

The global conditions of China's economic development: How does globalisation affect China in the context of Kornai's Frankenstein metaphor?

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ABSTRACT

The objective of this study is to identify how globalisation influences China and how China affects globalisation in the context of János Kornai's Frankenstein metaphor. Kornai (2019) felt moral responsibility for unwillingly contributing with his advice in the 1980s to the birth of a modern version of Frankenstein, the Monster which his creators could not control. A crucial guiding principle of this paper is how the US and the advanced democratic economies can respond to Kornai's dilemma and reconcile the diverging requirements of economic interests with national security priorities. There is a research gap in the systematic mapping of the external economic environment on China's development. The primary conclusion of this paper is that China is less dependent on the rest of the world than the world on China. As the de-risking concept suggests, trade restrictions and domestic industrial policy measures focused on a narrow range of strategic sectors should be combined with unlimited trade and cooperation in the remaining non-strategic sectors. This study's conceptual and methodological framework can be used to analyse the relationship between advanced democratic economies and autocratic regimes in Kornai's Frankenstein dilemma.

KEYWORDS

globalisation, world order, leverage, China, US, Kornai

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1. INTRODUCTION

In the past 15 years, three shocks shaped the global economic, social and political environment: the financial shock in 2008 triggered by the collapse of Lehman Brothers, the exogenous health shock in 2020 induced by the COVID-19 pandemic and the geopolitical shock in 2022 caused by Russia's aggression against Ukraine. With the first shock, a *new phase of economic globalisation*¹ started in 2008, characterised by the demise or the halt of trade liberalisation between 1980 and 2008, the decline or the stagnation of the significant globalisation indicators and changes in the driving forces of globalisation. The other two subsequent shocks reinforced the effects of the first shock. The new stage is often called deglobalisation or *slowbalisation* in contrast to the preceding hyper globalisation era (Aiyar – Ilyina 2023). These changes have implications for the world order² as well.

This paper discusses, on the one hand, the repercussions of the economic and non-economic shocks on the current state and the perspectives of China's economic development; on the other hand, the impact of China's responses to these challenges on the global economy. Thus, the study aims to map the interaction of these interdependent factors, i.e., how globalisation shapes China and China influences globalisation, and assess their combined net effects from two specific points of view formulated in the following research questions.

The first research question is to what extent the transformation of the global economy could help or inhibit China's economic development. The timeliness and relevance of this research question are straightforward. China's rise to an economic giant and power prior to 2008 was attributed substantially to the liberal era of economic globalisation during which, particularly after it had acceded to the World Trade Organization (WTO) in 2000, it reached foreign markets, Western technology, and finance. At the same time, the rest of the world benefitted from China's rapid growth and involvement in the global economy. Consequently, this was a win-win situation. The favourable external environment supported China's outward-looking economic policy. Therefore, assessing the role of external factors contributing to China's economic development under the current circumstances is justified. Simultaneously with the transformation of the global environment, the former driving forces of China's economic development have been exhausted, making a turn necessary in the development pattern.

The second research question is how China's responses to the recent short- and long-term global challenges affected the rest of the world. Although the actual global environment has had a significant impact on every country, China is not only exposed to the unfolding new trends, but at the same time, it is *shaping economic globalisation* as well. China is not only a rule-taker but, at the same time, a rule-maker with global implications and consequences. This is due to the size of its economy in terms of population, which until very recently was the largest in the world, GDP volume, which is second to that of the US, and merchandise trade, innovation, the source of global lending, etc. An adjacent question is whether China needs the world more than the

¹The definition of the UN Commission on Development is as follows: "Economic globalisation refers to the increasing interdependence of the world's economies due to the growing scale of cross-border trade of commodities and services, the flow of international capital and the wide and rapid spread of technologies." (Shangquan 2000) This paper focuses basically on economic globalisation.

²In analytical terms, world order is "the arrangement of power and authority that provides the framework for the conduct of diplomacy and world politics on a global scale." <https://pesd.princeton.edu/node/696>.



world depends on China. It is assumed that there is a research gap in the systematic mapping of the external economic environment on China's development.

On its way to market capitalism, China could become a liberal democracy, but it did not happen (Mihályi – Szelényi 2020, 2021). Contrary to the Western expectations, since 2012, China's leadership has accomplished a gradual return to the socialist system with the result of becoming more authoritarian in the domestic politics and more centralised in the economic policy. In addition, since 2017, it has pursued a coercive expansionist foreign policy and punitive diplomacy with aspirations of evolving into a hegemonic power (Schell – Gross 2023). Schuman (2020) verified China's expansive hegemonic ambitions and attempts based on the historical examples.

Kornai (2019) felt moral responsibility for unwillingly contributing with his advice in the 1980s to the birth of a modern version of Mary Shelly's Frankenstein, which his creators could not control.³ This is Kornai's *Frankenstein dilemma*. Nevertheless, scholars other than Kornai, including the Western ones, continued to advise the subsequent Chinese governments on economic reforms. In the late 1990s, the US leaders believed that by bolstering its integration into the global economy, in part through its accession to the WTO, China could become a constructive participant in the world order led by the US (Cass – Rodrigues 2023). These views reinforce the validity of Kornai's Frankenstein dilemma.

Western democracies are facing the challenge of finding a solution to the conflicting goals of limiting China's capabilities to threaten them with economic, military and political leverage on the one hand and maintaining China's involvement in the global economy resulting in mutual benefits on the other hand. Consequently, *the third research question* is the following. What should a reasonable strategy be for the advanced democratic economies (ADEs)⁴ *vis-a-vis* China to respond to Kornai's Frankenstein dilemma? This is a crucial *guiding principle* of this paper.

The structure of the paper is the following. The first Section discusses the impact of globalisation on China. The second Section highlights China's impact on globalisation, the third one focuses on the US-China rivalry, policies and global implications. The last Section contains the summary and the conclusions.

2. THE IMPACT OF GLOBALISATION ON CHINA

In addition to the specific economic and non-economic shocks mentioned above, the global environmental developments affect China through two primary channels. The first is the policy channel with geopolitical, security and trade policy challenges, and the second is the economic one associated primarily with foreign trade and economic openness. The changing economic order reflects the overall impact of policies on globalisation. Its precise shape is not yet clear, but "it will likely be far more local, heterodox, complicated and multipolar than what came before." (Foroohar 2022)

³Frankenstein; or, The Modern Prometheus is an 1818 novel written by English author Mary Shelley. The book is about the story of Victor Frankenstein, a young scientist who creates a sapient creature, a monster in fact, in an unorthodox scientific experiment.

⁴This term was used by Kramer (2023). It is more or less the synonym of the "West".



Shifts in the economic power relations characterise the current phase of globalisation. The gradual decline in the world economic position of the US, together with its retreat from global leadership during the Trump administration and the rise of China and some medium-sized assertive powers such as Egypt, India, Iran, Pakistan, Saudi Arabia and Turkey enabled a shift to *multipolarity* (Lehne 2023). Although China's GDP surpassed Japan's as the world's second-largest economy in 2010, the country, in the capacity of an economic engine in the world economy, contributed to easing the adverse global effects of the international financial and economic crisis of 2008. The crisis must have intensified the assertiveness of China's external economic policy. Based on several factors and indicators, Brooks – Wohlforth (2023) disputed this widely accepted concept of multipolarity by pointing out that the world became neither bipolar with an approximate power balance between the US and China nor multipolar, but "partial unipolar". In contrast to the "total unipolarity" of the post-Cold War period, the term "*partial unipolarity*" acknowledges the dominance of the US in many fields, particularly in the military⁵ and finances, including the still dominant position of the US dollar with a narrower room of manoeuvring for China than in a multipolar world.

One of the crucial consequences of the shift in economic power relations is that *geopolitical and security considerations* are set to prevail over economic efficiency in shaping the global economy. In the head of quite a few politicians, zero-sum games have been replacing the win-win ones. Furthermore, Russia's attack on Ukraine on February 24, 2022, with antecedents of the occupation of Crimea in 2014, destroyed the post-World War II order consensus according to which *international borders cannot be changed with force* (Brunk – Hakimi 2022). The war fractured the global economic and political order into *two large blocks*, with liberal democracies on the one side and autocracies such as Russia and China on the other. Global economic integration slowed down, and the pressure on countries, particularly in the Global South, is mounting to align themselves around the pole of the US and China. The war contributed to sharpening the *geopolitical rivalry* between the two great powers.

The outcome of Russia's war against Ukraine has implications for *China's attitude towards Taiwan*. Russia's incidental victory might encourage China's leadership to invade and recapture Taiwan despite the rhetoric of peaceful unification. The recent changes in the Chinese constitution involve additional military and economic risks to Taiwan. The other outcome, namely Russia's defeat, may refrain China from the attack. Or may not. What worse can be expected from a Frankenstein-type Monster than a provocation of a Third World War?

Even if no onslaught happens, uncertainty will prevail for the foreseeable future around the Taiwan Strait, an important maritime route connecting the Middle East with Japan and the Korean Peninsula, with negative risks concerning the security of global crude oil supply and global value chains with price implications. Of course, China's leadership knows the risks of such a war. According to Yarhi-Milo – Resnick Samotin (2023), despite the unknown intentions and unexpected behaviour of China's president, preparations for an attack such as a military buildup and moving troops into offensive positions, stockpiling vast quantities of food and motor fuel, changes in the rhetoric of the Chinese president, etc. can be identified relatively early allowing the US and its allies to take the countermeasures.

⁵China is much below the US in military capabilities, and the US lead is not likely to decrease in the next decade (Brooks – Wohlforth 2023).



Since the fiasco of the Doha Round under the aegis of the WTO, *multilateralism* has been on the retreat in global trade and gradually replaced by regionalism, plurilateralism and minilateralism, highlighted by the growing number of such agreements (Tirkey 2021). Their spread has led to the fracturing of the global economy into regional trade blocks and a set of bilateral agreements resulting in *selective trade policy openness* of the global economy. As regards China, it currently maintains 17 Free Trade Agreements (FTAs), and another 8 FTAs are in the negotiation and implementation phase.⁶ Due to the presumably prevailing trade diversion effects of the regional trade agreements, the easing of multilateralism is not advantageous for China in economic terms. On the other hand, the rules-based world order has gradually been replaced by a system of *transactional deals* providing China's leadership with ample room for the weaponization of international relations and coercion reinforced by economic and political leverage.

Economic globalisation affects China through its exposure to *foreign trade compared to GDP*. In the nearly two decades before the international financial and economic crises of 2008–2009, the share of exports and imports in China's GDP increased continuously. However, between 2008 and 2021, the relative weight of exports in GDP fell from 32.6% to 20.0%, and that of imports from 25.0 to 17.4%. Regarding structural openness, the Chinese economy is exposed to global effects less than a decade and a half ago.

In the preceding almost two decades, *the rapid expansion of international trade* helped China's integration into the global economy and, there, facilitated GDP growth. In the long term, export expansion is a crucial prerequisite for transitioning from middle-income to upper-income status, at least in the small and open economies (Subramanian 2022). However, the global shocks in 2020 and 2022 accumulated the ongoing deterioration of international competitiveness due to labour shortages and wage increases, causing China a loss of about USD 150 billion worth of exports.

Regarding the future, according to Table 1, between 2023 and 2028, the projected annual average rate of increase in the world gross domestic product (2.6%) and the volume of imports of trade and services (3.4%) will be slightly above the average of the 2017–2022 period (2.5% and 3.2%, respectively).⁷ China's international environment will not deteriorate in this respect. According to the empirical evidence, China is more dependent on exports when the growth rate of global demand is decelerating than in the periods of upswing.

Nevertheless, after the international financial and economic crisis of 2008–2009, trade in goods and services stopped growing as a proportion of the world's gross domestic product. Services trade continued to increase more rapidly than merchandise trade. This shift has affected China more severely since it specialised in the latter.

The impact of *international commodity price trends* on China is somewhat controversial. On the one hand, like in the case of any other country, world market prices are external factors for China to which its economic participants need to adjust. On the other hand, due to its vast import demand for fuels, raw materials, and other goods, China also shapes commodity prices.

⁶Source: <https://www.china-briefing.com/doing-business-guide/china/why-china/china-s-international-free-trade-and-tax-agreements>, http://fta.mofcom.gov.cn/english/fta_qianshu.shtml, <https://www.trade.gov/country-commercial-guides/china-trade-agreements>.

⁷These calculations are based on Losoncz (2023).



Table 1. The growth rate of GDP, exports and imports of the world and China (Annual average rate, %)

	2017–2022	2023–2028
<i>GDP</i>		
World	2.5	2.6
China	5.6	4.1
<i>World</i>		
The volume of imports of goods and services	3.2	3.4
<i>China</i>		
The volume of exports of goods and services	5.2	2.1

Source: International Monetary Fund, World Economic Outlook Database, April 2023.

In periods of economic recovery, China tends to exert an upward pressure on the global commodity prices, whereas, in the periods of economic gloom, the pressure is downward.

Posen (2023) pointed out that the stringent and costly lockdown measures lasting for three years with which the Chinese government managed the COVID-19 pandemic will likely drag down growth for several years even though the acute phase has ended. He calls it an “*economic long COVID*.” However, his explanation is more *systemic* than economic. In their first term in office, the leaders of autocratic regimes, such as China’s president, promise business as usual for the people loyal to the regime. In their second or third term in office, they pursue *interventionist policies* with increasing intrusion into and state control over the economy leading to growing uncertainty and the loss of confidence from the part of the population. The result is that economic participants turn away from investing in physical assets, and private investments and consumption of durable goods fall.

In contrast, liquid assets grow with an adverse impact on GDP growth. In China, the COVID-19 pandemic as an external shock coincided with the political cycle and triggered unfavourable economic developments. Nevertheless, due to its economic size, China is not only affected by globalisation, but it also shapes globalisation effectively. Sometimes it takes work to separate the two effects.

3. CHINA’S IMPACT ON GLOBALISATION AND THE WORLD ORDER

China’s impact on globalisation can be analysed from different angles. Since 2011, *China’s contribution to global growth* has permanently diminished, and this trend is assumed to continue. In the medium term (from 2023 to 2028), China’s annual average GDP growth rate (4.1%) is likely to significantly exceed the world’s (2.6%) (Table 1). In the previous period, from 2017 to 2022, the difference in China’s favour was much more significant. China’s contribution to total world growth through 2028 is expected to represent 22.6% and that of the US only



11.3%, according to Bloomberg calculations using data based on IMF (2023).⁸ However, recent forecasts published in August 2023 are more downbeat on China's short- and medium-term growth prospects. Despite its relative decline, China will still be the *top contributor to global growth* over the next five years, with its size set to be double that of the US.

China's impact on globalisation is much more pronounced in *international trade*, a crucial channel for supporting global growth. China is the world's largest exporter accounting for 13.7% of world merchandise exports in 2022, and the second largest importer after the US, with a 9.3% share in world merchandise imports. In 2021, China was *the most significant importer* of crude oil, accounting for more than 20% of the world's total in value terms and commodities such as, aluminium, coal, copper, iron ore, etc. This way, China's import demand has a *crucial impact on the world market prices* of fuels, a wide range of commodities and other goods.

China's substantial *foreign trade surplus* amounting to USD 577 billion in 2022 is a significant source of tension. Out of this, the surplus vis-a-vis the US totalled USD 384 billion and vis-à-vis the EU totalled USD 366 billion. The tremendous Chinese surpluses may have adversely impacted the deficit countries' economies since it may use its trade surplus as leverage. Trade imbalances constitute a deliberate strategy since the Chinese market is less open to the merchandise exports (and the inflow of FDI) of ADEs than the ADEs market to China (Cass – Rodriguez 2023).

China is the *top trading partner* to more than 120 countries.⁹ Decoupling from the world's largest trading country is not a reasonable solution for most of them in rational economic terms. Their substantial trade exposure allows the Chinese leadership to exert pressure on its partner countries and *weaponize trade* by taking discriminatory or retaliatory measures for political reasons against the countries addressing some of China's delicate issues, such as its relations with Taiwan, Hongkong, etc., as it often happened in the past.

In addition to the asymmetric trade dependency, based on its increased bargaining power, China exploits the possibilities emanating from the *fragmentation of the world economy* because of the shift from multilateralism to minilateralism characterised by the spread of transactional deals due to its restricted functioning and the missing competencies, the countries concerned cannot find remedy in the WTO. China's coercive steps have caused losses valued at tens of billions of dollars to those concerned. On the other hand, exposure and dependence are mutual. China's economy is more than 71% dependent on imports from the states that China has coerced (Cha 2023: 901).

The *role of foreign trade* in China's economic growth will likely change with implications for economic globalisation. The volume of goods and services exports is projected to grow at a slower rate in China than the volume of the goods and services imports in the world (Table 1). The diminishing future role of foreign trade is attributed to the *dual circulation strategy* (DCS, partly based on the Made in China 2025 project) incorporated into the 14th Five-Year Plan.

⁸<https://www.bloomberg.com/news/articles/2023-04-17/china-to-be-top-world-growth-source-in-next-five-years-imf-says#xj4y7vzkg>.

⁹To mention the most significant countries, China is the largest trading partner to the US, the European Union, Japan, South Korea, Vietnam and Taiwan and the top trader with Russia, Ukraine, South Africa, Kenya, Brazil and Saudi Arabia. <https://www.wilsoncenter.org/blog-post/china-top-trading-partner-more-120-countries>.



Its main components include the reduction of the “external demand as a driver of economic growth by boosting domestic consumption”, attaining “high levels of self-sufficiency in key areas by enhancing innovation”, making possible the “access to critical inputs by diversifying supply chains”, and positioning China as a “global manufacturing powerhouse in high value-added products.” (Kramer 2023: 4–5; ChinaPower 2022)

The declared and deducted strategic priorities include strengthening the reliance of economic development on the domestic market rather than exports (import substitution in contrast to export expansion), creating a *new balance* between global integration (first circulation) and domestic reliance (second circulation) as well as between national security and global integration, protecting the Chinese economy from the adverse effects of the global environment and at the same time ensuring the benefits that can be derived from the international economic relations. One-half of the economy constitutes the “*internal circulation*” based on more self-reliance, and the other half, the “*external circulation*”, is supported by selective contacts and contracts with the rest of the world. Its leaders want to enhance the dependence of the world on China to apply these links to increase its power and exert pressure (Leonard 2023).

Due to this more inward-looking economic strategy, the growth rate of China’s goods and services exports (2.1% from 2023 to 2028) is likely to be much slower than that of the world’s goods and services imports. This implies that, in contrast to the preceding period, China will only partially exploit the export possibilities offered by the global environment.

Despite its weaker global position in international trade due to the inward turn of the economic model and economic policy, China may still significantly influence globalisation and the world order. Behind the average trade figures, substantial differences exist in the reliance of the rest of the world on China. “As of today, China accounts for 63% of the world’s rare earth mining, 85% of rare earth processing, and 92% of rare earth magnet production.” (Seligman 2022).¹⁰ This represents a significant blackmail potential vis-à-vis the consuming countries. In addition to missiles, firearms, and stealth aircraft, *rare earth* alloys and magnets are critical components in digital and green technologies (computers, smartphones, etc., and batteries, respectively). The extraction and the process of rare earth elements pollute the environment significantly, with tremendous quantities of hardly usable spinoffs left behind. Due to the shortage of raw materials, high investment costs and the technology harming the environment, other countries face difficulties challenging China to extract and process rare earth elements.

China not only extracts rare earth elements, but processes imported material as well, as indicated by the fact that its share is higher in processing and production than in mining. Second, relying on its raw material reserves and processing, it has developed a wide range of value chains with forward linkages related to the transition to digital and green technologies. As a result, China has been most successful in developing and producing batteries for solar panels, wind turbines and electric vehicles. China is now dominant in nearly every segment of the *solar value chain*, and its innovations and growing output have contributed to the worldwide decrease in solar costs. China is on its way to becoming the most significant *battery, electric engine, and electric vehicle exporter*. These are strategic industries with Chinese dominance on which the rest of the world depends (Wang 2023).

¹⁰China produces 98% of the world’s supply of raw gallium, which is a soft, silvery metal used primarily in electronic circuits, semiconductors and light-emitting diodes (LEDs).



The *Belt and Road Initiative (BRI)* mega infrastructural project launched in 2013 touches some 60 countries with investments totalling USD 200 billion; thereby, it has some global implications (Economy 2022). First, it aims to reduce China's dependence on the sea trade routes controlled by the US. (Currently, 75% of world trade is shipped by sea. With the control of the US Navy, Chinese carriers can stay in the South China Sea.) Second, it helps explore new export markets for China. Despite the setbacks in implementation, the BRI is expected to contribute to the transformation of world trade. Third, the BRI is one of the means of politicising its investments and linking it to security alliances, and thereby, exerting China's influence on the world, including the transition of its political and cultural values (Economy 2022).¹¹ However, from Beijing's perspective the results achieved so far seem to be relatively modest.

The attitude of China's leadership to the *world order* could be more precise. It has already established alternative international financial institutions such as the AIIB (Asian Infrastructure Investment Bank) and the CIPS (Cross-Border Interbank Payment System) to challenge the existing global institutions such as the World Bank and the SWIFT (Society for Worldwide Interbank Financial Telecommunication), respectively. China's leaders bolster the yuan to become an alternative to the US dollar. The "external circulation" has implications for shaping the world order (Leonard 2023).

Due to its prominent world economic position, China gradually develops from a norm follower to a norm maker. Its representatives air their voice in the international standard-setting bodies. These attempts concern areas where norms and standards still need to be established, such as space, maritime issues and the Arctic (Economy 2022).

Although its capacities and capabilities are insufficient to dismantle the present one, China strives to transform the existing world order or adjust it to own interests to intensify its global influence. On the other hand, China is preparing for a world characterised by disorder, asymmetry and fragmentation (Lenoard 2023).

4. THE US-CHINA RIVALRY, POLICIES, AND GLOBAL IMPLICATIONS

In the context of the US-China rivalry, the "US bloc" (United States, European Union, other advanced economies) and the "China bloc" (China, emerging Southeast Asia, remaining countries group) can be distinguished (IMF 2023: 62). Higher trade barriers will reduce bilateral trade between the two blocs, partially offset by more significant trade flows within the blocs and with the non-aligned countries. The conclusion is that the net effect is shortening the global value chain and less global trade and output. With intensifying reshoring, if it really happens, China is likely to lose the most.

The economic power relations between the world's two largest economies are determined to a large extent by the actual size of China's GDP, both in monetary terms and relative to the US as well as its probable future growth trends. At *purchasing power parity*, China was the world's largest economy accounting for 18.5% of the world gross domestic product in 2022 against the 15.6% share of the US. This is primarily due to the undervaluation of the yuan. GDP figures based in *current prices and exchange rates* provide a different view. This indicator is generally

¹¹The Global Development Initiative serves similar objectives. Other organisations include the Global Security Initiative and the Shanghai Cooperation Organisation.



accepted as more realistic not only by scholars but policymakers as well. With USD 19.6 trillion, China's GDP corresponded to 72% of the US GDP, totalling USD 26.9 trillion. According to the figures, the US is still ahead of China in terms of GDP size. The lead of the ADEs over China and its actual and potential allies is even more significant. In this respect, Kornai's fear of the Monster is less dangerous. Due to the large population, China still has a medium per capita income. However, the difference between the two countries is striking regarding the productivity. China's GDP is produced by 733 million employees, whereas US GDP by "only" 130 million employees.¹²

As far as *China's long-term perspectives* are concerned, with labour shortages due to the demographic decline, the inherent constraints to investment-driven growth and the gradual deceleration in productivity increase, China's long-term GDP growth will likely slow down ([The Economist 2023a](#)). The individual forecasts may differ in assessing the size of the slow-down in the GDP growth rate. However, they come to similar conclusions, namely that China may become the largest economy in the world by 2030 or 2040, albeit with a modest lead over the US, in the best case. Nevertheless, it will likely remain less prosperous and productive ([Rahah – Leng 2022](#)) for a long time. Continued creeping deflation recorded in the second quarter of 2023 for the first time could reign in the growth of China's nominal GDP, and thereby, slow down its catching-up to the US ([The Economist 2023b](#)). These predictions are in line with the conclusions of [Posen \(2023\)](#) drawn from the "economic long-COVID" analysis. These projections are much more pessimistic than the previous mainstream ones, which anticipated China's much more significant lead over the US in the long-run.

Despite significant improvements in the past few years, China's global position is modest in *foreign direct investments* (FDI). According to UNCTAD figures, in 2021, China accounted for 4.5% of *FDI inward stock* against 30% of the US and 6.2% in *FDI outward stock* compared to 23.5% of the US. China's substantial catching up to the US in FDI stocks is improbable in the foreseeable future.

The same holds for *China's position in global finances*. Following the U.S. dollar, the euro, the Japanese yen and the pound sterling, China's renminbi ranked fifth among the most significant currencies in the world in 2021. The renminbi's share in global foreign exchange reserves totalled only 2.7%. The renminbi is not likely to challenge the global position of the US dollar or the euro for a relatively long time.

From China's unfavourable long-term growth trend, [Brands – Beckley \(2022\)](#) drew two general *political conclusions* for the world order. First, based on the somewhat controversial and disputed Thucydides Trap concept ([Allison 2017](#)), this great power rivalry may lead to a war when an emerging power threatens to replace an incumbent one. This reasoning is in line with Kornai's Frankenstein dilemma. However, it should be noted that this is more of a probable option than a necessity, and China will not have the military capability to launch a war for a long time. China's military expenditures account for nearly one-third of the US figures, and even if they grow much more dynamically, China cannot overtake the US in the foreseeable future. Second, China could be more dangerous as a peaking power heading for economic and political decline. The role of political factors will probably gain momentum, suggesting a higher degree of uncertainty in international relations with increasing instability.

¹²The reliability of China's statistical figures is a separate issue we cannot discuss here.



There is a debate about *China's global technological position* vis-à-vis the US and the rest of the world. Sceptical views of China's leadership argue that few multinational companies and globally recognised brands have evolved in China.

- China is behind the West in many critical technologies such as aviation, mobile phone, computer memory, logic chips, specialised tools for producing chips, software tools to design the most advanced chips, etc.
- China is catching up with the West in robotic arms, hydraulic pumps, other equipment, and the electronic supply chain, to mention a few items.
- China's *leading position* is unquestionable in building modern infrastructure including high-voltage transmission lines, high-speed rail and 5G networks (Wang 2023). China is also well ahead of the US in many segments of Artificial Intelligence.

On the other hand, the US leads in biotechnology, semiconductor production equipment and aircraft engines (Wang 2023: 77). "Of the top 2,000 corporations in the world, US firms are ranked first in global profit shares in 74% of sectors, whereas Chinese firms ranked first just in 11% of sectors." (Brooks – Wohlforth 2023: 82–83) In the high-technology sector, the US influential firms account for 53% of profits, whereas any other country has a single-digit share, with China ranking third with 6%. In 2021, the US earned patent royalties for USD 125 billion, China only USD 12 billion (Brooks – Wohlforth 2023). A considerable part of the best universities, too, are in the US.

However, with a different methodology and sampling focusing on tracking high-impact research, Gaida et al. (2023) pointed out that China is the leading country in 37 of the 44 technologies evaluated, and the US ranked first only in 7 ones. China surpassed the US often more than five times. The US maintains its leading position in the design and development of advanced semiconductor devices, high-performance computing and advanced integrated circuit design and manufacturing as well as in quantum computing and vaccines (and medical countermeasures). China's high-impact research activity will also bear fruit in production and exports.

Decoupling from China in a broader range of goods in global trade is neither viable nor desirable.¹³ Given China's dominant role in the digital technologies and green technology, and in some other industries, decoupling from trading with China in rare earth products, solar panels, batteries and battery components is simply impossible. Pushing it too far could further intensify the fragmentation of the global economy.

That is the reason why decoupling was replaced by *de-risking*, referring to "targeted action for a very narrow set of sensitive technologies that are crucial for national security and is focused on reducing excessive dependencies through diversification." (Romei 2023). De-risking is selective and targeted decoupling. It is not about China's exclusion from the global economy and the global value chains. It involves, on the one hand, promoting strategic investments in specific sectors important for national security and, on the other hand, the active use of trade defence instruments.

¹³In the Chinese ideological vocabulary the equivalent of "decoupling" is "self-reliance".



Regarding *strategic investments*, the Inflation Reduction Act (IRA)¹⁴ “envisages USD 500 million new spending and tax-brakes to boost clean energy, reduce healthcare costs, and increase tax revenues”. The CHIPS¹⁵ – Science Act “invests USD 280 billion over the next 10 years to bolster US semiconductor capacity, catalyse R&D, and create regional high-tech hubs and a bigger, more inclusive STEM¹⁶ workforce.”¹⁷ This is a response to the policy and practices prevalent in China where advanced technologies and industries were developed with heavy government subsidies amounting to 1.73% of GDP in 2019 well ahead of the exact figures of the ADEs. The US-China rivalry triggered a subsidy race with which the EU and its member states cannot keep pace.

Concerning *trade defence instruments*, the US aims at restricting China’s ability to obtain advanced computing chips, develop and maintain supercomputers, and manufacture advanced semiconductors.¹⁸ This is part of a broader trade war between the US and China in which China has responded lately by suspending the exports of rare earth products.

In light of the unintended adverse side effects of controls, restrictions, bans, etc., Posen (2023) proposed a different strategy based on the effects triggered by the latest political cycle in China. The US leaders should keep the door open for people and capital intending to leave China because of the uncertainty and loss of confidence caused by the interventionist and suppressive policies of the government with the consequence of falling investments in physical assets, etc. This concept draws attention to some essential indigenous aspects of the issue.

5. SUMMARY AND CONCLUSIONS

The objective of this paper is to analyse how the new era of globalisation and the world order affects China and, the other way around, how China influences globalisation and the world order in the context of Kornai’s Frankenstein dilemma. Kornai’s question is whether the advanced democratic economies should promote China’s economic development, and if yes, to what extent when China’s leadership is becoming more autarchic at home and attempting to be hegemonic in the world, and thereby, endangering their national security. In other words, the question is how to find a balance between the diverging requirements of economic rationality and national security.

Regarding *the impact of globalisation on China*, in terms of *world trade growth* trends, the country’s perspectives in the next five years are likely to remain the same compared to the previous five-year-long period. The trend is more complex in the structure of world trade.

¹⁴https://www.mckinsey.com/~media/mckinsey/industries/public%20and%20social%20sector/our%20insights/the%20inflation%20reduction%20act%20heres%20whats%20in%20it/the-inflation-reduction-act-heres-whats-in-it_final.pdf
¹⁵https://www.mckinsey.com/~media/mckinsey/industries/public%20and%20social%20sector/our%20insights/the%20inflation%20reduction%20act%20heres%20whats%20in%20it/the-inflation-reduction-act-heres-whats-in-it_final.pdf

¹⁵Creating Helpful Incentives to Produce Semiconductors.

¹⁶Science, technology, engineering, and mathematics.

¹⁷<https://www.mckinsey.com/~media/mckinsey/industries/public%20and%20social%20sector/our%20insights/the%20chips%20and%20science%20act%20heres%20whats%20in%20it/the-chips-and-science-act-heres-whats-in-it.pdf>

¹⁸<https://sanctionsnews.bakermckenzie.com/bis-issues-new-export-controls-targeting-chinas-advanced-computing-and-semiconductor-sectors/>.



With the expansion of global services trade surpassing the growth rate of merchandise trade, China's external environment is assumed to deteriorate since China's core business is merchandise trade rather than services trade. Trends of medium-term growth and trade policy conditions of the world economy are less favourable for China than formerly, but they are not entirely restrictive either.

However, with labour shortages, increasing wages and low productivity growth, the domestic conditions enabling the exploitation of the potential provided by the external environment will likely be less favourable in the future than in the preceding period.

Based on political considerations, the COVID-19 pandemic triggered decisive government intervention in the economy, adversely affecting long-term GDP growth. Because of the decreasing structural openness, China has been exposed to the global economy to a smaller extent. The past and future shifts in the economic power relations toward partial unipolarity, the increasing role of geopolitical and security considerations at the expense of pure economic rationality and the fracturing of the global economy will enhance the room for manoeuvring of China's external economic policy to enforce its interests albeit at significant costs.

China's impact on globalisation is much more pronounced than the globalisation's influence on China. Although the country's contribution to global growth is likely to diminish, but due to its strong position in total world exports and imports and substantial trade surpluses, its overall effects on world trade remain crucial. The softening of the rules-based world order and the spread of transactional deals enable the Chinese leaders to weaponise trade, particularly vis-à-vis the smaller partner countries.

Although in China's *dual circulation strategy*, the "internal circulation" represents a more inward-looking economic policy and model implying that the country is not going to exhaust fully the opportunities offered by the global environment, the "external circulation" aims to exploit China's dominant global trade position in specific industries. The rest of the world cannot circumvent China in some segments of the electronic industry, the production of batteries and electric vehicles and solar panels. These sectors are crucial for the digital and green transition in the ADEs.

Despite its significant economic strength and efforts to influence the global economy by establishing alternative international institutions, China's capacities must be improved to dismantle the present *global system* and build its own. However, China is interested in further weakening the rules-based world order to use its potential for economic and political leverage.

Consequently, China's catching-up process is likely to slow down, the volume of its GDP will remain the same as that of the US, and in the most optimistic but less probable case, the maximum outcome could be that it might slightly exceed the American one. Even in this situation, the Chinese per capita GDP will be much below the American. These long-term forecasts ease the economic leg of Kornai's dilemma.

The first political conclusion is based on the Thucydides Trap concept, according to which difficulties in the catching-up process combined with aspirations striving for hegemony may make China more dangerous for the rest of the world, leading to increasing uncertainty in the international relations. The second political conclusion is that even a war launched by China cannot theoretically be excluded in these circumstances. However, its military capabilities are insufficient to challenge the US and the ADEs. This is assumed to last for an extended period placing the political leg of Kornai's dilemma to a somewhat more favourable perspective,



however, with lasting uncertainty. Russia's war against Ukraine may have crucial implications for China's behaviour and policy towards Taiwan.

Due to solid economic interdependencies, the containment to oppose Chinese global aspirations, as Kennan (1947) proposed concerning the Soviet Union, does not work nowadays. Because of the complexity of the world economy, an adequate response to the Kornai dilemma by the ADEs cannot be complete or partial containment because it would involve unbearable costs. Since decoupling is not viable, it should be replaced by de-risking focused on national security, advanced technologies and critical infrastructures and developing strategic supply chains outside China to reduce dependencies. The subsidy race in strategic sectors, the mutual export controls, restrictions, and bans have unintended negative consequences.

In addition to the Western measures, the rise of Kornai's Frankenstein is harnessed by the slowdown of China's economic activity due to the government's intervention and suppressive policies. According to Posen (2023), students, scientists, entrepreneurs, etc. should be welcome in the US and the ADEs rather than impeding their inflow. These people will be missing in China and, at the same time, enrich the human potential of the US and the ADEs. The *conceptual and methodological framework* of this study can be used to analyse the relationship between advanced democratic economies and autocratic regimes in the context of Kornai's Frankenstein dilemma. The final lesson is that Kornai's spiritual heritage is worth considering and cultivating.

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