by the Glass-Steagall Act as a response to the economic crisis,[378] the Great Depression in the USA, and worldwide, but this regulation has been relaxed in 1999 with the Gramm–Leach–Bliley Act (GLBA).[379]

In the case of a **universal or continental banking system** or financial institution, the relationship between clients and the bank extends to a broad

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[375] Murphy, A., & Sabov, Z. (1991). Financial institution structures in a developing two-tier banking system: An empirical perspective from Eastern Europe. *Journal of banking & finance*, *15*(6), 1131-1142.
[376] López Escudero, M. (2022). Article 124 [Prohibition of Privileged Access to Financial Institutions] (ex-Article 102 TEC).
[377] Consolidated version of the Treaty on the Functioning of the European Union, Article 124
Council Regulation (EC) No 3604/93 of 13 December 1993 specifying definitions for the application of the prohibition of privileged access referred to in Article 104a of the Treaty
[378] Shapiro, E. C. (2023). Financial Alcoholism: An Institutionalist Analysis of the Repeal of the Glass-Steagall Act and 2008 Financial Crisis.
[379] Barth, J. R., & Zhang, S. (2022). Gramm-Leach-Bliley Act: Creating a New Bank for a New Millennium. In *Encyclopedia of Finance* (pp. 529-540). Cham: Springer International Publishing.

range of financial services.[380] This developmental direction implies that financial institutions provide consumer and corporate loans, accept deposits, and sell investment products such as securities (stocks, bonds, investment funds), insurance services, or wealth management services.[381]

Classification of Financial Intermediaries

Banking Financial Intermediaries	Non-Banking Financial Intermediaries	
	Institutional investors	**Other non-banking intermediaries**
• Commercial banks • Savings and credit cooperatives • Mortgage banks • Housing savings cooperatives	• Investment funds • Insurance co. • Pension funds	• Financial enterprises • Investment firms (brokerages)

Source: Pénziránytű (2018): 19. A pénzügyi közvetítők 1. Közvetítők nélkül nem megy

According to the Financial Stability Board (FSB) definition, the **shadow banking system** involves organizations and activities outside the regular banking system that facilitate credit intermediation across the global financial system, making it easier to create loans. Shadow banks, not being deposit-taking institutions, are often exempt from strict capital adequacy and transparency regulations imposed on banks.[382] The shadow banking system is an organization outside the traditional banking system that engages in credit intermediation. Since it is not classified as a banking institution, it is exempt from stringent capital adequacy and transparency rules, allowing it to increase its lending activities without restrictions, even with high debt ratios.[383]

In the continental system, the dominance of banks is evident, as financial institutions engage in universal activities, and the banking sector plays a significant role, managing 60% of financial assets. This category includes advanced economies characterized by the dominant share of banks, with the limited share of other financial institutions (OFIs) not exceeding 20%: Aus-

[380] Morrison, A. D. (2010). Universal banking. *The Oxford Handbook of Banking*, *2*.

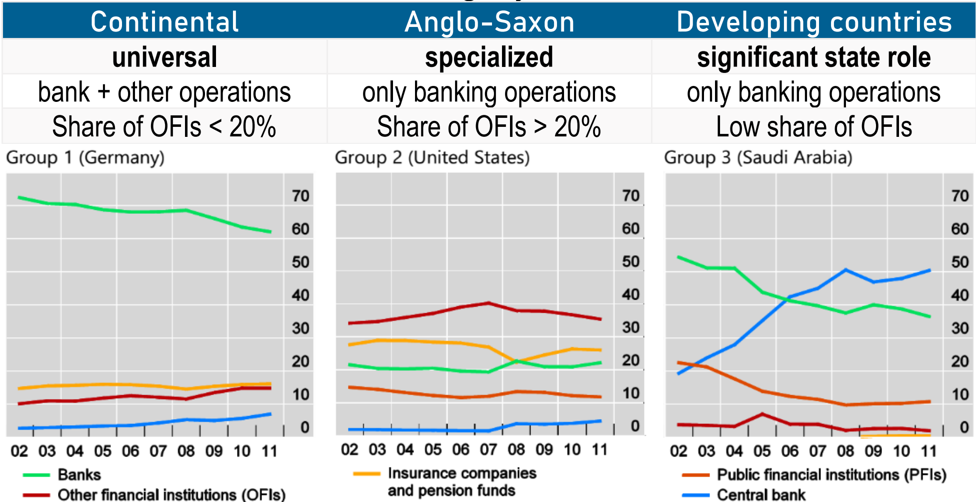
[381] de Haan, J. – Oosterloo, S. – Schoenmaker, D. (2015). Financial Markets and Institutions. A European Perspective. Cambridge University Press

[382] Irani, R. M., Iyer, R., Meisenzahl, R. R., & Peydro, J. L. (2021). The rise of shadow banking: Evidence from capital regulation. *The Review of Financial Studies*, *34*(5), 2181-2235.

[383] Girasa, Roy J. (2016). Shadow Banking: The Rise, Risks, and Rewards of Non-Bank Financial Services, Palgrave Macmillan

tralia, Canada, France, Germany, Japan, and Spain. In the Anglo-Saxon specialized banking system, the distribution among sectors is relatively balanced, and insurers and other financial institutions are becoming increasingly important, with a share exceeding 20%. Their proportion in the market is either higher or close to that of banks in the Netherlands, the United Kingdom, and the United States. The third group comprises emerging markets and developing economies, where the share of state financial institutions or central banks is significant (often due to high foreign exchange reserves or sovereign wealth funds), and the proportion of OFIs is relatively low. This group includes regions such as Argentina, China, Indonesia, Russia, and Saudi Arabia. In this third distinctive model, the role of the central bank is prominent, possibly indicating a unitary banking system.

Banking Systems



Source: Financial Stability Board (2012): Global Shadow Banking Monitoring Report. 2012. 13.

Segments

In the operations of banks, the separation of two fundamental segments or business lines is necessary. This separation is justified by the differing operational characteristics, technologies, and the characteristics of the economic actors utilizing the services in these segments. The **wholesale banking** offers individual transactions and structures, usually involving significant volumes of money. (The term wholesale does not directly refer to volume but rather conveys the essence based on the analogy of wholesale and

retail trade.) The operational characteristic of this activity is that its profitability is mainly determined by the benefit of financial intermediation, specifically the interest margin. The operational costs associated with providing services, often not insignificant, can essentially be considered fixed costs.[384] The **corporate banking**, a segment within wholesale banking, caters to medium-sized, large, municipal, and institutional clients. Depending on the bank, micro and small businesses may belong to the retail segment, while maintaining separate relationships with partner banks. Corporate banking typically offers account management and cash transactions, with non-standardized corporate lending processes. Corporate lending provides specialized lending solutions such as project finance, structured financing, club and syndicated loans, secondary market trading of loan participations, and trade finance. Products are sold through relationship managers and mobile bankers, tailored to customer segments and industries.

In contrast, the essence of **retail banking** lies in the mass sale of standardized services.[385] Its operational characteristic presupposes a significant sales channel network where, in addition to fixed operational costs, variable costs play a substantial role. The profitability of services in this segment is significantly influenced not only by the benefit of financial intermediation but also by the management of incurred operational costs. This business line typically serves individuals (consumers) and micro, small, and medium-sized enterprises, along with private banking services. It includes sales support, retail business development, and branch network management and development. Tasks involve numerous data analysis and planning activities. Standardized processes are followed for retail lending.

14.3. Types of Banking Services

Upon defining banks as service providers, these financial institutions are licensed to accept checking and savings deposits and make, grant loans. Banks also provide related services such as individual retirement accounts (IRAs), certificates of deposit (CDs), currency exchange, and safe deposit

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[384] Gertler, M., Kiyotaki, N., & Prestipino, A. (2016). Wholesale banking and bank runs in macroeconomic modeling of financial crises. In *Handbook of macroeconomics* (Vol. 2, pp. 1345-1425). Elsevier.
Murphy, N. B. (1968). *A study of wholesale banking behavior*. University of Illinois at Urbana-Champaign.
[385] Murphy, J. A. (1996). Retail banking. *Relationship Marketing: Theory and Practice, Paul Chapman Publishing, London*, 74-90.

boxes. The **business-like activity** is an economic activity carried out regularly for the purpose of obtaining profit or wealth in exchange for a consideration - aimed at concluding transactions that have not been individually determined in advance. All the conditions included in the definition, i.e., the three performance elements, must be realized together and simultaneously.

Bank's Balance Sheet

<table>
<tr><th>Assets</th><th>Liabilities</th></tr>
<tr><td>Funds
• Government bonds, securities
• Claims against credit institutions
• Receivables from customers: loan, leasing, factoring
• Securities embodying a credit relationship, including those with fixed interest rates; Shares and other variable yield securities; Shares and shares for investment purposes; Shares, holdings in affiliated companies
• Intangible assets; Tangible assets
• Own shares
• Other assets
• Active accruals</td><td>• Money market resources (central bank and interbank resources)
• Obligations towards credit institutions
• Liabilities to customers (deposits)
• Liability due to issued securities (issued bonds)
• Other obligations
• Passive accruals; Provisions; Subordinated liabilities
• Registered capital; Subscribed but not yet paid capital (-); Capital reserve
• General reserve; Retained earnings (±); Restricted reserve; Valuation reserve
• Financial year result (±)</td></tr>
<tr><td colspan="2">Off balance sheet items:
• contingent items: credit lines, bank guarantees, letters of credit
• risk-reducing derivative transactions for clients</td></tr>
</table>

Source: own compilation of the author

When analyzing bank transactions from an economic and financial perspective, classifying them based on their place in the bank's **balance sheet** and their impact on the bank's profitability is a key approach. The assets are transactions that increase the bank's assets, including loan disbursements, securities investments, and fixed asset purchases. The liabilities include customer deposits, borrowing from other banks, and issuance of bonds. The bank's equity is affected by the issuance of new shares, profit or loss for the period, and dividend payments.

Banking Transaction in the Balance sheet

Active transactions	Passive transactions	Indifferent transactions
• Credit, loan • Leasing • Factoring, forfaiting • Bank guarantee, surety • Securities transactions (purchase) • Bill of exchange and securities discount • Interbank lending • International operations • Capital withdrawal - delivery • Other	• Account opening, deposits, • Own securities issue • Use of central bank refinancing • Credit-loan admission • Bill of exchange and securities discount • Interbank borrowing • International direct borrowing • Capital increase: registered capital, capital reserve • Other	• Domestic and foreign cash flows • Cash-substitute means of payment • Deposit and safe box • Asset management trust • Gold trade • Organization of securities issuance • Customer-oriented banking services • Intermediary, bank agency activity • Expert advice and consultation • Other services (money exchange)

Source: own compilation of the author

In this traditional approach, the **active banking operations** are those found on the asset side of the balance sheet and represent claims held by the bank.[386] In reality, these operations involve the utilization of funds deposited by customers for lending purposes, including credit facilities, loans, leasing, factoring, forfeiting, bank guarantees, endorsements, securities transactions (purchases), bill od exchange discounting, interbank lending, and more. On the other hand, **passive banking operations** are located on the liabilities side, representing obligations the bank must repay its customers. These include deposits, account openings, securities issuance, utilization of central bank refinancing, borrowing, bill discounting, interbank borrowing, and international borrowing. The sources side is augmented by capital elements, capital increases, and reserves. The literature also uses the term neutral, other, or **indifferent banking operations** to refer to transactions that do not directly or only slightly represent claims or liabilities but still impact the balance sheet total. These include banking services, intermediation for the more sophisticated service of customers, domestic and international money flows,

[386] Migdadi, Y. K. A. A. (2013). Proposed typologies of banking operations strategy. *International Journal of Services and Operations Management*, *16*(1), 42-85.

cash substitutes, deposits, safe deposit boxes, trust services, gold trading, and securities issuance.

Risk or risk-taking activities involve various financial endeavors, including granting loans, purchasing debt securities, discounting promissory notes and checks, providing guarantees and collateral, acquiring business shares, and engaging in financial leasing. It also covers deposits placed with other credit institutions. Outsourcing occurs when a financial institution delegates certain activities related to its financial or supplementary financial services, as mandated by law. These activities often involve data management, processing, or storage and are contracted to an organizationally independent entity for continuous or regular execution.

It is important to note that other classification methods also exist, such as categorizing transactions by their type (e.g., payments, transfers, withdrawals), their purpose (e.g., business, personal), or their risk profile. In another approach, we can distinguish (i) interest-based transactions, (ii) fee-based transactions, (iii) asset-source management, and (iv) e-money and securities transactions.

Types of Banking Transactions

Interest-based transactions	Fee-based transactions	Asset-Liability management	E-money and securities transactions
• Credits and loans (and collaterals) • Leasing • Factoring, forfaiting • Deposit collection	• Account opening and management • Cash substitute payment instruments • Asset management • Deposit and safe service • Other banking services	• Transactions within the banking system • Capital transactions • Issue of securities	• Issuance of electronic money • Securities Transactions

Source: own compilation of the author

Interest-based transactions

Why did the banker quit his job?
He lost interest.

The **interest** is the amount payable by the debtor to the lender (deposit taker) for the use and risk of the accepted deposit or the loan taken, calculated as a percentage of the deposit or loan amount, to be paid proportionally (settled) over time, or other return.

The **credit and loan provision** involves several activities. The **credit** provision entails making a specified credit line available to the borrower under a written agreement between the lender and the borrower. This arrangement allows the borrower access to funds subject to certain terms and conditions and typically involves a fee. Once specific contractual terms are met, the lender commits to executing a loan agreement or undertaking other credit transactions. The **loan provision** involves providing a sum of money to the borrower as per a credit or loan agreement between the lender and the borrower. The borrower is obligated to repay this amount at the agreed-upon time, with or without interest. It encompasses any agreement involving the purchase of securities and their subsequent repurchase through futures transactions. These securities serve as collateral for the buyer (lender) without the ability to dispose of or encumber them during the transaction. Activities include the purchase and simultaneous sale of a separate mortgage right, providing pawn loans and group financing. **Mortgage loan** refers to a loan or credit granted to consumers with real estate-based mortgage rights, including standalone mortgage rights, as collateral. A **housing credit or loan** agreement involves the conclusion of a credit or loan agreement secured by a mortgage right established on real estate, which may include an independent mortgage right. This agreement can be for purposes such as the purchase, construction, expansion, modernization, or renovation of residential property, as specified by the parties in the deed. Alternatively, it can serve the certified purpose of redeeming the loan granted for the aforementioned purposes. The amount of this redemption may exceed the original amount solely due to exchange rate differences between the credit providers, along with certified fees and costs related to closing the original credit debt and disbursing the new credit. **Group financing** means financial operations jointly conducted between a parent company and its subsidiaries, or among these subsidiaries themselves, for liquidity or allocation. Financial service activities related to credit and loan provision include assessing creditworthiness, preparing credit and loan agreements, maintaining records of disbursed loans,

monitoring, overseeing, and taking measures related to loan recovery. It can be mentioned here, but they are fee-based services.

A financial **leasing** involves leasing real estate, movable property, or property rights owned by the lessor to the lessee for a specified period. During the lease period (i) the lessee bears the risk of loss, (ii) the lessee becomes entitled to collect profits, (iii) the lessee bears direct costs, including maintenance and depreciation expenses. (iv) The lessee gains the right to acquire ownership of the asset by paying the full principal and interest portions of the lease fee, along with any agreed residual value, or by returning the asset to the lessor. The leased asset reverts to the lessor's possession if the lessee does not exercise this right. The parties stipulate the contract's principal portion of the lease fee, which is equal to the agreed value of the leased asset or property right, as well as the interest portion and the repayment schedule. A financial leasing contract for **residential purposes** entails a contract where the purpose, as specified by the parties in the deed, is the lessee's acquisition of ownership of a residential property from a third-party seller. The Ottawa convention governs financial leasing transactions in which one party (the lessor), (i) on the specifications of another party (the lessee), enters into an agreement (the supply agreement) with a third party (the supplier) under which the lessor acquires plant, capital goods or other equipment (the equipment) on terms approved by the lessee so far as they concern its interests, and (ii) enters into an agreement (the leasing agreement) with the lessee, granting to the lessee the right to use the equipment in return for the payment of rentals. The financial leasing transaction includes the following characteristics: (i) the lessee specifies the equipment and selects the supplier without relying primarily on the skill and judgment of the lessor; (ii) the lessor acquires the equipment in connection with a leasing agreement which, to the knowledge of the supplier, either has been made or is to be made between the lessor and the lessee; and (iii) the rentals payable under the leasing agreement are calculated so as to take into account in particular the amortization of the whole or a substantial part of the cost of the equipment.[387]

The **receivables purchase** activity means acquiring, advancing (including **factoring** and **forfaiting**), and discounting receivables. This may involve assuming or not assuming the debtor's risk. Importantly, it encompasses activities regardless of who handles the due date registration and the

[387] UNIDROIT Convention on International Financial Leasing (Ottawa, 28 May 1988)

collection of outstanding amounts.[388] The factoring contract concluded between one party (the supplier) and another party (the factor) pursuant to which:[389]

- the supplier may or will assign to the factor receivables arising from contracts of sale of goods made between the supplier and its customers (debtors) other than those for the sale of goods bought primarily for their personal, family or household use;
- the factor is to perform at least two of the following functions: (i) finance for the supplier, including loans and advance payments; (ii) maintenance of accounts (ledgering) relating to the receivables; (iii) collection of receivables; (iv) protection against default in payment by debtors;
- notice of the assignment of the receivables is to be given to debtors.

The **deposit and collection of other repayable funds** from the public involves collecting funds from individuals not specifically identified in advance, allowing the deposit collector to have ownership over them but obligating them to be repaid, with or without interest or other benefits. The **deposit** refers to a contractual agreement or an indebtedness arising from a savings deposit agreement, including a positive account balance based on a payment account agreement at a financial institution.

Fee-based transactions

A money processing activity involves detailed counting, verification for authenticity and usability, and packaging of banknotes and coins for recirculation. The **payment services** include (i) cash deposits to payment accounts and all activities necessary for maintaining such accounts; (ii) cash withdrawals from payment accounts and all activities necessary for maintaining such accounts; (iii) execution of payment operations between payment accounts; (iv) issuance and acceptance of cash substitute payment instruments - excluding checks and electronic money; (v) cash transfers; (vi) payment initiation services, (vii) account information services. In **cash transfer**s, money is transmitted from the paying party to the beneficiary or their designated payment service provider without necessitating the opening of a payment account. The objective is to facilitate the payment directly to the beneficiary. The **payment system** refers to a comprehensive framework

[388] Salinger, F. R. (2006). *Factoring: the law and practice of invoice finance*. Sweet & Maxwell.

[389] UNIDROIT Convention on International Factoring (Ottawa, 28 May 1988)

comprising clearing and settlement mechanisms. These systems adhere to predefined procedures outlined in agreements or standards, ensuring uniform rules for processing, settling, or fulfilling payment operations.

The **currency exchange** activity involves buying and selling foreign currencies against legal tender and exchanging foreign currencies for other foreign currencies. It does not include the exchange of currencies related to payment services by a payment service provider, the numismatic distribution of circulating or exchangeable foreign coins and banknotes, or the fulfillment of payments related to domestic trade transactions for goods or services.

Financial service activities **related to credit and loan provision** include assessing creditworthiness, preparing credit and loan agreements, maintaining records of disbursed loans, monitoring, overseeing, and taking measures related to loan recovery. A **credit reference** service involves either providing non-confidential bank information for a fee or handling data by a financial enterprise managing the central credit information system as defined in the law on the central credit information system. The **credit counseling** entails providing personalized recommendations related to mortgage loans or financial leasing for real estate granted to consumers, separate from the provision of credit, loans, financial leasing, or intermediation of financial services.

The **account information** service is an online service designed to provide aggregated information about one or more payment accounts opened by the payment service user with another payment service provider or several payment service providers.

The **deposit and escrow service management** involves depositing and managing sums of money on behalf of the client in a separate escrow account, with or without interest, according to the conditions laid down in law. The **safe** service involves providing a safe deposit box for the customer in a permanently guarded room based on an agreement with the customer. In this safe, the customer can place and take out their valuables.

The **trust and wealth management** involves establishing and administrating trusts, which are legal entities designed to protect assets and manage property for the benefit of beneficiaries. A trust operates through a fiduciary relationship, where the trustor entrusts assets to a trustee to manage on behalf of the beneficiaries. Trusts serve various purposes, including asset protection and ensuring assets are distributed according to the trustor's wishes. They can also streamline processes, reduce paperwork, and potentially mitigate inheritance or estate taxes. Trusts are not solely for the wealthy; they are versatile

instruments that can be utilized for a range of purposes and by individuals from different financial backgrounds. They come in different types, including living or testamentary, funded or unfunded, and revocable or irrevocable trusts, each serving specific goals and objectives.

The **investment activities** cover a wide array of assets, including real estate, movable property, property rights, and shares in various enterprises. Moreover, it extends to the provision of subordinated loan capital to other financial entities.

A **gold commercial transaction** encompasses deals made for colored gold, which must have a fineness of at least 995/1000. Additionally, it includes transactions involving gold bars and blocks, irrespective of their gold content, along with non-circulating gold coins. Numismatically, it also involves transactions concerning circulating gold coins.

Asset-Liability Management (ALM)

Within the banking system, operations include **interbank** lending and borrowing, utilization of central bank refinancing, and international borrowing and lending. These activities directly impact liquidity and interest rate risk. ALM strategies address potential mismatches between short-term funding (borrowing) and long-term assets (lending) to ensure sufficient cash flow and manage interest rate fluctuations.[390] Utilizing central bank facilities can influence liquidity and access to funds. ALM considers these strategies while planning the funding mix and managing its overall risk profile. It can expand cross-border activities and introduce additional currency and sovereign risk. ALM incorporates these exposures when managing risk diversification and setting limits for international transactions.

The **capital operations** involve capital withdrawal, capital increase and reduction, including subscribed capital and reserves. The capital withdrawal and reduction actions affect the bank's capital adequacy ratio, a key measure of financial strength. ALM ensures that capital levels cover potential losses and support business continuity. Raising additional capital through subscribed capital or reserves strengthens the bank's financial position and improves its ability to absorb losses. ALM considers capital adequacy targets and optimizes the timing and composition of capital injections.

[390] Farahvash, P. (2020). *Asset-liability and liquidity management*. John Wiley & Sons. Owusu, F. B., & Alhassan, A. L. (2021). Asset-Liability Management and bank profitability: Statistical cost accounting analysis from an emerging market. *International Journal of Finance & Economics*, *26*(1), 1488-1502.

The **securities issuance** encompasses various forms such as bonds, mortgage bonds, and deposit certificates. These activities raise additional funds and impact the bank's liability structure. ALM analyzes the terms and maturity of different instruments to manage interest rate risk, liquidity, and overall balance sheet composition.

It is a comprehensive framework that integrates these operations, capital actions, and securities issuances with the bank's risk tolerance, business strategies, and market conditions. By proactively managing assets and liabilities, banks aim to achieve: (i) financial stability: maintaining sufficient capital and liquidity to withstand potential risks; (ii) profitability: optimizing the cost of funding and maximizing returns on assets; (iii) compliance: adhering to regulatory requirements and capital adequacy standards.

E-money, cash substitutes, and securities transactions

The **electronic money** is an electronically stored amount, including magnetic storage, represented by a claim against the issuer of electronic money, which is issued in exchange for receiving funds to perform payment transactions defined in the law on payment services, and which can be accepted by natural and legal persons, economic associations without legal personality, and sole traders other than the issuer of electronic money, excluding the value stored on a device. This involves creating units of digital value backed by traditional currency. Users load funds onto an electronic wallet or card, allowing them to make payments without physical cash. Examples include prepaid cards, e-wallets, and stablecoins. Issuance requires regulatory compliance and adherence to specific criteria, such as the value being stored electronically, issued against received funds, and accepted by third parties.

The **issuance of cash substitutes** refers to providing customers with checks or electronic money and providing payers with cash substitutes for initiating, approving, and processing payment transactions based on a contract. Services related to the issuance of cash substitutes encompass the aggregate of services provided based on regulations concerning the issuance, management, and use of cash substitutes or services undertaken by the issuer as stipulated in contracts with customers, sellers, or service providers.[391] This excludes the processing of settlement transactions related to the use of cash substitutes.

The activity aimed at issuing revolving **vouchers** involves providing the voucher holder with cash substitutes directly by the voucher issuer or

[391] Becker, C. (2019). The Pressure to Create Cash Substitutes. *Available at SSRN 3329150*.

through a voucher distributor in exchange for funds. A revolving voucher is any transferable and reusable paper-based payment instrument representing a monetary claim against the voucher issuer, excluding banknotes, cash substitutes defined in point 55, and securities. It serves to settle the value of goods or services.

The **securities transactions** encompass a broader range of activities related to tradable financial instruments like stocks, bonds, and derivatives. This includes investments involving buying and selling securities, such as through a brokerage account. Securities issuance involves assisting companies or governments in raising capital by issuing new securities, with roles including organizers, guarantors, and underwriters. Additionally, securitization involves packaging assets into tradable securities, often done with loans or mortgages.

The **securitization** means a transaction or scheme whereby the credit risk associated with an exposure or pool of exposures is trenched, having both of the following characteristics: (i) payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; (ii) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme. It involves a securitization special purpose entity (SSPE), which is a corporation trust or other entity, other than an institution, organized for carrying out a securitization or securitizations, the activities of which are limited to those appropriate to accomplish that objective, the structure of which is intended to isolate the obligations of the SSPE from those of the originator institution, and in which the holders of the beneficial interests have the right to pledge or exchange those interests without restriction. The originator is an entity which (i) itself or through related entities, directly or indirectly, was involved in the original agreement which created the obligations or potential obligations of the debtor or potential debtor giving rise to the exposure being securitized; or (ii) purchases a third party's exposures for its own account and then securitizes them. The sponsor refers to an institution other than an originator institution that establishes and manages an asset-backed commercial paper programme or other securitization scheme that purchases exposures from third-party entities.[392]

[392] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 Text with EEA relevance

The **discounting** involves several processes. It refers to buying bills of exchange or other financial instruments before their maturity date at a discount to their face value. Upon maturity, the purchaser collects the full face value, earning the difference as interest. Rediscounting involves central banks buying discounted bills from commercial banks, influencing money supply.

15. Antiquity

The emergence of banking and financial transactions in the ancient East is observed initially as a transition from a natural economy to a monetary economy. In the 23rd century BC, **Chaldean banks** engaged in **lending** as a commercial practice and were acquainted with banknotes. Similarly, in ancient **China** around 2000 BC, checks were already known. In ancient cultures, we also encounter contractual constructions that are more complex than simple lease agreements and can be likened more to modern leasing. In the 7-6th century BC in **Babylonia**, banking dynasties such as the **Egibi** family and **Murashu** families founded the first private banks in Babylon,[393] for instance persisted in its operations until the reign of Darius II (424–404 BC). They acted as *tamkarum*, and conducted various transactions, predominantly offering loans with interest and engaging in activities such as, mortgage, pledge, leasing land, equipment, slaves; obligations similar to banknotes (*hudu*). etc.[394] They maintained satellite positions in multiple locations, weaving their estates across Mesopotamia. During the Babylonian captivity (597-536 BC), the **Israelites** became a trading people, integrating into the thriving commercial life of the Babylonian empire. They established connections with almost the entire world through diasporas, further refining trade methods and developing credit systems. Upon the opportunity for return, particularly those involved in commerce refrained from it.[395] A debt burden relief solution is seen in the third book of Moses, which decrees that debts must be waived in the year of jubilee blowing of trumpets recurring every fifty years.

The Jubilee Year. You shall count seven weeks of years—seven times seven years—such that the seven weeks of years amount to forty-nine years. Then, on the tenth day of the seventh month let the ram’s horn resound; on this, the Day of Atonement, the ram’s horn blast shall resound throughout your land. You shall treat this fiftieth year as sacred. You shall proclaim liberty in the land for all its inhabitants. It shall be a jubilee for you, when each of you shall return to your own property, each of you to your own family. … But if the person does not acquire sufficient means to buy back the land, what was sold shall remain in the possession of the purchaser until the year of the jubilee, when it must be released and returned to the original owner. … When your kindred with you, having been so reduced to

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393 Erdoğan, S., Gedikli, A., & Derindağ, M. R. (2020). An investigation of Iran’s banking system: challenges and remedies. *Bilimname*, *2020*(41), 957-990.
Bozik, M. S., & Ustaoğlu, M. (2020). The merchant societies and usury: Assyrians and Babylonians. In *A History of Interest and Debt* (pp. 35-46). Routledge.
394 Ferguson, N. (2008). The Ascent of Money - Financial History of the World. Penguin Press. 31.
Monroe, C. M. (2020). Money and traders. *A companion to the ancient Near East*, 145-164.
395 Bartha T. (ed.) (1993). Keresztyén bibliai lexikon, Kereskedelem

poverty, sell themselves to you, do not make them work as slaves. Rather, let them be like laborers or like your tenants, working with you until the jubilee year, when, together with any children, they shall be released from your service and return to their family and to their ancestral property.

Leviticus 25:8-10, 28, 39-41.

Unfortunately, scant information remains about **Phoenician** and **Carthaginian** banking. In Ptolemaic Egypt, banking activities were leased as a state monopoly to individuals or corporations during the reign of the Ptolemies. This concession specifically involved money exchange and lending.

The earliest historical records of **leasing** as a financing method dates back to around 2010 BC, originating from clay tablets found in the city of Ur, where priests leased agricultural tools, land, and the rights to use water sources and water reserves to farmers.[396] Similar transactions can also be found in the Babylonian Empire, the Code of Hammurabi, and Egypt. **Factoring** has rich historical traditions. Even ancient civilizations were familiar with and utilized it; we can speak of established practices and regulations even in the Babylonian Empire. Hammurabi's Code is particularly important in this regard, as it contains the first commercial and financial laws. Researchers suggest that it was the Babylonians who developed the theory of factoring.[397] The basic form can be traced back to the commercial agent or consignee (*tamkaru* or *samallu*), who assumed the risk of selling goods and, notably, enforcing claims on behalf of the merchant. The earliest known factor in history was a Sumerian named Ur-Nusku, who acted as a damgar (merchant, moneyman), accepting commissions, including collecting state taxes.[398] During Hammurabi's time in the 18th century BC, the *tamkaru* represented both the moneyman and social status, facilitating settlements between parties by trading monetary tokens, while the *samallu* denoted a representative or agent in the business. Later, it became widespread in other ancient cultures, including the Chaldean Empire, Phoenicia, Egypt, and the Greek world.[399]

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397 Hillyer, W. H. (1941). *Key Business Cash, Origin of Factoring Traced Back to Ancient Babylon*. in Barrons National Business and Financial Weekly, Boston 1941/10.

398 Pomponio, F. (2013). Some Scraps of Information and Discussion about the Economy of Third Millennium Babylonia. *L'economia dell'antica Mesopotamia (III–I millennio aC), Per un dialogo interdisciplinare*, 23-39.

Phelps, C. W. (1956) *The Role of Factoring in Modern Business Finance*. Baltimore, USA.

399 Salinger, F. (1995). *Factoring law and practice*, Sweet & Maxwell Limited, London. 4.

15.1. Greece

Among the ancient **Greeks**, dealing with **money** was still not esteemed, primarily carried out by slaves, laborers, settled foreigners, and *metoikos* (μέτοικος). Greek citizens did not carry much money; bankers kept records of income and expenditures, holding surplus money in deposits. They entrusted bankers with transactions, without the need for witnesses.[400] The interest rates were generally high, ranging from 12-18% per annum, with instances of usury reaching 60%, and Theophrastus also reports on a case where one and a half obul, *obolos* (ὀβολός, means nail, metal spit) (25%) was taken for a day after one drachma, (9.000% for a year!). Both individuals and governments knew to reduce the purity of precious metals by alloying them with cheaper metals. Thus the bankers relied on touchstones – a small black siliceous stone convenient for holding in one hand ─ to test the purity of gold and silver coins.[401]

The **temple banks** operated during frequent wars, providing a secure environment for loans and (precious metal) deposits; as they were invulnerable during the frequent wars period. For religious reasons, the temples were considered inviolable, and thus people could keep their money relatively safe there. They also had their own militia to protect them, and the wealth of the temples also made them attractive to depositors. The Delian Temple (Delos) served as the bank of the Delian League in 478 BC, constituting an alliance of Greek city-states (150-330 cities) under the leadership of Athens.[402] Its objective was to continue the struggle against the Persian Empire after the Greek victory, culminating in the aftermath of the second Persian invasion (Plataea). Other prominent cities that had significant sanctuaries also had notable treasury houses, such as the Temple of Apollo at Delphi, the Temple of Artemis at Ephesus and the Temple of Hera at Samos, or the city of Olympia. These early treasury houses were a mixture of sacred, state, and financial institutions, housing a plethora (πληθώρη) of goods including votive offerings, cult statues, weapons, gold, and silver.[403]

Bankers in ancient Greece had various designations based on their occupations. The trapezoid, table-makers, carpenters or trapezithés (τραπεζίτες,

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[400] Elliott, C. P. (2020). The role of money in the economies of Ancient Greece and Rome. *Handbook of the History of Money and Currency*, 67-86.
[401] https://cotrugli.org/banking-in-ancient-greece/
[402] Harrison-Mills, D. (2023). Temple Banks and Priest-Bankers. In *Serving at the'Banking-Tables'* (pp. 85-96). Brill.
[403] https://www.thecollector.com/greek-roman-banking/

counter)[404] conducted banking transactions on small three-legged tables and benches in the Athenian harbor.[405] They managed over a hundred national currencies and provided additional services such as ensuring interest payments on deposited money, pawn loans, notarial activities, and safeguarding valuables.[406] The terms *argyramoibos* (αργυραμοιβός, silver changers) and *kollubisthes* (κολλυβιστής) originated from silver and referred to smaller-scale money changers and pawnshops exchanging foreign traders' coins for local currency.[407] They used the βάσανος (basanos) or touchstone to determine whether gold is genuine or counterfeit. In the Bible from Matthew 21:12-13 we can read that *Jesus entered the temple courts and drove out all who were buying and selling there. He overturned the money changers' tables and the benches of those selling doves*. In earlier versions *trapezitas* and *kollubisthes* can be found for bankers (καί τάς τραπέζας τῶν κολλυβιστῶν – and the tables of the money-changers). Obolostathes (οβολοστατες) dealt with copper coin measurement and earned a derogatory name due to the historical use of raw iron skewers as a form of currency; the Ionians called it obelos, the Atticians called it obolos. According to Pontikos Herakleides, the moneylender was called a skewer weigher because the ancients also used their skewers as weights. The term daneothés (δανεωτές) was a pejorative label for despised lenders, referring to the hated loan. The responsibilities of custodial deposit management in temple banks were handled by the *neokoros* (νεώκορος) or *zakoros* (ζάκορος).[408]

Pasion (Πασίων), a former slave of other bankers (Antisthenes and Archetratus) from the 4th century BC, exemplified this role as he managed his owner's business, gained Athenian citizenship, and he died with a wealth of 60 talent,[409] which is equivalent to nearly 44 million dollars at today's exchange rate. Isocrates (Ἰσοκράτης, 436–338 BC) the Greek rhetorician wrote the Trapezitica in 393 BC which is a court speech in which he defends the son of one of the favorites of the Bosporus king Satyros. The boy accuses Pasion of embezzling the money entrusted to him. The speech describes the

[404] Isocrates (Ἰσοκράτης, 436–338 BC) the Greek rhetorician wrote the Trapezitica in 393 BC which is a court speech against Pasion.
[405] Greek is almost the only language that does not use the word bank, see also the name of the central bank: Τράπεζα της Ελλάδος
[406] Bolkestein H. (1958). Economic Life in Greece's Golden Age. E.J. Brill.
[407] Adkins L. - Adkins RA (1998). Handbook to Life in Ancient Rome. Oxford University Press.
[408] Burrell B. (2004). Neokoroi: Greek Cities and Roman Emperors. Brill. and Craik E.M. (1980): The Dorian Aegean. Routledge
[409] A talent equals 26 kg of silver or gold

attempt as Pasion tries to embezzle the deposits entrusted to his bank by taking advantage of the difficult situation of the depositors, for which he did not hesitate to cheat, forge, steal contracts, bribe, etc. Isocrates begins his argument by saying how dangerous it is to sue a banker, since transactions with bankers take place without witnesses, and by suing the injured party puts himself in danger in front of people who have many friends, possess large sums of money, and are considered trustworthy stand out in their profession. Although there is no record of the verdict, it can be assumed that Pasion was either convicted or settled with his accusers. Be that as it may, after the incident he already behaved properly and earned the respect of the city. His house was inherited by a former slave, Phormio, who successfully ran the business.[410] We can also learn a lot about the activities of Greek bankers from Demosthenes' court speech defending Phormio. Demosthenes claims that before Pasion's death, Pasion gave a loan of fifty talents from accounts receivable that were not available to the bank.

As early as at that time, a **record** was probably kept on which customers were worthy of credit, and which ones did not comply with their obligations. It is the history of ancient Greece where we see the best-known measure that assumes comprehensive registrations. Solon (Σόλων), elected archon (ἄρχων) in 594 BC for a year with unlimited power, introduced as one of his first measures the shaking off of burdens or seisachteia (σεισάχθεια),[411] which meant concurrent and full cancellation of all debts.[412] Demosthenes' oratio aginst Timoteus from 362 BC is the first record of bankers keeping records of customer deposits and withdrawals and he also explains that current accounts worked. Rostovtzeff observed that the Ptolemaic bank also developed a sophisticated accounting based on well-understood professional terminology replaced the rather primitive Athenian accounting of the 4th century.[413]

Aristotle also raises the issue of **lending money** at interest in his work Politics. The individual who lends money to acquire more money after a certain period of time is considered a usurer, and the profit acquired through this

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[410] De Soto, J. H. (2006). *Money, bank credit, and economic cycles*. Ludwig von Mises Institute.

[411] from σείειν *seiein*, to shake, and ἄχθος *achthos*, burden, i.e. the relief of burdens

[412] Potter, T. (2022). 7. Solon's Petromorphic Biopolitics.

Zarotiadis, G. (2023). Guilt Economics: Rediscovering the Civilizing Process. In *Handbook of Research on Socio-Economic Sustainability in the Post-Pandemic Era* (pp. 324-333). IGI Global.

[413] Rostovtzeff, M. (1953). *The Social and Economic History of the Hellenistic World*. Oxford University Press, 405.

means is referred to as usury (interest).The Greek term usury actually denoted interest and did not carry a negative connotation; the misinterpretation of the Greek term *tokos*, τόκος, which means interest, the usury, preserves the same root: τοκογλυφία. Money was created to facilitate trade, yet usury still increases it itself. Therefore, when money is lent at usury, it is not being used in accordance with its original purpose, making lending money at interest the most unnatural mode of economic activity of all.[414] The maritime trade of the Phoenicians and Greeks was highly advanced, with indispensable tools such as ships, nets, and ship anchors, known as the iron maiden. Each of these items was expensive, and if a ship sank, no one would recover it, so the merchant bore the loss whether it was owned or leased.[415] However, in the latter case, the initial investment cost was lower, as the lessee did not need to invest the entire amount. As part of ship **leasing**, ancillary services such as providing personnel were also offered. Additionally, it became common for the lessee to bear both the risks and associated burdens alongside the right to use.

15.2. Rome

In ancient **Rome**, similar practices were observed. Though the occupation was also looked down upon, bankers formed associations, i.e. *collegium*. Legal aspects of banking transactions were meticulously developed, encompassing loans, interest, leases (leasing), discounting of receivables or claims (factoring), payments on behalf (*receptum* locally, *permutatio* in rural areas), and organizing auctions. Like their Greek counterparts, Roman bankers maintained regular accounting records on rolled scrolls (*codex accepti et expensi*), with each party having its own account (*ratio*).[416]

Professional **bankers** were referred to by expressions such as *argentarius*, *coactor argentarius*, *nummularius*, and *mensarius*. They were either appointed by the state, involving tasks such as tax collection, or operated

[414] Aristotle. (4th c. BC) Politics: Book One Part X (https://learn.saylor.org/mod/book/tool/print/index.php?id=30514&chapterid=6433)
[415] Papathanassiou, C. (2021). Evidence of finance leasing in the ancient mines of Laureion. *Available at SSRN 3760181*.
Bresson, A. (2003). Merchants and politics in Ancient Greece: Social and economic aspects. *Merchants and Politics in Ancient Greece: Social and Economic Aspects*, 139-163.
[416] Zandrino, L. (2017). Osservazioni sul codex accepti et expensi. *Studia et documenta historiae et iuris*, *83*, 131-164.
Tsatsis, C. (2020). Lessons from the evolution of the accounting tool: from the genesis up to the roman period. CEB Working Paper.

independently, with official premises located in the Forum near the Castor temple beside Janus medius. The term *argentarius* referred to private bankers and money changers who engaged in (i) *permutatio*, i.e.: exchange of foreign money for domestic money or vice versa; (ii) foreign money was used as *depositum* (deposit) or *creditum* (loan); (iii) they also participated in commercial matters as agents (*interpretes*).[417] Samuel Ball Platner identified the Clivus Argentarius, known as the Banker Street, with the Lautumiæ.[418] This location is only referenced in medieval sources, yet it likely reflects ancient financial activities concentrated around the offices of *argentarii*, and professional deposit bankers. *Mensarii* and *nummularii* were public bankers who conducted transactions on behalf of the state, verifying the authenticity of money and exchanging it. According to Callistratus, Roman law prohibited women from engaging in banking activities.[419] During the imperial period, there was significant state control over bankers. One infamous banker of the era was Publicus Tadius, entrusted with money obtained corruptly by Verres, the Sicilian propraetor who unjustly taxed and extorted valuable artworks. Cicero later mentioned them in his indictment speech from 70 BC.[420]

Comparing the Roman economic and legal concepts with nowadays, the essence of **loan and credit transactions** has significantly remained unchanged.[421] In the archaic era, the term nexum initially referred to loans in raw metal coins, later replaced by coined currency, constituting transactions conducted with metal and scales (*negotium per æs et libram*).[422] In case of non-payment by the debtor, *manus iniectio* was an option, meaning the creditor could ultimately kill the debtor or sell them as a slave beyond the River Tiber. This practice continued until the introduction of the **lex Pœtilia Papiria** in 326 BC, which prohibited debtor slavery. In the classical era, loans were known as mutuum, involving the transfer of fungible goods with the condition that the debtor must return an equal amount of the same type of goods in weight, number, and measure upon maturity. The credit derives

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[417] Andreau, Jean (1999): Banking and Business in the Roman World. Cambridge University Press

[418] Platner, S. B. (2015). *A topographical dictionary of ancient Rome*. Cambridge University Press.

[419] Benke, N. (2012). Gender and the Roman Law of Obligations. in Obligations in Roman Law: Past, Present, and Future. University of Michigan Press Volume 33 of Papers And Monographs Of The American Academy In Rome. 367.

[420] Cicero, Marcus Tullius: Actiones in C. Verrem II. 1, 100; 2, 49.

[421] Elliott, C. P. (2020). The role of money in the economies of Ancient Greece and Rome. *Handbook of the History of Money and Currency*, 67-86.

[422] Binder, M. (2022). Sanction for the non-confessing debitor. Litiscrescence in Roman law. *University of Vienna Law Review*, *6*(1), 1-29.

from *creditum*, credo (to believe).[423] This transaction was defined as a dare contract in legal theory and classified as a real obligation. As the indirect object of the transaction was a fungible item, even force majeure could not result in impossibility of performance. The typical form was interest-free loans, with interest (*fenus*) needing to be separately stipulated. From this term derived the fenorator, who provided interest-bearing loans. While fenus strictly referred to interest, the active and flourishing commercial life developed its own construct, known as *pecunia nautica* or *fenus nauticum*, meaning maritime interest or maritime loan. If the goods were damaged or lost during the voyage, the lender bore the loss, but this was offset by allowing for a higher interest rate than the legal maximum (annual 8⅓%, one-twelfth of the capital). Later, when prominent figures in the empire's economic life were Agrippa, Mæceans, and Trimalchio, interest-bearing loans became common, and wealthy individuals with vast real estate and financial wealth largely lived off their yields and interest.[424]

According to the classical Roman jurisprudence, *servi res sunt*, means that slaves were considered things or property. Therefore, the talking tool,[425] speaking machine, or slave, was a universally recognized instrument, leading to the development of long-term slave **leases** as a popular and widespread type of transaction. Consider the vast operations, mines, construction projects, and galleys requiring extensive (forced) labor. Even back then, large investments required capital, so the subject matter of the transaction adapted to the standards of the time. Slaves acquired in Africa were typically not sold but leased out to work in the marble quarries of northern Italy. Due to the flourishing trade, ship and anchor leasing also persisted. It is worth mentioning the institution of *constitutum possessorium*, which referred to the sale of

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[423] Online Etymology Dictionary https://www.etymonline.com/word/credit

[424] Andreau, J. (1999). *Banking and Business in the Roman World*. Cambridge University Press. 75-77.

[425] Lewis, J. P. (2013). Did Varro think that slaves were talking tools?. *Mnemosyne*, *66*(4-5), 634-648.

This article challenges the widespread notion that Varro's *Res Rustica* 1.17 defined slaves as talking tools. Instead, it argues that the *genus vocale instrumenti* comprised both slave and free workers within an economic unit. In this context, *instrumentum* does not mean tool, but what is needed to run a farmstead, including the human work-force, in accordance with the views that were prevalent among the Romans. Varro drew upon the agricultural literature of his time to build his three-fold division of the *instrumentum* . His definition was unoriginal and void of any moral implications. As such, it has to be seen as a mere rhetorical device. What Varro attempted to do in this passage was to cast the pedestrian claim that human labour is needed to run a farmstead into a language that resembled an academic and philosophical discourse.

property, involving a partial right, typically involving use, enjoyment, possession, and retention, meaning the property remained with the previous owner but was held by the new owner as a stranger. This construction most closely resembles modern-day subleasing. In Justinian's Institutes, we can also read, " So nearly akin, indeed, is purchase and sale to letting and hiring, that in some cases it is a question to which class of the two a contract belongs."[426] Additionally, responsibility for the condition of the leased item also emerged: "Where a man has either given or promised hire for the use of clothes, silver, or a beast of burden, he is required in his charge of it to show as much care as the most diligent father of a family shows in his own affairs; if he do this, and still accidentally lose it, he will be under no obligation to re store either it or its value."[427]

The prototype of **factoring** can be found in the Roman Empire was the first to sell bonds at a discount or with a rebate. This was largely due to the detailed regulations outlined in their laws regarding assignment, which established the transferability of obligations. Initially, they utilized the institution of *delegatio*, where the creditor sent the debtor to a new creditor (*delegatio activa*) or the debtor sent a new debtor to the creditor (*delegatio passiva*). This process, known as "endorsing" in modern terms, was not satisfactory for rapidly evolving commercial needs because it did not transfer the obligation but created a new one for the parties involved. The *mandatum agendi* allowed creditors to transfer claims to a new creditor without the debtor's knowledge or consent, a practice known today as silent factoring. In this scenario, the original creditor entrusted the new one to collect the debt without having to account for the amount collected. However, it posed issues as the old creditor could revoke the right to collect at any time, and the death of either party terminated the mandate. During the reign of Antonius Pius (138-161), the modern form of assignment, *cessio*, emerged, which involved the actual transfer of claims between the original creditor (*cedens*) and the new one (*cessionarius*) through agreement.[428] This reintroduced the notification (*denuntiatio*), after which the original creditor could demand payment at the risk of double payment. Roman law was the first to examine the extent of the

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[426] Justinianus. Institutiones. Justinian, Institutes Contents- J.B. Moyle trans. (Oxford, 1911) Book III Title XXIV. Of letting and hiring. The contract of hire resembles very closely the contract of sale, and the same rules of law apply to both.
[427] Justinianus. Institutiones. Justinian, Institutes Contents- J.B. Moyle trans. (Oxford, 1911) Book III Title XXIV. Of letting and hiring.
[428] The Italian law still employs this terminology, as seen in Law No. 52 of 1991 – "Disciplina della cessione dei crediti di impresa," which translates to "Regulation of the Assignment of Business Credits."

old creditor's liability to the new one in factoring. Liability was approached from two sides: (i) whether the assigned claim existed (*nomen verum*); (ii) whether it was enforceable (*nomen bonum*). In the case of retrograde assignment, the original creditor was liable for both, while in the case of gratuity, they were only liable for existence. It is also essential to highlight that alongside these developments, the rules of sale also changed, as it was stated that goods (merx) could be intangible things (res incorporales) as well, such as rights, foreign property rights, or claims, as "*omnium rerum, quæ quis habere vel possidere vel persequi potest, venditio recte fit*."[429] Wealthy senators and common citizens entrusted factors to manage their assets and sell their products, for which they received commissions.

Simlarly to Greece, another historical reference to a **debtor register** - at the time of the Roman Republic in 367 BC - is a provision of a law motioned by tribunes C. Licinius Stolo and L. Sextius Lateranus: 'de aere alieno' ruling that any interest paid must be deducted from the principal, and that any further outstanding principal debt must be repaid in equal instalments for three years.[430]

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[429] Paulus, Digesta 18.1.34.1.: The sale of all things is done lawfully, which a person can hold, or possess, or acquire through litigation.

[430] Better known as: Leges Liciniae Sextiae; in: Lexicon of the ancient world (Okori Lexikon); ed.: Pecz Vilmos; 1902
Bozik, M. S., Tunalı, H., & Ustaoğlu, M. (2020). Debt and politics in Ancient Rome. In *A History of Interest and Debt* (pp. 59-69). Routledge.

16. Middle Ages

With the collapse of the Roman Empire, the ancient standard disappeared, almost only money exchange remained, as the settlement and convertibility between various currencies with uncertain precious metal content made money circulation difficult. The economic standard was well below the ancient one, so it was difficult for the lawyers of the time (glossators, commentators and compilers) to decipher the meaning and purpose of the provisions of that time.

From the Christian tradition, **Saint Eligius** of Noyon (in French, Éloi; in Italian, Eligio, Alò) (c. 588 – 660), a Frankish goldsmith, held a high-ranking position at the Merovingian royal court.[431] He served as the patron saint of goldsmiths and other metalworkers, numismatists, veterinarians, electrical and mechanical engineers, horsemen and horses, having miraculously reattached a severed horse hoof. He became the master goldsmith and advisor to King Chlothar II (584-629) after which, upon his death, he entered the ecclesiastical order. Commissioned by him to craft a throne, Eligius received the required gold and skillfully produced two thrones.[432] His expertise and integrity impressed the king, who appointed him as the court goldsmith and chief treasurer. Constantly engaged in charitable activities, Eligius supported the poor and sick, contributed to the ransom of prisoners, financed the construction of numerous churches, and conducted missionary work among the Germanic tribes for twenty years. Eventually, he became the bishop of the Diocese of Noyon. St. Eligius is depicted with attributes such as a golden chalice representing his skills in goldsmithing and priestly duties and symbols like a hammer, pliers, bellows, and anvil. Occasionally, a severed horse's leg is included, signifying the historical role of blacksmiths as equine veterinarians.

16.1. Legacy of Levante

In the 10th to 11th centuries, banking activities experienced a resurgence in Italy. The focal point of financial affairs and the banking world during this period was the Levantine trade, emphasizing the city-states of northern Italy. Numerous expressions, such as *Lombard credit* and *giro* (reflecting Italian

[431] Kunzmann, R. (2014). The Saint Eligius, his life and work and his traces in numismatics. *Schweizer Archiv fur Tierheilkunde*, *156*(1), 13-16.
[432] Dijkdrent, M. (2021). The Lothar Crystal as a Relic of Saint Eligius. *Peregrinations: Journal of Medieval Art and Architecture*, *7*(3), 1-26.

origins), persistently underscore the influence of Italian banks. Initially expanding their operations to southern France (the city of Cahors), Italian banks gradually extended their reach to Europe, establishing branches or regularly dispatching their agents. Consequently, bankers from Lombardy and Cahors were commonly referred to for an extended period: Lombards and Cahorsians. The popes also collected church taxes (*usurarii Papœ)* with them. To this day, the center of banking life in London is Lombard street, which – according to tradition – got its name from the bankers who migrated there. The Lombard Street, situated in the City of London, stands out as a thoroughfare renowned for serving as a central hub for trade, banks, and insurers, with roots traceable back to medieval times.[433] King Edward I (1272-1307) allocated land to goldsmiths originating from the northern Italian region of Lombardy, solidifying the street's historical connection to commerce. It appears that historians have been misled by the context of the Ordinances of 1311, the attack on Despenser's treasury at the Bardi house in Lombard Street in 1326, and a poem written in the mid-fourteenth century.[434] But this hostility was focused principally on the members of the great banking houses and was a consequence of these individuals' role in English politics in the reigns of the three Edwards.[435]

In 1537, Sir Richard **Gresham** proposed to Thomas Cromwell, the Lord Privy Seal, establishing a stock exchange in Lombard Street, envisioning it as a conducive space for merchants to convene.[436] Subsequently, Thomas Gresham, the son of Sir Richard Gresham, founded the Royal Exchange. Notably, number 71 housed the headquarters of Lloyds Bank, while number 60 served as the headquarters for the Trustee Savings Bank (TSB).

The nomenclature of **banks** also derives from the Italian words *banco* and *banca*, which in the medieval context denoted publicly arranged

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[433] Kostić, V. (2008). Sketches from the Life of Ragusan Merchants in London in the Time of Henry VIII. *Dubrovnik annals*, (12), 45-56.
Spufford, P. (2016). From Genoa to London: the Places of Insurance in Europe. In *Marine Insurance: Origins and Institutions, 1300–1850* (pp. 270-297). London: Palgrave Macmillan UK.

[434] Dempsey, S. (1993). The Italian community in London during the reign of Edward II. *The London Journal*, *18*(1), 14-22.

[435] Prestwich, M. C. (1979). Italian Merchants in late thirteenth-and early fourteenth-century England. and Italian Merchants in the Thirteenth and early Fourteenth Century England, The Dawn of Modern Banking. New Haven. 79.
Rhodes, W. E. (1907). The Italian Bankers and their Loans to Edward I and Edward II. Historical Essays by Members of the Owens College, ed. T. F. Tout and J. Tait (Manchester, 1907), 137-67.

[436] Martin, J. B. (1892). *" The Grasshopper" in Lombard Street*. Leadenhall Press, Limited.

benches, tables, or counters for money changers at open places and markets, akin to practices among the Greeks and Romans.[437] Although the term banca is feminine, it appears in some proper nouns as masculine, as seen in Banco di Napoli or Banco di Rialto (1587) in Venice, which was succeeded by Banco del Giro (1619-1806) based on the silver ducat.[438] The wealth of these institutions is evidenced by architectural grandeur, exemplified by the headquarters of Banco di San Giorgio in Genoa. Incidentally, the term bank is also derived from the French word *banque,* which means a chest of drawers or cupboard closed with a large padlock. This refers to safekeeping, because in the turbulent political and public security conditions of the Middle Ages, rich people entrusted the preservation of their valuables to persons who could take care of the intuition of the wealth.

Those who engaged in various financial transactions were designated as *bancherii*,[439] or sometimes as *campsatores*, *cambiatores* or *cambiores* due to their involvement in money exchange. The term "banknote" also traces to this origin. The practice of *banco rotto* or *banca rotta*, originally in the Italian and French countryside, meant the accepted and regulated procedure according to which the bench or table of an insolvent money changer was officially broken in the open market. Subsequently, in Italian, it came to signify bankruptcy or financial ruin, permeating into several European languages, such as German *Bankrott, bankerott*, French *banqueroute*, or English *bankruptcy*.

The giro (*girare* - to turn, rotate, transfer, circulates spins) initially denoted an intra-bank operation but later expanded to inter-bank transactions, representing a payment method without physical money movement. During the Crusades (1096-1291), the Crusader States established various financial institutions, including *communes* that offered banking services. Inspired by Italian city-states, these communes might have used some form of giro-like system for internal payments, but details are scarce. The Italian city-states established giro systems for transferring funds within their territories. In the Islamic world, including parts of the Levante, a system known as hawala emerged around the 8th century. This informal network allowed merchants to transfer funds without physically carrying large sums of money. It relied

[437] Ferguson, N. (2008). The Ascent of Money - Financial History of the World. Penguin Press. 41-42.

[438] Lane, F. C., & Mueller, R. C. (2020). *Money and Banking in Medieval and Renaissance Venice: Volume I: Coins and Moneys of Account*. JHU Press.

[439] In Italian slang, this is still the derisive name given to lazzarones (Neapolitan vagabonds) who sleep on wooden benches (banchi) in public spaces.

on trust and reputation, with merchants exchanging credit notes instead of cash.

16.2. City banks

Characteristic of this era was the establishment of banks by cities. The first such institution was founded in Venice in 1157/1171, with its capital consisting quasi of government securities, and it operated until 1797, coinciding with the downfall of the Venetian Republic. Similarly, in the 14th century, comparable banks were established in Barcelona and Vienna in 1403, and in Genoa: **Banco di San Giorgio** in 1407, respectively.[440] The latter, also known as Casa delle compere e dei banchi di San Giorgio or Ufficio di San Giorgio, served as the financial institution of the Republic of Genoa. The headquarters of the bank was located in the Palazzo San Giorgio, constructed in the 13th century under the commission of Guglielmo Boccanegra, the great-uncle of Genoa's first Doge, Simone Boccanegra. Its primary purpose was to consolidate the growing state debt, which resulted from the ongoing competition with Venice for trade and financial dominance. The bank's central task was to facilitate the management of San Giorgio shares (luoghi). Notably, it stands as one of Europe's and the world's oldest banks, founded with one of the earliest charters.[441] Its capital comprised the funds of citizens transformed into deposits, and the island of Corsica served as collateral, allowing the bank to manage it until 1740, when Austrian forces looted the institution, ultimately leading to its cessation in 1805.

The history of **Banca Monte dei Paschi di Siena** S.p.A. can be traced back to a sanctuary established in 1472 on a sacred hill by the Sienese Republic.[442] In its present form, the bank was officially founded in 1624 by the Florentine Republic. Depending on the criteria for classification, it is considered either the world's oldest or second-oldest, still operating bank. Currently, it ranks as the fourth-largest Italian commercial and retail bank. Since 2017, the Italian Ministry of Economy and Finance has held the majority of

[440] Felloni, G. (2012). *1407. La fondazione del Banco di San Giorgio*. Gius. Laterza & Figli Spa.

[441] Taviani, C. (2022). *The Making of the Modern Corporation: The Casa Di San Giorgio and Its Legacy (1446-1720)*. Routledge.

[442] Bilotta, N. (2017). Case study: Banca Monte dei Paschi di Siena. *Seven pillars institute*, *6*(2).

shares, amounting to 68.2% in 2017.[443] This Siena bank established the Bi-annual journal Economic Notes in 1972. It presents key banking, finance, and monetary economics issues with open debate and interdisciplinary receptiveness.[444]

The other oldest bank, the **Berenberg Bank,** was established in 1590 in Hamburg within the Holy Roman Empire, now Germany. Berenberg Bank is recognized as the oldest continuously operating bank with the same legal entity and is the oldest commercial bank. The Joh. A Berenberg, Gossler & Co. KG, commonly known as Berenberg Bank, stands as a multinational, full-service private and commercial bank. Founded by the Flemish Berenberg family, particularly the brothers Hans (1561–1626) and Paul Berenberg (1566–1645), the institution traces its origins to cloth and textile merchants, a common background shared with many other banks of that era.[445] The bank's name finds its origin in Johann Berenberg (1718–1772). Throughout its history, Berenberg Bank has remained under the continuous ownership of its successors, notably the Berenberg/Gossler family. The institution has evolved into a comprehensive financial service provider with a global presence, reflecting its commitment to both private and commercial banking.[446]

Noteworthy banking families of this period include the Medici in Florence and the Welser and Fugger families in Augsburg, constituting Europe's largest banking dynasties with extensive international credit placements.

16.3. Florence - Firenze

In the 14th century, the **Bardi**, **Peruzzi**, and **Acciaioli** banking families constituted the three major Florentine banking companies, accumulating significant capital and establishing extensive and diversified business networks operating throughout the Mediterranean region and England. Among them, the Compagnia dei Bardi, a Florentine banking and trading company founded by the Bardi family, emerged as the most significant, becoming a medieval

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443 Miglionico, A. (2019). The restructuring of Monte dei Paschi di Siena. A controversial case in the EU bank resolution regime. *European Business Law Review*, *30*(3).

444 Asso, P., & Ferri, G. (2023). The early years of Monte dei Paschi's new journal, 1972-1983. *Economic Notes*, *51*, 1-30.

Ferri, G., & Fiorito, L. (2022). The years of Monte dei Paschi's disengagement 2012–2019. *Economic Notes*, *51*, e12212.

445 Verma, A. (2017). History of Banking. *History*, *4*(1).

446 Pianigiani, G., & Ewing, J. (2021). Days May Be Numbered for the World's Oldest Bank. *International New York Times*, NA-NA.

"super-corporation" during the 14th century and surpassing its nearest rival, the Peruzzi company, by 50%.

These companies engaged in trade of oil and wine, fostering close economic ties with Southern Italy and Sicily, but their primary product was high-quality woolen fabric. Between 1343 and 1345, concurrently with the Peruzzi and Acciaiuoli companies, the Bardi company also faced bankruptcy. The bankruptcy was attributed to King Edward III of England's extensive loans during the Hundred Years' War, and the English Crown eventually forgave the colossal debt after the king's downfall.[447] Giovanni Villani, whose brother was a member of the bankrupt Peruzzi company, claimed that Edward owed 900,000 gold florins (135,000 pounds) to the Bardi and 600,000 gold florins (90,000 pounds) to the Peruzzi.[448] However, Peruzzi records indicated that they never possessed such capital to lend to Edward III. The Acciaiuoli also faced bankruptcy, though they did not lend to Edward.[449]

Simultaneously, Florence experienced internal conflicts, and the unpaid loans by Edward III likely contributed to Florence's financial issues. The bankruptcy of these companies marked the decline of medieval super-corporations. The Bardi company survived the bankruptcy and later provided significant financing for various American exploration voyages, such as Columbus's, while Giovanni Boccaccio and his father, Boccaccino di Chellino, worked for the company for a period. The Peruzzi family remained influential, founding the Planters Nut and Chocolate Company in 1916.

In the 15th century, the new leaders in the Florentine banking sector became the Pazzi, Rucellai, **Strozzi**, and **Medici**, although these firms never wielded capital resources as vast as the preceding banks. Giovanni, Cosimo, and Lorenzo de' **Medici** were associated with the Medici Bank, which thrived in Florence from 1397 to 1494 and, at its zenith, stood as Europe's largest and most prestigious banking institution.[450] One of the contributing factors to its success was the refinement of the main ledger system through the development of double-entry bookkeeping. However, the downfall of the Medici Bank can be attributed to various factors, including (i) the imposition of

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[447] Tanzini, L. (2018). 1345: la bancarotta di Firenze: una storia di banchieri, fallimenti e finanza. *1345*, 1-170.
[448] Sapori, A. (1926). *La crisi delle compagnie mercantili dei Bardi e dei Peruzzi* (Vol. 3). LS Olschki.
[449] Szilagyi, G. A. (2023). Was the Medici Really the Most Powerful Family in Florence? Analysis of the Relationship Network of the 15th Century Florentine Merchant Families. *The Eurasia Proceedings of Educational and Social Sciences*, *31*, 151-159.
[450] Holler, M. J., & Rupp, F. (2021). Power in Networks: The Medici. *Homo Oeconomicus*, 1-17.

high interest rates, (ii) extensive leveraging of their deposits, and (iii) their involvement in patronizing artists, pursuing their own poetic and political interests. Additionally (iv), the political pressure exerted by King Charles VIII of France during his Italian campaign in 1494 played a significant role in the bank's decline.[451]

16.4. Augsburg

The Fugger and Welser families were prominent merchant and banking dynasties during the Renaissance period in Europe, particularly in the Holy Roman Empire. Each family played a significant role in trade, finance, and commerce, contributing to the economic development of the time. The era witnessed the zenith of colossal state and aristocratic loans. After the Reformation, both Welser and Fugger families remained in the Roman Catholic Church.[452]

The **Fugger** family rose to prominence in the 15th century and constituted a prominent group of European bankers, comprising patrician members of the Augsburg merchant elite, international trade bankers, and venture capitalists.[453] Jakob Fugger, known as Jakob the Rich (Jakob der Reiche, 1459–1525), was a key figure in the family's success, ascended to noble status within the Holy Roman Empire in May 1511, recognized as the wealthiest individual in history (amassing an estimated wealth of 400 billion dollars).[454] The family was involved in various trades, including textiles and mining; wielded near-monopoly control over the European copper market. Soon they became one of the wealthiest families in Europe through their banking activities; such as major financiers to the Habsburgs and the Catholic Church, funding projects such as the election of Emperor Charles V. The Fuggers lending Emperor Maximilian 170,000 gold coins for the war against Venice. In contrast, a conspicuous instance of credit uptake for purely consumptive

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[451] Belloc, M., Drago, F., Fochesato, M., & Galbiati, R. (2022). *Wealth Accumulation and Institutional Capture: the Rise of the Medici and the Fall of the Florentine Republic*. Centre for Economic Policy Research.

[452] Montenegro, G. (2018). “The Welser Phantom”: Apparitions of the Welser Venezuela Colony in Nineteenth-and Twentieth-Century German Cultural Memory. Transit, 11(2).

[453] Häberlein, M. (2012). *The Fuggers of Augsburg: pursuing wealth and honor in Renaissance Germany*. University of Virginia Press.

[454] González Enciso, A. (2021). A Great Modern Capitalist: Jakob Fugger. *Companies and Entrepreneurs in the History of Spain: Centuries Long Evolution in Business since the 15th century*, 49-64.

Strieder, J. (2001). *Jacob Fugger the rich: merchant and banker of Augsburg, 1459-1525*. Beard Books.

needs occurred during the coronation festivities of Charles V, who borrowed 300,000 gold coins. They also engaged in international trade, including spice and silver routes, establishing trade links with Asia and the Americas. Rising to prominence, the Fuggers supplanted the Medici family, inheriting numerous assets and financial resources from the Medicis.

Additionally, the **Fuggerei** stands as the world's oldest continually utilized social housing district, established in 1516, by Jakob the Rich. Its founding purpose was to provide affordable housing for the city's needy Catholic residents.[455] The Fuggerei consists of 67 houses with 140 apartments, and the rent for the residents is remarkably low. The unique aspect of the Fuggerei is its adherence to the original Renaissance-era rent conditions – residents pay an annual fee equivalent to one guilden (a historic currency) and three daily prayers for the Fugger family. Over the centuries, the Fuggerei has maintained its commitment to its charitable mission, offering secure and affordable housing for needy individuals while serving as a historical and cultural landmark.

The **Welser** family was involved in trade and banking, at the same time during the 15th and 16th centuries. In the 15th century, the brothers, Bartholomew and Lucas, engaged in extensive trade with the Levant and other regions, establishing branches in southern Germany and Italy and Antwerp, London, and Lisbon.[456] The family seized the opportunity to participate in the exploration and conquest of the Americas. Through the Contract of Madrid in 1528, King Charles V granted the Welsers privileges in the African slave trade and the colonization of the Americas in recognition of their financial support for his election in 1519. Bartholomeus V. Welser lent a significant sum of money to Emperor Charles V, and in return, he received the Province of Venezuela as security in 1528. Developing it as "Klein-Venedig" (Little Venice), the Welsers lost control due to their exploitative actions before the end of the Emperor's reign. His son, Bartholomeus VI. Welser, explored Venezuela alongside Philipp von Hutten and both were executed at El Tocuyo by the local Spanish Governor Juan de Carvajal in 1546.[457] The

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[455] Giovanazzi, T. (2023). Poverty and Architecture: The Fuggerei as an Early Example of Affordable Housing. *Burning Farm: A Journal on Domestic Space and Architecture*, (2023), 1-16.

[456] Denzel, M. A. (2009). The Merchant Family in the Oberdeutsche Hochfinanz from the Middle Ages up to the Eighteenth Century. *The Merchant Family in the Oberdeutsche Hochfinanz from the Middle Ages up to the Eighteenth Century*, 1000-1024.

[457] Tyce, S. (2023). German Conquistadors in Venezuela: The Welsers' Colony, Racialized Capitalism, and Cultural Memory.

Welsers played a key role in the establishment of cities such as Coro, Maracaibo, and Bogotá and in the mining industry in Cuba, particularly in the discovery of copper.

16.5. Transactions

In the Middle Ages, economic standards declined, and **loans** were primarily taken out for consumption. The security for medieval royal loans, sometimes irrational, often resulted in premature encumbrance or transfer of regalian yields. Financial matters were regarded as base, and the Christian Church strongly opposed usury. The Council of Nicaea II affirmed the prohibition of interest in 787, and the Lateran Council of 1139 imposed excommunication and denial of Christian burial for **usurers**.[458] Saint Thomas Aquinas, also sought to justify the ban on **interest**. The issue of usury resurfaced during the Reformation, with a gradual relaxation of strictures, recognizing fair and equitable financial gain. As the canonical prohibition did not apply to non-Christians, generally Jews and Muslims, they eventually became prominent figures in financial life. Markets further stimulated monetary circulation, leading to the emergence of bills of exchange, market loans, and market courts for swift dispute resolution. Despite a decline in the quality of trade, **leasing** persisted. In 1066, the Norman Conqueror William provided the fleet and personnel necessary for his campaign in England (business plan) through financial leasing because he did not have enough money. During this time, England faced numerous attacks from the Danes, Norwegians, and Normans; ultimately, this financial arrangement determined who gained power over the country. In this era, horses, agricultural equipment, and armor were popular leasing subjects. For example, in 1248, Knight Boniface Manganella decided to participate in the Seventh Crusade, for which he leased a complete set of knightly armor, with the interest (leasing fee) amounting to 25% of the armor's value. In the 13th century, we encounter **factoring**, as the Levantine and Hanseatic trading states established wholesale centers, known as factories (faktorien), in other countries (such as Fondaco dei Tedeschi in Venice, Steelyard in London, Olaf's Yard in Nizhny Novgorod), where the management was entrusted to close relatives or business partners acting as factors. In the 1400s, commercial banks spread again in Northern Italy, Germany,

[458] Kreikebaum, H., Bechte, H., Ellinger, T., & Herman, S. (2021). *Medieval usury and the commercialization of feudal bonds* (Vol. 11). Duncker & Humblot.
Vivas, M. (2018). Christian burial privation in the Middle Ages: An interdisciplinary approach (France, mid 10th-early 14th). *Imago temporis: Medium Aevum: 12, 2018*, 191-210.

and England, and in Spain during the 15th and 16th centuries, thanks to geographical discoveries. The institution of del credere, involving risk assumption and commissions, originated from the Lombard banking jargon of that time.

The banks provided a **safe** place for consumers and business owners to stow their cash and a source of loans for personal purchases and business ventures. In turn, the banks use the cash that is deposited to make loans and collect interest on them. The **deposit** transactions emerged, initially signifying the safekeeping of money, at the early stages it was necessary to pay for the safekeeping of the deposits, and only later did it appear that interest was paid on them.[459] During the 11th to 14th centuries, the use of bills of exchange, representing a form of promissory note, gained prominence across Europe. This diffusion of financial instruments coincided with the significant role played by the Crusades in stimulating credit and lending activities. The Crusades not only invigorated the provision of loans but also, by necessity, led to the adoption of bills of exchange as a more practical and secure means of settling transactions between banks, supplanting the cumbersome and risky physical transportation of currency over vast distances.[460] Marketplaces further stimulated financial activities, introducing bills of exchange, fair loans or market credits, and fair or market courts to adjudicate disputes swiftly.

In relation to banking transactions, **debtor prisons** also emerged in the Middle Ages. Both men and women debtors were commonly confined together in a single, large cell until their families settled their debts. Debt prisoners often succumbed to diseases contracted from others imprisoned in debtors' facilities for extended periods. Some debt prisoners gained release only to enter into servitude or indentured labor arrangements until they could repay their debts through labor. In the Medieval Islamic Middle East, imprisonment for debt was also practiced. Debtors who resisted repayment could face detention for several months to coerce compliance. If they were unable to repay their debts, they were eventually released before being placed under legal guardianship. In Germany, many cities had debtor prisons, with for example Nuremberg's Schuldgefängnis and Schuldturm (1395-1862). In other countries we can find similarities, like Le Châtelet in Paris (1130-1789), the Stinche in Florence (1298-1848). In England, London, the Fleet Prison (1197-1842) and Marshalsea Prison (1197-1842) in London were known for

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[459] Mikliński, M. (2021). The origins and evolution of deposit banking activities-analysis of the literature. *Financial Law Review*, (22 (3)).

[460] Katona K. (ed.) (2018). A pénzügyi közvetítőrendszer funkciói. Wolters Kluwer, III. 1. A bankrendszer kialakulásának története

holding debtors. Dates of operation: Fleet (1197-1842), Marshalsea (1307-1842). Medieval customs and **registration** systems are accurately reflected by stigmatisation for example in the form of the 'cap of shame'. The lender was allowed to force insolvent debtors to wear a green hat all the rest of their lives, and if the debtors appeared anywhere without the hat, they were imprisoned.[461]

[461] This custom is also reflected in court rulings in France in the 16th century. In: Rath-Vegh, I. (1964). Power and money (Hatalom es Penz); Gondolat

17. 17–19th Century

Banking in the 17th and 19th centuries underwent significant developments and transformations, marking a crucial period in the evolution of financial institutions, laid the groundwork for modern banking systems, with innovations in financial instruments. Many European countries established central banks to regulate and stabilize their monetary systems during this period. The issuance of banknotes became more widespread, facilitating transactions and reducing the reliance on physical coins. Even in the 19th century, the emergence of cooperatives and credit unions marked this era.

The **city bank** establishment continued. In the Netherlands, the De Amsterdamsche Bank, formed in 1609, saw the city assuming responsibility for its deposits,[462] but due to numerous dubious credit placements and subsequent loss of trust, the bank dissolved in 1819. In German territories, Hamburg founded its bank in 1619 to introduce giro transactions and a unified currency. Nuremberg stands as the last city to establish a bank purely for deposits and giro banking, founded in 1621.

Central banks and private banks started **issuing paper money** as a representative of value. The development of joint-stock companies allowed individuals to invest in ventures and share profits and losses. Banks began to adopt this structure, enabling them to raise more substantial capital. Banking practices evolved, with a focus on providing loans, facilitating trade finance, and acting as intermediaries in financial transactions. Bills of exchange, promissory notes, and other financial instruments became integral to banking operations. European banks engaged in international trade and finance, supporting global economic activities. Key banking centers, such as Amsterdam and London, played vital roles in international transactions and investments.

Governments began to introduce **regulations and legal frameworks** to govern banking activities. Central banks played a role in setting monetary policies, managing reserves, and maintaining financial stability. The banking sector faced challenges, including occasional panics and financial crises. Bank failures were common, and issues related to the banking system's stability prompted ongoing refinements in regulations.

The **Rothschild** banking dynasty originated with Mayer Amschel Rothschild in the late 18th century. Mayer Amschel Rothschild (1744–1812)

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[462] Quinn, S., & Roberds, W. (2023). *How a Ledger Became a Central Bank: A Monetary History of the Bank of Amsterdam*. Cambridge University Press.

founded the banking dynasty in Frankfurt, Germany. He established a successful business in banking and finance. The family strategically expanded its banking operations across major European financial centers. Branches were established in London, Paris, Frankfurt, Vienna, and Naples, forming a vast international network. The Rothschild Bank gained prominence during the Napoleonic Wars, especially through **Nathan Mayer Rothschild** in London.[463] The N.M. Rothschild was counted among the world's largest banks, exerting dominance over the international bond market and playing a crucial role in stabilizing the finances of numerous governments. In 1815, Nathan Rothschild in London received news of Wellington's victory at the Battle of Waterloo a full day before the government's official messengers. Thanks to his accurate and timely information, he immediately acquired the government bond market. Subsequently, he waited two years for the government's consolidation, ultimately selling with a 40% profit in 1817.[464] Rothschild banks played a significant role in financing various European governments during the 19th century. They facilitated loans and managed the financial affairs of nations. The 20th century saw a decline in the prominence of the Rothschild banking empire. In 1924, Edmond James de Rothschild founded the **Palestine Jewish Colonisation Association** (PICA), which purchased more than 505.85 square kilometers of land and established business enterprises.[465] Various factors, including geopolitical changes, nationalization of banks, and shifting financial markets, contributed to the family's reduced influence in banking.

17.1. Central banks

Governments and central banks were quietly admitting something they were still reluctant to announce publicly: the extraordinary power of private-sector banks lending to determine the pace of money creation, and therefore economic growth.

Mariana Mazzucato:
The Value of Everything: Making and Taking in the Global Economy

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[463] Kaplan, H. H. (2006). *Nathan Mayer Rothschild and the creation of a dynasty: the critical years 1806-1816*. Stanford University Press.

[464] For more details, see Ferguson, N. (2011). The House of Rothschild: Money's Prophets, 1789-1848. Penguin USA, Inc. and Ferguson, N. (2011): The House of Rothschild: The World's Banker, 1849-1999. Penguin Group

[465] Ussishkin, A. (1973). The Jewish colonisation association and a Rothschild in Palestine. *Middle Eastern Studies*, *9*(3), 347-357.
Berenstein, M. (1934). Jewish Colonisation in Palestine: I. *Int'l Lab. Rev.*, *30*, 623. and Jewish Colonisation in Palestine: II. *Int'l Lab. Rev.*, *30*, 797.

In some traditional distinction, the third era of banking history can be linked to the appearance of central banks, national banks, or monetary authorities.[466] Its origins can be traced back to 1668 when the **Sveriges Riksbank** (established in 1657 as Stockholms Banco and printed banknotes from 1661) became state-owned in Sweden.[467] At the Riksdag of the Estates in 1668, the nobles proposed establishing a new bank from the ruins of Stockholms Banco, now with the nobles, the clergy and the burghers as principals. The Bank of the Estates of the Realm – today Sveriges Riksbank – was established, so the world's oldest central bank was born.[468] While various banknotes and promissory notes existed across Europe and globally before this period, Sveriges Riksbank was the first to be recognized as a legal tender issuer (although other Swedish banks continued issuing money for another 200 years).

The **Bank of England** (BoE), established in 1694 as a joint-stock company, was founded in England as a body of creditors to the state. Quickly gaining the right to issue banknotes, it initially refrained from engaging in commercial banking transactions, except for discounting bills, precious metal, and pawn, pledge transactions. The **New England theory**, advocating for each state in the United Kingdom to have its own central bank, is also relevant: Bank of Scotland (1695), Bank of Ireland (1783). In 1717, Sir Isaac Newton, the Master of the Royal Mint (from 1696 warden, then master 1699-1727), implemented a new mint ratio between silver and gold.[469] This adjustment resulted in the displacement of silver from circulation (bimetallism) and shifted Britain towards a gold standard. Until the 19th century, it remained on par with other banks. Following the crisis of 1813-23, based on the **currency theory** developed by Samuel Jones **Loyd**, a healthy economy relied

[466] Ugolini, S. (2020). The historical evolution of central banking. *Handbook of the History of Money and Currency*, 835-856.
[467] Almani, M., Habib, A., Salam, A., & Nobanee, H. An Overview of the Sveriges Riksbank-Riksbanken (Sweden's Central Bank).
[468] Sveriges Riksbank. 1668 - Sveriges Riksbank is founded (https://www.riksbank.se/en-gb/about-the-riksbank/history/historical-timeline/1600-1699/sveriges-riksbank-is-founded/)
Marmefelt, T. (2015). Seventeenth Century Banking: Amsterdamsche Wisselbank, Stockholms Banco, and Their Consequences for Monetary Evolution. In *SASE 27th Annual Conference: Inequality in the 21st Century, London, July 2-4, 2015.*.
[469] Marples, A. (2022). The science of money: Isaac Newton's mastering of the Mint. *Notes and Records*, *76*(3), 507-525.

exclusively on the circulation of metallic coinage.[470] Thus, a banknote became a promissory note for a specific (round) amount, where the bank committed itself to redeem the note on demand and presentation, without interest, in lawful metallic coinage or precious metal equivalent to the face value of the note. The Bank of England's central banking role was codified by **Peel's Bank Charter Act** of 1844, granting it exclusive privileges for banknote issuance. Simultaneously, other joint-stock and private banks lost this right, resulting in a unified currency in circulation.[471] Consequently, the meaning of a banknote shifted in two directions: (i) as a legal tender recognized by the state and (ii) as the issuance monopoly of the central bank.[472] Until 1946, the Bank of England had private owners, but the state acquired all the shares at that point.

In the 19th century, a general wave of central bank establishments swept across the European continent. While attempts at establishing central banks occurred in the 18th century in **France**, such as the Banque Generale created by the Scotsman, John Law (1716) or later the Caisse d'Escompte (1776), these were not successful.[473] To the extent that the collapse of the former, due to large loans and massive abuses, had repercussions throughout Europe, and for about five decades, it was impossible to establish a central bank in France.[474] The **Banque de France** was founded in 1800, becoming a banknote issuer from 1803, although other banks also issued notes in rural areas. Napoleon, in particular, preferred not to have the central bank either too close or too far from the government.[475] From 1848 onwards, it became the exclusive banknote issuer (except for Banque de Savoya from 1860-64) and fully state-owned in 1945.

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[470] Loyd, Samuel-Jones (1840): Remarks on the Management of the Circulation and on the condition and conduct of the Bank of England and the County Issuers ..., in Overstone (1857) Tracts and Other Publications on Metallic and Paper Currency, in J.It McCulloch, reprint 1972, Augustus M. Kelley: 41-158.

[471] Read, C. (2023). Peel's Economic-Policy Regime Change in Britain During the Early Nineteenth Century. In *Calming the Storms: The Carry Trade, the Banking School and British Financial Crises Since 1825* (pp. 21-53). Cham: Springer International Publishing.

[472] Cairnes, J. E. (2021). An examination into the principles of currency involved in the Bank Charter Act of 1844. In *Irish Political Economy Vol 3* (pp. 132-169). Routledge.

[473] Anderson, M. S. (1996). Moneta e Politica in Francia: Dalla Cassa di Sconto Agli Assegnati, 1776-1792. *The English Historical Review*, *111*(440), 209-211.

[474] Ferguson, N. (2008). The Ascent of Money - Financial History of the World. Penguin Press. 138-139.

[475] Lessambo, F. I. (2023). The Bank of France. In *Fintech Regulation and Supervision Challenges within the Banking Industry: A Comparative Study within the G-20* (pp. 93-102). Cham: Springer Nature Switzerland.

In the **German territories**, in 1846, the Preussische Bank was established, emerging from the earlier institution known as Königliche Giro- und Lehnbanco in Berlin, which was founded during the reign of King Frederick II. From this, the **Deutsche Reichsbank** was transformed in 1875, which played a pivotal role in central banking functions and support for commerce and industry. Initially, the note issues of 32 other banks continued to exist, and they pursued their interest rate policies.[476] It gained full autonomy from the government in 1922. In 1895, the establishment of Preussenkasse marked an important addition to the financial system. This entity operated as a state organization, coordinating and supporting the functioning of cooperative credit institutions.

The Viennese municipal bank, the **Wiener Stadtbank**, established in 1706, pioneered the issuance of banknotes (Bancozettel) in **Austria** in 1762. In 1816, the **Österreichische National Bank** was founded based on the plans of Pillersdorf and Stadion. Following the Compromise (1867), it underwent reorganization in 1868 and 1878, and due to joint financial matters,[477] the **Oesterreichisch-ungarische Bank** (Austro-Hungarian Bank) assumed the central banking function in the monarchy until 1919.[478] The bank was a private company (joint-stock company). Its functions were defined by a state licence (a so-called patent), and in addition to its central banking function, it also had commercial banking functions (e.g. the discounting of commercial bills).

Italy remained fragmented for a long time, leading to the existence of short-lived, smaller central banks in cities such as Tuscany, Livorno, Siena, and Naples in the early 19th century. In 1849, La Banca Nazionale was established in Genoa, but several others coexisted alongside it. By 1874, there were six, reducing to three in 1892. In 1893, the fusion resulted in the foundation of **Banca d'Italia**, which obtained the monopoly on banknotes in 1926.[479]

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[476] Morys, M. (2023). The gold standard and the Reichsbank: The transformation of the monetary regime. In *An Economic History of the First German Unification* (pp. 144-159). Routledge.

[477] von Philippovich, E. (1916). Österreichs und Ungarns Zollgemeinschaft. *Zeitschrift für Politik*, *9*, 156-184.

[478] Jobst, C. (2009). Market leader: the Austro-Hungarian Bank and the making of foreign exchange intervention, 1896–1913. *European Review of Economic History*, *13*(3), 287-318.

[479] Forsyth, D. J. (2023). Storia della Banca d'Italia, vol. I, Formazione ed evoluzione di una banca centrale, 1893–1943: by Gianni Toniolo, Bologna, Il Mulino

I sincerely believe that banking establishments are more dangerous than standing armies, and that the principle of spending money to be paid by posterity, under the name of funding, is but swindling futurity on a large scale.

Thomas Jefferson

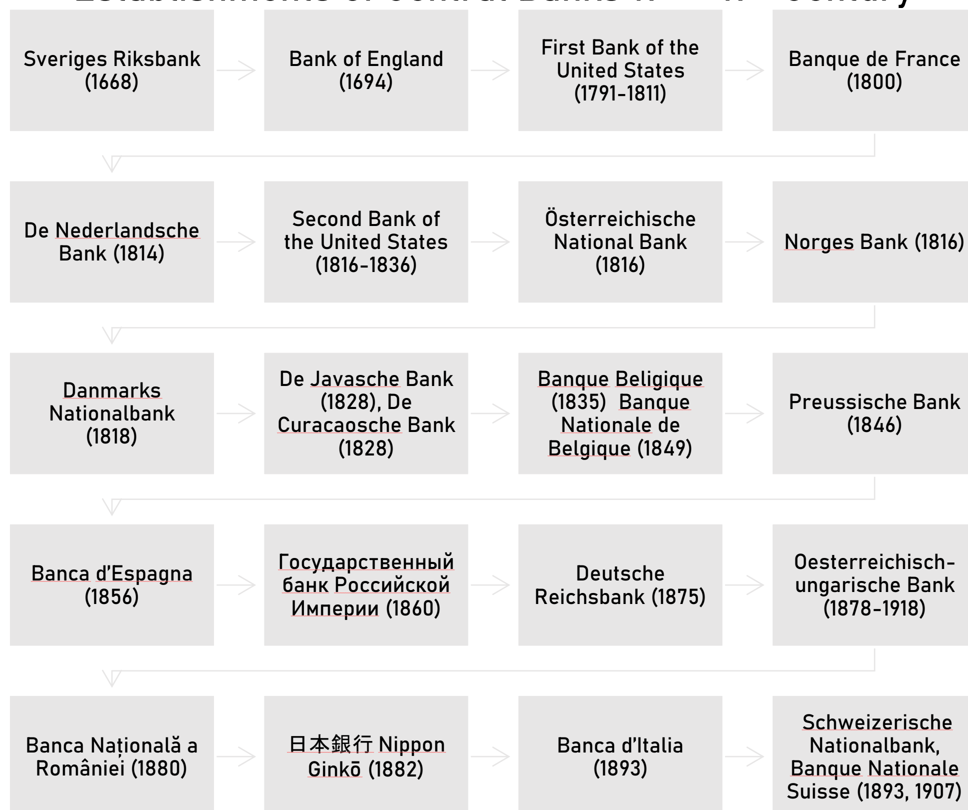
In the **United States**, the banking sector initially faced numerous challenges, as the activities of many note-issuing banks led to excessive issuance of paper currency and the depreciation of money. In 1775, Congress decided on a unified paper currency, but it was not widely accepted in circulation, and the Federal Bank established at that time ultimately became the state bank of Pennsylvania. In 1791, the **First Bank of the United States** was essentially created with central banking functions for a 20-year term. When the deadline in 1811 expired, individual states, concerned about their sovereignty, and banks, facing strong competition, prevented the extension of its operations.[480] The Congress denied the renewal of its charter. The resulting financial turmoil in 1816 led to the establishment of the **Second Bank of the United States**, again for a 20-year term. The existence of these banks faced opposition from many who believed they were hotbeds of corruption, serving the interests of businessmen rather than those of ordinary Americans. In December 1829, president Andrew Jackson's administration launched an attack on the bank, claiming it had not provided a stable national currency and lacked constitutional legitimacy. Congress responded by conducting committee investigations, which affirmed the bank's historical legitimacy and its crucial role in providing a consistent currency. Despite these findings, Jackson privately labeled the bank as corrupt and a threat to American freedoms. In 1836, Jackson vetoed the extension of its charter and it transitioned into a private corporation under Pennsylvania law, ushering in the era of "free banks". This led to a shortage of physical currency and instability, triggering the Panic of 1837, which persisted for about seven years, during which numerous state-chartered banks rose and fell.[481] Besides and after the two central banks, the state-chartered banks remained significant (with 707 state banks in 1845 and 1.562 state banks in 1860), reflecting a rather extreme interpretation of the New England principle.

Here, we only list the other major central banks and countries, with the year of foundation: De Nederlandsche Bank (1814), Norges Bank (1816) Danmarks Nationalbank (1818), De Javasche Bank (1828), De Curacaosche

[480] Al-Samarrai, A. M. A., Al Douri, I. N. D., & Al Douri, F. Q. R. (2021). The establishment of the first bank in the United States of America 1791-1812 AD. *Adab AL Rafidayn*, *51*(85), 447-476.

[481] Hilt, E., & Liang, K. (2020). Andrew Jackson's Bank War and the Panic of 1837. *Harvard University, February*, *14*.

Bank (1828),[482] Banque Beligique (1835) and Banque Nationale de Belgique (1849) Banca d'Espagna (1856), Gosudarstvenny bank Российский Empires (1860), Banca Națională a României (1880), 日本銀行 Nippon Ginkō (1882), Schweizerische Nationalbank, Banque National Suisse (1893, 1907).[483]



Source: own compilation of the author

[482] Richard Doornbosch. (2023). Forging new opportunities with old friends. BIS (https://www.bis.org/review/r220816b.htm)
[483] Ugolini, S. (2020). The historical evolution of central banking. *Handbook of the History of Money and Currency*, 835-856.

17.2. Microfinancing, Cooperatives, Credit Unions

To understand the relatively late emergence of cooperatives, we need to understand the main challenges of microfinance. As a general principle, surveying, processing, and managing a $1,000 loan requires nearly ten times the work and cost of a $10,000 loan, yet the total revenue for the financial institution from these two cases is likely similar, if not identical. There is a threshold for loan and deposit sizes below which banks lose money on each transaction, and people experiencing poverty often fall below this threshold. Moreover, most poor individuals possess little wealth that a bank would accept as collateral.[484]

Financial **cooperatives**, or cooperative banks (banking) or credit unions are financial or credit institutions owned and operated by their members. Their operations are democratic, with each member having one vote. These cooperatives provide quality services at competitive prices and may focus on the financial well-being of their members rather than profit maximization. While they offer fewer services/products than banks, they provide customers with better prices and more ATMs. Financial cooperatives have fewer branches, which can be a disadvantage for customers who prefer personalized service. Types of financial cooperatives include credit unions, savings cooperatives, people's banks, and community banks, and from the Anglo-Saxon culture, the different financial self-help groups (SHG), like the rotating savings and credit associations (ROSCA), saving associations (SAVA) and accumulating savings and credit associations (ASCA).[485]

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[484] McKillop, D., French, D., Quinn, B., Sobiech, A. L., & Wilson, J. O. (2020). Cooperative financial institutions: A review of the literature. *International Review of Financial Analysis*, *71*, 101520.

[485] Maitra, P., Miller, R., & Sedai, A. (2023). Household welfare effects of ROSCAs. *World Development*, *169*, 106287.

Maitra, P., Miller, R., & Sedai, A. (2022). JUE Insight: Household Welfare Effects of ROSCAs.

Banks vs. Cooperatives

	Banks	Cooperatives
	private property, joint stock companies or bank holding companies a variety of clients	owned by members usually only members can be customers
Advantages	**A variety of comprehensive services:** Banks offer a wide range of financial services, including deposits, loans, investments, credit cards, etc. **Global network:** Banks often have an international network, which can be useful during travel and international transactions. **Liquidity:** Banks generally have higher liquidity, which means that money is readily available for deposits at any time. → **better credit rating** **Technological innovation:** Banks develop and adopt the latest technologies such as online banking and mobile applications.	**Member-centered:** Credit unions prioritize the financial needs of their members, and members have ownership of the organization. **Lower interest rates and costs:** Cooperative credit institutions usually offer their members lower fees and interest rates. **Local decision-making:** Their decisions are often made at the local level, which enables a faster response to local needs. **Community orientation:** Cooperative credit institutions often play a community role and contribute to the development of the local community. Meeting the financial needs of members.
Disadvantages	**Higher interest rates, costs:** Banks usually charge higher fees and interest rates, which can cost their customers more. **Profit-oriented:** Banks seek to maximize profits, and their interests can often conflict with those of customers. **Central decision-making:** Their decisions are often made centrally, which can limit local relationships and customer focus.	**More limited services:** Credit unions generally offer a more limited range of financial services than large banks. **Less liquidity:** These organizations tend to have less liquidity, which may mean limited availability of deposits. **Smaller network:** Their international presence is often limited, which can be a disadvantage for those who want to conduct international transactions.

Source: own compilation of the author

In the 19th century, cooperatives began, initially in Central Europe and Japan, serving as an important source of microfinance for impoverished urban and rural communities. In **Japan**, Ninomiya Sontoku, an agricultural reformer and economist, pioneered the concept of *gojōkō* or *gojoukou* (五常講) in the early 19th century.[486] This was a village alliance where each member

[486] Yamauchi, T. (2018). The Agricultural Ethics of Ninomiya Sontoku. *Agricultural Ethics in East Asian Perspective: A Transpacific Dialogue*, 23-35.

could borrow interest-free funds for 100 days, while the entire membership collectively shared costs in case of non-compliance. In 1845, Samuel Jurkovič established the first credit union in Ószombat (Sobotište, **Austro-Hungarian Monarchy**, now Slovakia): Spolok Gazdovský (Agricultural Cooperative), operating until 1851.[487] The cooperative provided affordable loans from regular savings to its members, who, in turn, committed to a moral life and were required to publicly plant two trees annually.

In **Germany**, the 19th century began the establishment of cooperative credit institutions, with origins attributed to Schulze-Delitzsch and Raiffeisen.[488]

Schulze-Delitzsch vs. Raiffeisen Credit Unions

Schulze-Delitzsch	Raiffeisen
Exceptionally unlimited liability	Joint and unlimited liability
Loose neighborhood relationships	Strong neighborhood relationships
Urban (industrial)	Rural (agriculture)
Large operational area, extensive branch network	Highly decentralized with small membership units
Broad and diverse operational scope, engaging in transactions with non-members	Generally, cannot extend operations to non-members (credit provision)
Provision of advance loans	Credit provision for specific productive purposes
Ethical emphasis, lesser social commitment	Ethical and moral goals emphasized
Bank-like operations	Simpler business operations and inexpensive labor
Emphasis on increasing own capital	Minimal business share capital
Not necessary to establish credit centers	Necessity for establishing central cashiers

Source: own compilation of the author based on Olajos I. (2003). Szövetkezeti hitelintézetek. *Agráhitelezés*, 2.

Takehara, M., Hasegawa, N., Takehara, M., & Hasegawa, N. (2020). Ryoichiro Okada: Aiming for Integration of Economy and Morality. *Sustainable Management of Japanese Entrepreneurs in Pre-War Period from the Perspective of SDGs and ESG*, 43-58.

[487] Boisserie, É. (2021). The Formation of a New Administrative and Political Apparatus in Slovakia, 1918–1920: Backgrounds and Networks. In *Postwar Continuity and New Challenges in Central Europe, 1918–1923* (pp. 257-289). Routledge.

Gluchman, V. (2023). The 19th-century Slovak National Movement: Ethos of Plebeian Resistance. *Nationalities Papers*, *51*(6), 1263-1280.

[488] Belyaev, M. P., Boltaevskiy, A. A., Maltsev, V. A., Stadnyuk, A. V., & Elyazyan, A. S. (2023). Development of Cooperation Legislation in Germany. In *Challenges of the Modern Economy: Digital Technologies, Problems, and Focus Areas of the Sustainable Development of Country and Regions* (pp. 467-470). Cham: Springer International Publishing.

Franz Hermann **Schulze-Delitzsch** (1808-1883), a German civil economist, initiated the cooperative associations for small-scale industrialists in 1849, aiming to exploit the advantages of bulk purchasing raw materials. Recognizing that the competitiveness of small-scale industrialists could be further enhanced, he facilitated advances from paid business shares, against collateral, to support them until the sale of the product, with high dividends paid. In 1852, he established the first successful credit unions (Genossenschafts), marked by two experimental projects in the cities of Delitzsch and Eilenburg.[489] He emphasized the need for individuals to create credit for themselves and their characters. The insights gained from these projects led to the formulation of the concept of the common bond of association:

> ... you yourselves and your characters must create the credit, and your collective responsibility requires you to choose your associates carefully, and to insist that they maintain regular, sober, and industrious habits, which will make them worthy of credit.
>
> Schulze-Delitzsch

The **bond of association** demanded careful selection of associates, adherence to regular, prudent, and industrious habits, rendering them worthy of credit. This bond refers to the social relationship between members of credit unions and cooperative banks, serving as a substitute for guarantees in the early stages of financial system development. Schulze-Delitzsch's approach was commercially oriented, and his credit unions operated in urban areas with members consisting of traders, shop owners, and craftsmen. The establishment of new cooperatives proliferated wherever he went, reaching 183 with 18,000 members in Posen and Saxony by 1859. As a member of the Prussian House of Representatives and the German Reichstag, Schulze-Delitzsch ensured the adoption of the Act on national credit cooperatives in 1871. By 1912, the people's banks founded by him had amassed 641,000 members.

Concurrently, Friedrich Wilhelm **Raiffeisen** (1818-1888) responded to the plight of the poor during the winter famine of 1846/47 by founding the Verein für Selbstbeschaffung von Brod und Früchten (Association for Self-Provision of Bread and Fruits).[490] Similar initiatives were undertaken in 1849 and 1854 in Flammersfeld and Heddesdorf villages, where Raiffeisen served

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[489] Parisius, L. (2020). *Schultze-Delitzsch und Alwin Sörgel: Beiträge zur Geschichte der deutschen Genossenschaftsbewegung* (Vol. 4). Walter de Gruyter GmbH & Co KG.
Schulze-Delitzsch, H., & Thorwart, F. (Eds.). (2018). *Hermann Schulze-Delitzsch: Leben und Wirken*. Walter de Gruyter GmbH & Co KG.

[490] Dirninger, C. (2022). Sparkassen und Genossenschaftskassen als „soziale Innovation "im 19. Jahrhundert. In *Soziale Innovation im Kontext: Beiträge zur Konturierung eines unscharfen Konzepts* (pp. 177-200). Wiesbaden: Springer Fachmedien Wiesbaden.

as the mayor of three municipalities: Weyerbusch, Flammersfeld, and Heddesdorf, providing agricultural raw materials to farmers for charitable purposes, aiming to eliminate usury. In 1864, Raiffeisen established the first rural self-help credit union in Heddesdorf,[491] comprising predominantly poorer members, many of whom were former serfs liberated between 1800 and 1848. These individuals faced smaller, more seasonal, and less predictable incomes, complicating conventional debt repayment methods. Raiffeisen addressed the unique issues of rural poverty by leveraging strong solidarity bonds and the typical Christian values of village life, capitalizing on the social dynamics of rural communities.[492] Local social stigma and legal/religious/economic sanctions were imposed for those who failed to repay loans. Raiffeisen expected directors to volunteer their services, with only the treasurer receiving a small stipend. The cooperative values inspired priests, teachers, and other skilled villagers to volunteer in various capacities. In Die Darlehnskassen-Vereine, published in 1866, Raiffeisen provides a comprehensive guide on establishing credit and other cooperatives.[493] By 1913, the cooperative had over 2 million members, 80% of whom lived in communities with fewer than 3,000 inhabitants. In 1872, Raiffeisen established the first rural cooperative bank, Rheinische Landwirtschaftliche Genossenschaftsbank, in Neuwied to ensure liquidity equalization among small credit banks. In 1927, the Raiffeisen Bank group was founded.

A significant milestone in the development of German credit unions was the creation of a state organization, Preussenkasse, in 1895, which coordinated and supported the operations of cooperatives.[494]

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[491] Other sources mention Annhausen and 1862. Moizs, A. (2015). A szövetkezeti hitelintézetek jogi szabályozásának alkotmányosságáról; Sidlovicsné Tóth, I. (2018). A hazai takarékszövetkezetek gazdálkodásának jellemzői és működési kockázatait befolyásoló vagyon elleni bűncselekmények vizsgálata (Doctoral dissertation, Szent István Egyetem (2000-2020).

[492] Michels, A., Luna, J. C., & Rinaldi, D. (2020). Importância do cooperativismo de crédito para o desenvolvimento do agronegócio. *Revista Teoria e Evidência Econômica*, *26*(55), 244-271.

[493] Raiffeisen, F. W. (1866). Die Darlehnskassen-Vereine als Mittel zur Abhilfe der Noth der ländlichen Bevölkerung, sowie auch der städtischen Handwerker und Arbeiter: praktische Anleitung zur Bildung solcher Vereine, gestützt auf sechszehnjährige Erfahrung, als Gründer derselben. Strüder.

[494] Majoros Anna (1985): A takarékszövetkezetek története. SZÖVOSZ Oktatási – és Továbbképzési központja

Dispute between Schulze-Delitzsch and Raiffeisen

Schulze	Raiffeisen
Repeatedly argued that they are **unsafe** since Raiffeisen credit unions rely on a single paid employee - a **cashier**. However, evidence has never supported this claim.	Strongly opposed **Schulze's** efforts to **limit the liability of credit union members**, believing that such limits would dilute associational bonds and the power of rural banks to finance their loans from local members' savings. Over time, **auditors** were also employed, who not only audited, but many of them took on a more constructive role, supplying local cooperatives with useful materials and finally organizing formal training courses for cooperative managers.
However, their overall appearance and operation contradicted the arguments of the skeptics, who claimed that • poor people cannot be counted on to repay loans, and • no bank can make a profit by serving the poor.	

Source: own compilation of the author

Before consolidating in Germany, the **cooperative movement** proliferated worldwide: by the early 20th century, the largest presence was in Russia, followed by Austria, India, France, Japan, the United States, Switzerland, Italy, and Great Britain.[495] In 1864, Léon d'Andrimont founded the first popular bank, Banque Populaire, in Liège, **Belgium**. In **Italy**, Luigi Luzzatti, often referred to as the Italian "Schulze-Delitzsch," established the first credit cooperative, Banca Popolare di Milano, in 1865.[496] Leone Wollemborg, the Italian counterpart to Raiffeisen, founded the first rural bank, Cassa Rurale d'Italia, Cassa Rurale di Loreggia (Padova), in 1883.[497] In 19th-century **England** and Scotland, Robert Owen emerged as a prominent advocate of cooperative movements. In 1872, the Co-operative Wholesale Society in England created a retail deposit and credit department, eventually transforming into the well-known the Co-operative Bank. In 1878, the **French** network of popular banks formed Groupe Banque Populaire, and in 1882, the first credit cooperative of the system, known today as Crédit Mutuel, was established near Strasbourg, the Caisse locale de la Wantzenau.[498] By the 1890s, the

[495] Czettler Jenő – Ihrig Károly (1926). Szövetkezeti ismeretek. Pátria Irodalmi Vállalat és Nyomdai Részvénytársaság

[496] Solari, S. (2020). Luigi Luzzatti and the making of the Italian monetary system. *Luigi Luzzatti and the making of the Italian monetary system*, 67-84.

[497] Boscarello, S. (2023). A Long Migration: Cooperatives Practices and Social Innovation in Mediterranean Europe (1848–1900). In *Unframing and Reframing Mediterranean Spaces and Identities* (pp. 171-192). Brill.

[498] Poli, F., & Poli, F. (2019). Co-operative Banking in France. *Co-operative Banking Networks in Europe: Models and Performance*, 193-252.

movement had spread to **Austria**, **Switzerland**, **Hungary**, the **Netherlands**, and the **Balkans**. In 1889, the cooperative movement extended to British **India**, specifically Baroda state, leading to the formation of Anyonya Co-operative Bank Ltd.[499]

17.3. Transactions

In Anglo-Saxon countries, jurisprudence and banking practices entrenched in rich historical traditions extensively delineated banking transactions and contractual frameworks for everyday usage. Conversely, in continental countries, the emergence of credit, intricately linked to banking history, only became apparent from the 19th century onwards with the formation of civil societies, albeit with minimal alterations to transactional structures. This disparity endured for approximately two and a half centuries in Europe, impeding capital accumulation until notable amelioration commenced in the latter half of the 19th century and early 20th century, particularly during the interwar period. This progress coincided with the enactment and **codification of national civil codes** such as the Code Civil (1804), Allgemeines Bürgerliches Gesetzbuch (1811), Bürgerliches Gesetzbuch (1900), Codice Civile (1942), and commercial statutes such as the Code de commerce (1807), Allgemeines Deutsches Handelsgesetzbuch (1861), later Obligationenrecht (1911), and the Uniform Commercial Code (1952), which specifically addressed loan agreements. This fundamental notion of credit being indispensable to economic activity gained prominence in 19th-century Central Europe.[500]

In the 17th century, the surge in colonization and the emergence of colonial empires invigorated trade activity. The Anglo-Saxon financial world swiftly recognized the advantages of **factoring**, establishing the House of Factors and the Blackwell Hall in England during the 1600s, regarded as the precursor to modern factoring. Here, we can find the origin of the modern sense of **textile factoring**.[501] The widespread adoption of this practice was

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[499] Muthukrishnammal, S. (2018). Credit Risk Management in Cooperative Sector Banks in India. *International Journal of Management, IT and Engineering*, *8*(9), 432-443.
[500] Zivkovska, R., & Przeska, T. (2014). Codification of Civil Law. *Collection Papers Fac. L. Nis*, *68*, 251.
Mousourakis, G., & Mousourakis, G. (2015). Codification and the rise of modern civil law. *Roman law and the origins of the civil law tradition*, 287-309.
[501] Hillyer, W. H. (1939). Four centuries of factoring. *The Quarterly Journal of Economics*, *53*(2), 305-311.

facilitated in 1678 by an Act of Common Council.[502] It was followed by the Act of Parliament in 1696, granting regulatory oversight over trade and thereby diminishing the monopoly of existing factor companies. Consequently, factoring services underwent significant transformation, leading to increased specialization across the entire business sector. A substantial influx of timber, fur, wool, tobacco, and cotton from the American colonies prompted London and other European commercial bankers to advance funds for these raw materials before their arrival on the continent. Production saw remarkable growth, as it no longer relied on delayed payments from European financial institutions or consumers, thereby reducing the risk of non-payment for producers. The favorable structure of the American banking sector, characterized by numerous small banks, also contributed to the development of factoring.[503]

In the 18th century, U.S. producers sold 80% of their annual cotton harvest in Europe, marking the emergence of **cotton factors**.[504] Significant delays occurred between harvest and payment receipt due to prolonged transportation and storage, with factoring facilitating entrepreneurs through this process. Cotton was loaded onto ships in New Orleans and Savannah ports and transported via the river, with the transaction site still bearing the name Factors Walk to this day.[505] During the Industrial Revolution, factoring primarily served as a form of lending rather than its intended function of receivables financing.[506] Newly established, young enterprises met their capital needs through receivables sales, viewing it as a source of financing for their commercial operations, adapting to changing economic conditions. However, despite these shifts, the fundamental principles and structure of the transaction remained unchanged. During this period, the distinction between

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[502] Winter, M. (2022). *Banking, Projecting and Politicking in Early Modern England: The Rise and Fall of Thompson and Company 1671-1678*. Palgrave Macmillan.

[503] Silbert, J. (1952). Banking in U.S. in *Harvard Business Review* Jan/Feb 1952.

[504] In this time a factor was a trader who engages in the buying and selling of goods on commission, known as factorage. Acting as a mercantile fiduciary, a factor conducts business under their own identity without revealing the identity of their principal. The role of a factor is distinct from that of a commission merchant in that a factor receives goods (or documents representing goods, like a bill of lading) on consignment, while a commission merchant sells goods based on samples without taking physical possession of them.
Silverman, H. R. (1948): Factoring: Its Legal Aspects and Economic Justification. in *Law and Contemporary Problems* 1948.

[505] Factors Walk, also commonly spelled Factor's Walk or Factors' Walk, is a historic street in Savannah, Georgia, United States.

[506] Rey, H. (1991). *Die Behandlung des Factoringvertrages im schweizerischen Recht*. in Ernst A. Kramer: Neue Vertragsformen der Wirtschaft: Leasing, Factoring, Franchising, Bern, 1988-1991. 171-172.

recourse and non-recourse factoring emerged, with the former associated with lending, as the factor company could reclaim the amount paid if unable to recover the receivable. The initial step in U.S. regulation occurred with the Factors Act of 1830 in New York state. Subsequently, the United States enacted the Factors' Lien Act in 1889,[507] laying the foundation for factoring to diverge from conventional trade and emerge as a new form of financing in the economy.

The emergence of modern **leasing** can be traced back to the late 19th century, originating from Anglo-Saxon culture and the United States of America. Precedents for leasing can be found in the American West as early as the 1700s, involving the financial lease of horses, wagons, and carriages. The development of this transaction was primarily propelled by railway construction.[508] The financing of assets such as locomotives and railcars necessary for national (almost continental) investments and increased goods and passenger traffic was facilitated through leasing in the form of equipment trusts.[509] Initially, American banks were hesitant to finance railway construction due to perceived high risk, leading to the emergence of various types of leases and the introduction of ownership acquisition and purchase options. The Bell Co. started telephone leasing in 1877.[510]

During the 18th and 19th centuries in England, **debtors** faced **imprisonment** as a consequence of unpaid debts, with approximately 10,000 people incarcerated annually. However, imprisonment did not absolve the debt; inmates were typically required to repay creditors in full before release. Debtors' prisons in England and Wales varied in their degree of freedom, with some allowing inmates to conduct business and receive visitors. However, life in these prisons was harsh, with inmates forced to cover their own expenses. Influential figures like Samuel Byrom and Charles Dickens, whose father was imprisoned for debt, advocated for reform, leading to the Debtors'

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[507] Chalmers, M. D. E. S. (1890). *The Sale of Goods: Including the Factors Act, 1889*. W. Clowes.
McKendrick, E. (Ed.). (2020). *Sale of goods*. Taylor & Francis.
[508] Whittaker, W. H. (1882). Statutory Provisions for Leasing Railroad. in *Central Law Journal* 1882
[509] An equipment trust is an investment fund that leases the purchased equipment. By the way, a trust means a trust transfer of property, wealth management.
[510] Bera, R. K. (2023). Surviving the Intellectual Property Maze in Communication Technologies. *Available at SSRN 4531500*.

Act of 1869, which limited but did not entirely prohibit debtors' imprisonment.[511] By 1870, the total number of debtors imprisoned decreased by almost 2,000, dropping from 9,759 in 1869 to 6,605 in 1870. Despite initial reductions in the number of debtors imprisoned, the figures increased again up to 11,000 by 1905.[512] Some of London's debtors' prisons were the Coldbath Fields Prison, Fleet Prison, Giltspur Street Compter, King's Bench Prison, Marshalsea Prison, Poultry Compter, and Wood Street Counter.

Until the mid-19th century, debtors' prisons were widespread across the **United States**. The federal government ostensibly abolished the practice of imprisoning debtors under federal law in 1833, transferring the authority over debtors' prisons to individual states. The Walnut Street Jail in Philadelphia (1790-1971) initially held debtors but transitioned to other uses over time.[513] Debtors' Apartment in New York City (1797-1828) specifically housed debtors but faced harsh criticism for conditions. The practice of detaining debtors or making citizen's arrests remained prevalent in **Germany**. The codification of public law aimed to standardize coercive arrest practices (Pressionshaft) and eliminate the numerous arbitrary sanctions that lacked universality. At times, it was employed to compel payment, while in other instances, it served to secure an individual's arrest to initiate legal proceedings for wage garnishment, replevin, or trover. Although this practice was deeply demeaning to one's identity, it operated under different rules compared to criminal trials and sentence enforcement (Strafvollzug). For instance, debtors could work off their debts for a specified number of days, proportionate to the amount owed. The elimination of debtors' prisons occurred in the North German Confederation in 1868. In **France**, Le Châtelet in Paris (1130-1789) was demolished during the French Revolution, the Bicêtre (1636-1836) initially held both debtors and criminals, later focusing on the mentally ill, the Sainte-Pélagie (1655-1867) held political prisoners and debtors until its closure.[514] In **Dutch** law, the *gijzeling* (take in as hostage) can be ordered by a judge when people refuse to (appear as) witness, or don't pay off their fines or debts. The imprisonment does not cancel the due

[511] Kercher, B. (1984). The transformation of imprisonment for debt in England, 1828 to 1838. *Austl. JL & Soc'y*, *2*, 60.
Johnson, P. (1996). Creditors, debtors and the law in Victorian and Edwardian England.
[512] Judicial Statistics, England and Wales, Part 2. Great Britain Home Office. 1907. 35. (https://books.google.hu/books?id=64AzAQAAMAAJ&q=debt+imprisonment+statistics+england&pg=PA33&redir_esc=y)
[513] DePuy, L. B. (1951). The Walnut Street prison: Pennsylvania's first penitentiary. *Pennsylvania History: A Journal of Mid-Atlantic Studies*, *18*(2), 130-144.
[514] Griffiths, A. (2022). *Early French Prisons: Le Grand and Le Petit Châtelets; Vincennes; The Bastile; Loches; The Galleys; Revolutionary Prisons*. DigiCat.

amount and interest.[515] In **Greece**, until January 2008, imprisonment for debts, whether owed to governmental entities such as the tax office, social security office, or private banks, remained a legal practice. However, this changed when the law was amended due to the unconstitutionality of incarcerating individuals for unpaid taxes or other debts owed to the government after 173 years of enforcement. Despite this reform, imprisonment for debts owed to private banks was still permitted. In **India**, the Negotiable Instruments Act of 1881 includes clauses stipulating criminal consequences, including incarceration, in cases of default on debts or payment obligations.[516]

[515] Siahaan, T., Sinaulan, R. L., & Ismed, M. (2023). Implications of legal protection for taxpayers in the implementation of hostage taking (gijzeling). *World Bulletin of Management and Law*, *26*, 28-33.
[516] Patwa, A. (2022). An Analysis of the Decriminalisation of Section 138, Negotiable Instruments Act, 1881. *Issue 6 Indian JL & Legal Rsch.*, *4*, 1.
Kataria, S., & Agrawal, A. (2022). Fathoming the Negotiable Instruments Act, 1881. *Issue 2 Indian JL & Legal Rsch.*, *4*, 1.

18. 20th and 21st Century

Modernity brings new changes: (i) the gold standard ceases; (ii) global, international financial organizations are created; (iii) European integration begins (EEC, EU, Banking Union); (iv) application of Basel (mandatory) recommendations. With the turn of the millennium, the financial crisis draws attention to many problems. Around the turn of the millennium, noteworthy **tendencies** and trends include (i) the emergence of banks catering to the needs of the impoverished, (ii) the rise of green banking focusing on environmentally sustainable practices, (iii) the development of community banking models emphasizing local engagement, (iv) the advent of digital banking leveraging technological advancements, and (v) the establishment and growth of the ethical banking system, reflecting a focus on moral and socially responsible principles in financial operations.

18.1. General aspects

Until the latter half of the 20th century, all **national currencies** were fully backed by metallic reserves, typically gold, enabling the conversion of all banknotes into gold.[517] World War I effectively terminated the functioning of the **gold standard**, during which paper currency issuance was employed to finance war budgets, leading to the loss of convertibility of substitutes into gold. Despite the necessity of substantial gold reserves to maintain the gold standard, such reserves were unavailable, necessitating a reduction in domestic consumption, resulting in real wage decreases. Following World War II, in alignment with the Bretton Woods processes, the U.S. dollar became the key currency, and all European currencies were pegged to it, remaining the sole currency exchangeable for gold at a predetermined rate for the central banks of participating countries. The initiative of French president De Gaulle directly terminated the gold standard system, who purchased a

[517] Schenk, C. R. (2013). The global gold market and the international monetary system. In *The Global Gold Market and the International Monetary System from the Late 19th Century to the Present: Actors, Networks, Power* (pp. 17-38). London: Palgrave Macmillan UK. and Mundell, R. A. (2000). A reconsideration of the twentieth century. *American Economic Review*, *90*(3), 327-340.

significant amount of gold with U.S. dollars at the official rate in 1971. Subsequently, due to the market price exceeding the fixed rate, President Nixon suspended the convertibility of the U.S. dollar into gold.[518]

Transactions

James Talcott (1835–1916) was an American **factor** operating out of New York City. He founded James Talcott, Inc. in 1914, which became one of the oldest and most prominent factoring firms in the U.S. that was not connected to a credit institution.[519] Other simple financial institutions typically relied on classical banking services (deposits, loans, discounting). The legislative milestone was the New York Factors' Lien Acts adopted in 1911,[520] which were amended several times in 1931, 1935, and 1943. American factors were designated as follows: (i) colonial factor – a business still connected to merchandise trading; (ii) old line factor – purchasing claims at its own risk; (iii) new style factor – similar to old line, but operating within the framework of financial banking activities.[521] Until the 1930s, factoring in the United States was primarily associated with the textile and clothing industries. This was because this sector was considered the strongest element of colonial economy at the time. Factoring in the 1920s involved the advance payment of claims and assuming the risk of the buyer's solvency. This led to the development of guarantee factoring, where the seller financed with the prior consent of the factor. By the 1930s, this practice had become so widespread that American insurance companies' market share significantly declined. They protested, arguing that this was more like credit insurance, which was not within the scope of factors' activities.[522] In response, businesses began selling claims to factor companies without recourse (purchase factoring). Significant changes occurred in the social, economic, and geopolitical environment following World War II, which also affected factoring. Companies and factories saw an opportunity to integrate factoring with other account-based transactions, initiating the expansion of factoring. In the

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[518] Vigvári A. (2013). *A pénzügyek alapjai*. Budapesti Gazdasági Főiskola, 8.1.1. Az aranystandard.

[519] Hower, R. M. (1937). James Talcott and Factoring. *Business History Review*, *11*(2), 21-23.

[520] Silverman, H. R. (1948). Factoring: its legal aspects and economic justification. *Law and Contemporary Problems*, *13*(4), 593-608.

[521] Fossati, G. – Porro, A. (1974). *Il Factoring* – aspetti economici, finanziari e giuridici. Dott. A. Giuffrè Editore. 5.

[522] RÉCZEI László: *A faktoring ügyletről*. Jogtudományi Közlöny 1988/1. sz.

United States, the heyday of factoring continued as high interest rates prevented businesses from obtaining loans, leading them to factor their receivables to access funds. This became so popular for a time that it nearly jeopardized local banks. In America, interest rates remained high throughout the 1960s, 70s, and even 1980s due to strict regulations, making traditional financing (e.g., bank loans) extremely expensive for small businesses. Poorer companies were forced to find alternative ways to finance their growth and operations. As banks turned away from small(er) businesses, factoring became an increasingly popular option. In Europe, with the stabilization and gradual expansion of the European Community, and under American influence, factoring began to dynamically emerge in the early 1960s, showing continuous development on the continent since then. The initial step was marked by the establishment of a factoring company in the United Kingdom by the First Bank of Boston in 1961.[523] It later became widespread across the continent and globally, being employed in Austria, Hong Kong, Japan, Singapore, and South Africa by the 1970s.

The Remington in the 1920s and Ford in the 1950s, started to employ **leasing**, giving rise to vendor leasing. In fact, this business transaction maneuver pulled these companies out of economic difficulties, thereby stimulating demand for their products. The car leasing appeared earlier in the 1920s, and Zoli or Zolly Frank is considered the father of motor vehicle leasing, who leased individual vehicles and entire vehicle fleets.[524] Thus, they first resolved the dilemma in the USA that investments could still be made without sufficient equity capital. During World War II, in 1941, Congress passed the **Lend-Lease Act**, allowing the United States to assist the Allied powers without cash payment.[525] Between 1941 and 1945, the U.S. provided crucial resources like food, oil, medicine, raw materials, military equipment, weapons, and aircraft to mainly Britain, the Soviet Union,[526] furthermore France, and China at no cost. This aid was justified on the grounds that supporting these nations was vital to safeguarding the United States itself. It is historically interesting that even in the early years of the Cold War, the Soviet Union purchased materiel (military hardware, material) from the USA through such a construct (lend and lease).

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[523] Sommer, H. J. (1998). Factoring, International Factoring Networks and the FCI Code of International Factoring Customs. *Uniform Law Review*

[524] Iavich, M. Demand-side Factors of the Georgian Cars' Leasing Market Avtandil Gagnidze, East European University.

[525] Kimball, W. F. (2019). *The Most Unsordid Act: Lend-Lease, 1939-1941*. JHU Press.

[526] Suprun, M. (2023). Lend-Lease food aid to Russia/USSR during the Second World War. *The Journal of Slavic Military Studies*, *36*(1), 96-108.

Henry Schoenfeld is considered the father of **modern financial leasing**.[527] In 1952, he founded first financial leasing company the United States Leasing Corp. (now known as United States Leasing International Inc.).[528] The 1960s marked the beginning of the IT revolution, with IBM and Xerox being the first to recognize the potential of selling their products (hardware and software) through leasing. The development of the 1960s was also aided by a congressional amendment to the Bank Holding Company Act of 1956, allowing banks to engage in various activities alongside deposit and loan transactions.[529] This led to simultaneous changes in tax and accounting (especially amortization) rules. Leasing only began to spread in Europe in the 1960s, starting in Germany, Italy, and France. According to historical data, leasing was known earlier, likely due to the impact of the Industrial Revolution. There is debate in the literature about whether Bell or British Railway Wagons Co. was the first company which employed leasing.[530] Between the two World Wars in Central Europe, Volkswagen and sewing machine leasing were the most common, with the term Abzahlungsgeschäft used for installment transactions in the German region.[531] This area, particularly German leasing, was characterized by a preference for purchasing rather than financing, likely influenced by Prussian development. Italy experienced unparalleled growth, with the industrial competition of the 1960s having an extremely stimulating effect on leasing, here, we encounter two special types of leasing for the first time: container leasing and stock leasing.

In 1988, the United International Institute for Private Law (UNIDROIT) adopted two separate **conventions**: the Convention on International Financial Leasing and the Convention on International Factoring. These conventions provide uniform rules for international financial leasing and factoring transactions, aiming to facilitate cross-border transactions by harmonizing legal principles and reducing uncertainty for businesses involved. The leasing convention covers cross-border transactions where one party (lessor)

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[527] Varkulevich, T. V., Broder, S. E., & Titova, N. Y. (2022). Analyzing the features and issues of the leasing market in Russia. *Revista de Investigaciones Universidad del Quindío*, *34*(S2), 365-372.
[528] Dietz, A. (1990). Die betriebswirtschaftlichen Grundlagen des Leasing. *Archiv für die civilistische Praxis*, *190*(H. 3/4), 235-259.
[529] Ebaugh, D. D. (1975). An Interpretation of the Bank Holding Company Leasing Regulation. *Banking LJ*, *92*, 1053.
[530] Sheward, T. The financial state of Britain's railways in 1913. *Journal of the Railway and Canal Historical Society*, *38*, 410-25.
[531] Porkoláb E. (2002). *A lízing a polgári jog rendszerében*. in ELTE Seminarum
Müller-Stewens, G., & Schinken, C. (1988). Strategie im Auto Leasing. *Zeitschrift für das gesamte Kreditwesen (ZfgK)*, *40*(23), 1081-1084.

grants another (lessee) the right to use equipment in return for periodic payments. Similarly, the factoring convention deals with cross-border assignments of receivables by sellers to financial institutions (factors) that advance funds against them.[532]

The **credit information systems** as we mean today evolved only as late as in the 1980s in Western Europe: Spain (1983), France (1984, 1989) Belgium (1985), Austria (1986) - a curiosity: a central registration was in place in Germany as early as in 1934 and in Italy in 1964.[533] Participants of the credit world today use debtor lists combined with two attributes: negative or positive, depending on whether only defaulting debtors are registered, or every debtor. Both types raise a number of economic and legal problems - particularly in terms of constitutionality, data protection and civil law.

Banking systems

By the turn of the 19th and 20th centuries, the classical **two-tiered banking system** had become prevalent. The upper tier of this system is represented by the central bank, and the commercial banks represent the lower tier. In the U.S., commercial banks were specialized, which means they were excluded from engaging in financial service activities that deviated from traditional commercial banking functions. The separation is characteristic of Anglo-Saxon countries, mandated by the Glass-Steagall Act as a response for the economic crisis, the Great Depression in the USA, and worldwide. In 1932 the **Glass-Steagall Act**, and in 1933 the Banking Act were proposed by Representatives Carter Glass and Henry Steagall.[534] The legislation aimed to separate commercial and investment banking services, preventing securities firms and investment banks from accepting deposits. It outlined restrictions for Federal Reserve member banks, prohibiting them from trading non-government securities for customers, investing in non-investment-grade securities for their own accounts, underwriting or distributing non-government securities, and associating with (or having common employees with) firms engaged in such activities. The Glass-Steagall Act also established the Federal Deposit Insurance Corporation (FDIC). Although this regulation has been relaxed multiple times, with significant easing occurring in 1999, the

[532] Ferrari, F. (1998). General Principles and International Uniform Commercial Law Conventions: A Study of the 1980 Vienna Sales Conventions and the 1988 UNIDROIT Conventions on International Factoring and Leasing. *Pace Int'l L. Rev.*, *10*, 157.

[533] Vértesy L. (2008). Man's registered debts. *Pénzügyi Szemle/Public Finance Quarterly* 2008(2) 283-295.

[534] Act of June 16, 1933, ch. 89, 48 Stat. 162 shall be the Banking Act of 1933. Federal Reserve Bulletin, June 1933. 385-401. o.

Gramm–Leach–Bliley Act (GLBA) eliminated the constraints in the market between banking companies, securities firms, and insurance companies.[535] Critics argue that these changes contributed to the 2008 financial crisis.[536] The Dodd-Frank Wall Street Reform and Consumer Protection Act, shortly **Dodd-FrankAct**, was passed in 2010 during the Obama administration, it was a comprehensive financial reform legislation aimed at addressing various aspects of the financial sector with new institutions. The Financial Stability Oversight Council and the Orderly Liquidation Authority monitor major financial firms' stability. It aims to prevent the failure of large firms (deemed too big to fail) from negatively impacting the U.S. economy. It also introduces the Orderly Liquidation Fund to facilitate dismantling troubled financial companies without taxpayer funds. The Consumer Financial Protection Bureau (CFPB), focuses on preventing predatory mortgage lending and ensuring transparency in mortgage agreements; and oversees consumer lending practices, including credit and debit cards, and addresses consumer complaints. The **Volcker Rule** restricts banks from engaging in speculative trading and proprietary trading, regulates derivatives trading, and promotes transparency in swap markets to mitigate systemic risks. The Securities and Exchange Commission (SEC) Office of Credit Ratings ensures that credit rating agencies provide accurate and reliable ratings for businesses, municipalities, and other entities. This addresses concerns about misleading investment ratings prior to the financial crisis. Within the Whistleblower Program, the act strengthens and expands whistleblower protections, offering rewards for whistleblowers who report violations and extending the statute of limitations for bringing forward claims against employers.[537]

In the second half of the 20th and early 21st centuries, distinctive developmental trends are observed in **bank models**. The evolutionary process is divided into three stages and types in the literature, each having specific characteristics, both in terms of bank operations and regulatory constraints arising from these operations.

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[535] Gramm, P. (1999). Gramm–Leach–Bliley Act. In *Vol. Public Law 106–102). Washington, DC: United States Congress*.

[536] Ghosh, A. (2020). Discerning the impact of disaggregated non-interest income activities on bank risk and profits in the post-Gramm-Leach-Bliley Act era. *Journal of Economics and Business*, *108*, 105874.

Grant, J. K. (2009). What the financial services industry puts together let no person put asunder: How the Gramm-Leach-Bliley Act contributed to the 2008-2009 American capital markets crisis. *Alb. L. Rev.*, *73*, 371.

[537] Taylor, A. (2020). *Findings of the Effects of the Glass-Steagall Act and the Dodd Frank Act* (Doctoral dissertation).

Bank Models

	Traditional	Originate to hold (OTH)	Originate to distribute (OTD)
Period	- 1971	1972 – 1988	1988 – 2008
Basic activity	Loan + deposit	Loan + deposit + derivative transactions (credit derivatives)	Loan + deposit + derivative transactions + securitization
Additional activity	Securitization	Securitization	-
Typical	Delegate observer	A plant that trades in risks	Transfer of risk
Purpose of lending	Making a profit	Taking risks, holding loans, increasing the loan portfolio	Spreading credit risks to capital market investors

Source: Bouguelli, R. (2020). Is shadow banking really akin to banking? A critical analysis in light of monetary theory. *Journal of Post Keynesian Economics*, *43*(1), 1-27. and Gál E. (2010) *Az önkormányzatok adós- és követelésminősítésének elméleti és gyakorlati problémái*. Miskolci Egyetem, 55.

During the **traditional** bank model, the banking sector was the most strictly regulated branch of the economy, allowing banks to operate in a predictable economic environment without real competition. This period is often referred to as the 3-6-3 rule era:

Bankers gathered deposits at 3 percent, lent them at 6 percent, and were on the golf course by 3 o'clock in the afternoon.

Walter John R. (2006): The 3-6-3 Rule: An Urban Myth?
Fed of Richmond Economic Quarterly. (Winter 2006)

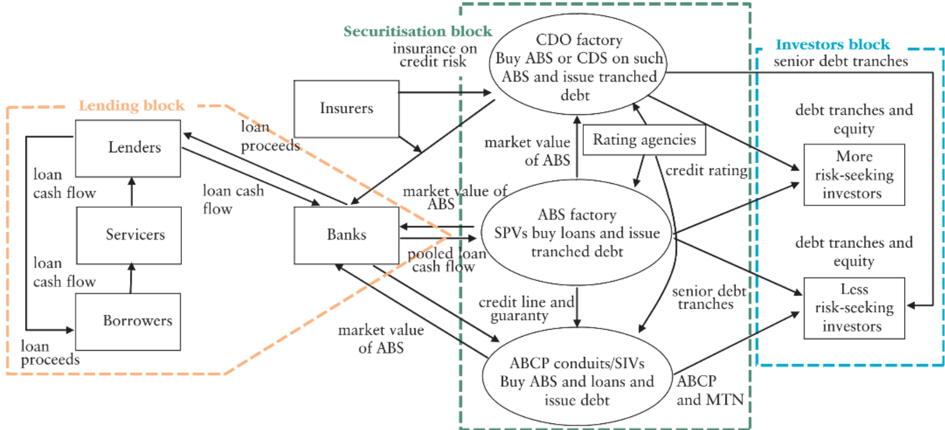
This comfortable state lasted until the early 1970s when the sector faced new challenges, including increased competition, volatile interest rates, fluctuating exchange rates, and an uncertain economic environment.

The risk-taking **Originate to Hold** (OTH) model was necessitated by the gradual depletion of the advantage that banks had derived from information asymmetry and reduced transaction costs compared to other financial intermediaries. In reality, the primary purpose of lending in this model is risk-taking. The risk management process is characterized by disintermediation, leading to a shift in activities towards trading risks, primarily through

derivative transactions. The initiation of this phase can be linked to the collapse of the Bretton Woods system and the period of liberalization of international monetary transactions.[538]

In the risk-sharing, **Originate to Distribute** (OTD) bank model, at the outset of lending, it is already determined that, for risk management purposes, the bank will securitize credit risk partially or entirely by transferring it to capital market investors through securitization.[539] The essence of the bank's activity lies in providing and selling multiple loans held or guaranteed in its portfolio, with the involvement of special-purpose entities to other participants in the financial intermediation system. This model significantly contributed to the emergence of market-based banking, characterized by: (i) asset valuation at market prices (marked to market); (ii) securitization or trading of bank loans; (iii) selling bank assets to shadow banks; and (iv) financing assets on the balance sheet from market sources. The pricing of bank products became increasingly market-based, influenced by vibrant demand and supply dynamics, in contrast to the traditional model where financial institutions unilaterally determined supply interest rates.

Originate to distribute (OTD) bank model



Source: Király J. – Nagy M. – Szabó E. V. (2008). Contagion and the beginning of the crisis – pre-Lehman period, *Magyar Nemzeti Bank Occasional Papers* 76. 20. based on IMF GFSR (2007); ABS: asset-backed security, ABCP: asset-backed commercial paper, CDO: collateralised debt obligation, CDS: credit default swap, SIV: structured investment vehicle.

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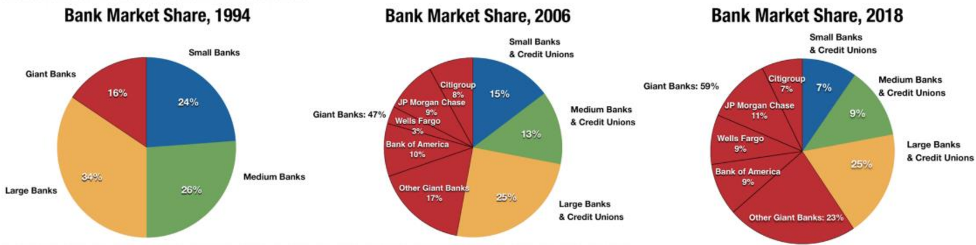
[538] Bouguelli, R. (2020). Is shadow banking really akin to banking? A critical analysis in light of monetary theory. *Journal of Post Keynesian Economics*, *43*(1), 1-27.

[539] Bord, V., & Santos, J. A. (2012). The rise of the originate-to-distribute model and the role of banks in financial intermediation. *Economic Policy Review*, *18*(2), 21-34.

Bank Concentration

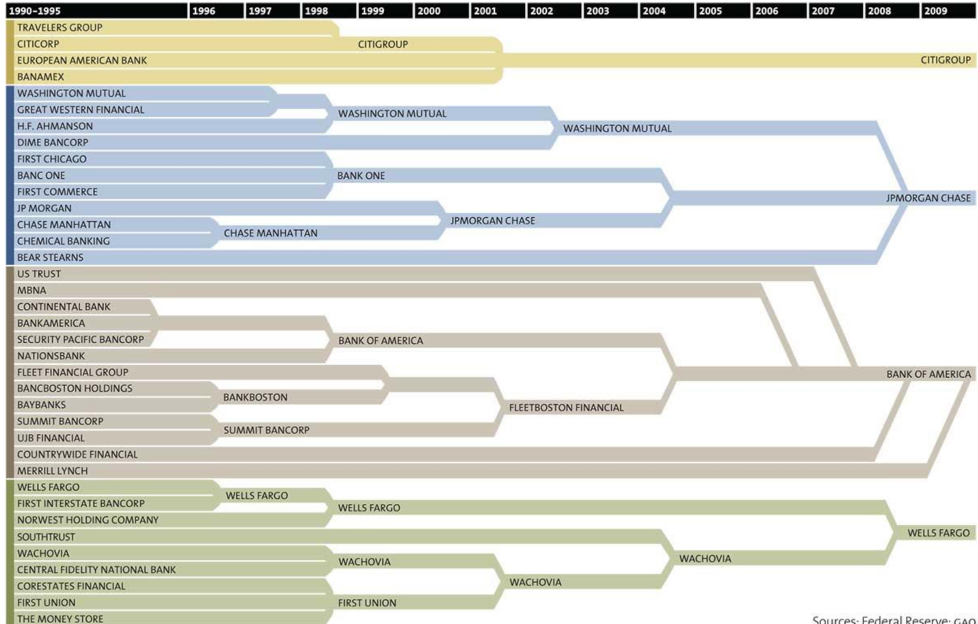
As a result of **bank concentration**, over the span of 24 years from 1994 to 2018, significant shifts have occurred in the banking sector, leading to the dominance of giant banks.[540] The graphical representations highlight that in 1994, small, medium, large, and giant banks held relatively equal market shares. However, a substantial transformation has taken place since then. In 2018, the market share of the largest banks surged to 59 %, with the top four banks alone commanding 36 % of the market – surpassing the collective market share of all small-sized banks and credit unions as well as all mid-sized banks and credit unions. This process can be identified worldwide.

Bank Market Share, 1994, 2006, 2018 (USA)



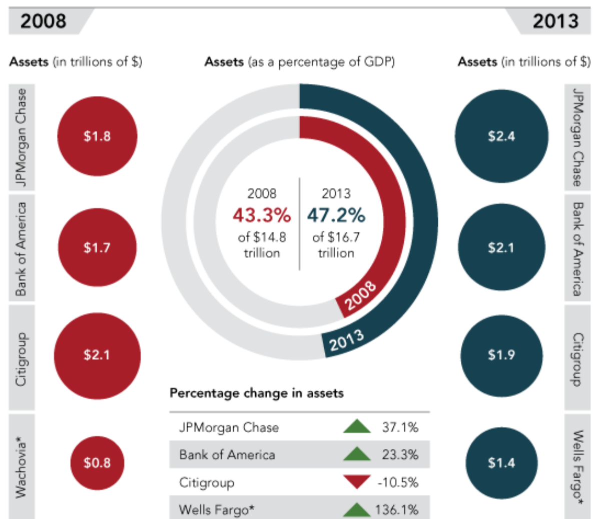
Source: ILSR. 2019. Bank Market Share by Size of Institution, 1994 to 2018. (https://ilsr.org/bank-market-share-by-size-of-institution/)

[540] Karadima, M., & Louri, H. (2021). Economic policy uncertainty and non-performing loans: The moderating role of bank concentration. *Finance Research Letters*, *38*, 101458. Saidi, F., & Streitz, D. (2021). Bank concentration and product market competition. *The Review of Financial Studies*, *34*(10), 4999-5035.



Source: Luke J. (2011). Too Big to Fail Should Be Too Big toExist. EconProph

Bank concentration also accelerated in the 2000s, especially in the USA, where the leading 37 banks of the 1990s merged into four institutions in about a decade and a half. Gongloff-Hall-Diehm presents the evolution of the assets of the four largest banks, JP Morgan Chase, Bank of America, Citigroup and Wells Fargo, in 2008 and 2013. The total assets of these four major banks accounted for 43.3% of the US GDP in 2008, which increased to 47.2% by 2013.



Source: Gongloff, M. - Hall, K. - Diehm, J. (2013): 5 Years After The Crisis, Big Banks Are Bigger Than Ever (CHART), Huffington Post 9/10/2013. (https://www.huffpost.com/entry/biggest-banks-even-bigger_n_3900363)

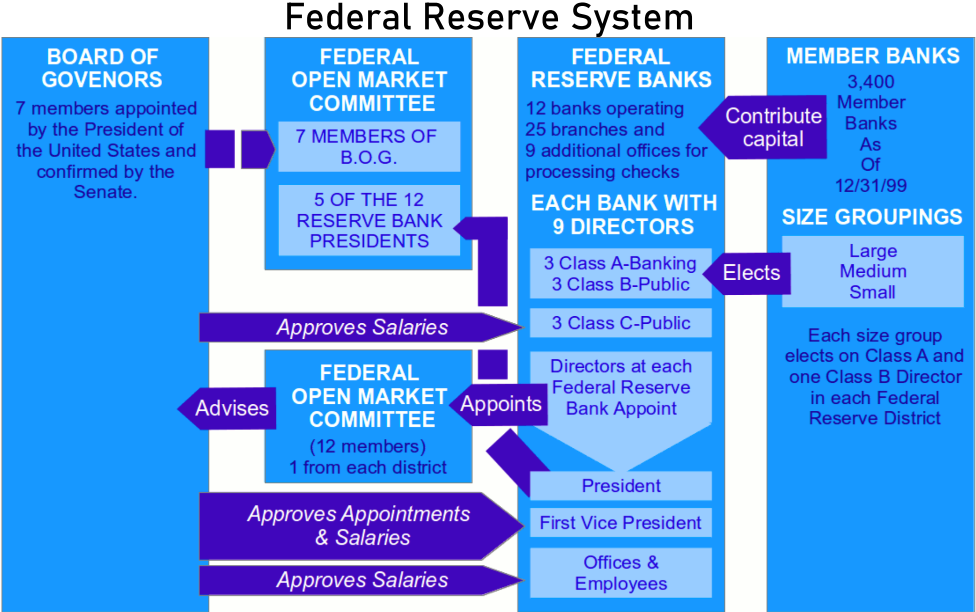
18.2. Central banks

Among central banks, the most remarkable development at the beginning of the 20th century is the Federal Reserve. Between 1791 and 1811, the **United States** experienced the establishment of its First Bank, followed by the existence of the Second Bank from 1816 to 1836. After the termination, although the idea of a central bank was unpopular, due to the bank panics in 1873, 1893, and especially in 1907 prompted the urgent need for a central banking system, although the idea faced unpopularity due to concerns about centralizing the operation of the monetary system under a central authority.[541] In response to the bank panics, Congress established the **National Monetary Commission** in 1907 with the task of devising a plan for the reform of the banking system.[542] Senator Nelson W. Aldrich, initially an opponent of the central bank, shifted his stance after examining Germany's banking system.[543] Convinced that a central bank operated more effectively than the previously supported system based on government bonds, he became a proponent.

In 1910, a clandestine meeting occurred on **Jekyll Island** in Georgia, lasting 10 days, involving Aldrich, representatives of J. P. Morgan, Rockefeller, and Kuhn, Loeb, & Co. banks.[544] Their objective was to prepare the initial draft of the later Federal Reserve Act. The outcome was a private central bank with minimal state influence, allowing government representation in the board of directors. The **Federal Reserve System** (FRS), the third central banking system in the United States, was officially established on December 23, 1913, largely owing to the influence of Democratic President Thomas Woodrow Wilson. The Federal Reserve Banks commenced operations on November 16, 1914.[545] This is a unique central banking system consisting of 12 regional reserve banks, and unlike the majority of state-controlled central banks, the Fed operates in a mixed state-private system. In

[541] Ramjerdi, M. H. (2020). Review of the Causes of 1907 Panic and Aftermath. *Journal of Reviews on Global Economics*, *9*, 18-22.
[542] Dewald, W. G. (1972). The national monetary commission: a look back. *Journal of Money, Credit and Banking*, *4*(4), 930-956.
[543] Wicker, E. (2005). *The great debate on banking reform: Nelson Aldrich and the origins of the Fed*. Ohio State University Press.
[544] Richardson, G., & Romero, J. (2022). The Meeting at Jekyll Island. *Federal Reserve History*.
Livingston, J. (1989). *Origins of the Federal Reserve System: Money, class, and corporate capitalism, 1890-1913*. Cornell University Press.
[545] Bordo, M. D., & Roberds, W. (Eds.). (2013). *The origins, history, and future of the Federal Reserve: a return to Jekyll Island*. Cambridge University Press.

1934, the federal deposit insurance system was introduced to protect bank depositors.[546]



Source: Organization of the Federal Reserve System. (http://www.richmondfed.org/publications/educator_resources/the_federal_reserve_system_in_action/index.cfm (archive) and located at: http://www.richmondfed.org/publications/educator_resources/the_federal_reserve_system_in_action/organization.jpg)

> The nice thing about America is, no matter how the economy is doing,
> you can always blame the Chairman of the Federal Reserve.
> Harley Schwadron

The Federal Reserve System serves as the central bank and monetary authority of the United States, structured as follows. The Board of Governors comprises 7 members appointed by the President and confirmed by the Senate for staggered 14-year terms. This Board oversees the operations of the Federal Reserve System. The 12 Regional Federal Reserve Banks operate within specific regions and play a crucial role in implementing monetary policy.[547] The **Federal Open Market Committee** (FOMC) servs as the key decision-making body for monetary policy; the FOMC manages the country's

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[546] Anderson, H., Richardson, G., & Yang, B. (2023). Deposit Insurance and Depositor Monitoring: Quasi-Experimental Evidence from the Creation of the Federal Deposit Insurance Corporation. *Journal of Money, Credit and Banking*, *55*(2-3), 441-464.
[547] Chabot, C. K. (2020). Is the Federal Reserve Constitutional? An Originalist Argument for Independent Agencies. *Notre Dame L. Rev.*, *96*, 1.

money supply. It consists of 12 members, including the 7 Board of Governors and 5 regional Federal Reserve Bank presidents. Additionally, the Federal Reserve System involves around 3,400 member banks. Its responsibilities encompass executing national monetary policy, supervising and regulating banks, maintaining financial stability, and providing banking services.[548] The primary focus of **monetary policy** involves influencing market interest rates to achieve sometimes conflicting goals, including: (i) maximizing employment; (ii) stable prices (averaging 2% inflation annually) and (iii) moderate long-term interest rates.[549]

After World War I and the Treaty of Trianon in 1920, which redrew the borders and reshaped the politics and economies of Central and Eastern Europe (dissolution of the Austro-Hungarian Empire, creation of new states), several countries faced the need to establish or reform their central banking systems to adapt to the new realities and challenges: Oesterreichische Nationalbank (OeNB, 1922), National Bank of Hungary (1921, 1924),[550] Narodowy Bank Polski (1924),[551] National Bank of the Kingdom of Serbs, Croats and Slovenes (1920), then National Bank of the Kingdom of Yugoslavia (1929), Národní banka Československá (1926). Here, we only list the other major central banks and countries, with the year of foundation: Schweizerische Nationalbank, Banque National Suisse (1893, 1907); Panama (1904), USA - Federal Reserve system – FED (1913), Australia (1920), Hungary (1921, 1924), Peru (1922), Colombia (1923), Chile (1925), Mexico (1927), Ecuador, Bolivia (1928); El Salvador (1934); Canada, India, New Zealand, Argentina (1935); Brazil (1945) Guatemala (1946); Dominica (1947); 中国人民银行 China People's Bank Zhongguo Rhenish mine Yinháng (1948), European Central Bank – ECB (1998).[552]

Gorodnichenko, Y., Pham, T., & Talavera, O. (2023). The voice of monetary policy. *American Economic Review*, *113*(2), 548-584.

[548] Clifford, A. J. (2016). *The Independence of the Federal Reserve System*. University of Pennsylvania Press.

Hafer, R. W. (2005). *The federal reserve system: An encyclopedia*. Bloomsbury Publishing USA.

[549] Feliz, R. A. (2021). *The Fed Explained: What the Central Bank Does* (No. 4860). Board of Governors of the Federal Reserve System (US).

[550] Vértesy L. (2020). Trianon és a magyar pénzügyi rendszer. In: Barna, A. (ed.) *Trianon 100. Tanulmányok a békeszerződés centenáriumára*. Ludovika Egyetemi Kiadó, 497-516.

[551] Truly it was the Second Bank of Poland (Bank Polski Spółka Akcyjna), founded in 1924, was the central bank of the Second Polish Republic.

[552] Ugolini, S. (2020). The historical evolution of central banking. *Handbook of the History of Money and Currency*, 835-856.

Source: own compilation of the author

A new type of central bank emerged, a unique entity, the **European Central Bank** (ECB) in Frankfurt, primarily responsible for the eurozone's monetary policy but also playing a role in the supervisory system of the EU banking sector.[553] Its capital is contributed by all EU member states based on

[553] De Haan, J., Eijffinger, S. C., & Waller, S. (2005). *The European Central Bank: credibility, transparency, and centralization*. MIT press.
Hjertaker, I., & Tranøy, B. S. (2021). The European Central Bank. *The Palgrave Handbook of EU Crises*, 339-355.

their share of the EU population and GDP, even for those still using their national currency. The largest share belongs to Germany (18.36%), followed by the United Kingdom (14.33%), France (14.20%), Italy (11.80%), and Hungary (1.33%).[554] Countries outside the eurozone do not benefit from the ECB's profits but are not obliged to finance its losses.

Its earliest precursor was the **European Monetary Cooperation Fund** (EMCF), which existed from 1973 to 1994 and played a significant role in European monetary development. The next milestone was the Maastricht Treaty of 1992/93 and the idea of establishing the European Economic and Monetary Union. In 1994, the **European Monetary Institute** (EMI) began its operations, tasked with preparing the introduction of the euro and the single community monetary policy.[555] Its first president was Sándor **Lámfalussy**, often referred to as the father of the euro.[556] In 1998, the ECB succeeded the EMI, followed by the settlement unit: in 1999, the euro (€) was introduced, replacing the European Currency Unit (ECU, ₠), and became an actual means of payment in 2002.[557]

The **European System of Central Banks** (ESCB) is a framework that comprises the European Central Bank (ECB) and the national central banks (NCBs) of all European Union (EU) member states. The ESCB was established to conduct the euro area's monetary policy and to promote the smooth operation of payment systems within the EU. Each EU member state has its own NCB, and within the euro-zone, they form the Eurosystem, implementing monetary policy.[558] The ESCB aims to maintain price stability, ensure financial stability, and coordinate efforts among central banks. It issues euro

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554 ECB (2019): Capital subscription

555 Kenen, P. B. (1998). Monetary policy in stage three: a review of the framework proposed by the European Monetary Institute. *International Journal of Finance & Economics*, *3*(1), 3-12.
Von Hagen, J., & Fratianni, M. (1993). The transition to European monetary union and the European Monetary Institute. *Economics & Politics*, *5*(2), 167-186.

556 He was also the General Manager of the Bank for International Settlements 1985–1994.
Nowotny, E., & Nationalbank, O. (2016) From the euro to banking union – what can we learn from Sandor Lámfalussy?.

557 Lámfalussy, Sándor (2005) *Az euró – politikai kezdeményezés vagy gazdasági szükségszerűség? | The Euro – A Political Initiative or an Economic Necessity?* In: Mindentudás Egyeteme. 4 . Kossuth Kiadó. 149-161.
Hartmann, P., & Smets, F. (2018). The first twenty years of the European Central Bank: monetary policy.

558 Eichengreen, B. (2018). *The political economy of European monetary unification*. Routledge.

banknotes, sets interest rates, and plays a crucial role in the stability and efficiency of the monetary and financial system within the Eurozone. The President of the ECB, together with the Executive Board, leads the central bank's decision-making process. The ECB and NCBs are responsible for issuing euro banknotes, ensuring a consistent currency across the euro area.[559]

In 2017, the European Commission announced a proposal for a **European Monetary Fund** (EMF)[560] as "Further steps towards completing the economic and monetary union". This financial institution would act as a lender of last resort for eurozone member states in financial difficulty. The EMF would succeed to and replace the European Stability Mechanism (ESM), including its legal position and assuming all its rights and obligations.[561] It has been under discussion, but there is no consensus on its design or implementation.

18.3. Microfinancing, Cooperatives, Credit Unions

Cooperatives, Credit Unions

In North America, Alphonse Desjardins established the parish-based Caisse populaire de Lévis in Quebec, **Canada**, in 1901. In 1908, St. Mary's Cooperative Credit Association was founded in New Hampshire, **USA**, under the voluntary guidance of attorney Joseph Boivin, who managed the credit union from his home in the evenings. The Credit Union National Extension Bureau was formed in the USA in 1921, a precursor to the Credit Union National Association (established in 1934).[562]

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[559] Wynne, M. A. (2020). European System of Central Banks. In *Handbook of Monetary Policy* (pp. 739-755). Routledge.
Siekmann, H. (2015). *The legal framework for the European system of central banks* (pp. 43-86). Springer International Publishing.
[560] Brussels, 6.12.2017 COM(2017) 827 final 2017/0333(APP) Proposal for a Council Regulation on the establishment of the European Monetary Fund
Meyer, D. (2022). European Monetary Fund: The EU Commission’s Proposal—Construct Leaves Extensive Room for Maneuver. In *European Union and Monetary Union in Permanent Crisis II: Scenarios for the future of the euro* (pp. 53-80). Wiesbaden: Springer Fachmedien Wiesbaden.
[561] Megliani, M. (2020). From the European Stability Mechanism to the European Monetary Fund: There and Back Again. *German Law Journal*, *21*(4), 674-685.
[562] McKillop, D., French, D., Quinn, B., Sobiech, A. L., & Wilson, J. O. (2020). Cooperative financial institutions: A review of the literature. *International Review of Financial Analysis*, *71*, 101520.

In his book People's Banks, Henry W. Wolff summarized the nature of the **common bond**: many individuals contribute small shares to a common fund, collectively forming a significant capital base. Borrowers, lenders, and guarantors live in close proximity to each other (e.g., in a village), making it convenient for lenders and guarantors to monitor the borrower's performance and address any potential issues. The bond establishes the interlinking of responsibility among members, which can either involve direct and unlimited financial responsibility or direct responsibility for good management (enhancing the sense of security for stakeholders after disclosure). All activities of the credit union must be conducted in a business-like manner, grounded in a strong sense of collective responsibility.[563]

It is quite true, as Dr. Johnson unkindly reminded Goldsmith, that it takes 240 poor men's pence to make one capitalist's sovereign. But once the sovereign is so put together, it is a totally different sovereign from that taken out of the rich man's purse. It has behind it 240 wills, 240 pairs of watchful eyes, 240 thinking brains. It has, so to speak, become an animate sovereign, with prudence, energy, vigilance, diffused throughout all its parts. Every spring, every wire of the composite machine takes a personal interest in the collective doings, watching the other parts, guarding against loss and waste, correcting the slightest irregularity.

Wolff. H. W. (1910). People's Banks

The **International Co-operative Alliance** (ICA) formulated the so-called **Rochdale Principles**, a set of ideals for the operation of cooperatives, in 1934, 1966, and 1995.[564]

The Rochdale Principles, as outlined in the 1995 ICA revision, encompass several key aspects. **1. Voluntary and Open Membership.** Cooperative societies must have an open and voluntary membership, welcoming all individuals without discrimination based on gender, social, racial, political, or religious factors. Membership criteria such as geographic location or fees are acceptable as long as they do not prevent willing participants from joining. Members are motivated by various factors, including financial benefits, quality of life improvements, giving back to the community, altruism, a sense of duty, and career experiences. **2. Democratic Member Control.** Cooperative societies must operate with democratic member control. Members actively participate in policy-setting and decision-making, with elected repre-

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Moysich, A. K. (1990). An overview of the US Credit Union industry. *FDIC Banking Rev.*, *3*, 12.

[563] Wolff. H. W. (1910). People's Banks: A Record of Social and Economic Success. P.S. King & Son, London. 29-30.

[564] Cuznetov, A. (2022). Rochdale principles – the catalyst for the functioning and individualization of cooperative societies. *Scientific Collection InterConf*, 20 (105), 242-247.

sentatives being accountable to the membership. Primary co-operatives ensure equal voting rights for all members. **3. Member Economic Participation.** Cooperatives involve member economic participation, where members contribute equitably and democratically to control the capital. Surpluses are allocated for cooperative development, benefiting members based on transactions and supporting other approved activities. **4. Autonomy and Independence.** Cooperative societies must be autonomous and independent, maintaining control by their members even in agreements with external organizations or governments. **5. Education, Training, and Information.** Co-operatives are responsible for educating and training members, elected representatives, managers, and employees. They also inform the general public, especially young people and opinion leaders, about the nature and benefits of cooperation. **6. Cooperation Among Cooperatives.** Cooperatives strengthen the movement by cooperating with each other through local, national, regional, and international structures. **7. Concern for Community.** Cooperative societies are committed to the sustainable development of their communities through policies approved by their members.[565]

Rochdale Principles

Rochdale Principles		
1934	1966	1995
• Open membership • Democratic control (one person, one vote) • Distribution of surplus in proportion to trade • Payment of limited interest on capital • Political and religious neutrality • Cash trading (no credit extended) • Promotion of education	• Open, voluntary membership • Democratic governance • Limited return on equity • Surplus belongs to members • Education of members and public in cooperative principles • Cooperation between co-operatives	• Open, voluntary membership • Democratic control/governance • Member economic participation • Autonomy and independence • Promotion of education, training, and information • Cooperation among co-operatives • Concern for community + Political and religious neutrality

Source: own compilation of the author

[565] Ibrahim, M. O. (2023). Application of universal cooperative principles among cooperatives in Ile Oluji.

According to the **World Council of Credit Unions** (WOCCU),[566] 85,400 credit unions operate in 118 countries, and collectively, they have served 274.2 million members and overseen assets totaling 2.19 trillion USD.[567]

Bank to the Poor

In the pursuit of social sensitivity, **Muhammad Yunus**, the Nobel Peace Prize-winning economist, developed the Bank to the Poor model.[568] Following experiments in the 1970s, the **Grameen Bank** was established in 1983 in **Bangladesh**, offering collateral-free loans, typically ranging from a few hundred to a maximum of one thousand dollars (the initial loan being $27), to the poorest individuals for tools, poultry, goats, sewing machines, mobile phones, laptops, etc. The underlying idea is that they possess talent, can create value, and have entrepreneurial ideas but would never access credit within the traditional financial system. The borrowed amount must be repaid within a year, with a 20% interest rate (8% for residential property); repayments are collected weekly by bank employees. Approximately 97% of the clients are women, and the repayment rate is high at 98%.[569] Clients are not the ones seeking the bank; rather, bank employees, often called bankers to the poor, visit clients' homes, serving as bank officials and social workers. There is no credit assessment, formal contract, or asset appraisal; the bank simply transfers the funds to the applicants. Borrowers form groups of five to ten individuals, where one or two people receive loans, and the others assist and monitor. Once the initial borrowers repay the loan, roles are reversed. The system's functioning relies on a balance between trust and control. The bank operates over 2,500 branches with more than 21,000 employees, serving nearly 10.5 million clients, and the total value of the cumulative disbursed loan from 1974 by 2024 amounts to $37.99 billion.[570]

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[566] Ryder, N. (2010). World council of credit unions. In *Handbook of Transnational Economic Governance Regimes* (pp. 479-488). Brill Nijhoff.

[567] Pavlovskaya, M., Borowiak, C., Safri, M., Healy, S., & Eletto, R. (2020). The place of common bond: can credit unions make place for solidarity economy?. *Annals of the American Association of Geographers*, *110*(4), 1278-1299.

[568] Yunus, M. (1999). Banker to the Poor. United States: Public Affairs.

[569] Gál – Sipiczki – Szóka – Vajay (2013). A Grameen-modell társadalmi hasznosulásának mérhetősége. in E-CONOM 2013/2. szám

[570] Grameen Bank. (2024). https://grameenbank.org.bd/

Bank to the Poor vs. Traditional Banks

	Bank to the poor	Traditional banks
Location	in rural areas	in cities, city centers
Preference	poor, women (97 %)	they are wealthier
Coverage	not necessary	basic condition
Interest	uniform	risk-based
Approach	the bank goes to the house	the debtor goes to the bank
In case of delay	help, tolerance	plus costs, penalty

Source: own compilation of the author based on Gál V.– Kürthy G. (2012). A Szegények Bankja modell lehetőségei Magyarországon. in: *A Virtuális Intézet Közép-Európa kutatására közleményei*, 4 (1), 141-150.

In his efforts to address poverty in Bangladesh, Muhammad Yunus initially focused on improving local farmers' crop yields but realized that a significant portion of the poor was not benefitting from existing poverty reduction programs. When establishing Grameen Bank, Yunus tailored its programs to target the most impoverished specifically. However, critics, like Milford Bateman, argue that Yunus' microfinance approaches may not be the most effective in addressing poverty. Bateman contends that microfinance-funded enterprises often displace other tiny businesses without funding, resulting in no net impact on poverty. Additionally, as more microenterprises enter the local economic space, the returns on each one diminish, harming the absolute poor. Bateman suggests that Yunus unintentionally crowded out the middle business sector vital to the economy, potentially undermining the economic structure of the country, region, or locality.[571]

As a significant microfinance institution in Bangladesh, the Building Resources Across Communities (BRAC) offers a comprehensive array of financial services to low-income individuals, including loans, savings accounts, and insurance. It was established in 1972 by Sir Fazle Hasan Abed, and now it is one of the largest non-governmental organizations in the world.[572] Beyond financial services, BRAC actively engages in social devel-

[571] Bateman, M., Blankenburg, S., & Kozul-Wright, R. (Eds.). (2018). *The rise and fall of global microcredit: development, debt and disillusion*. Routledge.
Bateman, M., & Chang, H. J. (2012). Microfinance and the illusion of development: From hubris to nemesis in thirty years. *World Economic Review*, (1).
Bateman, M. (2010). *Why doesn't microfinance work?: The destructive rise of local neoliberalism*. Bloomsbury Publishing.
[572] Fateh, M. A. (2020). *A Historical Analysis on Bangladesh Rural Advancement Committee (BRAC) and Abed's Reception of Paulo Freire's Critical Literacy in Designing BRAC's*

opment by providing its clientele with education, healthcare, and other essential services. BRAC has operations in 18 countries, not just in Asia, but in Africa, Europe, and the U.S.

The **SHG-Bank Linkage Program** was initiated by the Government of **India** in 1992. The program establishes connections between Self-Help Groups (SHGs) and banks.[573] SHGs, informal savings, and credit groups formed by impoverished women have played a pivotal role in expanding microfinance accessibility in rural India, significantly impacting poverty alleviation. As a prominent microfinance institution in India, **SKS Microfinance Plc** gained a listing on the New York Stock Exchange in 2010. The institution focuses on providing loans to low-income women in rural areas and has garnered acclaim for its business model and positive societal influence.

Established in 1993, **Acleda Bank** is a substantial microfinance institution in **Cambodia** that delivers diverse financial services to low-income individuals, including loans, savings accounts, and insurance.[574] Acleda Bank has played a leadership role in advancing microfinance, significantly enhancing financial service accessibility for millions of people.

In **Mongolia**, the **XacBank** was founded in 2001 following the merger the two largest non-banking financial institutes. This microfinance institution offers low-income individuals a broad spectrum of financial services, incorporating loans, savings accounts, and insurance. Notably, Xac Bank emphasizes technological integration, employing mobile banking to reach clients in remote areas.[575]

Bank Rakyat Indonesia (BRI) is a state-owned **Indonesian** bank specializing in microfinance. It is the largest MFI in the world, with over 130 million clients. BRI has been instrumental in providing financial access to the poor and underserved in Indonesia.

Functional Education Curriculum in Bangladesh from 1972 to 1981 (Doctoral dissertation, Queen's University (Canada)).

[573] Rajeev, M., Vani, B. P., & Veerashekharappa. (2020). Group lending through an SHG bank-linkage programme in India: transaction costs and social benefits. *Development in Practice*, *30*(2), 168-181.

[574] Ou, C., Sarath, E., Vorn, M., & Ngam, P. (2023). The Impact of Self-Service Banking Quality on Customer Satisfaction: Evidence from ACLEDA Bank Plc., 112.

Clark, H. A., & Clark, H. A. (2020). ACLEDA Bank Plc.: Principles and Practices. *Beyond Borders, Beyond Banking: The ACLEDA Bank Story, 2005-2019*, 109-129. Springer

[575] Jensen, M. (2022). Credit Source and Consumption in Mongolia: Do Microloans and Informal Loans Impact Consumption Differently?.

In Africa, the **Uganda Women's Finance Trust** (UWFT) is a **Ugandan** MFI that provides microloans to women entrepreneurs. It has a proven track record of success, with over 100,000 clients and a repayment rate of over 98%. The **Access Bank** is a **Nigerian** commercial bank that has a strong microfinance division. It provides microloans to businesses and individuals across Nigeria. Access Bank has been recognized for its commitment to financial inclusion and its positive impact on poverty reduction. The Forbes in 2007 made a list about the top 50 microfinance institutions.[576] The 60 Decibels **Microfinance Index** includes data from more than 114 participating financial service providers (FSPs). In 2023, the MFI has surveyed 32,000+ microfinance clients in 32 countries, focusing specifically on clients in Cambodia, Ecuador, India, Indonesia and Uganda.[577] The microfinance market size was valued at USD 199 billion in 2021 and is poised to grow from USD 220 billion in 2022 to USD 510 billion by 2030, growing at a CAGR of 11% in the forecast period (2023-2030).[578]

Community Banks

With the emergence of increasingly extensive bank networks and financial conglomerates, a discernible trend is observed wherein large banks exhibit greater indifference towards local interests compared to their smaller rural counterparts. The latter, owing to the inherent origin of their financial resources, demonstrate a heightened sensitivity to local interests. Simultaneously, there is a diminishing role of individuality in the economy, as leadership allocates minimal space for individual perspectives, and the interaction between bank executives and clients becomes progressively infrequent. The detachment from local conditions and direct personal engagement has altered the investment dynamics in the financial market. As a consequence of concentration, preference is given to more streamlined business sectors, deeming certain ventures too substantial for local (smaller) banks and others too trivial for the leaders of today's colossal banks.[579]

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[576] https://www.forbes.com/2007/12/20/microfinance-philanthropy-credit-biz-cz_ms_1220microfinance_table.html?sh=5d6ed55db292

[577] 60 Decibels. (2023). Financial Inclusion - 2023 Microfinance Index (https://60decibels.com/insights/mfi-index/)

[578] Skyquest (2023). Global Microfinance Market Size, Share, Growth Analysis, By Provider(Banks, Micro Finance Institute (MFI)), By End-User(Small Enterprises, Micro Enterprises) - Industry Forecast 2023-2030. (https://www.skyquestt.com/report/microfinance-market)

[579] Eckhart F. (1941). A magyar közgazdaság száz éve 1841-1941. Posner Grafikai Műintézet, 172.

In response to this imbalance, ethical (values-based, alternative, sustainable, or **community banks** (ethical, social, alternative, sustainable, civic bank) have emerged. These institutions prioritize the societal and environmental impacts of investments and loans as integral aspects of their core activities.[580] They equate economic benefit creation with corporate social responsibility, placing emphasis on financing projects that serve the community's welfare and align with movements such as fair trade, ethical consumption, and social entrepreneurship. Through community deposits, depositors have the autonomy to influence how the bank allocates funds for lending purposes, enabling them to impact the interest rates of selected borrowers or operational domains favorably without incurring additional costs. Community banks, or neobanks, prioritize transparency and regularly inform their clients about utilizing deposited funds.

In order to facilitate the **municipalities**' greater access to financial resources for local investments, reduce the lending gap, and support debt management, local government funding agencies have been established by the state and/or the local authorities in several countries in the 20th and in the 21st century, after 2010.[581] Generally, several terminologies apply to these institutions, and there is no uniform word usage; they can be local government funding (or financing) agencies (LGFAs), local government financing (or funding) vehicles (LGFVs), or municipal funding vehicles (MFVs). Since they provide financial services regulated by the state with an (exclusive) focus on municipalities, the specialised financial institutions (SFIs) for them are also accepted. The similarities tend to be that they operate (exclusively) for local authorities and have a monopolistic position in the market. In addition to traditional banking activities (lending, loans, leasing, factoring), they may engage in bond issuance and securitisation transactions or (fiduciary) asset management (e.g., trusts) and provide advisory services. The favourable financing terms and conditions (e.g., lower interest rates) are valuable to

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[580] Nikolaishvili, G. (2023). The Evolution of Community Bank Interconnectedness. *Available at SSRN 4393477*.

[581] Nota bene Denmark established the KommuneKredit in 1898, and Italy the Cassa Depositi e Prestiti SpA (CDP, Deposit and Consignment Office) in 1850 in Turin to finance different public works

municipalities and residents.[582] In Europe we can mention the in the following countries: Denmark (KommuneKredit, 1898),[583] Norway (Kommunalbanken, 1926), Sweden (Kommuninvest i Sverige AB, 1986), Finland (Municipality Finance Plc, 1990), the Netherlands (Bank Nederlandse Gemeenten, 1914, and the Nederlandse Waterschapsbank, 1954), Belgium (Belfius, Gemeentekrediet van België, 2012 and 1860), Italy (Cassa Depositi e Prestiti, 1850, 2014, and Cassa del Trentino, 2005), France (Agence France Locale, 2013), Spain (Fondo de Liquidez Autonómica, 2012), Portugal (Fundo de Apoio Municipal, 2014), UK (UK Municipal Bonds Agency, 2014), Ireland (Urban Regeneration and Development Fund and Rural Regeneration and Development Fund, 2018). The Emissionszentrale der Schweizer Gemeinden (ESG) operated for four decades in Switzerland between 1971 and 2012. While around the world, similar initiations can be found in Canada (Municipal Authority of British Columbia, 1970), New Zealand (New Zealand Local Government Funding Agency, 2009), or in the United States of America (various municipal bond banks such as Vermont Municipal Bond Bank, 1970; Maine Municipal Bond Bank; Sunshine State Governmental Financing Commission, 1985; and others). After the global financial crisis in 2008, China has seen a trend in using local government financial vehicles (difang rongzi pingtai, LGFVs), which include state-owned enterprises and government institutions, and they issue Chengtou bonds.[584]

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[582] Vértesy, L. (2019). Local Debt Burden at LAU2 level in the EU countries. In: Josef, Nešleha; Lukáš, Marek; Miroslav, Svoboda; Zuzana, Rakovská (szerk.) European Financial System, Masaryk University (2019) pp. 616-624.; Vértesy, L. (2019). Municipal funding vehicles in Europe. In: Kolupaieva, Irina (szerk.) Modern Strategies for Economic Development: Science, Innovation and Business Education. Харківський національний університет радіоелектроніки (2021) 74.; Vértesy L. (2022) The Role of Specialised Financial Institutions in Local Government Debt Financing. In: Andreeva, Lyubimka (szerk.) The 29th NISPAcee Annual Conference e-proceedings: Citizens' Engagement and Empowerment.; Vértesy, L. (2018). The State Intervention on Municipal Debts in the EU countries. *De Iurisprudentia et Iure Publico:* 2018/1-2 p. 78.

[583] Pedersen, N. J. M. (2002). Local Government and Debt Financing in Denmark. *Local Public Finance in Europe: Balancing the Budget and Controlling Debt*, 93.

[584] Feng, Y., and F. Zhang (2022): The development of local government financial vehicles in China: A case study of Jiaxing Chengtou. In: *Land Use Policy* 112 (2022): 104793; and Jin, H., and Rnial, I. (2016). *Regulating local government financing vehicles and public-private partnerships in China*. International Monetary Fund.

18.4. International, global initiatives

In the realm of global finance and economics, several key international organizations play pivotal roles in shaping policies, facilitating cooperation, and ensuring stability within the financial system. Among these entities are the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the Financial Stability Forum (FSF), which has evolved into the Financial Stability Board (FSB), and various International Financial Institutions (IFIs). Each of these organizations serves distinct functions aimed at fostering monetary stability, promoting economic development, and safeguarding the integrity of international finances.

The Convention for the Protection of Human Rights and Fundamental Freedoms, better known as the European Convention on Human Rights (1950), and its Protocol No. 4 to the Convention (1963), states the **prohibition of imprisonment for debt** (Article 1).[585] No one shall be deprived of his liberty merely on the ground of inability to fulfil a contractual obligation. The "merely" clause is important: the article does not forbid imprisonment where there is an extra element like fraud or negligence. It prevents imprisonment solely on the grounds of failing to pay a contractual debt or fulfilling some other contractual obligation.[586]

BIS

In the late 19th century, experimental attempts at **international monetary cooperation** began to unfold. In 1892, Julius Wolff proposed an international currency plan designed for emergency lending by national central banks to be issued by a common institution operating in a neutral country. Following this, in 1893, Raphaël-Georges Lévy suggested the establishment of an international central bank in Bern. Luigi Luzzatti, in 1907, referred to earlier instances of bilateral cooperation among central banks and emphasized the necessity for more institutionalized international collaboration. During World War I, in 1916, the Bank of England and the Banque de France reached an agreement on bilateral lending, establishing a direct telegraph line. Shortly after the war, Gerard Vissering advocated introducing an international currency that did not rely on a common gold reserve.[587]

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[585] Ware, S. J. (2014). A 20th century debate about imprisonment for debt. *Am. J. Legal Hist.*, *54*, 351.

[586] https://www.coe.int/en/web/echr-toolkit/protocole-4

[587] Simmons, B. A. (1993). Why innovate? Founding the bank for international settlements. *World Politics*, *45*(3), 361-405.

The Genoa Conference in 1922, with the support of experts like Ralph Hawtrey, Robert Horne, and John Maynard Keynes, adopted a resolution proposing the creation of an alliance or permanent agreement for cooperation among central banks, not necessarily limited to Europe, aiming at coordinating credit policies without compromising the freedom of individual central banks. In 1929, Montagu Norman conceptualized the Bank for International Settlements (BIS), a plan further developed by Owen Young, with the collaboration of Shepard Morgan, Warren Randolph Burgess, Walter W. Stewart, Émile Francqui, and Hjalmar Schacht, the German central banker.[588]

The **Bank for International Settlements** (BIS) stands as the world's oldest and currently operational international financial organization. Originally established in 1930 in Basel, Switzerland, as a joint-stock company.[589] Its primary purpose was to facilitate the financial transactions related to the German reparation settlement under the Young Plan. It serves as the principal organizer of monetary cooperation among international banks and is often referred to as the "*central bank for central banks*". Since 1971, the organization's focus has shifted to analyzing European financial markets and overseeing banks and insurance companies.[590] The BIS hosts permanent committees that support the work of central banks and authorities responsible for financial stability through background analyses and recommendations:[591]

- Basel Committee on Banking Supervision (BCBS): develops global regulatory standards for banks and seeks to strengthen micro- and macroprudential supervision.
- Committee on the Global Financial System (CGFS): monitors and analyses financial market and system issues.
- Committee on Payments and Market Infrastructures (CPMI): establishes and promotes global regulatory/oversight standards for payment, clearing, settlement and other market infrastructures and monitors and analyses developments in these areas. (till 2014, Committee on Payment and Settlement Systems)
- Markets Committee: monitors developments in financial markets and their implications for central bank operations.

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[588] Hudson, M. O. (1930). The bank for international settlements. *American Journal of International Law*, *24*(3), 561-566.
[589] Toniolo, G., & Clement, P. (2005). *Central bank cooperation at the Bank for International Settlements, 1930-1973*. Cambridge University Press.
[590] Borio, C., Claessens, S., Clement, P., McCauley, R. N., & Shin, H. S. (Eds.). (2020). *Promoting Global Monetary and Financial Stability: The Bank for International Settlements after Bretton Woods, 1973–2020*. Cambridge University Press.
[591] https://www.bis.org/stability.htm?m=70

- Central Bank Governance Forum: examines issues related to the design and operation of central banks.
- Irving Fisher Committee on Central Bank Statistics: addresses statistical issues relating to economic, monetary and financial stability.

In collaboration with the Basel Committee on Banking Supervision, the BIS established the **Financial Stability Institute** (FSI) in 1998, with the primary mandate to assist supervisors around the world in improving and strengthening their financial systems. FSI was set up in response to the East Asian financial crisis of 1997, as the result of a perceived weakness in coordination between national regulators in matters of training and general understanding of financial systems.

The **Basel processes** (Basel I-IV, CRDs, CRR, and other similar abbreviations) are linked to the recommendations, accords of the **Basel Committee on Banking Supervision** (BCBS), established by the leaders of the central banks of the G10 countries[592] in 1974. In the committee's first meeting in 1975, Sir George Blunden, the first chairman of the BCBS, emphasized that the organization's primary goal is to assist in ensuring the solvency and liquidity of banks.[593] To achieve this, efforts are made to encourage convergence towards common approaches and standards, eliminate deficiencies in banking supervision, and ensure adequate supervision at the international level to prevent foreign banking establishments from evading oversight. In summary, the overall aim is to strengthen financial stability.[594]

Bretton Woods: IMF and WB

There were three **Bretton Woods institutions**, the IMF, the International Bank for Reconstruction and Development (1944, now member of the World Bank), and the General Agreement on Tariffs and Trade (GATT, 1947, now the Word Trade Organization).

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[592] The Group of Ten (G-10 or G10) refers to the group of countries that agreed to participate in the General Arrangements to Borrow (GAB), an agreement to provide the International Monetary Fund (IMF) with additional funds to increase its lending ability. The GAB was established in 1962, when the central banks of eight IMF member states (USA, Belgium, United Kingdom, France, Netherlands, Japan, Canada, Italy) and two additional countries (Germany, Sweden) agreed on the availability of IMF resources in for participants and under certain conditions also for non-participants.

[593] http://www.bis.org/speeches/sp121115.pd

[594] Akwaa-Sekyi, E. K. (2020). Internal Controls and Credit Risk in European Banking: The Basel Committee on Banking Supervision Framework Approach. In *Credit Risk*. IntechOpen.

The **International Monetary Fund** (IMF) is an international financial institution formally came into existence in 1945, after the establishment at the United Nations Monetary and Financial Conference, commonly known as the Bretton Woods Conference (1944).[595] The IMF's primary purpose is to promote international monetary cooperation, exchange rate stability, balanced growth of international trade, and the resources of member countries to address financial crises. At the end of World War II, the US economy proved to be the strongest, the members agreed, that their national currencies will set in the strict exchange rate to the US dollar, and only the dollar remained backed by gold. The Bretton Woods exchange rate system prevailed until 1971, when the United States government suspended the convertibility of the U.S. dollar (and dollar reserves held by other governments) into gold. The IMF also played (and plays) a significant role in financing the balance of payments (BoP) of its member countries. When a country faces difficulties in maintaining equilibrium in its BoP (meaning the import > export), it can lead to the depletion or a run-out of the central bank's foreign exchange reserves. To replenish the reserves, the central banks need additional resources, i.e., from the government, which technically means a transaction from the budget. The government can pay this from the tax revenues (or imposing new taxes) or borrow money. In the latter case, the IMF provides financial assistance to help address these challenges in a special unit of account, "currency", the SDR (Special Drawing Rights). (After World War II, all the countries and the people, except the US, were exhausted, so the tax-way were impossible.)

The **Washington Consensus**, popularized in the 1980s, advocated neoliberal economic policies emphasizing free markets and reduced state intervention for developing countries, particularly in Latin America.[596] Implemented through IMF and World Bank loans, its measures aimed to achieve economic stability and integration into the global economy through trade reforms and market liberalization. By the late 1990s, criticism grew due to suboptimal outcomes, leading to a shift towards poverty reduction and increased participation from developing-country governments and civil society, termed the post-Washington Consensus.

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[595] Kahn, R. F. (2022). Historical Origins of the International Monetary Fund. In *Richard F. Kahn: Collected Economic Essays* (pp. 191-222). Cham: Springer International Publishing. Schenk, C. R. (2021). *International economic relations since 1945*. Routledge.

[596] Stewart, F. (1987). Back to Keynesianism: reforming the IMF. *World policy journal*, *4*(3), 465-483.

Washington Consensus

Policy area	Prescription
Fiscal policy	Fiscal discipline: avoid large government budget deficits (no more than 1–2% of GNP)
Public spending	Reduce expenditures on indiscriminate subsidies; target spending on health, education and (to some extent) infrastructure
Taxation	Tax base should be broad and marginal tax rates should be moderate
Interest rates	Should be determined by the market (rather than public authorities), and positive
Exchange rates	Should be determined by the market (rather than public authorities), and competitive (to foster export-oriented economies)
Trade policy	Remove restrictions on foreign imports
Foreign direct investment	Remove restrictions on foreign direct investment
Privatization	Sell state-owned enterprises to private firms
Deregulation	Remove excessive regulations on economic activity
Property rights	Property rights should be secure

Source: Babb, S., & Kentikelenis, A. (2021). Markets everywhere: The Washington consensus and the sociology of global institutional change. *Annual Review of Sociology*, *47*, 521-541.

The IMF played a crucial role during the debt crisis in the 1980s and adapted to the post-Cold War era, assisting countries in transition and responding to crises. Key moments include the Asian financial crisis, reforms in the 2000s, and its central role during the 2008 global financial crisis. The IMF played a key role in providing financial assistance and implementing structural adjustment programs aimed at economic reforms in these countries. Ongoing efforts involve addressing sovereign debt issues and responding to the impact of the COVID-19 pandemic, highlighting the IMF's continuous role in fostering global economic stability and cooperation.[597] Nowadays, the IMF provides a forum for member countries to discuss and coordinate their economic policies and offers financial assistance to countries facing balance of payments problems or experiencing difficulties in meeting their international obligations. The IMF has played a significant role in the global economy, particularly in times of financial instability, by helping

[597] McKibbin, W., & Vines, D. (2020). Global macroeconomic cooperation in response to the COVID-19 pandemic: a roadmap for the G20 and the IMF. *Oxford Review of Economic Policy*, *36*(Supplement_1), S297-S337.
Kentikelenis, A., Gabor, D., Ortiz, I., Stubbs, T., McKee, M., & Stuckler, D. (2020). Softening the blow of the pandemic: will the International Monetary Fund and World Bank make things worse?. *The Lancet Global Health*, *8*(6), e758-e759.

countries implement policies to restore stability and sustainable economic growth.

Common **criticisms** in terms of (i) **democratic governance**, the IMF has been faulted for structural under-representation of countries from the Global South, leading to concerns about fairness and equity in decision-making. Additionally, the institution has been accused of undermining democratic ownership by imposing policies without sufficient input or consent from affected nations. Furthermore, criticisms extend to decision-making, which has been described as biased and inconsistent, raising questions about the objectivity and impartiality of its policies. Moreover, the IMF's perceived inability to adequately learn from past mistakes has been a subject of contention, with critics pointing to a pattern of repeating flawed approaches without meaningful adaptation. Another area of concern is the lack of accountability within the IMF, with accusations of effective impunity for harms caused by its policies. This raises fundamental questions about responsibility and justice in the context of international financial governance. Regarding (ii) **human rights**, critiques include the IMF's role in restricting the macroeconomic environment for human rights to flourish, as well as the negative impacts of its development projects on human rights. Critics argue that while the IMF often touts positive impacts, there is insufficient evidence to support these claims, and harmful impacts are not adequately measured or addressed. The (iii) **environmental issues** also feature prominently in criticisms of the IMF. The institution's growth-oriented model has been deemed unsustainable, particularly in light of continued investments in fossil fuels and a focus on large-scale infrastructure projects that can have adverse ecological consequences. Concerns have been raised about the impact of IMF policies on forests and other vital ecosystems. Although **Keynes** participated in the creation of it, he did not agree with some solution; he criticized the IMF's imposition of harsh economic adjustment programs on borrowing countries, arguing they could exacerbate recessionary conditions and burden already struggling populations. He believed that the austerity measures during crises was counterproductive, advocating for policies like government spending to stimulate demand and promote recovery. He expressed concerns about the IMF's lack of democratic accountability and transparency in its decision-making processes. Joseph **Stiglitz** (2002, p. 38) put this argument starkly, writing that the IMF has taken on the preKeynesian position of fiscal austerity in the face of a downturn, doling out funds only if the borrowing country conforms to the

IMF's views about appropriate economic policy, which almost always entail contractionary policies leading to recessions or worse.[598]

World Bank Group

IBRD	International Bank for Reconstruction and Development, 1944	• its primary goal is Europe reconstruction • currently in development and long-term investment financing of projects
IFC	International Finance Corporation, 1956	• support for private enterprises in developing countries
IDA	International Development Association, 1960	• long provides long-term (mostly 50-year term), mostly interest-free* loans to poorer developing countries • interest to cover handling costs
ICSID	International Center for Settlement of Investments Disputes, 1966	• investment dispute is intended to ensure the settlement of cases
MIGA	Multilateral Investment Guarantee Agency, 1985	• advisory body to reduce investment risks (nationalisation, risk of profit repatriation; probability of war) • insurance (warranty letter)

Source: own compilation of the author

Among the Bretton Woods institutions, it is noteworthy to mention the **International Bank for Reconstruction and Development** (IBRD), established in 1944 with the following objectives: i) supporting reconstruction and productive investments; ii) promoting foreign private capital inflows; iii) encouraging international investment; iv) facilitating international co-financing; and v) facilitating the transition from wartime to normal economy.[599] Later, the **World Bank Group** emerged from this, comprising four additional institutions: the International Finance Corporation (IFC, 1956), the International Development Association (IDA, 1960), the International Centre for Settlement of Investment Disputes (ICSID, 1966), and the Multilateral Investment Guarantee Agency (MIGA, 1985).[600] It is worth to compare the IMF with the IBRD-WB.

[598] Stiglitz, J. (2002). *Globalization and its Discontents*. New York: W. W. Norton. 38.
[599] Kharas, H., & Bhattacharya, A. (2023). The trillion-dollar bank: Making IBRD fit for purpose in the 21st century.
[600] Morris, S., & Gleave, M. (2016). The World Bank at 75. *Journal of International Commerce, Economics and Policy*, *7*(01), 1650001.

IMF vs. WB

	IMF	WB
The purpose of the organization	maintaining the stability of the international financial system	the development of the economy of the member states
The possible debtor	state (national bank)	businesses (via local banks)
Settlement	SDR (Special Drawing Rights)	dollar
Sources	entirely members' contributions (SDR 145 billion ≈ $215 billion)	comes from financial markets, the capital is about $184 billion, 10% of which comes from members
Credit goal	free (originally monetary reserves)	specified (tender)
Usage	stand- by (macroeconomic conditions)	stand- by (microeconomic conditions)
Callable loan	based on quota	based on capital
Loan maturity	usually short and medium (1-3 years)	usually long (more than 5 years)
Members	190	189
Employees	2.400	> 10.000

Source: own compilation of the author

SWIFT, IBAN

The **Society for Worldwide Interbank Financial Telecommunication** (SWIFT) was established in Brussels in 1973 and received support from 239 banks across 15 countries.[601] Prior to its inception, international financial transactions relied on Telex, a public system that involved manual writing and reading of messages. It was created due to concerns about the potential consequences of a single private American entity, specifically the First National City Bank (FNCB) of New York, later known as Citibank, controlling global financial flows. In response to FNCB's dominance, its US and European competitors advocated for an alternative messaging system to replace

[601] Robinson, G., Dörry, S., & Derudder, B. (2023). Global networks of money and information at the crossroads: Correspondent banking and SWIFT. *Global Networks*, *23*(2), 478-493.
de Oliveira Dias, M., Pereira, L. J. D., & dos Santos Vieira, P. (2022). Are the Russian Banks Threatened with Removal from SWIFT? A Multiple Case Study on Interbank Financial Messaging Systems. *International Journal of Scientific Research and Management (IJSRM)*, *10*(03), 3137-3144.

the existing public providers and expedite the payment process. SWIFT began establishing standardized protocols for financial transactions and implemented a shared data processing system and global communications network, developed by Logica and the Burroughs Corporation. In 1975, fundamental operating procedures and liability rules were established, and the first message was transmitted in 1977. The SWIFT code, also called SWIFT number, is used to identify banks and financial institutions worldwide. The term Business Identifier Code (BIC) is used interchangeably with SWIFT code and means the same thing.

The **International Bank Account Number** (IBAN) is a universally recognized system designed to identify bank accounts across borders, streamlining communication and processing for cross-border transactions while minimizing the risk of errors during transcription. Originally developed by the European Committee for Banking Standards (ECBS), it has been standardized internationally since 1997 under ISO 13616 by the International Organization for Standardization (ISO), with the latest version being ISO 13616:2020, administered by the Society for Worldwide Interbank Financial Telecommunication (SWIFT).[602] Initially intended to facilitate transactions within the European Union, the IBAN has been adopted by most European nations and numerous countries worldwide, particularly in the Middle East and the Caribbean. Comprising up to 34 alphanumeric characters, an IBAN includes a country code, two check digits, and various account details such as the domestic bank account number, branch identifier, and potential routing information. Including check digits allows for verification of the bank account number's integrity before transaction submission.

FSF, FSB

The Financial Stability Forum (FSF) was established in 1999 as a group comprising significant national financial authorities such as finance ministries, central banks, and international financial organizations. As a response to the crisis and in accordance with the decision adopted by the G20 leaders in 2009 at the Pittsburgh summit, the **Financial Stability Board** (FSB) succeeded the FSF.[603] The FSB was entrusted with addressing the "too big to fail" phenomenon and played a role in the development of Basel bank-

[602] Team, V. (2023). Swift Code vs IBAN: Which is Better for International Transfers?.
[603] Knaack, P. (2022). *Global Financial Networked Governance: The Power of the Financial Stability Board and its Limits*. Taylor & Francis.

ing regulations, specifically contributing to the formulation of CRD IV, criteria for systemic risks, macroprudential risks, credit rating agency assessments, and regulations pertaining to investment fund management.

IFIs

After World War II, the most prominent **international financial institutions** (IFIs) were established to assist in the reconstruction of Europe and provide mechanisms for international cooperation in managing the global financial system. These institutions share common characteristics, such as (i) being created by more than one country, (ii) having international legal status, and iii) being owned or shareholders generally by national governments or other international institutions and organizations.[604] Various categories of international financial institutions can be identified, including (i) Bretton Woods institutions; (ii) bilateral development banks and agencies; (iii) multilateral development banks; (iv) regional development banks, and (v) other regional financial institutions.[605]

International and European IFIs

BIS	Bank for International Settlements, 1930	• the world's oldest and currently operating international financial organization • monetary cooperation between international banks • the central bank of central banks • operator of the Basel Banking Supervisory Committee
IBRD WB	World Bank Group	• International Bank for Reconstruction and Development, 1944 • International Finance Corporation, 1956 • International Development Association, 1960 • International Center for Settlement of Investments Disputes, 1966 • Multilateral Investment Guarantee Agency, 1985
EIB	European Investment Bank, 1958	• Europe's employment and growth potential • efforts to curb climate change

[604] Sanders, G. J. (2022). The Historical Roots of International Financial Institutions and their Impact on the Purposes and Governance of these Organizations. *Manchester Journal of International Economic Law*, *19*(1), 2-36.

[605] Castellarin, E. (2019). World Bank Group (IBRD), International Monetary Fund (IMF) and European Bank for Reconstruction and Development (EBRD). The EU's participation in the global financial world. *Research Handbook on the European Union and International Organizations*, 293-315.

EIF	European Investment Fund, 1994	• policy aspirations outside the borders of the EU • its owners are EU member states • the EIB is the majority owner of the EIF
EBRD	European Bank for Reconstruction and Development, 1991	• development and reconstruction projects on a European scale • not an EU institution! • helped the former socialist countries in the transition to a market economy • supports private business initiatives
ECB ESCB	European Central Bank, 1998 European System of Central Banks	• defining and implementing the monetary policy of the Community • the euro - maintaining price stability • supports the general economic policy within the Community

Source: own compilation of the author

Multilateral development banks (MDBs) are institutions created by groups of countries that (i) provide financing and professional advice for development purposes; (ii) have large memberships, including developed donor countries and borrowing countries; (iii) commonly use market-based interest long-term loans, below-market interest rates, and subsidies as their primary financing forms.[606] They serve as a distinctive bridge between national development banks, other international financial institutions, and commercial banks.

Characteristics of multilateral development banks from other similar organizations

	National development banks	Other international financial institutions	Commercial banks
Similarities	• priorities/goals to be financed (public projects) • operating principle (banking nature) • non-profit	• international status • often shared frameworks and goals with multilateral development banks • often working closely with multilateral development banks • non-profit	• common field of activity, extensive cooperation • fundraising, banking operations

[606] Bazbauers, A. R., & Engel, S. (2021). *The global architecture of multilateral development banks: a system of debt or development?*. Routledge.
Mendez, A., & Houghton, D. P. (2020). Sustainable banking: the role of multilateral development banks as norm entrepreneurs. *Sustainability*, *12*(3), 972.

Differences	• lack of international status • subject to national law • liability rules are governed by national law • lack of multilateral structures	• the cost of member states is higher (non-banking operation) • some or all of the funds are non-refundable	• lack of international status (international exemptions, tax exemption, wider liability) • multilateral structures • residential department • profit-oriented operation
Examples	• Kreditanstalt drill Wiederaufbau, Hungarian Development Bank	• International development funds (European Development Fund, International Development Association), international guarantee funds (MIGA)	• Collaborations (e.g. collaboration between the EIB and HWB bank for enterprise development projects)

Source: own compilation of the author

The most significant **international development banks**:

IIB	International Investment Bank	1970
BSTDB	Black Sea Trade and Development Bank	1997
CEB	Council of Europe Development Bank	1956/99
NIB	Nordic Investment Bank	1976
IDB, IADB	Inter -American Development Bank	1959
IIC	Inter -American Investment Corporation	1985
CBD	Caribbean Development Bank	1969
CABEI	Central American Bank for Economic Integration	1960
CAF	Development Bank of Latin America	1970
PIDB	Pacific Islands Development Bank	1989
ADB	Asian Development Bank	1966
AIIB	Asian Infrastructure Investment Bank	2014
IsDB	Islamic Development Bank Group	1973
AFDB	Africa Development Bank	1964
BOAD	West African Development Bank	1973
BDEAC	Development Bank of Central Africa States	1975

Source: own compilation of the author

18.5. European Union

From the perspective of the banking system, a significant economic event of the 20th century was the establishment of the European Economic Community and later the **European Union** in 1957. According to Article 26 of the Treaty on the Functioning of the European Union, the internal market is defined as a borderless area where, in accordance with the provisions of the Treaties, the free movement of goods, persons, services, and capital is ensured. Article 56 prohibits any restriction on the **freedom to provide services** within the Union for citizens of member states who are not residents in the member state where the service recipient is located. Article 63 prohibits any restriction on **capital movements** between member states and between member states and third countries. However, member states retain the right to take necessary measures to prevent violations of national laws and regulations, particularly in the areas of taxation and prudential supervision of financial institutions, or to establish procedures for the administrative or statistical reporting of capital movements, as well as to take measures justified by public order or public safety. The free flow of capital and services has particular significance for the banking sector.[607]

The **European Investment Bank** (EIB), established in 1958 by the Treaty of Rome, serves as a pivotal institution in Europe and beyond by providing long-term loans and guarantees aimed at fostering EU economic integration, cohesion, and development.[608] Its focus areas encompass infrastructure, climate action, innovation, and support for small and medium-sized businesses (SMEs). The **European Investment Fund** (EIF), formed in 1994 through collaboration among the European Union, EIB, and private banks, plays a significant role in financing SMEs and innovative enterprises throughout Europe.[609] Its mission involves offering equity and debt financing, particularly in areas such as venture capital, growth capital, microfinance, and social impact investing. Meanwhile, the **European Bank for Reconstruction and Development** (EBRD), established in 1991 by 61

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[607] Vértesy, L. (2022). A pénzügyi piac szabályozásának okai és módszerei: IV.24. In: Kálmán, J. (ed.) *A pénzügyi jog alapintézményei.* ORAC. pp. 474-485.

[608] Erforth, B. (2020). *The future of European development banking: What role and place for the European Investment Bank?* (No. 11/2020). Discussion Paper.
Rakić, D. (2021). *The European Investment Bank - legal basis objectives*, European Asylum Support Office. Malta. (https://policycommons.net/artifacts/2057582/the-european-investment-bank/2810673/). CID: 20.500.12592/zm6ddj.

[609] Naert, F. (2017). EU governance and the European fund for strategic investment. In *European administrative space: spreading standards, building capacities* (pp. 77-95). NISPAcee Press.

countries and two international organizations, is dedicated to advancing private sector development and market economies in regions spanning Central and Eastern Europe, Central Asia, the Caucasus, and North Africa. Its focus sectors include infrastructure, energy, climate change mitigation, agribusiness, and support for SMEs, among other areas.[610]

Currently, only private **credit bureaus** have been able to establish a cross-border association, under the name of European Association of Consumer Credit Information Suppliers (ACCIS, est. 1990, Dublin). It is an international non-profit association under Belgian law bringing together 37 consumer credit reference agencies in 27 European countries and 4 associate members from all other continents.[611] The European Union has set it as a goal to ensure on revising its Consumer Credit Directive 87/102/EEC that lenders in a member state have access to a credit information system operated in another country under the same conditions as in their own country.[612] But, as seen with support for similar approximations, and also considering the conduct of member states concerning approximation of laws, this will take a long time yet. In spite of this, a uniform registration system for the European Union will be developed in the medium term, and business life will no doubt force it through, given the increasing movements of private individuals and enterprises among member states. Even today, independent institutions providing references operate with success, which offer reliable business information on potential borrowers on request by foreign financial institutions, and are not liable to corruption in the interest of their creditworthiness. Now, according to the principle of database access, Aricel 9 of Directive 2008/48/EC regulates that each Member State shall in the case of cross-border credit ensure access for creditors from other Member States to databases used in that Member State for assessing the creditworthiness of consumers. The conditions for access shall be non-discriminatory. If the credit application is rejected on the basis of consultation of a database, the creditor shall inform the consumer immediately and without charge of the result of such

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[610] Shields, S. (2020). The EBRD, fail forward neoliberalism and the construction of the European periphery. *The Economic and Labour Relations Review*, *31*(2), 230-248.
Obydenkova, A., Rodrigues Vieira, V. G., & Tosun, J. (2022). The impact of new actors in global environmental politics: the European Bank for Reconstruction and Development meets China. *Post-Communist Economies*, *34*(5), 603-623.

[611] Rothemund, M. and Gerhardt, M. (2011). The European Credit Information Landscape. An analysis of a survey of credit bureaus in Europe. ECRI Industry Survey

[612] Council Directive 87/102/EEC for the approximation of the laws, regulations and administrative provisions of the Member States concerning consumer credit

consultation and of the particulars of the database consulted.[613] A key obstacle to this are the considerable differences in conditions in the member states: mandatory/voluntary, positive/negative list, state founded/organised on a market basis, and appearance of threshold values.[614]

Storage of Positive and Negative Data

	On individuals		On SMEs			On businesses of any structure		
	Positive & negative	Negative only	Positive & negative	Negative only	No data collected	Positive & negative	Negative only	No data collected
AT	x		x					x
BE	x				x			x
CZ	x		x			x		
DE	x		x				x	
DK		x		x			x	
FI		x		x			x	
GR	x		x				x	
HR	x				x			x
HU	x		x			x		
IS		x	x			x		
IT	x		x			x		
NL	x				x			x
NO		x	x			x		
PL	x		x				x	
RO	x				x			x
RS	x		x				x	
RU	x		x				x	
SE	x		x				x	
SL	x				x			x
SK	x				x			x
SP		x		x			x	
TU	x		x			x		
UK	x		x			x		
TOTAL	18	5	14	3	6	11	5	7

Source: Association of Consumer Credit Information Suppliers, ACCIS survey 2010

[613] Directive 2008/48/EC of the European Parliament and of the Council of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC

[614] Vértesy, L. (2008). Man’s registered debts. *Pénzügyi Szemle/Public Finance Quarterly* 2008(2) 283-295.

List of Credit Bureaus

Country	Credit Bureau	Abbreviation
Austria	Kreditschutzverband von 1870	KSV 1870
Belgium	Banque Nationale de Belgique	NBB
Croatia	Hrvatski registar obveza po kreditima d.o.o.	HROK
Czech Republic	Czech Credit Bureau, a.s.	CCB
Denmark	Debitor Registret A/S Experian A/S	Debitor Experian (DK)
Finland	Suomen Asiakastieto Oy	Suomen
Germany	CEG Creditreform Consumer GmbH SCHUFA Holding AG	CEG Schufa
Great Britain	Callcredit Ltd. Equifax Ltd. Experian Ltd.	Callcredit Equifax Experian (UK)
Greece	Tiresias Bank Information Systems SA	Tiresias
Hungary	BISZ Central Credit Information Plc.	BISZ
Iceland	Creditinfo Group	Creditinfo
Italy	CRIF S.p.A. Consorzio per la Tutela del Credito Experian Information Services S.p.A.	CRIF CTC Experian (IT)
Netherlands	Stichting Bureau Krediet Registratie	BKR
Norway	Experian Norway	Experian (NO)
Poland	Biuro Informacji Kredytowej S.A. Krajowy Rejestr Dlugów Biuro Informacji Gospodarczej SA	BIK KRD
Romania	Biroul de Credit S.A.	BDC
Russia	National Bureau of Credit Histories	NBCH
Serbia	Kreditni Biro (Association of Serbian Banks)	ASB
Slovakia	Slovak Credit Bureau s.r.o	SCB
Slovenia	The Bank Association of Slovenia	Sisbon
Spain	Experian Bureau de crédito S.A.	Experian (SP)
Sweden	UC AB	UC

Source: Rothemund, M. and Gerhardt, M. (2011). The European Credit Information Landscape. An analysis of a survey of credit bureaus in Europe. ECRI Industry Survey

Banking regulation, adoption of the Basel Accords

Among the **banking regulations**, the first Banking Directive, Council Directive 77/780/EEC, dealt with the harmonization of legal, regulatory, and administrative provisions regarding the commencement and pursuit of credit institutions' business. Then, in 1989, three additional directives were adopted: Council Directive 89/647/EEC on the solvency ratio of credit institutions, Council Directive 89/647/EEC on the liquidity ratio of credit institutions (liquidity directive), and Council Directive 89/299/EEC on the own

funds of credit institutions. European Union law and the Basel Committee on Banking Supervision (BCBS) requirements and recommendations are obligatory for all member states' financial institutions, including Basel I-IV, CRD I-IV, CRR, etc. requirements. Furthermore, the turn of the millennium brought about other changes. A new type of central bank emerged, a unique entity, the **European Central Bank** (ECB) in 1998, primarily responsible for the monetary policy of the eurozone but also playing a role in the supervisory system of the EU banking sector in 1999, the euro (€) was introduced, and became an actual means of payment in 2002.

EU legislation heavily incorporates **Basel Accords** (Basel I-IV) from the Basel Committee on Banking Supervision (BCBS). Established in 1974, the BCBS aims to ensure banks' solvency, promote common standards, and prevent foreign banks from evading national supervision.[615] **Basel I** (1988) was soon incorporated into the legal system of all G10 countries in 1992, and later, more than 100 other states, which set minimum capital requirements adopted globally and introduced the capital adequacy ratio (8 % of the risk-weighted assets) and the capital structure with different tiers and components. **Basel II** (2004) focused on financial stability with three pillars: Minimum capital requirements, Supervisory control process, and Market disclosure. Soon, **Basel III** responded to the 2008 financial crisis; it extended Basel II with macroprudential elements to be fully implemented by 2019/2020 (some elements by 2022).[616] The EU implemented Basel III through the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD IV); the regulation primarily establishes the prudential requirements to be observed by financial institutions, while the directive regulates access to deposit collection activities.[617] The **CRR** ensures banks control risks and maintain adequate capital, adhering to global standards (Basel III). Key features include higher capital requirements, liquidity measures, and limits on the leverage effect. In this way, it is possible to make banks more stable and

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[615] http://www.bis.org/speeches/sp121115.pdf (15.11.2023).

[616] Alvi, F. H., & Williamson, P. J. (2023). Responses to global financial standards in emerging markets: Regulatory neoliberalism and the Basel II Capital Accord. International Journal of Finance & Economics, 28(3), 2635-2650. and
Metrick, A. (2019). Basel III B: Basel III Overview. *Journal of Financial Crises*, *1*(4), 59-69.

[617] Regulation (EU) No575/2013 on prudential requirements for credit institutions and investment firms and amending Regulation
Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC

increase their resilience during economic difficulties. Its unique points include: higher and better capital requirements, liquidity measures (liquidity buffers, liquidity coverage ratio, minimum net stable funding requirements), and limiting the leverage effect (capital leverage ratio).[618]

The **CRD IV** replaced and amended earlier directives (2002/87/EC, 2006/48/EC and 2006/49/EC), regulates deposit collection activities conditions for banking activities, and introduced new factors like performance rewards and enhanced transparency. In addition to these, the directives cover several new factors: performance rewards for staff (bonuses), better and more adequate management, increased transparency, and requiring additional capital for banks (capital buffers). Furthermore, it reduces the possibility of financial companies relying on external credit ratings, requiring, for example, that banks base their investment decisions not only on ratings but also on their internal credit assessment opinions.

The main contents of the CRR and CRD

CRR	CRD
• Capital, capital structure, own funds, capital conservation buffer • Capital requirement: credit risk, operational risk, market risk • Solvency – liquidity requirements (liquidity buffers, liquidity coverage ratio, net stable funding requirement) • Leverage limits (leverage ratio) • Large exposures (risks) • Default loss rate • Risk weights for targeting asset bubbles in the residential and commercial property sector; exposures secured by mortgages on immovable property • Disclosure	• Taking up and pursuit of the business activity • Freedom of establishment and free flow of services • Prudential supervision • Capital buffers: institution-specific anticyclical capital buffer, capital buffer for globally systemically significant institutions, capital buffer for other systemically significant institutions, systemic risk capital buffer, anticyclical capital buffer • Capital conservation measures • Corporate governance • Application of supervisory measures to institutions with similar risk profiles • Sanctions

Source: own compilation of the author

[618] Neisen, M., & Schulte-Mattler, H. (2022). CRR III implementation: Impact on capital requirements, performance and business models of European banks. *Journal of Risk Management in Financial Institutions*, *15*(4), 338-361.

In addition to the capital requirements, the directive on consumer credit agreements harmonizes the EU rules on loans granted to consumers for financing goods and services (holidays, goods, new cars, etc.).[619] Before entering into a contract, the creditor must promptly provide clear and standardized information about key loan features. The creditor is also required to assess the consumer's creditworthiness before contract signing. The consumer must be informed of the database search results and relevant characteristics if the loan application is rejected. Consumers retain at least 14 days to withdraw from the agreement without providing reasons. Additionally, they have the right to repay the loan before the due date, subject to fair and objectively justified compensation received by the creditor.

Regulation 2016/1011 amended Directive 2008/48/EC and required the creditor, in the period prior to the conclusion of consumer credit agreements, to inform the consumer of the name of the benchmark and its manager and the possible consequences for the consumer if the credit agreement refers to a benchmark.[620] Directive 2014/17/EU establishes special rules for **consumer credit** agreements and mortgages related to residential real estate, defining basic business principles and the content of the uniform European data sheet (EEA) required for information.[621]

After more than two years of in-depth discussions and considerations, the EU's "Banking Package" was concluded in 2019 and 2021,[622] setting an agenda for 2024 (or 2027). The implementation involves substantial modifications to the Capital Requirements Regulation (**CRR II**, general application from 2021), the Capital Requirements Directive (**CRD V**), the Bank Recovery and Resolution Directive (BRRD II), and the Single Resolution Mecha-

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[619] Directive 2008/48/EC on credit agreements for consumers and repealing Council Directive 87/102/EEC

[620] Regulation (EU) 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014

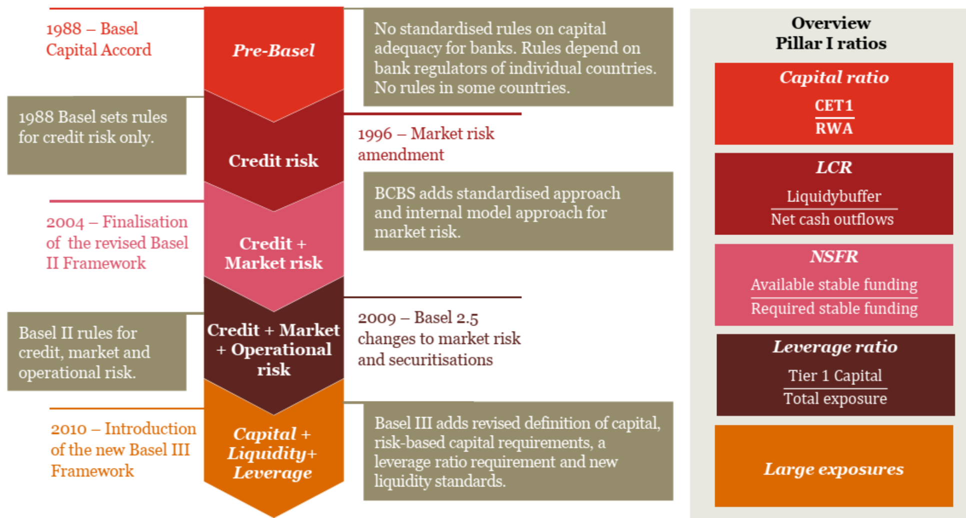
[621] Directive 2014/17/EU on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No1093/2010

Comparato, G. (2016). The design of consumer and mortgage credit law in the European system, in Micklitz, Hans-W. – Domurath, Irina: Consumer debt and social exclusion in Europe, Routledge, pp. 23-40.

[622] European Commission: Banking package 2021 (https://finance.ec.europa.eu/publications/banking-package_en) (09.11.2023) and European Commission: Banking Package 2021: new EU rules to strengthen banks' resilience and better prepare for the future (https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5401) (09.11.2023)

nism (SRMR II), is anticipated to be a significant and challenging undertaking.[623] The CRR II and the CRDV focus on enhancing liquidity standards, ensuring that banks have sufficient readily available funds to meet their obligations.[624] Fundamental changes include the expanded Liquidity Coverage Ratio (LCR), which measures the amount of high-quality liquid assets (HQLA) held by banks to meet short-term liquidity needs and is extended to cover additional types of liabilities. It strengthened the Net Stable Funding Ratio (NSFR), which ensures that banks match their stable funding with their stable assets refined to address potential vulnerabilities. Furthermore, with a comprehensive reporting requirement, banks must provide more granular information on their liquidity positions, enabling regulators to monitor better and assess their resilience. SRMR II relates to the implementation of the Total Loss-Absorbing Capacity (TLAC) standard in EU law, which needs to take into account the existing institution-specific minimum requirement for own funds and eligible liabilities (MREL) that applies to all credit institutions and investment firms established in EU as well as to any other entity as laid down in BRRD.[625]

[623] CRR II: Regulation (EU) 2019/876 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012
CRD V: Directive (EU) 2019/878 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures
BRRD II: Directive (EU) 2019/879 amending Directive 2014/59/EU as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC
SRMR II: Regulation (EU) 2019/877 amending Regulation (EU) No 806/2014 as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms
[624] Pricewaterhouse Coopers (2021): CRD V and CRR II Finalising Basel III and setting the stage for Basel IV. and Pricewaterhouse Coopers (2019). Stand out for the right reasons - Financial Services Risk and Regulation: Time to prepare for finalised CRR 2 and CRD 5.
[625] Smoleńska, A. (2022). Multilevel cooperation in the EU resolution of cross-border bank groups: lessons from the non-euro area Member States joining the Single Resolution Mechanism (SRM). *Journal of Banking Regulation* 23.1 42-53.



Source: PwC (2017). Basel IV: Big bang – or the endgame of Basel III? BCBS finalises reforms on Risk Weighted Assets (RWA)

In line with **Basel IV** recommendations, the BCBS revised regulations in various areas, publishing Basel III: finalizing post-crisis reforms, in 2017.[626] The definitive upgrade included elements such as managing sovereign risks and calibrating specific aspects. These reforms, often referred to as Basel III, are regarded as only the finalization of a package of reforms following the global economic crisis, with a deadline of 2022, with adjustments to the initially planned market risk capital calculation.[627] **Basel IV** began implementation in 2023, although banks will have five years to comply, with implementation requirements varying across countries.[628] This is the most extensive regulatory change package of all time. By using the term Basel III instead of Basel IV, the BCBS may wish to give the impression that only its approaches and ideas from the Basel III. Nevertheless, Basel IV extends the prudential rules with known standards on the one hand, and on the other, it introduces entirely new approaches that until now have not existed.

[626] BCBS: Basel III: Finalizing post- crisis reforms, 2017, BCBS. and Vértesy, L. (2020). *Jog és pénzügyek a bankszektorban*. Akadémiai Kiadó.
[627] Zaevski, Tsvetelin S., and Dragomir C. Nedeltchev: From Basel III to Basel IV and beyond: Expected shortfall and expectile risk measures. International Review of Financial Analysis 87 (2023): 102645.
Vértesy, L. (2022). A pénzügyi piac szabályozása az Európai Unióban: IV.25.. In: Kálmán, J. (ed.). A *pénzügyi jog alapintézményei*. ORAC, pp. 486-514.
[628] S&P Global (2023). Navigating Basel IV (https://www.spglobal.com/marketintelligence/en/news-insights/blog/navigating-basel-iv)

Two banking packages are necessary. The first package was adopted in 2019, in particular, the implementation of the amendments to the capital requirements directive (CRD V) and capital requirements regulation (CRR II) will present many banks with major challenges. The second package is still in the planning stage. A draft of the second package, probably including CRD VI and CRR III, is still pending and anticipated in mid-2020.[629]

European Banking Union

The idea of establishing the European Banking Union (EBU) emerged after the 2008 crisis. It has three pillars: (i) the single supervisory mechanism, (ii) the single resolution mechanism and (iii) the European deposit insurance system. The Banking Union is an essential milestone on the way to a genuine EMU; it aims to increase the European banking system

- *transparency*: the consistent application of common banking supervision, recovery and resolution rules and administrative standards;
- *uniformity*: the equal treatment of banking activity within and across national borders, and by eliminating the link between the financial position of banks and the country in which they operate;
- *safety*: the early management of problems arising at banks (to prevent them from going bankrupt) and, if necessary, through their effective resolution.[630]

[629] Neisen, M., & Schulte-Mattler, H. (2020). CRD V/CRR II: A comprehensive synopsis of the first European step towards implementing Basel IV (Part I). *Journal of risk management in financial institutions*, *13*(2), 114-125.
Neisen, M., & Schulte-Mattler, H. (2020). CRD V/CRR II: A comprehensive synopsis of the first European step towards implementing Basel IV (Part II). *Journal of risk management in financial institutions*, *13*(3), 224-241.
[630] Epstein, R. A., and Rhodes, M. (2019). The political dynamics behind Europe's new Banking Union. The Politics of Supranational Banking Supervision in Europe. Routledge. 1-23.
Angeloni, I. (2020). *Beyond the pandemic: reviving Europe's Banking Union*. Centre for Economic Policy Research.

The structure of the European Banking Union

European Banking Union		
Single Supervisory Mechanism (SSM)	Single Resolution Mechanism (SRM)	European Deposit Insurance System (EDIS)
• supervise that credit institutions comply with prudential requirements; • reveal deficiencies at an early stage; • ensure that these deficiencies are remedied so that they do not become a risk to overall financial stability; • European System of Financial Supervision (ESFS).	• EU-level resolution authority: Single Resolution Board, SRB; • common resolution fund financed by the banking sector (Single Resolution Fund, SRF).	• provide depositors with a higher level of protection (Deposit Guarantee Scheme).
Single Rulebook		
• capital requirements for banks CRD and CRR • deposit insurance directive, directive on Deposit Guarantee Schemes (DGS) • the prevention of bankruptcy situations and the management of bankrupt banks, Bank Recovery and Resolution Directive (BRRD)		

Source: own compilation of the author

The **Single Supervisory Mechanism** (SSM) and **Single Resolution Mechanism** (SRM) constitute a new European banking and financial oversight system involving the ECB, EU authorities, and national banking supervisors.

European System of Financial Supervision

European System of Financial Supervision (ESFS)			
Microprudency			Macroprudency
Joint Committee of European Supervisory Authorities ESAs			European Systemic Risk Board (ESRB)
European Banking Authority (EBA)	European Insurance and Occupational Pensions Authority (EIOPA)	European Securities and Markets Authority (ESMA)	**European Central Bank (ECB)*
National Competent Authorities (NCAs)			

Source: own compilation of the author

The **European System of Financial Supervision** (ESFS) consist of the three main European supervisory authorities (European Supervisory Authorities, ESAs), a network organized around the European Systemic Risk Board and the national supervisions. For macroprudential supervision, the European Systemic Risk Board (European Systemic Risk Board, ESRB) is responsible, the sectoral microprudential supervision is the European Banking Authority (EBA), European Insurance and Occupational Pension Authority (European Insurance and Occupational Pensions Authority, EIOPA), European Securities and Markets Authority Authority ESMA).[631] The **Single Resolution Mechanism** (SRM) aims to efficiently address bank failures with minimal taxpayer and economic impact, facilitated by the swift decision-making of the unified resolution council.[632] The ECB plays a crucial role in assessing a bank's likelihood of failure, and resolution costs are covered by the unified resolution fund contributed by banks. The Bank Recovery and Resolution Directive, BRRD,[633] defines the framework through which the EU member states transpose the main features outlined by the Financial Stability Board (FSB).[634] The **European Deposit Insurance System** (EDIS) harmonizes deposit protection across the EU, ensuring consistent compensation for frozen deposits through Directive 2014/49/EU (DGSD).[635] The min-

[631] Strongyli, M. (2020). The European System of Financial Supervision (European Banking Authority, European Securities and Markets Authority, European Insurance and Occupational Pensions Authority).

[632] Busch, D. Mirik BJ Van Rijn, and M. Louisse (2019). How single is the single resolution mechanism?. *European Business Law Review* 30.4

Kern, A. (2015). European Banking Union: a legal and institutional analysis of the Single Supervisory Mechanism and the Single Resolution Mechanism. *European Law Review*, Vol. 40.2. 154-187.

[633] Directive 2014/59/EU on the establishment of a framework for the recovery and resolution of credit institutions and investment companies and Council Directive 82/891/EEC, 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/ EC Directives 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and on the amendment of European Parliament and Council Regulation 1093/2010/EU and 648/2012/EU.

[634] The Financial Stability Board (FSB, Financial Stability Board) is an international body that monitors and makes recommendations regarding the global financial system. It was created by the G20 countries in 2009 after the London summit, as a successor to the Financial Stability Forum (FSF). The board includes the G20 and the European Commission. Operated and funded by the BIS, the Board of Directors is based in Basel, Switzerland. It should not be confused with Act CXXXIX of 2013 on the Hungarian National Bank with the Financial Stability Council of the MNB established pursuant to law.

[635] Howarth, David, and Lucia Quaglia: *The difficult construction of a European Deposit Insurance Scheme: a step too far in Banking Union*?. The Difficult Construction of European Banking Union. Routledge, 2020. 188-207.

imum compensation is €100,000 or £85,000, with some member states having no upper limit due to national discretion (e.g. Austria, Denmark, Ireland, Germany, or Slovakia).[636] The **single rulebook** establishes legal and administrative standards for regulating and supervising the EU financial sector. It covers capital requirements, recovery and resolution procedures, and harmonized national deposit guarantee schemes.

Nota bene, in the U.S., the **Federal Deposit Insurance Corporation** (FDIC) is an independent agency created by Congress to maintain stability and public confidence in the financial system. The FDIC supervises and examines banks to ensure that the money they handle is safe. Moreover, it insures your money. The insurance maximum is $250,000 per depositor, per insured bank, for each account ownership category.[637]

18.6. Trends: Digital, Green, and Ethical banking

Several noteworthy trends and tendencies close to the turn of the millennium include: (i) microfinance and community banking, (ii) digital banking, (iii) green banking, and (iv) the ethical banking system.

Digital Banking

The penetration of Information Technology in the banking sector is evident, marking the era of Digital Banking 4.0 alongside Industry 4.0.[638] The early 21st-century e-banking represents **Digital Banking 1.0**, where online

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Directive 2014/49/EU on deposit guarantee schemes

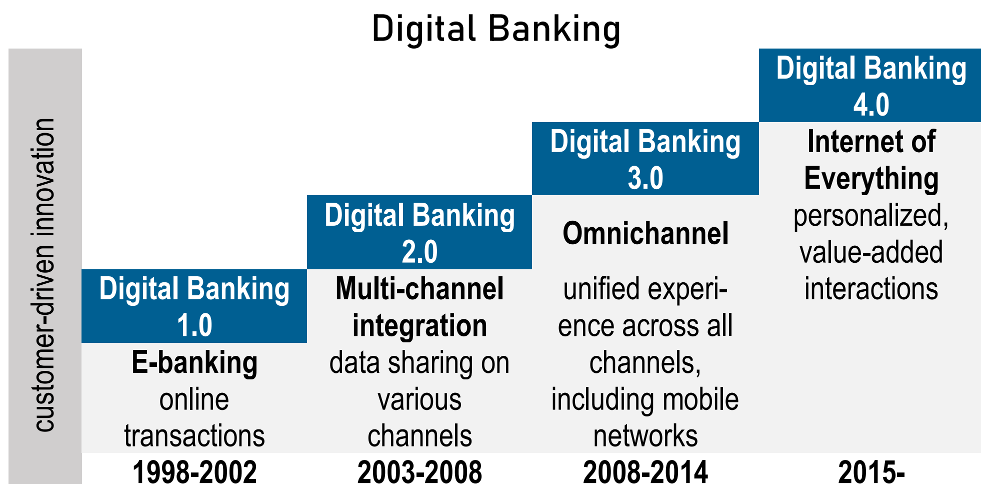
[636] Schich, Sebastian: Financial Crisis: Deposit Insurance and Related Financial Safety Net Aspects, in Financial Market Trends, Vol. 2/2/2008 (December).

[637] Kolichala, H. K. (2021). Deposit Insurance Evolution and Legal Framework. *Vinimaya*, *41*(4).

Amosova, N. A., & Sanakoev, M. Y. (2020, September). Deposit Insurance Systems: Evolution, Risks, Development Trends. In *The 3rd International Conference on Economy, Management and Entrepreneurship (ICOEME 2020)* (pp. 1-10). Atlantis Press.

[638] The term Industry 4.0, referring to the fourth industrial revolution, means the increasingly close intertwining of information technology and automation, and through this, it is the summary name of the period that brings about a fundamental change in production methods. One of the most basic technologies is M2M, i.e. machine to machine: in order for machines to effectively take over control of more complex processes, we must teach them to communicate with each other without human intervention. Artificial intelligence relies heavily on big data, i.e. the data set that is almost unmanageable by the individual, which was created by the actors of the information society. The data and software are not stored on local data carriers, but on the devices of a service provider, in the so-called cloud.

transaction capabilities signified progress, accelerating financial communication and transfers. **Digital Banking 2.0 and 3.0**, between 2003 and 2014, essentially broadened access interfaces, evolving gradually into an omnichannel system. In 2011, MasterCard Mobile introduced QR code-enabled payments, allowing transactions from mobile devices instead of traditional bank cards. Concurrently, Google Wallet, a peer-to-peer payment service,[639] launched in the same year and was later rebranded as Google Pay Send in 2018. Mastercard introduced Pay Pass in 2012. From 2015, **Digital Banking 4.0** transcended the Internet of Things (IoT) and aspired to more personalized, tailored, and value-added relationships within the Internet of Everything (IoE) framework. The rapidly advancing realm of smart technology showcased a banking system for wearable devices, presented by Misys in 2016. Globally, over 10,000 fintech startups operate, poised to reshape the financial services market with attractive products, akin to the transformative impact of Amazon in commerce, Google in advertising, or Skype in telecommunications. In 2018, JP Morgan Chase established a mobile-only bank called Finn, designed for Generation Y. After successful testing in St. Louis, the bank expanded Finn nationwide, offering a range of features promoting savings, financial awareness, and education. The Finn mobile app incorporates JP Morgan's online account-opening technology, enabling new customers to open accounts from mobile devices within minutes.



Source: own compilation of the author based on Bradley, J. M. (2015). *How Banks Can Begin the Journey to IoE Readiness*. Based on Cisco

[639] The peer-to-peer or P2P paradigm is that the endpoints of the IT network communicate directly with each other, without a central designated node.

Green Banking

The concept of sustainable development is closely associated with the paradigm of **green banking**.[640] Green banking encompasses various aspects of ethical, social, and sustainability dimensions to recognize the positive benefits of green financing in fostering innovative green growth initiatives by financial institutions. The practices of green banking, inclusive of their consequences, involve the effective application of Corporate Social Responsibility (CSR) alongside sustainability reports,[641] aiming to add value to sustainable and ethical banking practices, fostering synergy through social efforts.[642] Financial institutions, through their investment decisions and support for environmentally friendly investments, can significantly influence the quality of the environment. The challenge developing countries face is mainstreaming green finance to incorporate environmental considerations into business-driven lending decisions.[643] Banks commit to sustainability for three primary reasons: (i) reputation (prioritized by 68% of banks), (ii) investor demand (64%, second priority), (iii) risk reduction and increased returns (52%, third place). Green banking, therefore, signifies the relationship between banks and environmental conservation, where sustainable development is equally important alongside economic efficiency.

Green financial institutions, in their internal and external operations (daily operations, business strategy, investment policy, risk management), respect the environment, its protection, and societal values in their decision-making. Three principles can be identified that facilitate the integration of sustainability into banking strategy and operations, constituting the guiding principles of environmentally conscious banks:

- *Integration of sustainability into core banking activities:* Green banks do not view sustainability merely as charity but incorporate

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[640] Park, H., & Kim, J. D. (2020). Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, *5*(1), 1-25.
Shaumya, K. – Arulrajah A. A. (2017). *Green Banking*: Measuring Green Banking. Lambert Academic Publishing

[641] Sun, H., Rabbani, M. R., Ahmad, N., Sial, M. S., Cheng, G., Zia-Ud-Din, M., & Fu, Q. (2020). CSR, co-creation and green consumer loyalty: Are green banking initiatives important? A moderated mediation approach from an emerging economy. *Sustainability*, *12*(24), 10688.

[642] Sarkar, A. N. (2014). Green Banking. Atlantic Publisher

[643] Gandhi, R.S. (2017). Green finance – early initiatives. Keynote speech at the launch of the Final UNEP India, Inquiry Report titled Delivering a Sustainable Financial System in India, Mumbai, 29 April 2016.

principles of environmentally conscious management into their value creation processes, manifesting in environmentally friendly products, services, and processes.

- *Incorporation of sustainability into the overarching business strategy:* This does not imply a transformation from a universal bank to an eco-bank; but rather indicates that the bank aims to uphold sustainability principles in the long term across all aspects of its activities.
- *Sustainability as a measurable business outcome, not a soft factor:* The defining feature of environmentally conscious banks is their continuous measurement, evaluation, and communication of their environmental activities and performance to their clients. They develop a set of indicators that allows them to compare both their past performance and the activities of competitors.

The acronym **ESG** refers to the integration of environmental, social, and governance considerations into the operations, decision-making processes, and practices of financial institutions. The criteria are used by banks to evaluate and manage the non-financial risks and impacts of their activities, aligning their operations with broader sustainability goals. For a better environment, banks engage in green financing for sustainable projects, manage climate risks, and reduce their carbon footprint. Socially, they promote financial inclusion, support employee well-being, and engage in community projects. Governance aspects include ethical leadership, risk management, and diverse board oversight.[644] Transparent ESG reporting and stakeholder engagement are crucial, and ESG factors are integrated into investment decisions and lending practices. Overall, ESG in banking aligns financial operations with sustainability goals and societal well-being.[645]

Considering individual countries, in Europe, the **central banks** of England, France, and the Netherlands lead in initiating analyses related to climate change risks and embracing green finance.[646] In the Netherlands, the supervisory central bank (DNB) established the Sustainable Finance Platform in

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[644] Agnese, P., Battaglia, F., Busato, F., & Taddeo, S. (2023). ESG controversies and governance: Evidence from the banking industry. *Finance Research Letters*, *53*, 103397.
[645] Azmi, W., Hassan, M. K., Houston, R., & Karim, M. S. (2021). ESG activities and banking performance: International evidence from emerging economies. *Journal of International Financial Markets, Institutions and Money*, *70*, 101277.
[646] Ferrari, A., & Landi, V. N. (2023). Whatever it takes to save the planet? Central banks and unconventional green policy. *Macroeconomic Dynamics*, 1-26.

2016, taking on a supervisory role. Within the Basel III framework, the consideration of environmental risks is expected in the **Internal Capital Adequacy Assessment Process** (ICAAP), and financial institutions regularly provide information on loans and investments flowing into the green economy. Regulatory bodies and central banks in China, Japan, and other Asian countries quickly recognized the topic's significance. Remarkable green financial initiatives have also recently emerged in several South American countries. In Indonesia, environmental impact assessments have been mandatory for large loans for decades, and banks are required to evaluate what steps clients have taken to preserve the environment before deciding on significant loans. In Brazil, the central bank, which also performs supervisory functions, mandated in 2014 that the management of environmental and social risks be incorporated into banks' ordinary risk management, building on the sustainability-themed self-regulation of the Brazilian Banking Federation.[647]

Ethical Banking

It is now widely accepted that perfect market competition is mostly unattainable in practice due to the presence of monopolies, economic dominance, corruption, and various other factors, necessitating the imposition of legal and ethical regulations on the market.[648] The emergence of a **fair and ethical banking system**, known as **ethical finance** or **economic ethics**, is commonly traced back to 1960s America, spreading to Europe in the 1980s and gaining global prominence since the 2008 financial crisis. The crisis, in addition to highlighting issues like "*too big to fail*" and "*too interconnected to fail*," drew attention to the significance of *moral hazard*. Despite financial decisions being justifiable through legal and economic methods, there is a perceptible misalignment with certain unwritten ("invisible") fundamental norms and principles. This has been evident in instances of (i) the interdependence of banks and credit rating agencies, (ii) an excessively performance-based remuneration policy, (iii) over-insuring with CDS products, or (iv) exploiting the possibility of state bailouts.

Dikau, S., & Volz, U. (2021). Central bank mandates, sustainability objectives and the promotion of green finance. *Ecological Economics*, *184*, 107022.

[647] MNB (2019). MNB's green program. 6.

[648] Valls Martínez, M. D. C., Martín-Cervantes, P. A., & Peña Rodríguez, S. (2021). Ethical banking and poverty alleviation banking: The two sides of the same solidary coin. *Sustainability*, *13*(21), 11977.

Gómez, L. B., Serrat, N. A., & Salas, O. A. (2024). The organic model and ethical banking: The importance of identity. *Intangible Capital*, *20*(1), 1-15.

Ethical banking and **financial literacy** are two sides of the same coin, both working towards a more empowered and secure financial future for individuals and communities. Ethical banking prioritizes socially and environmentally responsible financial practices. It promotes financial inclusion by offering accessible products and supporting financial education initiatives. For example, microfinancing provides capital to low-income individuals, accompanied by financial literacy programs. Financial literacy enables informed decision-making. It fosters responsible banking by helping people understand financial products and services, leading to a demand for transparency and social responsibility in banking practices.[649]

Ethical banking, also known as social, alternative, **civil**, civic, or sustainable **banking**, is an approach that focuses on the social and environmental impacts of investments and loans.[650] Civil economics seeks to internally modify the motivation of economic actors from individual profit maximization to maximizing the common good. The table below outlines the fundamental differences between mainstream economics and civil economics:

Mainstream vs. Civil Economics

Mainstream Economics	Civil Economics
Money as a tool for societal destruction; dead money	Money serves to build society; living money
Individual profit maximization	Maximizing the common good
Insensitivity to environmental consequences	Responsibility for environmental consequences
Unrestricted competition and rivalry	Solidary competition and rivalry
Free and absolute market	Solidary market
Development model leads to exclusion	Development model leads to inclusion
Competing multinational corporations emerge	Inter-company networks and alliances emerge
Detachment from operational area	Rootedness in operational area
Concentration of wealth	Redistribution of wealth

Source: Smohay F. (2010). Etikus Bank - Egy egyedi olasz bank innovatív kapcsolati jellemzői. *Vigila* 2010/10.

[649] Vértesy, L. (2021). *Pénzügyi kultúra – pénzügyi oktatás Magyarországon*. Gazdaságelemző Intézet, Institute for Economic Analysis.
[650] Jayasekera, M. D. S., & Pushpakumari, M. D. (2020). Is Ethical Banking the Future? A Literature Review. In *Proceedings of International Conference on Business Management* (Vol. 17).

The **ethical banking movement** encompasses ethical investments, impact investments, socially responsible investments, corporate social responsibility (CSR), and is linked to movements such as fair trade, ethical consumption, and social entrepreneurship.[651]

> Ethical banks exist not solely for their own merits but due to the market's undesirability; they are on the market to demonstrate and promote the need for the economy and finance to rediscover their ethical, sensitive, and social face, not just in words but in actions.
>
> Milano, Riccardo[652]

In a broader sense, ethical banking services respond to environmental and social issues raised by consumers, such as climate change.[653] Behind the principles and goals lies a unique and sophisticated economic theory: civil economics, which views the economy as a tool serving the well-being, development, common good, and public happiness (*felicità public*)[654] of every individual and society. The preeminent figure in this field is Amartya Sen, often referred to as the "Mother Teresa of economics," who places the ethical renewal of economics at the center of his professional activities.[655] The Catholic Church also emphasizes the inseparability of ethics and the economy through a series of papal encyclicals: Rerum Novarum (Leo XIII, 1891), Quadragesimo Anno (Pius XI, 1931), Populorum Progressio (Paul VI, 1967), Centesimus Annus (John Paul II, 1991), Caritas in Veritate (Benedict XVI, 2009), and Evangelii Gaudium (Francis, 2013).[656] The Church asserts that the economy is not a separate world with its own facts, laws, and specific actors, but a manifestation of human activities, an integral part of human life.

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651 Jayasekera, M. D. S., & Pushpakumari, M. D. (2021). Can ethical banking change the banking landscape?.

652 Milano, R. (2001): La Finanza e la Banca Ethics. Paoline, p. 107. Translated by Ferenc Smohay

653 Webster, Anthony J. (2018): A global consumer-led strategy lake tackle climate change. Cornell University

654 One of the key expressions of the Neapolitan economist Antonio Genovesi (1713–1769), who is one of the fathers of civic economics, head of the first European Economics department (University of Naples, 1754).

655 Sen, A. (1982). Poverty and Famines: An Essay you Entitlement and Deprivation. Oxford New York: Clarendon Press; Sen, A. - Suzumura, Kōtarō; A. Kenneth J. (2002). Handbook of social choice and welfare. Amsterdam Boston: Elsevier; Sen, A.; Stiglitz, J. E.; Fitoussi, J-P. (2010). Mismeasuring our lives: why GDP doesn't add up: the report. New York: New Press

656 O'Boyle, E. J. (2014). A Commentary on Evangelii Gaudium: Part I of II Parts. *Institute For Theological Encounter With Science and Technology*.

It is a community of people who are not identical to the narrow image of "homo œconomicus."[657]

The **Fédération Européenne des banques Ethiques et Alternatives** (FEBEA, European Federation of Ethical and Alternative Banks) was established in 2001, uniting financial institutions from 15 European countries to advance ethical and social financing in Europe.[658] Currently, the organization has 27 members, comprising 12 banks and 15 financial institutions, including the seven founding banks: Banca Popolare Etica (Italy), Caisse Solidaire Nord Pas de Calais (France), Crédal (Belgium), Crédit Coopératif (France), Hefboom (Belgium), La Nef (France), and Tise (Poland). Triodos, one of the world's leading sustainable banks, founded the Global Alliance for Banking on Values (GABV) in 2009. This alliance brings together financial institutions committed to global, socially, or environmentally positive projects. The organization comprises 54 financial institutions and four strategic partners operating in Asia, Africa, Australia, Latin America, North America, and Europe. Collectively, they manage assets worth approximately $163.4 billion, serve nearly 50 million clients, and support around 60,000 employees.

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[657] Norcross, E., & Koopman, C. (2015). Pope Francis and the Economy: Evangelii Gaudium, New Institutional Economics, and the Search for Consistency Across Disciplines. *New Institutional Economics, and the Search for Consistency Across Disciplines (September 21, 2015).*

[658] San-Jose, L., Retolaza, J. L., & Gutierrez-Goiria, J. (2009). Ethical banks: an Alternative in the Financial Crisis. *Available at SSRN 1416757*.
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60 Decibels. (2023). Financial Inclusion - 2023 Microfinance Index (https://60decibels.com/insights/mfi-index/)

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IV. INSURANCE

Insurance is a means of protection from financial loss. It is a form of risk management, primarily used to hedge against the risk of a contingent or uncertain loss. Generally, it is a coverage by contract whereby one party undertakes to indemnify or guarantee another against loss by a specified contingency or peril.[659] The terms Insurance 1.0 to 4.0 generally refer to different stages or phases of evolution in the insurance industry, similar to the concepts in the industry, money, banking, fintech etc.. Each stage represents a significant transformation in the way insurance is conceptualized, managed, and delivered, often driven by technological advancements.

Insurance 1.0 to 4.0:

	Time Period	Key Developments
Insurance 1.0	2nd - 3rd millennia BC	• eastern merchants practice early risk management • caravans and marine insurance • Greeks and Romans: benevolent societies
Insurance 2.0	14-16th century	• formalization of insurance contracts • focusing on marine insurance for goods in transit • early prototypes for life and reinsurance • legal frameworks, jurisdiction
Insurance 3.0	17-20th century	• arise of classical insurance branches: property, business, life, accident, reinsurance • mathematical approach, actuarial tables • appearance of national insurance, later social insurance • beginning international regulation
Insurance 4.0	20-21st century	• digitalization, focus on customer experience, PPP, and new investment practices • trends: bancassurance, Insurtech (AI, machine learning, blockchain, parametric), cyber insurance, sustainability and ESG considerations

Source: own compilation of the author

Insurance 1.0: Ancient Risk Management, began in the cradles of civilization, particularly in the Middle East and Asia. As early as the second and third millennia BC, Chinese merchants engaged in an early form of risk management by distributing goods across multiple ships and trade routes to minimize potential losses. In Babylonia, a primitive form of credit insurance

[659] "Insurance." *Merriam-Webster.com Dictionary*, Merriam-Webster (https://www.merriam-webster.com/dictionary/insurance)

emerged, where merchants paying back loans for shipped goods included an additional fee to the lender, canceling the loan if the goods were lost. This practice is enshrined in the Code of Hammurabi. The Greeks and Romans laid the groundwork for life and health insurance with benevolent societies, guilds that provided funds for funeral expenses of deceased members.

Insurance 2.0: Birth of Formal Contracts, saw the emergence of the first formal insurance contracts in Genoa, Italy, during the 14th century. These contracts, primarily focused on marine insurance for goods in transit, represented a formalization of the risk management concepts from Insurance 1.0.

Insurance 3.0: The Great Leap Forward, in the 17th century, marked a significant development, driven by disasters (Great Fire of London in 1666) or international political changes (colonization, international trade) This period saw the formalization of the classical insurance branches: property, business, life, accident, reinsurance. Insurance became an empirically-based practice, French and English mathematicians calculated loss probabilities and introduced actuarial tables. At the end of the 19th century, Germany introduced a comprehensive national insurance system. In the 20th century governments around the world are increasingly recognizing the importance of wider social insurance programs, aiming to provide comprehensive coverage for citizens in areas such as healthcare, unemployment benefits, and disability support. As the insurance sector becomes more interconnected globally, there was a growing need for international regulation to ensure consistency, compliance, and effective risk management across borders, like in the European Union.

Insurance 4.0: Accelerated Digital Disruption, started at the end of 20th century with the digitalization and the IoT (Internet of Things). The sector experienced a rapid disruption in its basic functions and processes; include broader product lines, expanded distribution channels. They emphasize on improving the overall customer experience, personalized and seamless customer experience, fostering Public-Private Partnerships (PPP) to address emerging challenges and adopting new practices: bancassurance, big data analytics, Insurtech (AI, machine learning, blockchain, parametric), cyber insurance, sustainability and ESG considerations.

Finally, we just mention the concept of Maslow's Hierarchy of Needs is a psychological theory proposed by Abraham **Maslow** in 1943, which categorizes human needs into a pyramid structure with five levels.[660] The hierarchy, often depicted as a pyramid, includes physiological needs, safety needs, social needs, esteem needs, and self-actualization. In some concepts, the application of Maslow's Hierarchy of Needs to the insurance industry can provide insights into how insurance products and services align with individuals' fundamental needs at different levels of the hierarchy. Insurance coverage for health and medical expenses can address individuals' basic physiological needs for healthcare, ensuring access to essential treatments and services. Insurance offerings such as life insurance, property insurance, and disability insurance contribute to meeting safety needs. These products provide financial protection and security against unexpected events, accidents, or loss of income. Social needs involve a sense of belonging and connection. Family and social insurance policies, including life insurance and family coverage, can help individuals fulfill their social needs by providing support and financial stability for loved ones. Esteem needs encompass self-esteem and the recognition of others. Certain insurance products, such as personal liability insurance and professional indemnity insurance, can contribute to protecting one's reputation and professional standing.

[660] Maslow, A.H. (1943). A theory of human motivation. *Psychological Review*. 50 (4): 370–396.

19. The Concept of Insurance

The concept of insurance is rooted in the principles of risk management and financial protection. It involves the transfer of risk from an individual or entity to an insurer in exchange for a premium. Insurance, as an activity, encompasses various types that cater to different aspects of life and business. Common characteristics, such as risk pooling and premium payment, define the nature of insurance. Two broad categories, life insurance and non-life insurance, address diverse needs. Moreover, insurance extends its influence to the broader scale of the entire economy and society, encompassing national or social insurance, deposit insurance, and reinsurance. This comprehensive framework plays a vital role in safeguarding against uncertainties and promoting financial stability.

The term insurance occurred in English in the mid-16th century derived from the Old French term enseurance, meaning assurance or guarantee. Initially referring to an engagement to marry, over time, its commercial meaning evolved to signify security against loss or death in exchange for payment, dating back to the 1650s. Assurance, dating from the late 14th century, initially meant a formal pledge or promise and later evolved to mean certainty or confidence. Medieval Latin as assecurare came from the ad- (to), securus (safe, secure), -are (verb-forming suffix).

19.1. Characteristics of Insurance

Insurance plays a multifaceted role in the economy,[661] providing essential financial protection against unforeseen events such as accidents, illnesses, natural disasters, and other unexpected occurrences. (i) The **risk management** function enables individuals and businesses to mitigate potential financial losses, ensuring stability and security in their financial lives. (ii) Moreover, certain insurance products like life insurance and annuities not only offer protection but also **encourage savings** and long-term financial planning. These products serve as a dual-purpose tool, helping individuals and businesses plan for future financial needs, including retirement, while safeguarding against unexpected challenges. When insured against losses, individuals and businesses can recover more quickly from setbacks, preventing a significant decline in their financial well-being, and safeguarding ex-

[661] Liedtke, P. M. (2007). What's insurance to a modern economy?. *The Geneva Papers on Risk and Insurance-Issues and Practice*, *32*, 211-221.

isting wealth (wealth protection). (iii) Beyond individual and business protection, insurance companies are significant investors in the economy. By **capital accumulation**, they channel the premiums, savings collected from policyholders into investments and various financial instruments such as stocks, bonds, and real estate. This investment activity plays a crucial role in capital markets, supporting economic growth and development by providing capital for businesses and infrastructure projects. This mobilization of financial resources supports economic activities. (iv) For entrepreneurs, insurance serves as a safety net that enables them to maintain operations, supporting **business continuity** even in the face of unexpected challenges.[662] This continuity is vital for preserving employment, sustaining supply chains, and maintaining overall economic stability. (v) Additionally, insurance reduces the financial risks associated with entrepreneurship, **encouraging** innovation, job creation, and economic expansion and growth.[663] (vi) Furthermore, certain insurance schemes contribute to **social welfare** by providing essential services and financial support to individuals in need. Health insurance and unemployment insurance, for instance, help reduce poverty, improve living standards, and promote social inclusion by ensuring access to healthcare and financial assistance during periods of unemployment. (vii) Insurance operates on the principle of **risk pooling**, where premiums from many policyholders are collected to pay for the losses of a few.[664] This mechanism **redistributes** financial risks across society, ensuring that individuals and businesses are not overly burdened by catastrophic events. By providing coverage against unexpected events (such as accidents, natural disasters, or health issues), insurance ensures that individuals and businesses can manage risks effectively. (viii) Insurance companies play a **governance** role by ensuring

[662] Rusetskiy, M. G., Agarkova, L. V., Ulibina, L. K., Okorokova, O. A., & Aygumov, T. G. (2018). The role of insurance in providing economic safety of business entities. *Espacios*, *39*(27), 20.
[663] Apergis, N., & Poufinas, T. (2020). The role of insurance growth in economic growth: Fresh evidence from a panel of OECD countries. *The North American Journal of Economics and Finance*, *53*, 101217.
[664] Cronk, L., & Aktipis, A. (2021). Design principles for risk-pooling systems. *Nature Human Behaviour*, *5*(7), 825-833.
Risk-pooling systems are most effective when their participants adhere to several principles: (1) participants should agree that the pool is for needs that arise unpredictably, not for routine, predictable needs; (2) giving to those in need should not create an obligation for them to repay; (3) participants should not be expected to help others until they have taken care of their own needs; (4) participants should have a consensus about what constitutes need; (5) resources should be either naturally visible or made visible to reduce cheating; (6) individuals should be able to decide which partners to accept; and (7) the scale of the network should be large enough to cover the scale of risks.

compliance with regulations, risk management practices, and economic, financial **stability**. Their operations contribute to overall economic stability. (ix) Lastly, insurance provides **public relief** during catastrophic events (e.g., natural disasters). By helping individuals and businesses recover, it contributes to economic resilience and growth. Overall, following Smith' invisible hand metaphor, insurance is like an invisible glue that strengthens the economy by mitigating risks, promoting financial security, and facilitating capital formation and stability.

Both terrorism and insurance sell fear -- and business is business
Liam McCurry, Terminal Policy

3/7 Common Characteristics of Insurance

Risk		
Large number of similar exposure units		Benefit from the **law of large numbers** in which predicted losses are similar to the actual losses (exceptions include Lloyd's of London)
Loss	Definite loss	The loss takes place at a known **time**, in a known **place**, and from a known **cause**
	Accidental loss	Fortuitous, or at least **outside the control of the beneficiary**
	Large loss	The size of the loss must be **meaningful** from the perspective of the insured
	Calculable loss	Two elements that must be at least estimable, if not formally calculable: the **probability of loss**, and the **attendant cost**
	Limited risk of catastrophically large losses	The losses do **not happen all at once**
Affordable premium		The premium **cannot be so large, but needs to cover** the loss and insurers expenditures on administration

Source: own compilation of the author

The **insurance activity** is a performance obligation to fulfill the insurance contract, during which the insurer (i) organizes the community of persons exposed to the same or similar risks (risk community), (ii) assesses insurable risks using mathematical and statistical tools, (iii) determines and collects the consideration (fee) for the commitment, (iv) forms specific reserves, (v) based on the established legal relationship, assumes the risk and performs the services, including the activity of providing annuity services carried out in a business-like manner, regardless of whether the consideration for the commitment is in the form of a specific payment (fee) or other con-

sideration.[665] Nowadays, this is complemented by many areas from prevention to monitoring. The insurance can be voluntary or mandatory insurance, depending on the basis of the insurer's service, it can be damage insurance or sum insurance, as well as fixed value (limited) or without value fixed.

Risk refers to the possibility of experiencing loss or injury, often associated with peril. It can be caused by someone or something that presents a hazard, determining the likelihood of loss or the perils covered by an insurance contract. Additionally, it signifies the degree of probability of such loss and identifies a person or thing that poses a specified hazard to an insurer, often stemming from a particular cause or source. Risk in this perspective is relational because it establishes a link between two different cognitive objects and between two (or more) actors. We argue that this is the case when at least two actors refer to a common risk object while retaining distinct objects at risk. We can call this a **constellation of risk entanglement** across actors.[666] Insurance companies normally only indemnify against pure risks, otherwise known as event risks. A pure risk includes any uncertain situation where the opportunity for loss is present and the opportunity for financial gain is absent. Speculative risks are those that might produce a profit or loss, namely business ventures or gambling transactions. Speculative risks lack the core elements of insurability and are almost never insured.[667] An insurance **risk class** categorizes policyholders into specific risk groups, allowing insurers to assess policies accordingly (e.g. elite, preferred, standard, substandard). Individuals within each group typically have similar traits, aiding insurers in predicting claim likelihood. Higher-risk groups, such as those with health issues, older individuals, or poor driving histories, will generally face higher premiums.

A large number of **similar exposure units** stand to benefit significantly from the application of the law of large numbers, wherein predicted losses tend to align closely with the actual losses incurred (with exceptions such as Lloyd's of London). In the realm of **losses**, there are various categories to consider. Definite loss is characterized by its occurrence at a known time, in a known place, and from a known cause. Accidental loss, on the other hand, is fortuitous, occurring outside the control of the beneficiary and often

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[665] Vértesy L. (2013). Kockázatkezelés és biztosítás: Risk Management and Insurance. *Gazdaság és Társadalom* 2013(19. 27-42.

[666] von Scheve, C., & Lange, M. (2023). Risk entanglement and the social relationality of risk. *Humanities and social sciences communications*, *10*(1), 1-10.

[667] https://www.investopedia.com/articles/insurance/082616/elements-insurable-risks-quick-guide.asp

marked by unforeseen circumstances. A large loss, within the context of insurance, assumes significance when it holds meaningful proportions from the perspective of the insured party. Calculable loss introduces the requirement of estimability, if not formal calculability, involving two essential elements: the probability of loss and the attendant cost. The concept of a limited risk of catastrophically large losses emphasizes that such losses do not transpire all at once, mitigating the potential for overwhelming financial impact. Finally, an **affordable premium** is a critical consideration, necessitating that the premium, while not excessively high, must still be sufficient to cover the anticipated loss and the insurer's expenditures on administration. This balancing act ensures a sustainable and equitable arrangement for both parties involved in the insurance contract.

19.2. Types of Insurance

Within the insurance business we distinguish the life and the non-life line. **Life insurance** policies usually have a duration ranging from 5 to 25 years. The degree of deviation in terms of damages is typically small, reflecting a more stable and predictable nature of risks associated with the insured events. Termination of the life insurance contract is generally within the purview of the insurer and may occur only in exceptional cases. In contrast, **non-life insurance** policies typically span a duration of one year. The degree of damage-deviation tends to be larger in non-life insurance, reflecting the more variable and immediate nature of risks associated with covered events. Furthermore, the insurer retains the authority to terminate the contract, and such termination may occur on the anniversary of the policy. Nowadays the two lines can be provided only separately, only the earlier established so-called composite insurance companies can carry on both lines.

Insurance Lines

Life	Non-life
The duration is typically 5-25 years	The duration is typically 1 year
The damage-deviation is small	The damage-deviation is large
The contract may be terminated by the insurer only in exceptional cases	The contract may also be terminated by the insurer on the anniversary
Life insurance classes according to risk	**Non-life insurance classes according to risk**
• Life insurance (survival to a stipulated term or on death); annuities; supplementary insurance • Marriage insurance, birth insurance • Unit linked life insurance and annuities (linked to investment funds) • Capital redemption operations (insurance savings arrangements) • Management of group pension funds • Transactions relating to the length of human life which are prescribed by or provided for in social insurance legislation at their own risk	• Health insurance: accident (industrial injury and occupational diseases) + sickness vehicle insurance (motor vehicle, aircraft, ships) • Marine transport insurance, aviation insurance • Goods in transit • Property insurance (fire and other damage) • Liability insurance (motor vehicle, aircraft, ships) general liability • Credit and suretyship insurance • Miscellaneous financial loss (insufficiency of income, bad weather) • Legal expenses • Assistance

Source: own compilation of the author

Within the **life line**, the **life insurance** can be a survival to a stipulated term or on death, which provides financial protection to the policyholder's beneficiaries in case of the policyholder's death. Additionally, some life insurance policies may offer benefits if the policyholder survives a specified term. Annuities are a form of life insurance where the policyholder receives regular payments, either for a specified period or for their lifetime. This can serve as a retirement income stream. Supplementary insurance can refer to additional coverage that policyholders can purchase to enhance their existing insurance policies. It could include riders or additional policies to cover specific risks. In terms of premium costs, a number of factors are used to determine which risk class the individual fits into, e.g. smoking status, height, weight, gender, family history, age, occupation, risky hobbies or other potentially dangerous behaviors, such as substance or alcohol abuse.

Insurance with investment is the 9th wonder of the world.
David Angway,
How to Save Money, Create More Income, & Live a Happier Life:
Simple ways how to get back on track in your finances

The **unit linked life plans** (UILP) and annuities: are life insurance or annuity products where the policyholder's funds are invested in investment funds. The returns are linked to the performance of these funds, providing the potential for higher returns but also exposing the policyholder to investment risks. Life insurances are very close to the form of savings and investments. **Marriage insurance** provides financial protection or benefits related to marriage. This could include coverage for wedding-related expenses or protection in the event of marriage-related risks. **Birth insurance** related to financial support or benefits for medical expenses, maternity leave, or other related costs. **Capital redemption operations** are savings arrangements where a lump sum is paid out at the end of a specified period or upon the occurrence of a certain event. It combines elements of savings and insurance. **Management of group pension funds** involve the administration and management of pension funds for groups of individuals, typically employees of a company. It aims to provide retirement benefits to the group members.

Among the **non-life line**, the **health insurance** can cover injuries or diseases resulting from accidents that occur in an industrial or occupational setting (injuries, diseases), furthermore coverage for medical expenses and other related costs incurred due to illness or sickness, where the underlying business is not pursued on a similar technical basis to that of life insurance. The **vehicle insurance** can refer to motor vehicles, coverage for automobiles,

providing protection against financial losses arising from accidents, theft, or other damages. The aircraft and ships risks associated with aviation or maritime activities, including accidents and damages for the airplanes and vessels. Motor vehicle, aircraft, ships liability insurance refers the liabilities arising from the use of motor vehicles, aircraft, or ships, including damages to third parties. The **marine, aviation and transport insurances** cover all damage or loss to sea, lake, river and canal vessels, aircraft, and damage to or loss of goods in transit or baggage irrespective of the form of transport (including carrier's liability). The **property insurance** includes structures and contents, with specific emphasis on risks like fire, snow, drenching, flood, and other types of damage. The **general liability insurance** is a broad category, it covers against various liabilities, typically associated with business activities and professions (CEOs, accountants, doctors, lawyers), including bodily injury, property damage, and legal costs. The **credit and suretyship insurance** protect against the risk of non-payment by debtors or other parties obligated under financial agreements; guarantees for the performance of contractual obligations. The **legal expenses** refer to legal costs and expenses incurred in legal proceedings such as the cost of litigation. Insurance can offer assistance services for persons who get into difficulties while travelling, while away from home or while away from their habitual residence. the **miscellaneous financial losses** can cover employment risk, insufficiency of income, bad weather, loss of benefit, continuing general expenses, unforeseen trading expenses, loss of market value, loss of rent or revenue, indirect trading losses other than those mentioned above, other financial loss (non-trading).

At the level of the **entire economy and society**, the **national or social insurance** encompasses various programs designed to provide financial protection and support to individuals and families in times of need. This can include health insurance, unemployment benefits, disability insurance, and pensions. The purpose of them is to create a safety net for all individuals, citizens, without the respect to their amount of contribution to the public burdens, ensuring that they have access to essential services and financial support during various life events, such as illness, unemployment, or retirement. They are associated to the welfare state. The **deposit insurance** is a financial guarantee provided by a government or a designated agency to depositors in banks and other financial institutions.[668] It aims to protect depositors in the

[668] Barth, J.R., Nguyen, N., Xu, J. (2022). Deposit Insurance Schemes. In: Lee, CF., Lee, A.C. (eds) Encyclopedia of Finance. Springer, Cham. https://doi.org/10.1007/978-3-030-91231-4_2

event of a bank failure. If a bank becomes insolvent, deposit insurance ensures that depositors will be reimbursed up to a certain limit, safeguarding their savings. **Reinsurance** is a form of insurance purchased by insurance companies to protect themselves from the risk of large financial losses.[669] In other words, it is insurance for insurers. It mitigates the financial impact of large and unexpected claims, spreading the risk across multiple insurers or reinsurers. Reinsurers assume a portion of the risk in exchange for a premium.

[669] Vértesy L., Széplaki V. (2021). A viszontbiztosított állományátruházás szabályozása és gyakorlata. *Jogelméleti Szemle* 2021(4) 71-86. and Vértesy L., Széplaki V. (2020). Outsourcing insurance risks and reinsurance: European solutions. In: Труніна, І. М.; Тульчинська, С. О.; Бєлікова, Н. В. Економічні Та Безпекові Виклики Сучасного Бізнес-Середовища Колективна Монографія 48-55.

20. Antiquity

Early societies had agreements of **mutual aid**, where if one family's house was destroyed, neighbors were committed to helping rebuild it. **Public granaries** represented another early form of insurance designed to indemnify against famines. **Caravans** were also organized for mutual assistance against looting and pillaging.

In 3rd and 2nd millennia BC **China**, merchants navigating treacherous river rapids adopted a risk management strategy by redistributing their wares across multiple vessels to limit potential losses in the event of any single vessel capsizing.

Around 1750 BC in Babylon, the **Code of Hammurabi** addressed insurance-like arrangements for sailing merchants (Law 105, Law 126, Law 235-240). If a merchant received a loan to fund a shipment, they would pay the lender an additional sum. In exchange, the lender guaranteed to cancel the loan if the shipment was stolen or lost at sea. The code also outlines a type of **bottomry** as a method for transferring risk.[670] In this arrangement, a bottomry would be secured, but the repayment would hinge on the successful completion of the ship's voyage. This structure bears more resemblance to a catastrophe bond than to conventional insurance. However an upfront loan is received, and repayment is contingent on the occurrence of the risk event, with a premium only paid if the event does not transpire.[671]

In the 6-4th century BC, during the **First Persian Empire** (Achaemenid Empire), monarchs received annual gifts from various ethnic groups under their control. This practice served as an early form of political insurance, officially binding the Persian monarch to protect the group from harm.[672]

The **Jewish Talmud** also delves into several aspects of insuring goods, reflecting the historical evolution and diverse applications of insurance-like practices in different cultures and periods. In Ecclesiastes 11:1-2 we can read: Cast your bread upon the waters, for you will find it after many days. Give a portion to seven, or even to eight, for you know not what disaster may happen

[670] Bottomry or bottomage, referring to the ship's bottom or keel, constitutes a maritime transaction wherein the vessel owner borrows money, utilizing the ship as collateral. Nevertheless, in the event of an accident during the voyage, the creditor faces the risk of losing the loan, as the pledged security may no longer exist or may exist in a damaged state.

[671] Trenerry, C. F. (2009). *The origin and early history of insurance: including the contract of bottomry*. The Lawbook Exchange, Ltd..

[672] Afshar M. S. N. (2022). Insurance in Ancient Iran. *Gardeshgary, Quarterly Magazine*, Vol. 4, No. 12, Spring 2002, 14-16.

on earth. This can be interpreted as a form of risk management through diversification. If a person's livestock causes damage to another's field, they are required to make restitution from the best of their own fields. While not insurance in the modern sense, it reflects the principle of compensating for damages (Exodus 22:5).

20.1. Greece

In Ancient Greece, marine insurance played a crucial role in facilitating international trade, enabling the smooth operation of large-scale commercial transactions. During the 1st millennium BC in Rhodes, a significant development known as the **law of general average** emerged.[673] This principle dictated that all stakeholders in a sea venture would proportionally share any losses resulting from a voluntary sacrifice of part of the ship or cargo to save the whole in an emergency. This innovation allowed groups of merchants to pool funds to insure their goods being shipped collectively. The collected premiums were then utilized to reimburse any merchant whose goods were jettisoned during transport, whether due to storms or sinkage.

In the 4th century BC, Athens introduced the concept of **maritime loans**, where advanced money for voyages would be canceled if the ship was lost. The rates for these loans varied based on safe or dangerous times of the year, indicating an intuitive pricing of risk with an effect similar to insurance. Additionally, the term ναυτικὸν δάνειον (nautikon daneion)[674] referred to maritime yield granted to a long-distance merchant or ship's owner (naúklēros) at interest (ναυτικὸς τόκος, nautikós tókos) for the duration of a commercial voyage.[675]

Around 600 BC, the Greeks and Romans established **benevolent societies** in the form of guilds. These societies, had the dual purpose of caring for the families of deceased members and covering the funeral expenses of their members.[676] This multifaceted approach marked a significant step in the evolution of insurance-like practices within the ancient Greek context.

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[673] Bolanca, D., Pezelj, V., & Amizic, P. (2017). General average-an ancient institution of maritime law. *Ius Romanum*, 390.
[674] Jakab, É. (2022). Loans and securities: Tracing Maritime Trade in the archive of the Sulpicii. *Roman Law and Maritime Commerce*, 137.
[675] Bresson, A. (2003). Merchants and politics in Ancient Greece: Social and economic aspects. *Merchants and Politics in Ancient Greece: Social and Economic Aspects*, 139-163.
[676] Graves, F. P. (2022). *The Burial Customs of the Ancient Greeks*. DigiCat.

20.2. Rome

In Ancient Rome, the insurance technique included the concept *of pecunia traiectitia*, which referred to the amount of money taken on a voyage. In a broader sense, it encompassed the funds allocated for a journey, while in a narrower sense, it denoted money given under certain conditions at a higher interest rate. Within the Digesta (533 AD), there is a legal viewpoint authored by the Roman jurist Paulus at the onset of the Crisis of the Third Century in 235 AD regarding the Lex Rhodia. This legal perspective elucidates the overarching average principle of marine insurance, which originated on the island of Rhodes around 1000 to 800 BC. The *lex Rhodia de iactu* or *fenus nauticum* introduced the notion of **nautical or maritime interest**.[677] This represented an extraordinary interest rate charged to underwrite hazardous sea voyages. Notably, credit and sea insurance were concurrently provided, offering a comprehensive approach. Under this system a **marine loan** for a ship's cargo was established, stipulating that in the event of goods being lost due to a shipwreck (*naufragium*) or a similar event, the loan could not be recovered. Besides this, an **investor lent money to a traveling merchant**, with the understanding that the merchant would be liable to repay it only if the ship returned safely. If the ship failed to return, the borrower had no further contractual obligation to the lender, who assumed the sea risk. The **interest rate** for these transactions was not limited, and the lender's profit was derived from the difference between the loan amount granted and the amount repayable upon the safe arrival of the vessel. This difference was justified as compensation for the transferred risk but also resembled interest. These terms and solutions were similar to ναυτικὸν δάνειον (nautikon daneion) and ναυτικὸς τόκος (nautikos tokos). Lucius Mestrius Plutarchus wrote, that bottomry is neither a loan nor a partnership, and has been called the most disreputable form of money lending.[678]

He used to loan money also in the most disreputable of all ways, namely, on ships, and his method was as follows. He required his borrowers to form a large company, and when there were fifty partners and as many ships for his security, he took one share in the company himself, and was represented by Quintio, a freedman of his, who accompanied his clients in all their ventures. In this way his entire security was not imperilled, but only a small part of it, and his profits were large.

Plutarch: Roman Lives. Cato. 21:6

[677] Zalewski, B. (2016). Creative interpretation of lex Rhodia de iactu in the legal doctrine of ius commune. *Krytyka Prawa*, *8*(2), 173-191.

[678] Plutarchus, Lucius Mestrius (Λούκιος Μέστριος Πλούταρχος): The Parallel Lives: Roman Lives. The Life of Cato the Elder. 21:6. (https://penelope.uchicago.edu/Thayer/E/Roman/Texts/Plutarch/Lives/Cato_Major*.html)

Additionally, Ancient Rome featured collegia tenuiorum, collegia funeraticia or **burial societies**, which functioned as insurance entities guaranteeing a decent burial for their members.[679] These societies constituted an early iteration of life insurance, with annuities being employed. Ulpian and Macer referenced actuarial tables from around 220 AD in connection with this practice.

Between approximately 50 AD and the compilation of all Roman laws by Byzantine Emperor Justinian around 530 AD, the highest permissible interest rate had been fixed at 12%. Nevertheless, the Code of Justinian introduced a variable scale, with the 12% rate exclusively applicable to maritime loans. The rationale behind the maximum rate of 12% for **bottomry** was rooted in the acknowledgment that it involved more than a simple loan of money, incorporating the risks associated with maritime ventures.

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[679] Randazzo, S. (1998). I'collegia tenuiorum'fra libertà di associazione e controllo senatorio. *Studia et Documenta Historiae et Iuris*, *64*, 229-244. and Koschembahr-Łyskowski, I. (1888). *Die collegia tenuiorum der Römer*. Plötz.

21. Middle Ages

During the Middle Ages, as seafaring commerce expanded, the intricate interplay between legal frameworks and jurisdiction became crucial for regulating and resolving disputes in the maritime domain. This era witnessed the emergence of rudimentary forms of insurance contracts and the establishment of legal structures to govern maritime affairs. Exploring the confluence of marine insurance and the development of legal frameworks and jurisdiction during the Middle Ages unveils the foundations laid for the intricate maritime and legal systems that would shape subsequent centuries.

21.1. Marine insurance

In the realm of marine insurance during this historical period, the cambium nauticum represented a **maritime exchange contract**, functioning as a variant of the bill of exchange, or cambium per litteris. This financial instrument enabled merchants to execute transactions over considerable distances without the need for the physical transfer of money, concurrently concealing interest-bearing loans through exchange-rate gains. Payment under this contract was contingent upon the safe delivery of the collateral cargo. The determination of insurance premiums in the cambium nauticum system was influenced by several factors, including the distance shipped, the time of year, the geopolitical state of war or peace, the prevalence of piracy, and the characteristics of the vessel employed. Notably, this form of financial arrangement was not subject to Church restrictions, as it did not fall under the classification of a loan for consumption. Later, the maritime loans came into conflict with Canon laws prohibiting usury. In certain instances, the fees encompassing both interest and risk for these loans could reach as high as 30%, 40%, or 50%. The contractual structure of fœnus nauticum raised suspicions of usury and faced condemnation by Pope Gregory IX in his decretal Naviganti of 1236.[680]

[680] Lane, F. C. (1964). Investment and usury in medieval Venice. *Explorations in Economic History*, *2*(1), 3-15. and Lapidus, A. (1991). Information and risk in the medieval doctrine of usury during the thirteenth century.

In the domain of marine insurance, a significant historical development occurred in 1287 in **Palermo**, marking the earliest extant example of an insurance loan contract.[681] The primary objective of these contracts was to allocate, either partially or entirely, the marine risk from the shipper to the shipowner or from the borrower to the lender.

The emergence of **separate insurance contracts**, distinct from bundled arrangements with loans or other contractual forms, is evident in the historical timeline. Notably, the earliest written insurance contract was documented in 1343, in Pisa,[682] and in the same year in Genoa, the oldest marine insurance policy was recorded. Furthermore, in 1347, in Genoa, the first marine insurance contract, specifically the commenda contract, was established.[683] Similar practice can be found in Florence in 1397.

The insurance concepts of Risicum Mare (marine risks) and Risicum Gentium (war risks) operated within a framework that did not necessitate the explicit enumeration of individual perils in the insurance contract, such as sinking, storms, or risks of theft or fraud by the captain or crew. This lack of specificity was underpinned by Dutch insurance law, which did not require a distinct categorization between marine and war risks. The prescribed policy forms covered both categories comprehensively, insuring against a spectrum of risks. A notable development in insurance practices emerged with new insurance contracts allowing for the separation of insurance from investment. This separation of roles, initially observed in marine insurance, marked a departure from previous interconnections.

The history of **reinsurance** can be traced back to maritime transportation endeavors during the 14th century, when sailors began to transfer some of the risks associated with their voyages to other parties. The first recorded reinsurance contract was in 1370, when an underwriter named Giuliano Grillo contracted with Goffredo Benaira and Martino Saceo to reinsure a ship

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[681] De Roover, F. E. (1945). Early examples of marine insurance. *The Journal of Economic History*, *5*(2), 172-200.

[682] Kuter, M., Gurskaya, M., & Papakhchian, A. (2019, October). The early practice of maritime insurance accounting in the first proprietorship of Francesco di Marco Datini in Pisa in 1382–1406. In *The 2018 International Conference on Digital Science* (pp. 299-313). Cham: Springer International Publishing.

[683] Piccinno, L. (2016). Genoa, 1340–1620: early development of marine insurance. In *Marine Insurance: Origins and Institutions, 1300–1850* (pp. 24-45). London: Palgrave Macmillan UK.

on part of the voyage from Genoa to the harbor of Bruges.[684] The first appearance of the equivalent of the term "to reinsure," expressed as the Italian term "rasichurare," can be traced back to a document from Florence dated in1457.

21.2. Legal frameworks and jurisdiction

During medieval times and earlier, the legal foundation for international commerce was known as The Law Merchant or Lex Mercatoria. Civil Law, including the Code of Justinian, proved inadequate in resolving trade disputes that extended across multiple countries. Marshall suggests that the principles of insurance law were adopted from the Lombards.[685]

In 1310, the establishment of the **Chamber of Assurance** in Bruges marked a pivotal development in the historical evolution of insurance practices.[686] As traders engaged in the sale of goods through travel, it became evident that such a method introduced inherent risks, encompassing potential losses from damage, theft, and even the well-being of the trader. Furthermore, the limitation in market coverage became apparent. To mitigate these risks, a discernible trend emerged, wherein traders embraced the practice of hiring **commissioned base agents** across various markets. Under this model, traders would export their goods to these agents, who, acting on their behalf, would oversee the sale of the goods. The adoption of this approach aimed at both diversifying market reach and delegating the risk associated with the sale of goods. The transportation of goods, whether by road or sea, introduced distinct sets of risks. Maritime transportation, for instance, posed threats such as sea storms and pirate attacks, while both modes of transport carried the risk of damage due to poor handling during loading and unloading processes. In response to these risks, traders implemented various measures to hedge against potential losses in the exportation of goods. One such strategy involved diversifying the transportation of goods by sending them over multiple vessels instead of consolidating them on a single ship or truck. This approach aimed to minimize the impact of potential total losses in the event of individual vessels facing challenges like sea storms, fires, pirate attacks, or enemy encounters. However, it was recognized that while this strategy

[684] Gerathewohl, K. (1982) Reinsurance Principles and Practice, trans. John Christopher La Bonté, Vol. II. Karlsruhe: Verlag Versicherungswirtschaft e. V. 649-651.

[685] Marshall, S. (1865). *A Treatise on the Law of Insurance, in Four Books.* I. Of Marine Insurances. II. Of Bottomry and Respondentia. III. Of Insurance Upon Lives. IV. Of Insurance Against Fire. Shaw & Sons. 18-19.

[686] Pendleton, O. W. (1948). Insurance Libraries. *Journal of Documentation*, *3*(4), 232-249.

mitigated risks, it also incurred drawbacks, including prolonged time and increased logistical efforts involved in managing multiple vessels.

The development of **legal frameworks** and **jurisdiction** in marine insurance matters became apparent. The oldest law addressing insurance is an ordinance from 1435, issued in **Barcelona**, mandating traders to resort to formal courts in cases of insurance disputes. The purpose of this law was to "...eliminate all forms of fraud that may occur in arranging insurances for ships, both large and small, as well as for goods and merchandise....".[687] In 1436, **Venice** established the Consoli dei Mercanti, a specialized court dedicated to addressing marine insurance issues.[688] The earliest insurance regulation among the Italian maritime cities was established through a decree of the Grand Council of Venice in 1468. This institutionalization was further refined in 1520 in **Genoa**, where the mercantile court was replaced by the more specialized "Rota," which not only adhered to merchant customs but also integrated legal laws. In a broader geopolitical context, Emperor Charles V, in 1549, introduced provisions for compulsory marine insurance in his legislation for the **Netherlands**.

The standardization of the term **policy** for insurance contracts occurred in the 15th century. By the 16th century, insurance had become a common practice in Britain, France, and the Netherlands, solidifying its presence across prominent European maritime nations. In 1574, Queen Elizabeth bestowed upon Richard Candler the privilege to establish an **insurance office** within the Royal Exchange Building.[689] While the Hanseatic traders and Lombard money-lenders were not forcibly expelled from England, they gradually relocated around this period. The insurance policies issued at the Royal Exchange explicitly stated that it is agreed by us, the insurers, that this policy

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[687] Alemany, R., & Guillén, M. (2013). The History of the Insurance Market in Spain. *Insurance and Risk Management Journal*, *81*(1-2), 103-118. and Martin, F. (1876). *The History of Lloyd's and of Marine Insurance in Great Britain: With an Appendix Containing Statistics Relating to Marine Insurance* (No. 44525-44529). Macmillan. 23.

[688] Papakosta, C. E. (2006, May). Consoli dei mercanti nel Levante veneziano. In *M. D'A ngelo, G. Harlaftis, C. Vassallo (éds), Making Waves in the Mediterranean. Sulle onde del Mediterraneo. Proceedings of the 2 nd MMHN Conference. Messina and Taormina* (pp. 4-7).

[689] Bogardus, J. .A. and Robert H. Moore (2003). *Spreading the Risks*. Chevy Chase: Posterity Press, Inc., 4.

Martin, F. (1876). *The History of Lloyd's and of Marine Insurance in Great Britain: With an Appendix Containing Statistics Relating to Marine Insurance* (No. 44525-44529). Macmillan. 23.

of assurance shall be of as much force and effect as the surest writing or policy of assurance heretofore made in Lombard Street.

A **life insurance** policy issued to William Gybbons in 1583, is often regarded as the earliest surviving life insurance policy. However, its notable recognition may stem from being associated with the earliest known contested life claim. The policy, with a duration of 12 months, became subject to dispute when the insured passed away nearly a year later. An unsuccessful claim contended that the policy was based on 12 lunar months of 28 days each, implying its expiration.[690]

Additionally, **commenda contracts** were prevalent during this era, wherein capitalists provided funds to an entrepreneur to engage in trade as partners in the enterprise.[691] While both parties shared in the profits, the sea and commercial risks were assumed solely by the capitalist. In this arrangement, the insured or borrower remained on land, and the insured goods were dispatched unaccompanied. Importantly, the repayment of the loan was contingent not upon the safe arrival of the ship but upon the safe arrival of the goods, illustrating a nuanced approach to risk allocation in maritime trade and insurance practices.

During the Middle Ages, **guilds** served as a form of insurance, extending coverage even to **funeral expenses**. In the context of mining activities between the 13th and 16th centuries, voluntary donations from miners were solicited to support sick and elderly colleagues, as well as widows and orphans. Notably, Thurzó János (1437-1508) established the first **companion box**, or mining chest in Körmöc (körmöci bányaláda), encompassing both employers and employees, signifying an early form of communal support and risk-sharing within the mining community.[692]

Pedro de **Santarém**, Italianized as Pietro Santerna (1460 – 1521), was a Portuguese jurist. In 1489, he attended the University of Perugia and later worked as the consul of Portugal in the cities of Florence, Pisa, and Livorno.

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[690] Ashton, J. (1898). *The history of gambling in England*. Createspace Independent Publishing Platform. 283.

[691] Pryor, J. H. (1983). Mediterranean Commerce in the Middle Ages: A Voyage under Contract of" Commenda". *Viator*, *14*, 133. and

[692] Kenyeres, Á. (1994). *Magyar életrajzi lexikon: 1978-1991*. Akadémiai kiadó. Thurzó János. Other sources mention 1346; Bencsik Mária: *A magyar társadalombiztosítás története és intézményei*. Óbudai Egyetem, Oktatási segédlet; and Szabó A. (2017): Az „önsegélyező” társaságtól a társadalombiztosításig - a magyar egészségbiztosítás fejlődése. Communicationes de historia artis medicinae. Vol. LXIII. 16.

In 1552, he published the Tractatus de assecurationibus et sponsionibus mercatorum (On Insurance and Merchants' Bets), the first systematic treatise on insurance.[693] This work also includes the definition of the contract based on the principle of good faith. It is often published together with Benvenuto Stracca's De Mercatura and has been included in Anton Hering's Tractatus de fideiussoribus, printed in Turin in 1675. The reflections and arguments presented in the treatise have been revisited by subsequent authors, notably the Anconetan jurist Benvenuto Stracca and the Portuguese jurist Antonio da Gama.

[693] de Santarem, P. (1488, pub. 1552) *Tractatus de assecurationibus et sponsionibus mercatorum*. Apud Viduam Ioannis Gymnici, sub Monocerote.
Pia, E. C. (2018). " Dal cielo alla terra": gli sviluppi dell'assicurazione. *Reti Medievali Rivista*, *19*(1), 177-187.

22.17-19th Century

During the 17th to 19th centuries, the insurance industry experienced significant growth and transformation. Insurance evolved into a more advanced system during the Enlightenment era in Europe, giving rise to specialized forms.

The **emergence of modern insurance practices** was driven by various factors. The growth of international trade necessitated protection against shipping risks. Marine insurance, developed in the 17th century, provided coverage for merchants against cargo loss or damage. The rise of cities led to increased property ownership, prompting the need for protection against fire and other perils. With longer life expectancies and expanding economic opportunities, individuals sought financial security for their families. The 18th-century introduction of life insurance allowed individuals to transfer risk and ensure financial protection for dependents. In the 19th century, statistical methods emerged, enabling insurance companies to assess risk more accurately. This led to a more stable and profitable insurance industry. Governments recognized the importance of insurance and established regulatory frameworks to protect policyholders and ensure industry stability, fostering public trust and participation. This expansion of insurance had a profound societal impact, promoting economic growth, providing peace of mind for individuals, and mitigating financial consequences of unforeseen events. The industry continued to evolve in the 20th and 21st centuries, becoming an essential component of modern economies with diverse coverage options for individuals and businesses.

In the early decades of the 17th century, **certain types of insurance** originated in London. An illustration of this development is found in the will of English colonist Robert Hayman, which referred to two policies of insurance. These policies, each valued at £100, were arranged with the diocesan Chancellor of London, Arthur Duck. *One policy pertained to the secure arrival of Hayman's ship in Guyana, while the other involved one hundred pounds assured by the said Doctor Arthur Ducke on my life*.[694]

Around the same time, French mathematicians Blaise **Pascal** and Henri de **Fermat** conducted loss probability studies that resulted in the first actuarial tables. Insurance became an empirically based enterprise, and became widely understood to be a prudent expenditure for businesses and families.

[694] Holland, D. M. (2009). A brief history of reinsurance. *Reinsurance News*, *65*(19), 4-29.

With the rise of modern insurance in the 1800s, concerns arose about insurer **solvency and fair practices**. The United States became a pioneer in **insurance supervision**, the New Hampshire Insurance Department was established in 1851, the first insurance regulatory agency in the United States.[695] Other states and European countries followed suit, establishing their own regulatory bodies, but it mainly arose in the 20th century.

22.1. Marine insurance

England – shortly after the defeat of the Spanish Armada in 1588 – adopted its first legislation in 1601, An acte concerninge matters of assurances, amongste marchantes.[696] Also known as the Francis Bacon Act, which recognizes the importance of insurance in commerce and complains that it was not as open as it had been. During the 17th to 19th centuries, the practice of **bottomry** transactions were still common in maritime trade, especially when voyages involved significant risks. This type of insurance was particularly popular among shipowners who were unable to secure traditional financing due to their limited assets or creditworthiness.[697] The bottomry insurance has three characteristics: (i) loan against ship's hull; (ii) risk-sharing mechanism, and (iii) suitable for high-risk ventures. If the voyage was successful, the shipowner would repay the loan with interest, while the lender would receive a portion of the profits. However, if the ship was lost or destroyed, the lender would forfeit their investment, and the shipowner would be liable for the debt.

In **France**, the Grande ordonnance de la marine in 1681, also known as the maritime code or simply the royal ordinance of 1681, also referred to as the Colbert Ordinance, is a significant royal ordinance enacted under the reign of Louis XIV. It was based on an earlier text known as the Guidon de la Mer from 1671 (or 1570).[698] It comprehensively codifies practices related

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[695] https://www.nh.gov/insurance/aboutus/index.htm

[696] Leonard, A. (2013). Contingent commitment: the development of English marine insurance in the context of new institutional economics, 1577–1720. *Questioning credible commitment: perspectives on the rise of financial capitalism, macroeconomic policy making*, 48-75.

[697] Park, J. A. (1792). *A System of the Law of Marine Insurances: With Three Chapters on Bottomry, on Insurances on Lives, and on Insurance Against Fire*. J. Moore.

[698] Marshall, S. (1865). *A Treatise on the Law of Insurance, in Four Books.* I. Of Marine Insurances. II. Of Bottomry and Respondentia. III. Of Insurance Upon Lives. IV. Of Insurance Against Fire. Shaw & Sons. 18.

to maritime transport, specifically within the realm of merchant shipping. Inspired by the customs and statutes of the United Provinces (Amsterdam and Antwerp), it was established under the guidance of Colbert, with its principles later incorporated into positive law in 2006.[699] The ordinance is divided into five books, each further subdivided into several titles and chapters: 1. Officers of the Admiralty, 2. People and Sea Vessels, 3. Maritime Contracts, Charter-Parties, Engagements, and Seamen's Wages; Bottomry Loans, Insurance, Captures, 4. Policing of Ports, Coasts, Roads, and Shores, 5. Sea Fishing. The ordinance stipulates that everything covered and uncovered by the sea during new and full moons, and to where the highest tide of March can extend on the shores, shall be deemed the border and shore of the sea. This formed the basis of the concept of the maritime public domain until it was specified by the Kreitmann ruling of the State Council in 1973, which delineated the limits of the maritime domain to the point where the highest seas can extend in the absence of exceptional meteorological disturbances.[700] The text regulates the mesh size of fishing nets and sets the period for harvesting seaweed.

22.2. Property insurance

The catalyst for this development can be traced back to the catastrophic **Great Fire of London** in 1666, which consumed over 13,000 houses and precipitated a perceptible shift in the perception of insurance from a matter of convenience to one of urgency. *"from a matter of convenience into one of urgency, a change of opinion reflected in Sir Christopher Wren's inclusion of a site for 'the Insurance Office' in his new plan for London in 1667."* In 1681, Nicholas Barbon and eleven associates established the Insurance Office for Houses, pioneering the first fire insurance company designed to provide coverage for brick and frame homes. Initially, the company insured 5,000 homes, and this innovative approach led to the founding of numerous similar companies in the subsequent decades. Each of these companies, in their initial phase, operated **independent fire departments** dedicated to preventing and minimizing damage from conflagrations specifically for houses

[699] The August 1681 maritime ordinance was formally repealed by Article 7 of Ordinance No. 2006-460 of April 21, 2006, regarding the legislative part of the general code of public property. However, it transposed the provisions related to the definition of the maritime public domain, as interpreted by the Kreitmann ruling, into Article L. 2111-4 of the general code of public property.

[700] Bordereaux, L. (2014). Seashore law: The core of French public maritime law. *The International Journal of Marine and Coastal Law*, *29*(3), 402-414.

insured under their purview. Notably, these companies issued distinctive 'Fire insurance marks' to be displayed above the main doors of the insured properties. Further advancements in property insurance occurred with the establishment of the Hand in Hand Fire & Life Insurance Society in 1696 and the Sun Fire Office in 1710. The latter, in particular, stands as the earliest extant **property insurance company**, contributing to the ongoing evolution and institutionalization of property insurance practices.

In 1676, the establishment of the **Hamburger Feuerkasse** marked a historic milestone as the world's first officially recognized **fire insurance** company, representing the oldest extant insurance enterprise accessible to the public.[701] In 1842, Hamburg faced a devastating fire that razed approximately a quarter of the inner city, displacing 20,000 residents. The reconstruction efforts following this calamity spanned over 40 years. The Feuerkasse was depleted, and several German insurance companies found themselves in a state of significant financial strain.[702]

In 1732, in **Colonial America**, specifically in Charles Town (South Carolina), the inception of the first insurance company occurred, specializing in the underwriting of fire insurance. Subsequently, in 1752, Benjamin **Franklin** established the Philadelphia Contributionship for the Insurance of Houses from Loss by Fire, marking the establishment of the oldest property insurance company in the United States.[703] This pioneering institution, founded by Franklin, not only played a crucial role in property insurance but also actively contributed to fire prevention efforts. The company's involvement extended beyond mere financial coverage, as it proactively identified and warned against specific fire hazards. Additionally, it implemented a policy of refusing to insure certain buildings, particularly wooden houses, where the perceived risk of fire was deemed excessively high. This dual approach of risk management and fire prevention underscored the multifaceted role played by the Philadelphia Contributionship in shaping the property insurance practices in the United States during the 18th century.

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[701] Poppelbaum, W. (2009). *Hamburger Feuerkasse: seit 1676 Hamburgs Gebäudeversicherer*. Hamburg: Hamburger Feuerkasse.

[702] Kopf, E. W. (1929). Notes on the Origin and Development of Reinsurance. In *Proceedings of the Casualty Actuarial Society*. Vol. 16, No. 33/34, 22-91.

[703] Pollman, E. (2020). The history and revival of the corporate purpose clause. *Tex. L. Rev.*, *99*, 1423. and Bridenbaugh, C. (1952). Book Review: A Philadelphia Story. The Philadelphia Contributionshipfor the Insurance of Houses from Loss by Fire, by Nicholas B. Wainwright.

In **Italy**, The Riunione Adriatica di Sicurtà (RAS) was founded in Trieste, in 1838 to operate in the branches of fire and transportation insurance.[704] Within six months of its establishment, the Riunione Adriatica di Sicurtà had already established general agencies in Vienna, Athens, Venice, Prague, Budapest, and Ljubljana. In 1839, additional General Agencies were created in Milan, Lugano, Berlin, Lviv, and Innsbruck. A great retrocession dates back to 1854 when Le Globe Compaigne d'Assurance contre L'incinde ceded fire business to Riunione Adriatica.[705] It was one of the largest insurance companies in Italy and Eastern Europe, acquired by Allianz SE in 2007. Another insurance company from Trieste, form 1831 is the Imperial Regia Privilegiata Compagnia di Assicurazioni Generali Austro-Italiche (Imperial and Royal Privileged Company for General Austrian-Italian Insurances), which nowadays functions as the Assicurazioni Generali.[706]

22.3.Business insurance

Business insurance refers to a variety of insurance coverages designed to protect businesses from financial losses resulting from unexpected events. It is a crucial risk management tool that provides financial support in the event of property damage, liability claims, business interruption, and other unforeseen circumstances.

Lloyd's of London, commonly referred to as Lloyd's, has a historical origin dating back to 1686 when Lloyd's Coffee House emerged as the first marine insurance company.[707] Edward Lloyd's coffee house, initially a popular meeting place for sailors, merchants, and shipowners, swiftly gained recognition as an ideal venue for procuring marine insurance, encompassing coverage for cargoes, ships, and involvement in the slave trade. Notably, Lloyd's secured a monopoly on maritime insurance linked to the slave trade and retained this exclusive privilege until the early 19th century. It is crucial to note that Lloyd's is not an insurance company in the conventional sense;

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[704] Schisani, M. C., & Ragozini, G. (2023). Marine insurance firms, business networks, and the modernisation of the financial sector in Southern Italy (1820–1900). *Business History*, 1-35.

[705] Holland, D. M. (2009). A brief history of reinsurance. *Reinsurance News*, *65*(19), 4-29.

[706] The adjective "Generali" ("general") referred to the company's comprehensive insurance coverage across all the branches (fire, life, hail, sea, land and river transport). This approach was rare at the time when most Trieste insurance companies focused solely on maritime transport, except for the Azienda Assicuratrice, which also dealt with hail insurance.

[707] Lloyds Bank and its related organisations are not named after the London coffee house; the bank was founded in Birmingham by Sampson Lloyd and John Taylor in 1765.

rather, it functions as a market comprised of members and stands as the oldest continuously active insurance marketplace. Unlike traditional insurers, Lloyd's itself does not underwrite insurance business, delegating this responsibility to its members. The Society, governed by the **Lloyd's Act of 1871** and subsequent acts of the Parliament, operates primarily as a market regulator.[708] It establishes rules governing the conduct of its members and provides centralized administrative services to facilitate their operations. Therefore the Lloyd's is an insurance and reinsurance market of members not oly in Enlgand but on an international level.

Lloyd's unique corporate structure and practices deviate significantly from those of contemporary insurance providers, embodying distinctive characteristics that set it apart within the insurance industry.[709] We list some of the **unusual structures and practices:** silent film comedian Ben Turpin's eyes against uncrossing; Marlene Dietrich's, Brooke Shields's, and Tina Turner's legs; Merv Hughes's trademark walrus mustache; Jimmy Durante's nose; the hands of the 1932 World Yo-Yo Champion Harvey Lowe; Keith Richards' fingers; gourmet Egon Ronay's taste buds for £250,000; Whitney Houston's, Celine Dion's, Bob Dylan's vocal cords; Michael Flatley's legs for $47 million; America Ferrera's smile for $10 million; Ken Dodd's teeth for $7.4 million; Tempest Storm's breasts; Steve Fossett's life for $50 million; Troy Polamalu's hair for $1 million; Holly Madison's breasts for $1 million; a grain of rice with a portrait of the Queen and the Duke of Edinburgh engraved on it for $20,000; Lloyd's is in talks with Virgin Galactic to insure spaceflights.

22.4. Life insurance

Why did the insurance company hire a ghost?
To offer afterlife insurance!

Life insurance witnessed its inception in the early 18th century with the establishment of the Amicable Society for a Perpetual Assurance Office in 1706 in London. Founded by William Talbot and Sir Thomas Allen, this pioneering company marked the advent of life insurance, commencing its

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[708] Havens III, C. W., & Johnson IV, J. F. (1982). What's Really Happening at Lloyd's of London. *Brief*, *12*, 30.
[709] Pearson, R. (2022). Lloyd’s: Its History and Business Practices. In *Delusions of Competence: The Near-Death of Lloyd’s of London 1970--2002* (pp. 9-17). Cham: Springer International Publishing.

operations with an initial membership of 2000 individuals.[710] Members were required to make fixed annual payments per share, ranging from 1 to 3 shares, with consideration given to the age of the participants falling within the range of 12 to 55 years. The unique structure of the Amicable Society involved the distribution of a portion of the **amicable contribution** at the end of the year among the wives and children of deceased members. The allocation was proportionate to the number of shares held by the heirs. This marked a significant development in the concept of life insurance, establishing a mechanism for providing financial support to the families of policyholders upon their demise. Following the collapse of the South Sea Bubble (1720), the sole survivor was the Amicable Society for Perpetual Assurance. Under the **Bubble Act of 1720**,[711] King George I of England authorized the formation of the Royal Exchange Assurance Corporation and the London Assurance Corporation, establishing them as exclusive entities, distinct from all other corporations and societies.[712]

The theoretical foundations for **modern life insurance** were laid in 1693 when Edmund Halley produced the first life table. However, it wasn't until the 1750s that the necessary mathematical and statistical tools were sufficiently developed to pave the way for the evolution of contemporary life insurance practices. James **Dodson**, a mathematician and actuary, played a crucial role in attempting to establish a new company dedicated to issuing premiums that accurately offset the risks associated with long-term life assurance policies.[713] Unfortunately, Dodson passed away in 1757 before obtaining a charter from the government for his proposed company. Despite this setback, his efforts contributed to the ongoing development and refinement of life insurance practices during this foundational period.

In 1762, the Society for Equitable Assurances on Lives and Survivorship was established by Edward Rowe Mores, a disciple of James Dodson,

[710] Borda, M., Chmielowiec-Lewczuk, M., & Kwiecień, I. (2020). European Life Insurance Market: Analysis of Current Situation and Development Prospects. *Life Insurance in Europe: Risk Analysis and Market Challenges*, 3-17. and Walford, C. (1885). History of Life Assurance in the United Kingdom (Continued). *Journal of the Institute of Actuaries*, *25*(4), 257-271.

[711] Pearson, R. (2023). The Bubble Act and the First Corporate Economy. In *The Bubble Act: New Perspectives from Passage to Repeal and Beyond* (pp. 13-36). Cham: Springer International Publishing.

[712] Zartman, L. W. (1914). Life Insurance - Yale Readings in Insurance, ed. William H. Price, Yale University Press. 250-251.

[713] Brockett, P. L., & Zhang, Y. (2021). Actuarial (Mathematical) Modeling of Mortality and Survival Curves. *Handbook of the Mathematics of the Arts and Sciences*, 1559-1591.

marking the inception of the first **mutual insurer**.[714] Notably, this society pioneered the introduction of age-based premiums, grounded in mortality rates. Mores' innovative approach laid the foundation for scientific insurance practices, shaping the framework for modern life assurance that subsequently influenced all life assurance schemes. Edward Rowe Mores emphasized the role of an actuary in the management of the society, designating the chief official with this title. During the period from 1775 to 1830, William **Morgan** emerged as the first modern **actuary**, contributing significantly to the field.[715] In 1776, the Society conducted the first actuarial valuation of liabilities, a pioneering initiative in the industry. Subsequently, the society distributed the first reversionary bonus in 1781 and an interim bonus in 1809 among its members. Utilizing regular valuations, the society aimed to balance competing interests and ensure policyholders received a fair return on their investments. The premium structure adopted by the society was regulated based on age, allowing the admission of individuals irrespective of their health condition or other circumstances, marking a departure from conventional insurance practices.

The inception of life insurance sales in the **United States** can be traced back to the late 1760s. Notably, the Corporation for Relief of Poor and Distressed Widows and Children of Presbyterian Ministers was established by the Presbyterian Synods in Philadelphia and New York in 1759, while a comparable relief fund was founded by Episcopalian priests in 1769.[716] The period between 1787 and 1837 witnessed the establishment of over two dozen life insurance companies; however, only a handful, fewer than half a dozen, managed to endure and sustain their operations.

The Cologne Reinsurer Co. in Germany engaged in life reinsurance from 1854 to 1860, and Swiss Reinsurer Co. entered the life reinsurance arena with its initial treaty in 1865.[717] Despite these early developments, life reinsurance experienced a relatively gradual evolution, and it appears that,

[714] Takehara, M., Hasegawa, N., Takehara, M., & Hasegawa, N. (2020). Tsuneta Yano: Established a Life Insurance Business Through Mutualism. *Sustainable Management of Japanese Entrepreneurs in Pre-War Period from the Perspective of SDGs and ESG*, 221-239.
[715] Bennetts, N. B. (2020). *William Morgan: Eighteenth-century Actuary, Mathematician and Radical*. University of Wales Press.
[716] Brackenridge, R. D., & Boyd, L. A. (1988). *Presbyterians and Pensions: The Roots and Growth of Pensions in the Presbyterian Church (USA)*. Westminster John Knox Press.
[717] Pearson, R. (2001). The birth pains of a global reinsurer: Swiss Re of Zürich, 1864–79. *Financial History Review*, *8*(1), 27-47.

from 1865 to 1880, Swiss Re.[718] was the sole company involved in life reinsurance. Cologne Re. resumed writing life business in 1885, and Munich Reinsurer Co. joined the realm of life reinsurance in 1888-1889.[719] The **accidental death benefit policies** provided death benefits to beneficiaries in case of an accidental death of the policyholder, offering financial security to families affected by such tragedies.

22.5. Accident and Health Insurance

In the late 19th century, the availability of **accident insurance** marked a notable development, operating in a manner analogous to contemporary disability insurance practices. A pioneering initiative in this realm was undertaken by the Railway Passengers Assurance Company in 1848 in England.[720] (The company was dissolved in 2002.) This company emerged as the first entity to provide accident insurance, driven by the imperative to safeguard individuals against the increasing number of fatalities associated with the burgeoning railway system. It was initially registered as the Universal Casualty Compensation Company to *grant assurances on the lives of persons traveling by railway and to grant, in cases, of an accident not having a fatal termination, compensation to the assured for injuries received under certain conditions*.[721] To facilitate the distribution of accident insurance, the company reached an agreement with railway companies. This arrangement involved offering basic accident insurance as part of a comprehensive package along with travel tickets to customers. Notably, they implemented a differentiated premium structure, charging higher premiums for second and third-class travel. This adjustment reflected the elevated risk of injury associated with the use of roofless carriages in those classes. Accident insurance policies became more widely available in the United Kingdom in the late 19th century. Companies like the Prudential Assurance Company (1881),[722] or Scottish Amicable Society (1854) began offering policies that covered accidents and industrial injuries.

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718 Swiss Re, Corporate History 1863 – 1870. (http://swissre.com/pws/about%20us/corporate%20history/1863%20-%201870/corporate%20history%201863%20-%201870.html.)

719 Holland, D. M. (2009). A brief history of reinsurance. *Reinsurance News*, *65*(19), 4-29.

720 Rhodesian Study Circle (2020). Railway Passengers Assurance Company (https://www.rhodesianstudycircle.org.uk/railway-passengers-assurance-company/)

721 Csulich, G., & Preiner, S. (2018). The development of the insurance system in Great Britain. *Dev. Mutual. Princ. Insur. Bus. Int. Comp*, *32*, 31-35.

722 Companies House services (https://find-and-update.company-information.service.gov.uk/company/00015454)

The Travelers Insurance Company in the **United States** issued the first accident insurance policy in 1863. This policy provided coverage for injuries sustained in various accidents, not just those related to travel. By 1866, sixty organizations provided accident insurance in the U.S. The Fidelity and Casualty Company of New York, founded in 1876, was among the early companies in the United States to offer accident insurance policies.[723] It later merged with other companies to form what is now known as the Fireman's Fund Insurance Company.

Several different types of accident insurance emerged in the 19th century, each catering to specific needs and risk profiles. The **workmen's compensation insurance** provided benefits to workers who suffered workplace accidents or injuries, regardless of fault. It was often mandated by governments or employers, recognizing the social responsibility to protect workers. In 1884, the British Compensation Act is passed, establishing the first national system of workmen's compensation insurance.[724] The **disability insurance** covered individuals who became disabled due to accidents, providing financial support during their period of incapacitation. In the later part of the 19th century, several accident insurance companies were established in Europe and the United States to meet the growing demand for coverage against the financial consequences of accidental injuries.

22.6.Health Insurance

Everyone should have health insurance?
I say everyone should have health care. I'm not selling insurance.
Dennis Kucinich

In these centuries **health insurance** often related to accident insurance. Evidences for private health insurance can be found only in the mid-19th century; but its raise strongly related to the establishment of the national and social healthcare system, firstly in Germany under chancellor Bismarck.

In the late 19th century, accident insurance emerged, functioning similarly to modern disability insurance. It was first introduced in the **U.S.** by the Franklin Health Assurance Company of Massachusetts in 1850, offering cov-

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[723] Caverly, R. N. (1939). The Background of the Casualty and Bonding Business in the United States. *Ins. Counsel J.*, *6*, 62.

[724] Gurtler, P. R. (1988). The Workers' Compensation Principle: A Historical Abstract of the Nature of Workers' Compensation. *Hamline J. Pub. L. & Pol'y*, *9*, 285.

erage for injuries from railroad and steamboat accidents. The roots of sickness coverage in the U.S. can be traced back to 1890, with the issuance of the first employer-sponsored group disability policy occurring in 1911.

In **Europe**, the health insurance in the **Netherlands** has roots dating back to the 19th century, closely tied to the development of the medical profession and modern medicine. During this period, many workers lacked access to affordable healthcare and income protection in case of illness, relying on charities or local governments for support. To address this, voluntary sickness funds (*ziekenfondsen*) were established by labor unions, guilds, employers, and municipalities, initially covering limited medical services such as family medicine, specialist care, maternity care, and pharmaceuticals. Under the influence of the Medical Association (est. 1840), sickness funds primarily served individuals with low incomes. By the early 20th century, approximately 10% of the population was affiliated with a sickness fund, the first government intervention in health insurance was the 1901 Law on Accidents (*Ongevallenwet*), providing workers with financial protection against workplace accidents.[725]

The history of **France**'s *mutuelles* predates the Social Security system, dating to the mid-19th century.[726] In 1900 there were roughly 13 000 mutuelles covering over 2 million people and by the start of World War II, two-thirds of the population had coverage for illness.[727] The mutuelles participated in the management of the Assurances Sociales. From the beginning of the 19th century various examples of mutuality and cooperation among citizens sprang up in **Switzerland**, leading to the spontaneous formation of numerous mutual support groups.[728]

The initial experience with community health insurance in 19th century **Japan**, called *Jyorei*. Whereas Jyorei began in 1835 in one village in Fukuoka Prefecture, it gradually expanded and the basic ideas came under gov-

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725 Maarse, H. and Jeurissen, P. (2020). Private health insurance in the Netherlands. In: North, J. *Private health insurance: History, politics and performance*. Cambridge University Press.
726 For a complete chronology of the mutualiste movement see www.musee.mutualite.com.
727 Buchmueller, T. and A. Couffinhal (2004). Private Health Insurance in France. *OECD Health Working Papers*, No. 12, OECD Publishing, Paris,
Sandier, S., Polton, D. and Paris, V. (2002). *Health Systems in Transitions: France*. In Health Care Systems, No. 7, Thomson, S. and Mossialos, E. (Eds).
728 Crivelli, L. (2020). Consumer-driven health insurance in Switzerland, where politics is governed by federalism and direct democracy. In: North, J. *Private health insurance: History, politics and performance*. Cambridge University Press.

ernment stewardship. It was scaled up as the core model of the National Citizen's Health Insurance Fund, one of the pillars of the Japanese social health insurance system. Several Jyorei success points are relevant today for developing countries wishing to support community health insurance.[729]

22.7.Reinsurance

In the 17th and 18th centuries, the initial legal judgments pertaining to reinsurance were formulated, emphasizing the autonomous nature of this contract, both legally and economically. In **England** Lloyd's underwriter, engaged in reinsurance as well, was established in London as early as 1688. Reinsurance essentially serves as insurance for insurance companies. In 1746, due to numerous detrimental practices associated with insurance in England, remedial legislation was enacted. The Act prohibited marine policies lacking adequate proof of interest, engaging in gaming or wagering, or lacking salvage benefit for the assurer, and also prohibited reinsurance without providing a specific rationale. This ban persisted for 118 years until its repeal in 1864.[730] Other key principles like insurable interest and the prevention of insurance as a cover for wagers were established. By the 1770s, reinsurance was emerging in the United States, but the majority of significant policies were still underwritten in England. In 1799, James Park, in a more vivid expression, described it as follows: *re-assurance, as interpreted by the law of England, can be characterized as a contract that the initial insurer engages in to free themselves from the risks they have unwittingly assumed by transferring those risks to other underwriters, referred to as re-assurers.*[731]

The evolution of European societies necessitated the establishment of reinsurance companies, addressing not only marine risks but also the pressing requirements of fire insurers. Reinsurance was explicitly authorized in a law passed in **Antwerp** in 1609. It should also be noted that specific legislation relating to reinsurance was also passed in **Venice** (1705), **Hamburg** (1731),

[729] Ogawa, S., Hasegawa, T., Carrin, G., & Kawabata, K. (2003). Scaling up community health insurance: Japan's experience with the 19th century Jyorei scheme. *Health policy and planning*, *18*(3), 270-278.
[730] Arnould, J., & Maclachan, D. (1866). *On the law of marine insurance* (Vol. 1). Stevens & Sons, H. Sweet, and W. Maxwell, Law Publishers. 1113.
[731] Park, J. A. (1799). A System of the Law of Marine Insurances, Second American Edition, Massachusetts: Thomas and Andrews, David West, John West, 1799. 276-277.

Bilbao (1738) and Prussia (1794).[732] The first independent **professional reinsurance company** was the Cologne Re., in response to the losses incurred during the Great Fire of 1842 in Hamburg. Statutes were drafted in 1843 and the Kölnishe Rückversicherungs–Gesellschaft established in 1846.[733] It secured the necessary authorization to operate in Germany, entering into its first reinsurance contract in 1852. The Aachener Re (1853), Frankfurter Re (1857) and Magdeburger Re (1862) were founded after Cologne pioneered the way.[734] Of 13 reinsurers founded in Germany in 1870-1871, most were out of business by 1880, but in this year another reinsurance company, the Münchener Rückversicherungsgesellschaft was established. The Swiss Reinsurance Company was founded in Zurich in 1863, the reinsurance practiced on a reciprocal basis, sharing risks amongst local companies. In 1894, the Egid, a Swedish company, offered reinsurance on a risk-premium basis.[735] In the United States, the organization of reinsurance companies commenced just before the turn of the 20th century.

22.8. Deposit Insurance

The history of deposit insurance is a story of bank failures, public panic, and ultimately, a solution aimed at stabilizing the financial system. Individual states experimented with deposit insurance programs throughout the 1800s, but these were often short-lived due to funding issues and limited scope. Bank failures were common, triggering bank runs and financial instability. The first state-level deposit insurance program was established in **New York** in 1829.[736] It aimed to guarantee bank obligations, which means both banknotes and deposits, creating a sense of security for depositors. The program was devised by Joshua Forman, with three principal components: (i) the establishment of an insurance fund, to which all banks had to pay an as-

[732] Gerathewohl, K. (1982) Reinsurance Principles and Practice, trans. John Christopher La Bonté, Vol. II. Karlsruhe: Verlag Versicherungswirtschaft e. V. 654.
[733] Sterling Offices Limited, & Golding, C. E. (1931). *A History of Reinsurance with Sidelights on Insurance*. Waterlow and Sons. 10.
[734] Holland, D. M. (2009). A brief history of reinsurance. *Reinsurance News*, *65*(19), 4-29.
[735] Kopf, E. W. (1929). Notes on the Origin and Development of Reinsurance. In *Proceedings of the Casualty Actuarial Society* (Vol. 16, No. 33/34, pp. 22-91).
[736] Gates, S. J. (2017). *More Lives than a Cat: A State and Federal History of Bank Deposit Insurance in the United States, 1829-1933*. The University of North Carolina at Greensboro. Hotori, E., Wendschlag, M., Giddey, T., Hotori, E., Wendschlag, M., & Giddey, T. (2022). The United States: The First Formalization of Banking Supervision. *Formalization of Banking Supervision: 19th–20th Centuries*, 23-41.

sessment; (ii) a board of commissioners, which was granted bank examination powers; and (iii) a specified list of investments for bank capital.[737] Funding proved problematic, and the program eventually collapsed in 1842, highlighting the need for more sustainable models. Other State Initiatives: Inspired by New York, other states like Vermont, Indiana, and Michigan launched their own deposit insurance programs in the mid-1800s.[738] However, many encountered similar difficulties and were discontinued over time. Nevertheless, the last of these insurance programs went out of existence in 1866 when the great majority of state-chartered banks became national banks. Growing public demand for deposit protection emerged.

Bank-Obligation Insurance Programs

<table>
<tr><th>State</th><th>Period</th><th>Obligations Insured</th><th>Banks Participating</th><th>Payment of Bank Creditors</th></tr>
<tr><td>New York</td><td>1829-66</td><td>1829-42, all debts; 1842-66, circulating notes</td><td rowspan="3">All banks established or rechartered subsequent to passage of act</td><td rowspan="3">After completion of liquidation of failed bank.</td></tr>
<tr><td>Vermont</td><td>1831-66</td><td rowspan="2">All debts</td></tr>
<tr><td>Michigan</td><td>1836-42</td></tr>
<tr><td>Indiana</td><td>1834-66</td><td>All debts</td><td>Branch banks</td><td>Within one year after failure, if liquidation proceeds and stockholder contributions are insufficient</td></tr>
<tr><td>Ohio</td><td>1845-66</td><td>Circulating notes</td><td>Branch banks</td><td rowspan="2">Immediately, through special assessments on solvent branch banks. Assessments to be repaid from insurance fund, and fund repaid from proceeds of liquidation of assets of failed bank.</td></tr>
<tr><td>Iowa</td><td>1858-65</td><td>Circulating notes</td><td>Branch banks</td></tr>
</table>

Source: FDIC, A. (1998). *Brief History of Deposit Insurance in the United States*. In Prepared for the International Conference on Deposit Insurance Washington, DC, FDIC Division of Research and Statistics (Sept. 1998).

Similar to the U.S., European countries experimented with deposit insurance programs in the 19th century. However, these were mostly short-lived

[737] FDIC, A. (1998). *Brief History of Deposit Insurance in the United States*. In Prepared for the International Conference on Deposit Insurance Washington, DC, FDIC Division of Research and Statistics (Sept. 1998).
[738] Hartley, J. E. (2001). Mutual deposit insurance: Other lessons from the record. *The Independent Review*, *6*(2), 235-252.

or limited in scope. By the late 19th century, mutual guarantee schemes started emerging, where banks contributed to a fund collectively insuring deposits. The 19th century witnessed the early stirrings of deposit insurance in Europe, with Prussia, Denmark, and Austria taking pioneering steps amidst concerns about bank failures and depositor protection. Unlike individual state-level initiatives in the U.S., Europe leaned towards **mutual guarantee schemes** in the mid-19th century. These were voluntary associations of banks contributing to a pooled fund used to reimburse depositors in case of a bank failure, fostering solidarity within the banking sector and aimed to instill public confidence. Some notable early examples include the mutual guarantee scheme from Prussia, which was implemented in 1871 specifically for banks holding savings deposits.[739] Contributions to the scheme were based on the amount of deposits held by each bank, with limited government oversight. Despite this, the scheme demonstrated sustainability in funding during economic downturns and remained stable until the early 20th century. Its success raised awareness of the importance of depositor protection. While providing a sense of security, these schemes often faced issues like limited resources and difficulties enforcing contributions.

22.9. National Insurance

In the late 19th century, governments embarked on the initiation of national insurance programs aimed at addressing concerns related to sickness and old age. In Germany, the foundation for such programs was laid on an existing tradition of welfare initiatives in Prussia and Saxony, dating back to the 1840s.[740] Otto von **Bismarck**, serving as the Chancellor of the German Empire from 1871 to 1890, played a pivotal role in shaping the country's welfare state. Under Bismarck's leadership, Germany implemented a comprehensive framework for national insurance, so called Bismarck model.[741] The government introduced the **Act on Health Insurance** in 1883.[742] This law established the world's first national health insurance system. It aimed to provide financial protection for workers and their families in case of illness

[739] Burhop, C., Guinnane, T. W., & Tilly, R. (2018). The financial system in Germany, 1800–1914. *Handbook of Finance and Development*, 148-172.
[740] Thane, P. (2011). The making of national insurance, 1911. *Journal of Poverty and Social Justice*, *19*(3), 211-219.
[741] Haim, A. B. (2023). Bismarck model. In *Elgar Encyclopedia of Healthcare Management* (pp. 24-25). Edward Elgar Publishing.
[742] Gesetz betreffend die Krankenversicherung der Arbeiter

and to prevent the spread of socialist ideas. The health insurance system required both employers and employees to contribute to a fund that would cover medical expenses. This marked the beginning of a state-sponsored, compulsory health insurance program. In 1884, they extended the social insurance system by adopting the **Act on Accident Insurance**.[743] This legislation mandated coverage for work-related injuries and disabilities. Similar to health insurance, both employers and employees contributed to a fund to provide compensation and support for workers affected by workplace accidents. The **Act on Old Age and Disability Insurance**, enacted in 1889,[744] established a system of social insurance for elderly and disabled individuals. It marked another pioneering step in the development of national social security systems. Contributions were made by both employers and employees, and the system provided financial support to workers upon reaching a certain age or in the event of disability.

After Bismarck, the development of national insurance was continued. The **Workers Protection Act** of 1891,[745] established a maximum working day of eleven hours for women and ten hours for men under 16 years of age. Night work was prohibited for women and children under 14. The law prohibited work on Sundays, recognizing the need for workers to have time for rest and leisure. Other rules related to safety regulations in factories and workplaces, including the provision of proper ventilation, lighting, and fire safety measures, and introduced a system of factory inspections to ensure compliance with the new regulations. The second **Health Insurance Act** of 1891,[746] also known as the Reich Insurance Act, required all workers and employees who worked in a company with at least 20 employees to pay for health insurance. The contributions were borne equally by employees and employers. The insurance provided benefits in the event of illness, accident, maternity and disability.

The **Children's Protection Act** of 1903 further extended the government's role in protecting the rights and well-being of children. It prohibited the employment of children under the age of 13 in industrial settings. Children under 14 were only allowed to work up to eight hours per day in non-industrial jobs. The law mandated compulsory education for children between the ages of 6 and 14. This aimed to ensure that children received a

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[743] Unfallsversicherungsgesetz. The regulations of the Accident Insurance Act were transferred to the Third Book of the Reich Insurance Regulations in 1911, Reichsversicherungsordnung (RVO)
[744] Gesetz über Invaliditätsund Alterssicherung für Arbeiter, Gehilfen und Lehrlinge
[745] Arbeiterschutzgesetz
[746] Krankenversicherungsgesetz

basic education and could develop their skills and abilities. The juvenile courts dealt with young offenders in a more humane and supportive manner, to prevent delinquency and provide opportunities for rehabilitation.

These paternalistic programs garnered support from German industry, and their objectives extended beyond immediate welfare concerns. Bismarck aimed to secure the backing of the working classes for the Empire and simultaneously curtail the emigration of laborers to America, where higher wages coexisted with a lack of comprehensive welfare provisions. The introduction of these measures laid the foundation for the modern welfare state.[747] Bismarck's motivations included social stability, loyalty to the state, and the desire to undermine support for socialist and revolutionary movements. The German Bismarck model also referred as Social Health Insurance Model served as an inspiration for the development of social security systems in other countries over the following decades, especially Austria, Switzerland, Czech Republic, Hungary and other central European countries.[748]

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[747] Bosch, G. (2015). The German welfare state: from an inclusive to an exclusive Bismarckian model. *The European Social Model in Crisis: Is Europe losing its soul*, *175*.

[748] Kaminska, M. E. (2022). Variations on Bismarck: Translations of Social Health Insurance in Post-Communist Healthcare Reforms in Central and Eastern Europe—The Role of Vertical and Horizontal Interdependencies. In *International Impacts on Social Policy: Short Histories in Global Perspective* (pp. 449-462). Cham: Springer International Publishing.

23.20th and 21st Century

Insurance in the 20th and 21st centuries has undergone significant evolution, shaped by technological advancements, changes in the global economy, regulatory developments, and shifts in societal needs. Here are the key trends and developments in insurance during these periods:

The 20th century saw the expansion of insurance coverage beyond traditional areas like life and property insurance. Health insurance, disability insurance, and other specialized forms of coverage became more prevalent. Many countries established **social security programs**, providing a safety net for citizens in areas such as retirement, disability, and unemployment. These programs often included government-backed insurance elements. Several insurers became unable to pay claims while others made their reputation and that of the insurance/reinsurance industry by their ability to pay. These were followed by the sinking of the Titanic (1912), World War I (1914-1918), and the 1918 influenza pandemic.

Since the mid-20th century, **insurance supervision** has become more sophisticated. Regulators are focused on both solvency (insurers' ability to pay claims) and market conduct (ensuring fair treatment of policyholders). The European countries developed their own supervisory frameworks. Germany and the UK were often seen as models for others, like central Europen countries: Austria, Hungary in the 1920s,[749] and later in harmonized system with the establishment of the European Economic Community (EEC) from the 1960s. Around and after the collapse of the soviet regimes the post socilaist countries introduced the insurance market with a supervision. In the U.S., the McCarran Ferguson Act was passed by Congress in 1945.[750] The law solidified the state-based system of insurance regulation. Subject to certain conditions, it essentially returned insurance regulation to the states. The Act was designed to ensure the preeminence of state regulation not to free insurers from federal antitrust laws.

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[749] Vértesy, L. - Széplaki, V. (2021). A biztosításfelügyelet története Magyarországon a 19. századtól a rendszerváltozásig. *Jogtörténeti Szemle*, *19*(2), 41-47. Vértesy, L. - Széplaki, V. (2022). A biztosításfelügyelet története Magyarországon a rendszerváltozástól napjainkig. *Jogtörténeti Szemle*, *20*(1), 45-51.

[750] Crowell, E. K. (2022). A Tale of Two Preemptions: The New York Convention Preempts the McCarran-Ferguson Act on Its Own Muster. *Ga. J. Int'l & Comp. L.*, *51*, 711. Macey, J. R., & Miller, G. P. (1993). The McCarran-Ferguson Act of 1945: reconceiving the federal role in insurance regulation. *NYUL Rev.*, *68*, 13. https://www.iii.org/publications/insurance-handbook/regulatory-and-financial-environment/mccarran-ferguson-act

Internationally, **organizations** like the International Association of Insurance Supervisors (IAIS), Insurance Information Institute (III), or the International Insurance Law Association/Association Internationale de Droit des Assurances (AIDA) promote cooperation and information sharing among regulatory bodies. Insurance **regulation** continues to adapt to the changes. Issues like cyber threats, climate change, and the rise of InsurTech (insurance technology) require ongoing adjustments to supervisory practices. The use of **computers** and data analytics allowed insurers to better assess risks, price policies more accurately, and streamline operations. The late 20th century saw the emergence of **catastrophe modeling**, which involved using advanced analytics to assess the potential impact of catastrophic events on insurance portfolios. This became crucial for managing risks associated with natural disasters. Insurance markets became increasingly globalized, with multinational insurance companies expanding their reach and offering coverage in various regions. This **globalization** facilitated the transfer of risks across borders. Within the mare and more interconnected financial sectors, the bancassurance emerged.

Soon after the millennium, the global financial crisis of 2008 showed that alternative financial, stock market solutions can be dangerous. Financial institutions, including banks and insurance companies, used Credit Default Swaps (CDS) to protect themselves against potential losses from the subprime mortgage market. They thought the CDS colud function as an insurance for the whole market. Investors and financial institutions underestimated the actual risk associated with subprime mortgages and related securities. The reliance on CDS and other forms of insurance contributed to this mispricing, as these instruments were often seen as a way to transfer risk rather than accurately assess and manage it. When the housing market collapsed and mortgage defaults surged, the interconnectedness of financial institutions and the reliance on CDS amplified the impact.[751]

The 21st century witnessed a profound digital transformation in the insurance industry: insurtech, cyber insurance, telematics in auto insurance, blockchain technology. Climate change concerns led to a greater focus on environmental, social, and governance (ESG) factors in insurance. The COVID-19 pandemic highlighted challenges in business interruption coverage.

[751] Andres, C., Betzer, A., & Doumet, M. (2021). Measuring abnormal credit default swap spreads. *Global Finance Journal, Forthcoming*. and Fu, X., Li, M. C., & Molyneux, P. (2021). Credit default swap spreads: market conditions, firm performance, and the impact of the 2007–2009 financial crisis. *Empirical Economics*, *60*, 2203-2225.

23.1. Social insurance

In 1911, the National Insurance Act was introduced in **Britain** by the Liberal government, led by David Lloyd George. This legislation marked the inception of the first contributory system of insurance against illness and unemployment for the working classes. The implemented shared payment system required all workers earning under £160 a year to contribute 4 pence per week to the scheme, with employers contributing an additional 3 pence and general taxation contributing 2 pence. This structure enabled workers to avail sick leave for up to 26 weeks, receiving compensation ranging from 10 to 5 shillings per week. The system further included provisions for free treatment of tuberculosis and offered maternity benefits, while the unemployment benefit was time-limited. Following World War II, the principles of this social insurance system underwent significant expansion, the **Beveridge Report**, officially titled Social Insurance and Allied Services, was published in 1942, named after Sir William Beveridge, economist and social reformer. This report laid the foundation for the post-war welfare state in the United Kingdom. Following the recommendations of the report, the National Health Service (NHS) was established in 1948.

In this system, all citizens are entitled to health care, regardless of their income or employment status. By having the government serve as the sole payer in this healthcare system, competition within the healthcare market is eradicated, contributing to cost containment. The government is responsible for managing the health care system, including setting prices for services and drugs. The majority of hospitals and clinics are government-owned; while certain doctors and healthcare professionals work directly for the government. There are also private institutions that receive payments from the government. Funding healthcare primarily through income tax ensures that services are provided without direct charges, and individuals contribute to their healthcare costs through taxes. Primary care is emphasized as the foundation of the system. Preventive care: Preventive care is promoted to reduce the need for expensive treatments. Among the criticisms we can mention, that there can be long waiting times for non-urgent care. Patients may have fewer choices of providers and treatments. The government can be slow to respond to changing needs, as a potential for bureaucracy. Examples of countries that use the Beveridge model besides the United Kingdom, Norway, Sweden, Denmark and Finland.

Three main types of healthcare systems

	Bismarck Model	Beveridge Model	Out-of-Pocket Model
Universal Coverage	Yes, typically covers the entire population.	Yes, aims for universal coverage.	No, coverage depends on an individual's ability to pay.
Financing	Funded through social insurance contributions from employers and employees.	State-funded through taxation.	Funded directly by individuals at the point of service.
Provider Ownership	Mix of public and private ownership.	Predominantly public ownership of healthcare facilities.	Primarily private ownership.
Cost Structure	Social insurance spreads costs among employers and employees.	Government is the primary payer, reducing competition in the market.	Individual bears the full cost at the time of service.
Access to Services	Access is often dependent on employment and social insurance contributions.	Generally provides broad access to services for all citizens.	Access is limited to what individuals can afford.
Government Role	Government involvement in regulation, less in direct provision.	Strong government involvement in financing and provision of services.	Limited government involvement; healthcare is market-driven.
Preventive Care	Generally includes preventive care within the scope of services.	Emphasis on preventive care as a means of reducing long-term costs.	Limited focus on preventive care due to cost constraints.
Examples of Countries	Germany, France, Belgium.	United Kingdom, Nordic countries (Sweden, Norway, Denmark).	Many low-income countries; certain populations globally.

Source: own compilation of the author

The Beveridge model is one of **three main types of healthcare systems**, along with the Bismarck model[752] and the Out-of-Pocket model.[753] The Bismarck model is characterized by social insurance, where individuals and

[752] Haim, A. B. (2023). Bismarck model. In *Elgar Encyclopedia of Healthcare Management* (pp. 24-25). Edward Elgar Publishing.
[753] Ibrahim, H., Mahmood, H. S., & Ali, R. (2020). The Major Merits of Healthcare Insurance Models A Review Study. *Karbala Journal of Pharmaceutical Sciences*, (18). and Hoctor, T. (2021). Beveridge or Bismarck? choosing the Nordic model in British healthcare policy 1997-2015. Routledge.

employers contribute to a fund that pays for health care. The Out-of-Pocket model is characterized by private insurance, where individuals or employers purchase private insurance to cover their health care costs.

> If you look at how the federal government spends our money,
> it's an insurance conglomerate protected by a large, standing army.
> Ezra Klein

In the **United States**, private health insurance emerged from the efforts of hospitals and physicians to devise alternative payment arrangements during the Great Depression.[754] During the first half of the 20th century, hospital and medical expense policies were introduced, with individual hospitals offering pre-paid services in the 1920s, leading to the formation of Blue Cross organizations. The early versions of Health Maintenance Organizations (HMOs) began to emerge in the late 1920s through the 1930s and during World War II. The **Social Security Act** was adopted in 1935, designed as a mechanism to attain individual financial security. It was enacted during the presidency of Roosevelt as part of the New Deal, aimed to address the economic challenges of the Great Depression and provide a safety net for American citizens, in an effort to alleviate poverty and provide economic security for vulnerable populations. The program is financed through payroll taxes collected from both employees and employers; constitutes a lasting framework encompassing universal retirement pensions, unemployment insurance, and welfare benefits.

This program provides a kind of old-age insurance, benefits to retired workers who have paid into the social security system for a minimum number of years. Benefits are based on a worker's earnings history and are intended to replace a portion of their pre-retirement income. This initiative offers benefits to individuals who have experienced disability, rendering them unable to continue working. These benefits are calculated based on the individual's earnings history and are designed to serve as partial income replacement. The system program extends benefits to the spouses and dependent children of deceased workers; determined by the earnings history of the deceased worker and aim to furnish financial support to their surviving family members. Aid to Families with Dependent Children (AFDC) program supplies financial aid to families with children facing the absence of parental support due to reasons such as death, disability, or the parent's absence from the household. The Employee Retirement Income Security Act of 1974 (ERISA) regulated

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[754] Field, R. I. (2013). How the Government Created Private Health Insurance. *Mother of Invention: How the Government Created "Free-Market" Health Care*. Oxford Academic

employer-established health benefit plans, while the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) allowed ex-employees to continue coverage under an employer-sponsored group health plan. In 1996, this program was succeeded by Temporary Assistance for Needy Families (TANF). The maternal and child health services allocate grants to states to address the prevention and treatment of health issues related to maternal and child well-being. There are also financial assistances to individuals who are blind and unable to engage in work.

Additionally, the **G.I. Bill**, officially known as the Servicemen's Readjustment Act of 1944, was designed to provide comprehensive support and benefits to American servicemen returning from World War II, aiming to facilitate their smooth transition to civilian life.[755] The Act aided veterans by providing educational benefits, home loan guarantees, unemployment compensation, and vocational training, particularly through the G.I. Bill of Rights, which facilitated higher education access, significantly expanding the American middle class and fostering social mobility. The bill's home loan guarantee program supported veterans in buying homes, promoting homeownership and economic stability, while the unemployment compensation and vocational training provisions addressed challenges in transitioning to the civilian workforce after military service.

The current system in **Japan** was established in 1922 with the Health Insurance Act (Kenkou Hokenhou), which secured health services for employees – mainly blue-collar workers – and gradually expanded to cover other groups.[756] **Other countries** in Europe, South American, African developing countries started the national or community-based health insurance in the 1960s or later only in the 1990s.

23.2.Deposit Insurance

In the **U.S.** from 1908 to 1917, eight states adopted deposit insurance programs: Oklahoma (1908), Kansas (1909), Nebraska (1909), Texas (1909), Mississippi (1914), South Dakota (1915), North Dakota (1917) and Washington (1917). Seven of the eight states were located west of the Mississippi

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[755] G.I. is an informal expression denoting a member of the United States armed forces, particularly the army. Its origin lies in being an initialism initially employed in U.S. Army documentation to designate items constructed from galvanized iron.

[756] Kiikuni, K. (1972). Health insurance programs in Japan. *Inquiry*, *9*(1), 16-23.
Ikegami, K., Onishi, K., & Wakamori, N. (2020). *Induced Physician-Induced Demand* (No. CIRJE-F-1149). CIRJE, Faculty of Economics, University of Tokyo.

in predominantly agricultural areas. An average of more than 600 banks per year failed between 1921 and 1929, which was 10 times the rate of failure during the preceding decade.[757] The 1930s saw a wave of bank failures, fueling the Great Depression. Public confidence in the banking system plummeted, leading to mass withdrawals and further instability. In the U.S., in 1933, the **Federal Deposit Insurance Corporation** (FDIC) was established by the Glass-Steagall Act. Initially offering $2,500 per depositor, it aimed to restore confidence and prevent bank runs. With the immediate success, the general deposit insurance proved highly effective. Bank failures dropped dramatically, and public confidence rebounded. Coverage was later increased to $5,000 per depositor. Over time, deposit insurance coverage was gradually increased to keep pace with inflation and changing economic needs. The failure of many savings and loan institutions in the 1980s exposed weaknesses in deposit insurance systems. Reforms were implemented, including stricter regulations and higher premiums. The Great Recession led to further debate about the role and limits of deposit insurance. The Dodd-Frank Wall Street Reform and Consumer Protection Act aimed to strengthen financial regulations and prevent future crises. Nowadays the coverage stands at $250,000 per depositor for most accounts. From 2024 the deposit owner's trust deposits is also insured in an amount up to $250,000 for each of the trust beneficiaries, not to exceed five, regard less of whether a trust is revocable or irrevocable, and regardless of contingencies or the allocation of funds among the beneficiaries. This provides for a maximum amount of deposit insurance coverage of $1,250,000 per owner, per insured depository institution for trust deposits.[758]

After several bank crises, including the Great Depression, the need for deposit insurances across **Europe** became apparent. Each country in Europe has its own unique deposit insurance history and current framework, often influenced by regional and national developments. The 1970s saw increased cooperation, with the Council of Europe adopting a model convention for deposit guarantee schemes.[759] In 1994, the **Deposit Guarantee Schemes Directive** (DGS Directive) was implemented, requiring all EU member states

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[757] FDIC, A. (1998). *Brief History of Deposit Insurance in the United States*. In Prepared for the International Conference on Deposit Insurance Washington, DC, FDIC Division of Research and Statistics (Sept. 1998).
[758] FDIC (2024): Final Rule on Simplification of Deposit Insurance Rules for Trust and Mortgage Servicing Accounts (https://www.fdic.gov/resources/deposit-insurance/brochures/deposits-at-a-glance/)
[759] Calomiris, C. W., & Chen, S. (2022). The spread of deposit insurance and the global rise in bank asset risk since the 1970s. *Journal of Financial Intermediation*, *49*, 100881.

to establish **national deposit guarantee schemes** (DGSs).[760] This marked a significant step towards harmonization and minimum standards. For example, the push by the EU was associated with a sudden change in Europe: 16 European countries installed deposit insurance between 1994 and 1998, with many of the adopters being middle- or low-income countries.[761]

The 2008 financial crisis highlighted limitations of the then-existing DGS framework. Concerns arose regarding funding issues and uneven coverage across countries. Several reforms were implemented to strengthen the system.[762] These reforms included increasing the minimum coverage per depositor (from €50,000) to €100,000. Additionally, a "bailing-in" mechanism was introduced, enabling burden sharing between banks and creditors before taxpayer funds are utilized.[763] Efforts were also made towards establishing a Single European Deposit Insurance Scheme (EDIS) in 2015, with the goal of promoting further integration and risk-sharing within the Eurozone.[764] The **EDIS proposal** is still under discussion, facing challenges related to risk sharing and liability among member states. While the DGS Directive sets minimum standards, national systems still differ in some aspects, including funding mechanisms and crisis resolution procedures.

Nowadays all modern countries employ deposit insurance scheme, like Canada, Mexico, Brazil, non-EU countries (Norway, Iceland, Switzerland, Serbia, Albania), United Kingdom, Turkey, Ukraine, Russia, Australia, New Zealand, Japan, China, Bangladesh, India, Central Africa, South Africa.

Garonna, P., Crosetti, S., & Marcelletti, A. (2021). *Deposit insurance in the European Union: in search of a third way*. Working Paper Series, Luiss School of Government, SOG-WP64/2021. Available online: https://sog. luiss. it/sites/sog. luiss. it/files/WP64% 20proofs% 20CORRETTO3. pdf (accessed on 12 August 2022).

[760] Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes

[761] Calomiris, C. W., & Jaremski, M. (2016). Deposit insurance: Theories and facts. *Annual review of financial economics*, *8*, 97-120.

[762] Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (recast)

[763] Kerlin, J. (2017). *The role of deposit guarantee schemes as a financial safety net in the European Union*. Springer.

[764] Tümmler, M. (2022). Completing Banking Union? The Role of National Deposit Guarantee Schemes in Shifting Member States' Preferences on the European Deposit Insurance Scheme. *JCMS: Journal of Common Market Studies*, *60*(6), 1556-1572.

Högenauer, A. L., Howarth, D., & Quaglia, L. (2023). *The challenge of completing banking union*. European politicians may need to dare to take more risks. European University Institute 149.

Criticism of deposit insurance argues that it creates a **moral hazard** by incentivizing both depositors and banks to take on excessive risks.[765] Without deposit insurance, banks would compete cautiously for deposits, as depositors prefer safer institutions. However, with deposit insurance, banks may engage in riskier behavior since depositors are less concerned about their funds' safety. This shared risk among all banks, regardless of their safety measures, exacerbates the issue. If deposit insurance is provided by another business or corporation, like other insurance agreements, there is a presumption that the insurance corporation would either charge higher rates or refuse to cover banks that engaged in extremely risky behavior.[766] An alternative proposal, such as the **Bibby plan**, seeks to address moral hazard while still preventing bank runs.[767] Under this plan, the state would provide deposit insurance, with banks paying premiums reflecting their level of risk. This allows for differentiation between banks based on their investment risk and the level of insurance offered, potentially mitigating moral hazard concerns.

23.3. European Union

Insurance sector regulation was initiated in the 1960s with Directive 64/225/EEC, which abolished restrictions on reinsurance and retrocession. The 1970s saw the separation of life and non-life sectors through the First Council Directive (73/239/EEC) under Solvency I.[768] The Council's other First Directive (79/267/EEC) focused on legal harmonization for direct life insurance activities. Composite insurance was no longer allowed from this point.[769] The first motor insurance directive (72/166 EEC) predates these developments.[770] Amendments in the 1980s (e.g., Directive 88/357/EEC) and

[765] Schich, S. (2008). Financial turbulence: Some lessons regarding deposit insurance. *OECD Journal: Financial market trends*, *2008*(1), 55-79.
[766] Hummel, J. R. (1989). Privatize Deposit Insurance. *The Freeman*, *39*(7), 270.
[767] Sangwan, R. (2022). Present Status of Deposit Insurance in India. *International Journal of Creative Research Thoughts* (IJCRT). 10:7. 826-831.
[768] The Council's First Directive (1973) on the coordination of legal, regulatory and administrative provisions regarding the initiation and practice of direct insurance activities outside the scope of life insurance.
[769] Directive 79/267/EEC (1979) on the coordination of legal, regulatory and administrative provisions on the initiation and exercise of direct life insurance activities.
[770] Directive 72/166/EEC on the approximation of the laws of Member States relating to insurance against civil liability in respect of the use of motor vehicles, and to the enforcement of the obligation to insure against such liability

in the 1990s separately for the life and the non-life branch followed.[771] Criticisms of Solvency I arose in the Müller Report of 1997 and the Sharma Report of 2001. In the early 2000s, Directive 2002/83/EC on life insurance and Directive 2002/92/EC on insurance mediation were adopted. Directive 2000/26/EC, the fourth motor vehicle insurance directive, also emerged during this period.

A composite insurance company is defined as a company that provides a comprehensive array of insurance services, encompassing both life and non-life lines or branches. However, within the European Union, there is a **prohibition on composite insurance companies**. This regulation specifies that insurance companies, as well as branches of insurance companies from third countries, are not permitted to be authorized to conduct both non-life and life insurance business simultaneously. The term line of insurance refers to the two primary groups of insurance that are differentiated based on risk criteria. These two main groups are specifically identified as non-life insurance and life insurance.

The insurance market underwent significant regulatory changes post-financial crisis, with most prior legal acts repealed. The **Solvency II** Directive[772] and its supplementing regulation oversee insurer solvency in three pillars,[773] akin to Basel II in banking. It replaced the quantitative-based capital adequacy of Solvency I with an economic risk-based model, offering standard or internal model options based on economic evaluation.[774]

Solvency II mandates insurance companies to have sufficient financial resources for insurance and reinsurance, defining rules for management and supervision. Its scope includes non-life insurance, life insurance, and rein-

[771] Directive 92/96/EEC on the harmonization of statutory, regulatory and administrative provisions on direct life insurance and amending Directives 79/267/EEC and 90/619/EEC Directive 92/49/EEC on the harmonization of statutory, regulatory and administrative provisions relating to direct insurance outside the scope of life insurance and amending Directive 73/239/EEC and Directive 88/357/EEC

[772] Directive 2009/138/EC on the taking up and pursuit of the business of insurance and reinsurance.

[773] Regulation (EU) 2015/35 supplementing Directive 2009/138/EC on the taking up and pursuit of the business of insurance and reinsurance (Solvency II)

[774] Scherer, M. and G. Stahl. (2021). The standard formula of Solvency II: a critical discussion. *European Actuarial Journal* 11 (2021): 3-20.

surance. Capital requirements include the minimum capital requirement, ensuring policyholders' protection from excessive risk, and the solvency capital requirement, covering significant losses.[775]

The main contents of the Solvency II Regulation and Directive

Solvency II – Regulation	Solvency II Directive
• Valuation and risk-based capital requirements (Pillar I), strengthened governance (Pillar II), greater transparency (Pillar III): valuation of assets and liabilities; insurance technical reserves; solvency capital requirement (standard formula; full and partial internal models); minimum capital requirement; investments; management system; supervision; special purpose economic entities; • Insurance groups: group-level solvency capital adequacy calculation (methods and internal model); supervision of group-level solvency capital compliance of groups with centralized risk management; • Equivalence provisions for third countries.	• Licensing; • Capital requirements; • Risk management system: appropriate management system; own risk and solvency assessment; • Special provisions for insurance and reinsurance; • Supervision: supervisory review, group supervisory authority.

Source: own compilation of the author

Besides the directive, the **Solvency II Regulation** further outlines three pillars: valuation and risk-based capital requirements, reserve rules, capital adequacy (Pillar I), strengthened corporate governance and supervision (Pillar II) and increased transparency, data provision and publication (Pillar III).[776] The regulatory burden aligns with an insurer's risk profile, emphasizing the need for internal credit ratings to reduce reliance on external ratings. Insurers using unapproved models for credit risk calculations must not bias estimates or yield lower capital requirements than those derived from external ratings. Supervisory authorities ensure insurers develop internal models for credit risk assessment when exposures are material and involve numerous significant counterparties. The annexes to the regulation contain the correlation coefficients required for the above calculations, as well as the correlation

[775] Vértesy, L. (2022). A pénzügyi piac szabályozása az Európai Unióban: IV.25. In: Kálmán, J. (ed.). *A pénzügyi jog alapintézményei*. ORAC. pp. 486-514.
[776] Regulation (EU) 2015/35 supplementing Directive 2009/138/EC on the taking up and pursuit of the business of insurance and reinsurance (Solvency II).
Kochenburger, P. and Patrick Salve. (2023). An Introduction to insurance regulation." *Research Handbook on International Insurance Law and Regulation*. Edward Elgar Publishing, 2023. 247-280.

matrices of premium and reserve risks, for each country and each category of insurance claims, over nearly 500 pages.

Solvency II Framework

Solvency II Framework		
Pillar 1 Quantitative Requirements	Pillar 2 Qualitative Requirements	Pillar 3 Transparency & Disclosure
Available Capital • FV Approach, e. g. Technical Provisions • S II Balance Sheet Available Own Funds Capital Requirements • SCR and MCR via Standard Formula, Partial or Internal Model • Eligible Own Funds	Governance & RM System • Governance • Adequate Risk Management Process • ORSA Process Supervisory Review • Review Process • Capital Add-On • Prohibition of Business Activity	Qualitative Requirements • SFCR and RSR • ORSA Report • Partly Public (e. g. for Investors & Analysts) Quantitative Requirements • Quantitative Reporting Templates (QRT) • Partly Public (e. g. for Investors & Analysts)
Based on Data & Processes		

Source: own compilation of the author

In conjunction with the Solvency II Directive, Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor vehicles, and the enforcement of the obligation to insure against such liability (fourth motor vehicle insurance) ensures that individuals with compulsory motor vehicle liability insurance are covered throughout the EU. Directive 2016/97 on insurance distribution aims to enhance the sale of insurance products to benefit consumers and retail investors in the EU.

For occupational pension benefits and Institutions for Occupational Retirement Provision, the IORP II Directive regulates the activities and supervision of institutions providing such benefits.[777] Employer pension funds provide collective pension schemes for employers and can operate across EU member states, enabling cross-border management or establishing subsidiaries.[778] The directive focuses on minimum harmonisation, allowing Member States to maintain or introduce additional provisions to protect scheme members and beneficiaries. The Pan-European Personal Pension Product (PEPP), regulated by Regulation 2019/1238, complements existing pension systems. It offers savers greater choice and competitive pension products for voluntary

[777] Directive (EU) 2016/2341 on the activities and supervision of institutions for occupational retirement provision (IORPs)

[778] Butler, Graham: Private Pensions and EU Internal Market Law: Enhancing Retirement Provision through Harmonisation. *European Business Law Review* 32.5 (2021).

retirement savings, ensuring strong consumer protection.[779] PEPPs can be provided by various financial service providers throughout the EU, including insurance companies, asset managers, banks, select investment firms, and certain occupational pension funds.

The global financial crisis had brought into question the credibility and responsibility of the financial sector and led to an increased lack of both confidence and trust, among the public. Established in 2011, the **European Insurance and Occupational Pensions Supervisory Authority** (EIOPA) is an independent regulatory body that forms part of the European System of Financial Supervision (ESFS), and located in Frankfurt am Main.[780] It is responsible for (i) supervising and ensuring the financial stability and proper functioning of the insurance and occupational pensions sectors; (ii) protecting policyholders and beneficiaries; (iii) contributing to the development of sound financial regulation. EIOPA achieves its objectives through a number of activities, including: (i) developing and issuing guidelines and recommendations for national supervisory authorities; (ii) conducting stress tests and risk assessments; (iii) collecting and analyzing data; (iv) mediating disputes between national supervisory authorities. It operates as an independent authority, contributing to the harmonization and coordination of insurance and pension regulation across EU member states.

Unfortunately, there is currently no Insurance Union initiative within the EU, like the Banking Union or the Capital Markets Union.[781]

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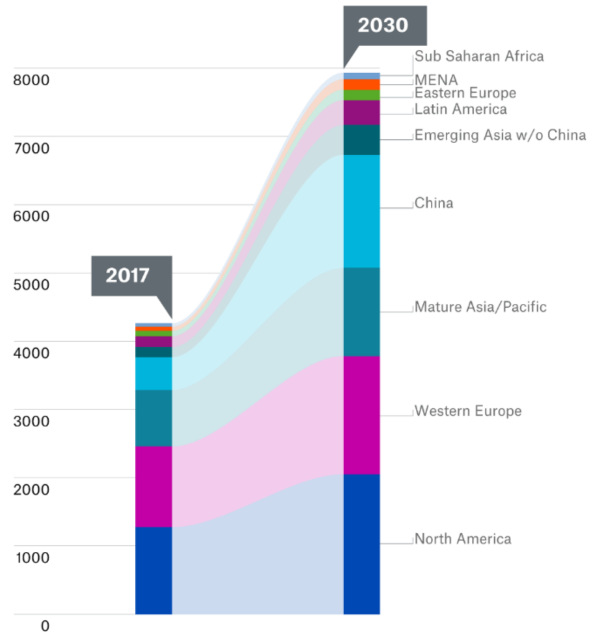
[779] Kochaniak, Katarzyna, et al. (2023). Does the Pan-European Personal Pension Product Suit All? Its Perspectives in the EU Member and Candidate Countries." *Comparative Economic Research. Central and Eastern Europe* 26.4: 141-162.
Bär, M. (2022). The Pan-European Personal Pension Product: key characteristics and main challenges. *Zeitschrift für die gesamte Versicherungswissenschaft* 111.3: 305-337.
[780] Regulation (EU) 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/79/EC
[781] Vértesy, L. (2019). The legal and regulatory aspects of the free movement of capital - towards the Capital Markets Union. *Jogelméleti Szemle* 20 (4) 110-126.

23.4. Trends

The size of the global insurance market reached USD 6,313.33 Billion in 2022 and is anticipated to achieve USD 12,726.96 Billion by 2030, exhibiting a Compound Annual Growth Rate (CAGR) of 9.21% from 2024 to 2030.[782] Asia is expected to be the fastest-growing region for both life and non-life insurance premiums in the coming years. The increasing demand for health and protection products is driving the growth of life insurance premiums. The growth of emerging economies and the rising middle class are driving the growth of non-life insurance premiums. Of the additional premium of €3.7trn by 2030, some €1.2trn is expected to come from China.[783]



Source: https://www.munichre.com/topics-online/en/economy/insurance-markets/outlook-2018-2019.html

Current trends in the insurance industry encompass bancassurance, insurtech, blockchain, parametric insurance, cyber insurance, and cybersecurity risks, as well as a focus on sustainability, ESG considerations, and ongoing innovations in life and health insurance.

Bancassurance

The **bancassurance** is a collaborative arrangement between a bank and an insurance company, enabling the insurer to offer its products to the bank's clientele. The origins of bancassurance, as it is recognized today, can be

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[782] Verified market research (2023). Insurance Market Size And Forecast. (https://www.verifiedmarketresearch.com/product/insurance-market/)

[783] Brandmeir K., Grimm, M., Holzhausen A. (2017). *Global insurance markets – Current status and outlook*. Allinaz (https://www.allianz.com/en/press/news/studies/170705-insurance-markets-outlook-2027.html)

traced back to the 1970s in France, which may explain its French nomenclature. Spain also embraced this financial collaboration in the 1980s, marking an early adoption of the concept.[784] It is not a type of insurance but a sales channel for the selling of insurance products through banks.

This partnership proves mutually beneficial as the bank generates additional revenue by selling insurance products, while the insurance company expands its customer base without the need to increase its sales force. Common in Europe, with prominent examples like Crédit Agricole and ING, bancassurance has historically faced varying acceptance levels globally. Depending on the country and the particular bank, consumers can have the opportunity to purchase a diverse range of insurance products, such as life, health, and property and casualty insurance, at their local banks.[785] While it dominates life insurance sales in countries like Italy and France, its presence is lower in Eastern Europe and nonexistent in the United Kingdom and Ireland. The United States initially resisted bancassurance due to regulatory concerns, with the Bank Holding Company Act of 1956 imposing restrictions. However, the Gramm-Leach-Bliley Act in 1999 removed many barriers, allowing U.S. banks to actively participate in selling insurance products.

Deposit Insurance

After the financial crisis of 2008, to strengthen the public confidence in the financial sector, governments raised the coverage limits of deposit insurance. It varies across countries, reflecting different policy approaches and financial systems. In November 2015, the Commission proposed the establishment of the **European Deposit Insurance Scheme** (EDIS) for bank deposits in the euro area, forming the third pillar of the banking union. This initiative was part of a broader strategy to strengthen the economic and monetary union and complete the banking union.[786] Building upon the existing national Deposit Guarantee Schemes (DGS) governed by Directive 2014/49/EU,[787] EDIS aims to offer enhanced and uniform deposit insurance coverage. Article 6 states, that Member States shall ensure that the coverage

[784] Genetay, N., & Molyneux, P. (2016). *Bancassurance*. Springer.
[785] Choudhury, M., & Singh, R. (2021). Identifying factors influencing customer experience in bancassurance: A literature review. *Journal of Commerce & Accounting Research*, *10*(2).
[786] Chiaramonte, L., Girardone, C., Migliavacca, M., & Poli, F. (2020). Deposit insurance schemes and bank stability in Europe: how much does design matter?. *The European Journal of Finance*, *26*(7-8), 589-615.
[787] Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (recast)

level for the aggregate deposits of each depositor is €100.000 in the event of deposits being unavailable. It seeks to reduce the vulnerability of national DGS to local shocks, ensuring consistent depositor confidence regardless of bank location and weakening the ties between banks and national governments. EDIS would cover deposits below €100,000 in all banking union banks, intervening alongside national DGS in cases of bank insolvency or deposit transfers. The scheme will be implemented in stages, with EDIS contributions increasing over time, ultimately aiming for full financing of bank deposit protection, supported by collaboration with national DGS. **Other countries**, like the U.S. the Federal Deposit Insurance Corporation (FDIC) insures deposits up to $250,000 per depositor per insured bank. The Canada Deposit Insurance Corporation (CDIC) covers up to CAD $100,000 per depositor per insured category. The Deposit Insurance Corporation of Japan provides coverage up to ¥10 million (approximately $90,000) per depositor per bank. The Singapore Deposit Insurance Corporation (SDIC) has recently increased its coverage limit from SGD $75,000 to SGD $100,000 per depositor per bank in 2024.[788] Other introduced unlimited coverage: Australia, Austria, Denmark, Germany, Iceland, Ireland, Slovakia. Many developing countries have established or are in the process of establishing deposit insurance systems, with coverage limits that vary widely depending on the country's economic conditions and policy objectives.

Deposit Insurance Coverage

Country Name	Deposit insurance coverage	Previously	Co-insurance
Australia	Unlimited	Not relevant	No
Austria	Unlimited	EUR 20,000	No
Belgium	EUR 100,000	EUR 20,000	No
Canada	CAD 100,000	CAD 100,000	No
Czech Republic	EUR 50,000	EUR 25,000	Abolished
Denmark	Unlimited	DKK 300,000	No
Finland	EUR 100,000	EUR 25,000	No
France	EUR 70,000	EUR 70,000	No
Germany	Unlimited	Different, but typically EUR 20,000	No
Greece	100,000	EUR 20,000	No
Hong Kong	Unlimited	HKD 100,000	No
Hungary	EUR 100,000	HUF 6 and 13 million	Abolished

[788] https://www.channelnewsasia.com/singapore/mas-increase-coverage-deposit-insurance-scheme-100000-april-2024-3790666

Iceland	Unlimited	EUR 20,887	No
Ireland	Unlimited	EUR 20,000	Abolished
Italy	EUR 103,291.38	EUR 103,291.38	No
Japan	JPY 10 million	JPY 10 million	No
Korea	KRW 50 million	KRW 50 million	No
Luxembourg	EUR 100,000	EUR 20,000	Abolished
Mexico	UDIs 400,000	UDIs 400,000	No
Netherlands	EUR 100,000	EUR 40,000	Abolished
New Zealand	NZD 1 million	Not relevant	No
Norway	NOK 2 million	NOK 2 million	No
Poland	EUR 50,000	EUR 22,500	Abolished
Portugal	EUR 100,000	EUR 25,000	No
Russia	RUB 700,000	RUB 400,000	Abolished
Singapore	SGD 100,000	SGD 75,000	No
Slovak Republic	Unlimited	EUR 20,000	De facto abolished
Spain	EUR 100,000	EUR 20,000	No
Sweden	SEK 500,000	SEK 250,000	No
Switzerland	CHF 100,000	CHF 30,000	No
Turkey	YTL 50,000	YTL 50,000	No
United Kingdom	GBP 50,000	GBP 35,000	No
United States	USD 250,000	USD 100,000	No

Source: own compilation based on Schich, S. (2009). Expanded Government Guarantees for Bank Liabilities: Selected Issues and Schich, S. (2008), Financial Crisis: Deposit Insurance and Related Financial Safety Net Aspects, *OECD Financial Market Trends*; updated with https://documents.worldbank.org/en/publication/documents-reports/documentdetail/997911468781752511/deposit-insurance-around-the-globe-where-does-it-work; and Barth, J.R., Nguyen, N., Xu, J. (2022). Deposit Insurance Schemes. In: Lee, CF., Lee, A.C. (eds) *Encyclopedia of Finance*. Springer, Cham. https://doi.org/10.1007/978-3-030-91231-4_2

Lifting deposit insurance limits is a multifaceted issue, closely linked with the concept of "too big to fail" banks. Advocates **argue** that a higher insurance limit would offer increased depositor protection, safeguarding a larger portion of savings in the event of a bank failure, thereby enhancing financial security. Additionally, a higher limit could potentially reduce the likelihood of bank runs by reassuring depositors and stabilizing the financial system. It could also level the playing field by making deposit insurance more appealing to individuals with larger savings, who might otherwise opt for riskier investment options outside the banking system.[789] However, there

[789] Bonfim, D., & Santos, J. A. (2023). The importance of deposit insurance credibility. *Journal of Banking & Finance*, *154*, 106916.

are **counterarguments** to lifting the deposit insurance limits.[790] Critics warn of the potential moral hazard, where banks might take on riskier activities, knowing that governments would step in to protect depositors with higher insurance limits. This could lead to increased bank failures and financial instability. Moreover, high insurance levels could diminish market discipline, as overly confident depositors might neglect monitoring a bank's financial health, reducing the pressure on banks to operate responsibly. Additionally, lifting the limits could exacerbate the "too big to fail" problem, compelling governments to bail out large banks to prevent broader financial collapse, thereby distorting market competition. The debate over the €100,000 limit continues, with some countries considering adjustments to better align with current economic conditions.[791] Policymakers face the challenge of balancing the benefits of enhanced depositor protection against the potential risks of moral hazard and the perpetuation of the "too big to fail" issue. Some suggest implementing risk-based premiums, where banks with riskier profiles would pay higher insurance premiums, encouraging safer banking practices. Others propose a tiered insurance system, offering different insurance levels based on deposit amounts, as a compromise solution. Additionally, exploring alternative safety nets, such as encouraging account diversification across multiple banks, could be part of the broader discussion on deposit insurance reform. It's important to note that these coverage limits are typically per depositor per bank, meaning that if a person has deposits in different banks, the coverage limit applies separately to the deposits in each bank. Additionally, not all types of accounts and financial products are covered by deposit insurance, and there may be specific rules regarding joint accounts, trust accounts, and other categories.

Insurtech

Insurtech refers to the innovative use of technology to enhance and streamline various aspects of the insurance industry. Insurtech companies leverage cutting-edge technologies such as artificial intelligence, data analytics, blockchain, and digital platforms to create more efficient processes, improve customer experiences, and introduce novel insurance products. These technological advancements aim to address longstanding challenges

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Quintero-V, J. C. (2023). Deposit insurance and market discipline. *Journal of Financial Stability*, *64*, 101101.

[790] Alam, N., Sivarajah, G., & Bhatti, M. I. (2021). Do deposit insurance systems promote banking stability?. *International Journal of Financial Studies*, *9*(3), 52.

[791] Sardana, V., & Shukla, A. (2020). Deposit insurance coverage limit: How much is enough? evidence from India. *Indian Journal of Finance and Banking*, *4*(4), 66-83.

within the insurance sector and adapt to the evolving needs and preferences of consumers. Insurtech encompasses a wide range of applications, including digital distribution channels, automated underwriting, claims processing, and the development of new insurance models such as peer-to-peer insurance and parametric insurance. The insurtech movement has significantly influenced the traditional insurances, fostering increased competition, innovation, and a shift toward more customer-centric solutions.

Within the **data-driven decision-making**, the use of data analytics and AI will continue to play a crucial role in risk assessment, pricing, and product development, enabling insurers to make more informed decisions and provide more personalized insurance solutions. The **telematics**, which involves using technology to monitor and collect data on driving behavior, became a key feature in car insurance.[792] Insurers adopted telematics to offer personalized pricing based on individual driving habits. Established in 2017, kasko2go is a pioneering Insure-Tech company specializing in the risk assessment of policyholders. The telematic insurance and usage-based insurance (UBI) market redefined the innovative solutions.[793]

The adoption of **blockchain** technology in insurance aimed to enhance transparency, reduce fraud, and improve the efficiency of transactions. Smart contracts on blockchain platforms were explored to automate claims processing and policy administration. Smart insurance contracts automatically execute and enforce contractual clauses when predefined conditions are met.[794] Claims processing, policy execution, and premium payments can be automated through smart contracts, reducing the need for intermediaries and minimizing the risk of errors or fraud. Insurers can use blockchain to create a secure and tamper-resistant repository of customer information, reducing the risk of fraud in areas such as underwriting, claims processing and claim management, reinsurance or peer-to-peer insurance. Customer data, policy information, and claims data stored on a blockchain are protected from unauthorized access, enhancing the overall cybersecurity of the insurance ecosystem. **Parametric insurance** relies on predefined parameters to trigger automatic payouts when specific conditions are met. Blockchain enables the

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[792] Francois, P., & Voldoire, T. (2022). The revolution that did not happen: Telematics and car insurance in the 2010s. *Big Data & Society*, *9*(2), and Eling, M., & Kraft, M. (2020). The impact of telematics on the insurability of risks. *The Journal of Risk Finance*, *21*(2), 77-109.

[793] kasko2go AG (https://kasko2go.com/about)

[794] Sheth, A., & Subramanian, H. (2020). Blockchain and contract theory: modeling smart contracts using insurance markets. *Managerial finance*, *46*(6), 803-814. and Borselli, A. (2020). *Smart contracts in insurance: a law and futurology perspective* (pp. 101-125). Springer International Publishing.

creation of parametric insurance contracts with transparent and automated triggers, facilitating faster and more efficient payouts, particularly in situations like natural disasters.[795] Reinsurance contracts and settlements can be executed on a blockchain, reducing the administrative complexities and enhancing trust among reinsurers.[796] Fizzy is an automated, digitised and consumer-friendly form of parametric insurance – where, instead of offering coverage that needs to be triggered by claims for any losses incurred in an event, payouts are automatically triggered by pre-agreed thresholds. Fizzy Smart Insurance, which was initially launched for flight delay coverage, utilizes smart contracts on the Ethereum blockchain to automate the claims process. The smart contract is programmed to trigger a payout automatically when predefined conditions (such as a flight delay) are met, eliminating the need for traditional claims processing.[797]

Cyber insurance and Cybersecurity risks

Cyber insurance is a specialized form of insurance designed to mitigate financial losses and liabilities associated with cybersecurity risks. As businesses increasingly rely on digital technologies, the threat map for cyberattacks has expanded, leading to the need for insurance coverage specifically tailored to address these risks. Here's an overview of cyber insurance and its relation to **cybersecurity risks**: (i) data breaches; (ii) business interruption; (iii) ransomware;[798] (iv) phishing attacks; (v) business email compromise (BEC); (vi) denial of service (DoS) attacks; (vii) insider threats and (viii) liability.[799] Cyber insurance can provide protection against legal liabilities arising from privacy violations, intellectual property theft, or other cyber-related lawsuits. While cyber insurance provides financial protection, effective cybersecurity practices are crucial for **risk management and preven-**

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[795] Lin, X., & Kwon, W. J. (2020). Application of parametric insurance in principle-compliant and innovative ways. *Risk Management and Insurance Review*, *23*(2), 121-150.

[796] Mendoza-Tello, J. C., & Calderón-Hinojosa, X. (2021). A blockchain-based approach to supporting reinsurance contracting. In *Advances in Emerging Trends and Technologies: Proceedings of ICAETT 2020* (pp. 252-263). Springer International Publishing.

[797] Futures Centre. (2020). AXA launches Fizzy: the first automated insurance payout scheme. (https://www.thefuturescentre.org/signal/axa-launches-fizzy-the-first-automated-insurance-payout-scheme/)

[798] Ransomware: some policies cover ransom payments in the event of a ransomware attack, although coverage terms may vary

[799] Florackis, C., Louca, C., Michaely, R., & Weber, M. (2023). Cybersecurity risk. *The Review of Financial Studies*, *36*(1), 351-407. and Hubbard, D. W., & Seiersen, R. (2023). *How to measure anything in cybersecurity risk*. John Wiley & Sons.

tion. Implementing robust cybersecurity measures, such as firewalls, antivirus software, encryption, and employee training, can help reduce the likelihood and impact of cyber incidents.

The market for cyber insurance has experienced significant growth as businesses recognize the importance of protecting against cyber threats.[800] Insurers continually evolve policies to address emerging cyber risks and ensure coverage remains relevant in a rapidly changing technology. Assessing and quantifying cyber risks can be challenging due to the evolving nature of cyber threats. Cyber insurance policies may have exclusions and limitations, requiring organizations to carefully review and understand the terms of coverage.

Sustainability and ESG considerations

Sustainability and **Environmental, Social, and Governance** (ESG) considerations have become increasingly important in the insurance industry. Insurers are recognizing the impact of environmental and social factors on their operations, risk management, and long-term financial performance. Insurers are increasingly assessing climate-related risks when underwriting policies.[801] This includes evaluating exposure to natural disasters, extreme weather events, and other climate-related risks. They may implement risk mitigation strategies, such as encouraging policyholders to adopt sustainable and environmentally friendly business practices or incorporating climate risk models into underwriting processes. There is a growing emphasis on transparency and reporting regarding sustainability and ESG performance. Insurers are disclosing their ESG policies, practices, and performance to stakeholders, including investors, regulators, and the public. Companies are also recognizing the importance of diversity and inclusion in their workforce, leadership, and corporate culture. Insurers are assessing the long-term resilience of their business models in the face of climate change, social issues, and evolving regulations. This includes scenario planning to understand potential future risks and opportunities.

Green insurance are very similar products designed to promote environmental sustainability and address the challenges associated with climate

[800] Xie, X., Lee, C., & Eling, M. (2020). Cyber insurance offering and performance: An analysis of the US cyber insurance market. *The Geneva Papers on Risk and Insurance-Issues and Practice*, *45*, 690-736.
[801] Khovrak, I. (2020). ESG-driven approach to managing insurance companies' sustainable development. *Insur. Mark. Co*, *11*, 42-52.

change and other environmental issues. It may include coverage for environmental risks, such as pollution liability, environmental cleanup costs, and damage to ecosystems. Businesses that handle hazardous materials or operate in environmentally sensitive areas may seek such coverage.[802] The offer coverage tailored to the unique risks associated with renewable energy projects, such as wind farms, solar installations, and other clean energy initiatives. Green insurance may extend to cover green building practices, such as Leadership in Energy and Environmental Design (LEED) certification. Companies seeking to manage their carbon footprint may explore insurance products that provide coverage for liabilities associated with carbon emissions. This could include coverage for regulatory fines, legal expenses, and other costs related to carbon reduction initiatives. In the agricultural sector, it may address the risks associated with sustainable farming practices, organic farming, and the adoption of environmentally friendly technologies, such as weather-related risks, crop losses, and sustainable farming certification. Some insurers offer green auto insurance options that encourage environmentally friendly driving habits or provide coverage for electric or hybrid vehicles.

Innovations in Life and Health insurance

The history of **unit-linked insurance plans** (ULIPs) can be traced back to the 1960s when the concept of combining insurance with investment started to gain traction.[803] Like traditional life insurance, ULIPs provide life coverage. In the event of the policyholder's death during the term of the policy, a death benefit is paid out to the nominee. In North America, it has been mainly of the variable annuity in approximately1952. In the UK it has been mainly of the endowment assurance variety, commencing in approximately 1957 but not really making a big impact until 1962-63 when the unit trust-groups first came on the scene.[804] The first ULIP was introduced in Japan in 1969 or in India in 1971,[805] and they quickly became popular in other Asian countries as well. In the 1970s and 1980s, ULIPs began to gain popularity in

[802] Chen, Q., Ning, B., Pan, Y., & Xiao, J. (2021). Green finance and outward foreign direct investment: evidence from a quasi-natural experiment of green insurance in China. *Asia Pacific Journal of Management*, 1-26.
[803] van der Heide, A. (2023). Shifting Boundaries between Insurance and Finance. In *Dealing in Uncertainty* (pp. 36-55). Bristol University Press.
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Europe and North America. However, they were initially met with some skepticism due to concerns about their complexity and the potential for investment losses. Nowadays insurers are using data analytics to develop ULIPs that are tailored to the specific needs and goals of individual policyholders.

Given that the average wedding budget currently stands at approximately $20,000, planning your ceremony and reception may constitute the costliest event you and your partner undertake. Considering the substantial financial investment involved, opting for **wedding insurance** might be a wise decision.[806] A wedding insurance policy serves as a financial safeguard against unforeseen events on your special day. Wedding liability insurance is designed to cover injuries or accidents that may occur during the ceremony or reception. Wedding cancellation or postponement insurance can reimburse you for expenses incurred if you need to call off or postpone the ceremony due to factors such as extreme weather, injury, illness, or issues with a vendor.Wedding liability insurance typically starts at around $125, while wedding cancellation and postponement insurance starts at approximately $100. The first forms of marriage insurance emerged in the 19th century, but these provided cover more for death before marriage. The first real marriage insurance was taken out by Cornhill Insurance in Britain in 1988.[807] This insurance provided cover so that if one party died after the marriage, the other party would receive the sum insured.

John Hancock's **interactive life insurance** is a type of life insurance that uses wearable devices and other data sources to provide personalized coverage and rewards.[808] The goal of interactive life insurance is to help policyholders improve their health and habits, which can lead to lower premiums and better overall health outcomes. Policyholders are given wearable devices, such as smartwatches or fitness trackers, to track their activity levels, sleep patterns, and other health metrics. This data is then used to assess the policyholder's risk profile and determine their insurance premiums. Policyholders can earn rewards for engaging in healthy behaviors, such as meeting daily step goals or staying within a healthy weight range. These rewards

[806] Surplice, P. (2020). Future of the Wedding industry: Is the party over?.
[807] Sales, A. (1988). Solcitors. *Solicitors Journal*, *132*(33-19).
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can be used to reduce their premiums or pay for other benefits, such as gym memberships or health coaching.

Most comprehensive health insurance plans cover **rehabilitation** services to some extent. However, the extent of coverage can vary depending on the plan and the insurance provider, often covering the costs of rehabilitation services like physical or occupational therapy.[809] Various insurance products, including health, disability, auto, and workers' compensation insurance, may provide coverage for these services. Rehabilitation providers often participate in insurance networks, offering services at negotiated rates.[810] Some insurance plans may require pre-approval for rehabilitation treatments. Despite insurance coverage, individuals may still incur out-of-pocket costs.

With the employment of the **blockchain in life insurance**, the policyholders can be involved into the system more smoothly and expeditiously compared to the past. If blockchain seamlessly integrates into the insurance and financial sectors, clients and patients will gain access to their own medical histories.[811] Presently, individuals try to gather the necessary documents from different healthcare providers, a process that is both time-consuming and, in numerous instances, intricate. With the assistance of blockchain technology, all information would be instantaneously accessible through a secure cloud application. The moment a patient registers for medical treatment, the event immediately registers in the database, accessible to insurers who can promptly fund any potential hospital expenses. This could streamline communication among insurers, patients, and healthcare providers, potentially

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leading to reduced costs.[812] However, a significant drawback is the potential compromise of medical confidentiality since everything in the system is public and open to anyone.

Innovations in life insurance included the development of **hybrid and customizable policies**, as well as the incorporation of wellness programs. Insurers leveraged data from wearable devices to incentivize policyholders to adopt healthier lifestyles. Consumers are increasingly demanding more transparency, convenience, and control over their insurance choices. Insurers will need to adapt their services and offerings to meet these evolving expectations. The COVID-19 pandemic highlighted challenges in business interruption coverage.[813] Insurers faced increased claims, leading to discussions and debates about coverage for pandemic-related losses.

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