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Trends in Income Inequality and Its Impact on Economic Growth*

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In recent years, climate change and the pandemic have brought the issue of the link between inequality and economic growth to the fore. In my essay, I examine this relationship, focusing on whether inequality has a positive or negative effect on economic growth. I approach the issue through the lens of income inequality without seeking to explore all aspects of inequality. Starting from the relevant conceptual framework, I present the link between global inequality and long-term growth. Since inequalities affect both developed and developing countries, I compare them and show why the latter cannot repeat the economic progress achieved by earlier industrialisers. Finally, I conclude that the clear objective should be to reduce excessive inequalities.

Journal of Economic Literature (JEL) codes: B55, D63, F63, O15

Keywords: social inequality, income inequality, income distribution, economic growth

1. Introduction

Issues of rising inequality have been a subject of economic thinking for centuries, but in recent years they have become increasingly important and are a critical problem in most countries around the world. As the IMF, the World Bank and other institutions have predicted, one of the most acute current problems is that the pandemic has brought about a further increase in inequality. Looking back over the past few years, we find many examples of this.

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Inequality is a complex issue with many facets that is present within individual countries as well as between countries. In some parts of the world, divisions based on identity are becoming more pronounced, while in other there are disparities in access to basic services such as education or health care. There are also those who lack access to the basic necessities of life such as water, food of an adequate quality and quantity, and a secure home. Additionally, new areas have emerged, such as access to the online space and to different technologies, where differences pose challenges.

Circumstances beyond an individual's control also affect their chances of managing in life, such as gender, race, ethnicity, and for children, the socio-economic status of the parents or whether they were born in a developed or developing area, as well as migrant status. Since not all of us start out on an equal footing, these social inequalities can affect the economy in myriad ways through its driving forces. A child born in a developing country or into the poorest class of a developed country will not receive the same education as a child born in a developed economy or the upper social class. As a result, they will not have the opportunity to tap their potential later on, they will not be able to contribute to economic growth, or at least, not as much as they could have had they received the right education.

Similarly, inequalities in people's health have an impact on economic performance. Access to health care among the poor, be it a country or a social group, is also a major challenge. In a developing country, for example, society is mostly made up of young people. This age trend can be explained by low life expectancy, on the one hand, and high infant and child mortality rates, on the other. This is due to a lack of health care, as there are not sufficient resources – money and knowledge – to run an adequate health care system. The health indicators listed above can be considered as relevant measures of the level of development, and accordingly this is not only a social issue but also, like education, a matter of economics and politics.

The aim of my essay is to explore whether inequalities encourage or hinder economic growth. It is not possible to describe all areas of inequality with a single indicator, but the best way to illustrate the topic is perhaps through income inequality.

2. Definition of inequality

Inequality is a multidimensional challenge that can take many different forms, and so it is important to clarify some basic concepts. The relevant literature distinguishes between the inequality of outcome and the inequality of opportunity which often

determine each other. For us, the most important is income inequality, which falls into the first category and shows the distribution of income earned in an economy across the population, usually calculated at the household level, weighted by the number and age of household members. It is measured by a number of indicators, among which the internationally applied Gini coefficient is the most common. It ranges from 0 to 1: the higher the value, the greater the inequality (*EC 2017*). *Deininger and Squire* (*1996*) explain that the coefficient is based on the Lorenz curve, which plots the share of population against the share of income received. However, when Lorenz curves intersect, a change in the Gini coefficient may not accurately reflect changes in the welfare of particular groups of the population, i.e. despite the apparent stability of the Gini coefficient, there may be significant changes in the income shares of the quintiles of the population within the countries. The share of quintiles, or income fifths, in total income gives an idea of the degree of inequality. The closer the share of each quintile is to 20 per cent, the smaller the inequalities (*Siposné Nándori 2017*).

Income inequality is a measure of outcome which is a matter of opportunities available at birth, choices made throughout one's life and luck. Therefore, introducing the concept of equal opportunity is essential. While more challenging to measure, it is a policy goal for which there is a clearer consensus to act than for achieving equal outcomes. Inequality of opportunity can contribute to inequality of income (*EC 2017*), as it prevents people from making the most of their abilities, and this in turn can lead a country down a path of rising income and wealth inequality. The adverse impact of inequality can be even greater if, in times of rapid technological change, entire groups of the population are unable to acquire the new skills needed for – and share the benefits associated with – technological innovation (*EBRD 2017*).

As *Stiglitz* (*2015*) points out, perhaps the most detrimental aspect of inequality is that affecting opportunity. Stiglitz explains the problem through the concept of the United States of America and the "American dream". The data show that one of America's most cherished ideals is a myth: the US has become the advanced country not only with the highest level of inequality, but one of those with the least equality of opportunity. The life prospects of young Americans are more dependent on the income and education of their parents than in other developed countries. When there are large inequalities of income, those at the top can buy privileges for themselves and their children that are not available to others. In contrast, without

equality of opportunity, those born in the bottom of the distribution are likely to end up there: inequalities of outcomes perpetuate themselves (*Stiglitz 2015*).

Neckerman and Torche (*2007*) believe it is important to examine the subtler ways in which inequality can shape our institutions. They explain this process through risk aversion. A system of great inequalities, in which failures become more and more expensive, can prompt risk-averse choices when people select schools and neighbourhoods for their children or choose their own career, partner and friends. Growing inequality in higher education can increase competition for scarce goods and services, such as the most desirable neighbourhood or the most prestigious college, raising prices for the wealthy and limiting opportunities for everyone else. These show that inequalities can be "passed on" from one generation to the next through several channels. This can happen because children in low-income households are less able to study due to poor health, and as a result, will earn less as adults. Political processes can also lead to similar outcomes if low-income voters lose their political voice and thus are unable to support policies that would improve their living standards (*Neckerman and Torche 2007*). According to *Jerrim and Macmillan* (*2015*), a key reason why many believe income inequality and intergenerational mobility are linked is that income inequality tends to be higher also in countries where a larger part of economic (dis)advantages are transmitted from parents to their children. This relationship is usually represented by what is known as the "Great Gatsby Curve" (*Corak 2013*). This graph plots income inequality as measured by the Gini coefficient against intergenerational income elasticity, a measure of social mobility: an upward-sloping line demonstrates that income inequality is associated with less social mobility (*Jerrim and Macmillan 2015*).

According to the European Commission (*EC 2017*), it is generally considered that some inequality may provide incentives to invest in human capital, promote mobility and stimulate innovation, since economic incentives — which are important for growth — rely on the possibility for an individual to achieve better outcomes through their own hard work. However, when inequality becomes too large, it can threaten growth. This is especially true when it is driven by increased poverty at the bottom of the income distribution. In this case, individuals at the bottom lack the resources to invest in their skills and education, and may be unable to reach their full potential. This can result in less equality of opportunity for the next generation, which is harmful for overall growth (*EC 2017*).

3. The link between global inequality and long-term growth

The relation between income distribution and economic growth has become a popular topic of recent economic research, especially in the context of the contrasting experience of post-World War II Latin America and East Asia. In Latin America, initial income inequality was high and long-term economic growth low. East Asia, on the other hand, had low initial inequality and high long-term growth (*Chen 2003*). *Berman* (*2021*) compares data from the post-World War II era with later data. This comparison suggests that rising inequality correlates with slower economic growth: in the 20th century, when inequality was on the decline, growth was faster than today, and in recent decades, countries with high inequalities have grown more slowly than those with lower levels of inequality. While some theoretical works postulate a negative relationship between initial inequality and economic growth, other empirical studies have found a positive relationship (*Chen 2003*). Although no theory proposes the coexistence of a positive and a negative relationship, *Chen* (*2003*) thinks it is very likely.

A number of studies and theories point to the two-way correlation between inequality and growth, i.e. that growth also affects inequality. The core literature on the relation between these two factors is provided by *Kuznets* (*1955*) who theorised that in earlier periods of industrialisation, even when the non-agricultural population was still relatively small in total, the gains of growth were distributed unevenly across the country as only a smaller fraction had the advantage of technology. Over time, however, the effects of a growing economy – a result of improving productivity – on employment and wages trickle down to lower income categories, thus reducing inequality. This hypothesis is the basis of the Kuznets curve (*Tóth and Benkő 2018*) which is now considered obsolete as recent research suggests the existence of multiple development paths (*Baranyai 2018*). In his article, *Kuznets* (*1955*) also cautions against any far-reaching conclusions, pointing out that he had little reliable information, his paper being perhaps 5 per cent empirical information and 95 per cent speculation.

Freeman (*2012*) assumes that optimal economic performance can be achieved at either extremely low or extremely high levels of inequality. This means that the relation between output and inequality follows an inverse U-shaped curve. When inequality is zero and output is low, there is no incentive for people to try harder or invest in risky economic performance. In this state, an increase in inequality increases output. Furthermore, when inequality is extremely high, output will be low again. The few who have the skills or the background to get the best jobs work hard, while others have no chance of achieving similar results. Optimal inequality lies between these two extremes (*Freeman 2012*), i.e. the optimal level of inequality

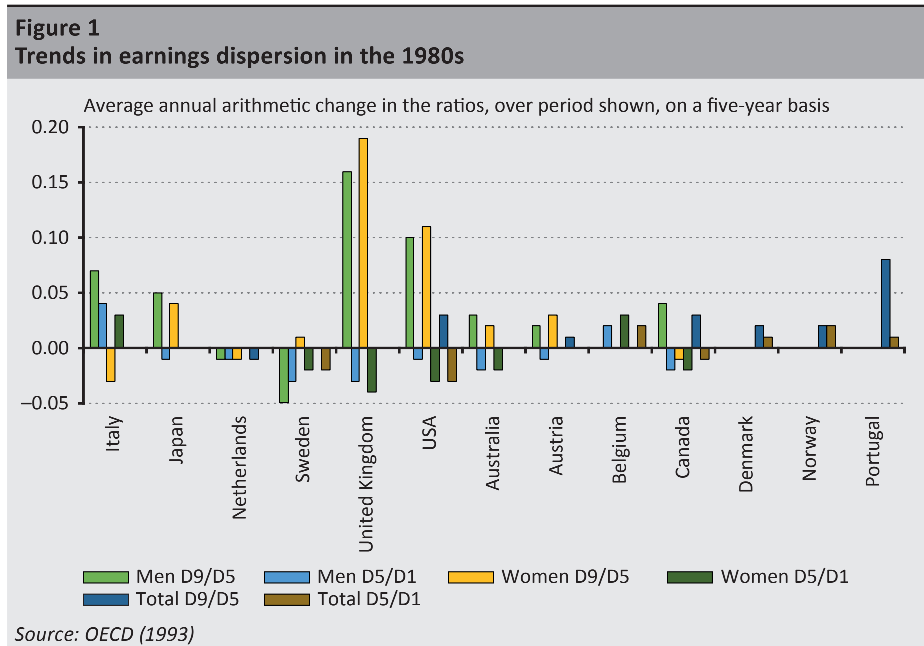
is the top of the inverse U curve (*Tóth and Benkő 2018*). *Tóth and Benkő* (*2018*), on the other hand, believe that lower inequality is preferable in the longer term as it can help improve social cohesion, mobility and the quality parameters of human capital.

Citing Richard Freeman, one of the most articulate contemporary proponents of the "optimal inequality" thesis, *Edsall* (*2014*) writes that the costs of excessive inequality are high: "Inequality that results from monopoly power, rent-seeking or activities with negative externalities that enrich their owners while lowering societal income (think pollution or crime), adversely affect economic performance." High inequality reinforces corruption, and when national income goes mostly to those at the top, there is little left to motivate people lower down. *Stiglitz* (*2015*) argues that much of the inequality at the top cannot be justified as "just deserts" as these individuals are disproportionately those in the financial sector, some of whom made their wealth by market manipulation and similar methods. The inadequacy of the just deserts theory was demonstrated by the 2007 collapse of Wall Street and the subsequent recession. It showed that inequality in income and power can threaten economic stability and concentrate economic power in the hands of the few (*Edsall 2014*).

Conservative economists look at the issue of equality from the opposite vantage point: they want to know when government efforts to redress inequalities and redistribute income worsen conditions by acting as a disincentive to work and productive activity. *Casey Mulligan* (*2012*), one of the leading critics of government intervention, argues that safety net programmes face a well-known equity-efficiency trade-off: providing more resources for the poor can raise their living standards, but it also gives them less incentive to raise their own living standards. Carrying this logic a step further, Mulligan contends that the expansion of the safety net both immediately before and after the financial collapse of 2007–2009 was the major cause of rising unemployment. Some recent analyses dispute the findings of *Mulligan* (*2012*), one of the most important of which, according to *Edsall* (*2014*), is the study by *Ostry et al.* (*2014*). The study found that lower net inequality is robustly correlated with faster and more durable growth, for a given level of redistribution. The IMF economists argue that redistribution appears generally benign in terms of its impact on growth; only in extreme cases is there some evidence that it may have direct negative effects on growth. More broadly, redistribution can also occur when progressive taxes finance public investment, when social insurance spending enhances the welfare of the poor and risk taking, or when higher health and education spending benefits the poor, helping to offset labour and capital market imperfections. In such cases, redistributive policies could increase both equality and growth (*Ostry et al. 2014*).

Freeman (*1994*) argues that due to the significant changes in the wage structure after 1980, the inverse correlation between inequality and economic growth may no longer hold true for advanced industrial countries. This idea is taken up by *Partridge* (*1997*) who claims that greater human and physical capital mobility among advanced economies or among regions within advanced nations may limit the income redistribution capacity of national or subnational governments. This led him to the conclusion that the model developed by *Persson and Tabellini* (*1994*), which shows a negative relationship between income inequality and future economic growth, may not be valid. He used the Gini coefficient to test this assumption. The results indicate that in countries with a higher income inequality at the beginning of the period, subsequent economic growth was actually higher, but in countries where the middle quintile had a higher income share, growth was also faster. This is consistent with what the model of *Persson and Tabellini* (*1994*) suggests – a positive relationship between the relative welfare of the median voter and economic growth – but contradicts the empirical findings of the model. In this context, Partridge's research implies that the generally negative relationship between inequality and future economic growth only applies to developing or newly industrialised nations, but not to advanced nations. According to *OECD* (*1993*) data, income inequality has risen in virtually all advanced economies since 1980, led by the United States and the United Kingdom (*Figure 1*), indicating that their labour markets are developing as they become more skill-intensive. However, this would imply that there is a need to create models that can explain why overall inequality is positively related to subsequent economic growth in advanced economies (*Partridge 1997*).

Figure 1
Trends in earnings dispersion in the 1980s



Source: OECD (1993)

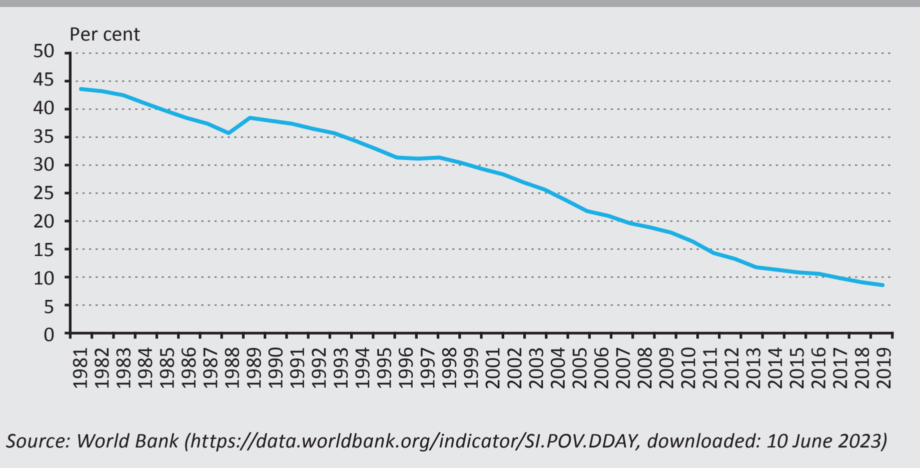
The possible tendency for structural changes during the early stages of rapid economic growth to widen relative income inequalities was noted by *Kuznets* (*1955*). According to *Tendulkar and Jain* (*1995*), two points require emphasis here. First, *Kuznets* (*1955*) treated this as a tendency and not an inevitable consequence; second, he made this observation when conceptualising the growth-inequality relationship in the context of predominantly market-driven growth that had historically taken place in the then developed countries. He attributed this tendency to three factors. One is the rise in intersectoral inequality in product per worker due to the uneven impact of technological changes across sectors and across production units within a given sector; the second is the greater concentration of asset incomes and their higher rewards because of deficiency of capital relative to labour in the early stages of growth; and the third is the predominance of self-employment incomes in the early stages with inherently greater variability than wage and salaried incomes (*Tendulkar and Jain 1995*).

Another equally important aspect of growth and inequality is what *Kuznets* (*1955*) called “income mobility”. This refers to shifts in the relative income positions of individuals during the growth process. These shifts may involve various combinations of a change in location (e.g. from rural to urban), a change in occupation (e.g. from craft-based to education-based), a change in industry of attachment (e.g. from agrobased to non-agrobased) as well as a change in employment status (e.g. from self-employed to employee). The phenomenon is brought about by new economic opportunities generated by structural changes during the growth process. The availability of (real) income-enhancing opportunities is governed by improvements in the efficiency of resource utilisation, improved functioning of economic organisation and by a rise in total factor productivity brought about by technological progress. Some sectors and production units affected by the foregoing factors would be expanding rapidly, whereas others may become obsolete, resulting in unemployment or a deterioration in the relative income position of those employed in these lagging sectors and units. Consequently, the growth process may engender income mobility in either direction. However, during the process of rapid economic growth, newly generated opportunities leading to upward income mobility far outweigh those leading to unchanged income position or downward income mobility. The phenomenon of income mobility thus tends to soften the adverse social consequences of widening income inequalities that might be experienced in the growth process (*Tendulkar and Jain 1995*).

4. Comparison of developed and developing countries

The nature of the social inequalities we are still experiencing is determined by historical factors which many countries, such as China and South Korea, have managed to overcome through intensive development built on institutions that are appropriate to the existing economic structure. Absolute poverty has started to decline as per the World Bank criteria, but it is still high (*Figure 2*) and steadily increasing in countries that have not yet completed the second demographic transition. Judging by contemporary discourse, relative poverty creates sharp social contrasts (*Grigoryev and Pavlyushina 2019*).

Figure 2
Absolute poverty headcount ratio between 1981 and 2019, at 2017 purchasing power parity, expressed as a percentage of the world population



Source: World Bank (https://data.worldbank.org/indicator/SI.POV.DDAY, downloaded: 10 June 2023)

Despite significant improvements over the past half century, absolute poverty remains widespread in many lower-middle and low income countries. Calculated at 2011 USD purchasing power parity, in 2015, nearly 750 million people lived on less than USD 1.90 a day, and around 2 billion people lived on USD 3.20 a day (*Todaro and Smith 2020*). According to *Kuznets* (*1955*), one of the reasons for greater inequality in developing countries is that because of the low average income of these countries, significant savings are possible only for those with high incomes, which leads to even greater stratification. Another reason is the low GDP growth rate (hence the low per capita income) in these countries. Kuznets assumes that these countries represent fairly unified population groups, and excludes, for the moment, areas that combine large native populations with small enclaves of non-native, privileged minorities (e.g. Kenya and Rhodesia), where income inequality,

because of the excessively high income shares of the privileged minority, is appreciably wider than in the other developing countries. On this assumption, he infers that in countries with low average income, the secular level of income in the lower brackets could not be below a fairly sizable proportion of average income – otherwise the groups could not survive.

Kuznetz (*1955*) explained that the countries of Latin America, Africa and Asia were underdeveloped because during the last two centuries their rate of economic growth had been far lower than that in the Western World. The underlying shifts in industrial structure, the opportunities for internal mobility and for economic improvement were far more limited than in the developed countries. He thought there was no hope, within the lifetime of a generation, of a significantly perceptible rise in the level of real income. A few decades later, *Rodrik* (*2018*) wrote that not so long ago, economic analysts had been extremely optimistic about the economic growth prospects of the developing world. Emerging markets were expected to maintain their strong performance that characterised the pre-crisis decade, unlike the US and Europe where prospects looked weak. In this case, developing countries could have become the engine of the world economy – some economists, for example, have concluded that the conditions have never been so favourable for broadscale, sustained growth, and they envisioned this growth and development to be led by African and Asian countries. However, these forecasts have now been replaced by what the Economist called the “the great slowdown”:[1] Growth in China and India has slackened, Brazil and Turkey are struggling with political problems, and Latin American countries are witnessing the slowest growth in recent times, as Rodrik points out, with inequality rising again since the 2010s according to the *UN* (*2020*) report.

Looking at the impressive pace of growth of China’s economy, *Yuan et al.* (*2011*) point out that poverty has declined at an astonishing rate since the 1978 reforms. Rapid economic growth has led to the rapid emergence of an expanding middle class and, more recently, a super-rich class with wealth rivalling that of their counterparts in developed countries. One driver of the expansion of this stratum is human capital formation, with graduates returning from overseas showing significant growth, in particular.

[1] https://www.economist.com/leaders/2012/07/21/the-great-slowdown?utm_medium=cpc.adword.pd&utm_source=google&ppccampaignID=18151738051&ppcadID=&utm_campaign=a.22brand_pmax&utm_content=conversion.direct-response.anonymous&gclsrc=aw.ds&gad_source=1&gclid=Cj0KCQjwhfipBhCqARIsAH9msbm_M9Yruyi3kcPhrx13wvkou6z8DA-_1dfzzwirKZqUBG9H-Z5XvroaAjlLEALw_wcB

According to *Sachs* (*2005*), it is typical that in a fast growing country like China, growth gradually moderates over time, just as it did in Japan in the second half of the 20th century. The fundamental reason is that much of this growth is catching up, i.e. adopting technologies from leading innovative countries. As these technologies come into use, and thus the income gap relative to the leading countries narrows, the scope for "easy" growth through technology imports narrows. This is important because other drivers of middle class expansion are industrialisation and urbanisation. The growth of the tertiary sector depends on urbanisation, but the Chinese government curbs urbanisation through institutional restrictions. As a result, despite the fact that employment in the tertiary sector outstripped employment in the secondary sector in 1995, the services sector lagged behind the country's economic development. The sector could have employed more people and contributed more to GDP if urbanisation had kept pace with the country's economic development (*Yuan et al. 2011*).

It is estimated that China will add an additional 80 million people to the middle and upper classes between 2022 and 2030, which will make up nearly 40 per cent of the total population. But this means new challenges and pressures for the country. Income inequality, regional disparities and rising living costs present obstacles to raising more people to the middle-income bracket, and addressing these issues is becoming a top priority for the government. However, social mobility overall has slowed in recent years following decades of rapid social change. People belonging to low-income groups and high-income groups were more likely to stay in the same profession or class as their parents, further consolidating these two groups' levels of wealth and social positions. According to a survey that examined the relationship between children's and their parents' occupational income between 2010 and 2015, around 47 per cent of sons and 58 per cent of daughters of farmers would also be farmers. Meanwhile, 43.2 per cent of sons and 39.4 per cent of daughters of highly paid employees would remain in the same wealth class as their parents. The reasons for the slowing social mobility are increasing levels of intergenerational transfer of wealth and unequal economic opportunities. In addition, rising costs of living make it harder for poorer families to raise a child, which in turn makes it harder for low-income earners to catch up with higher-income earners. Increasing medical burdens can also be a major factor contributing to low-income groups falling into the poverty trap (*Huld and Interesse 2023*).

5. The impact of industrialisation on inequality

Economic miracles refer to the development experiences of countries that have not just witnessed a sudden burst of economic growth, but have grown quickly and sustainably. With the exception of a few small countries rich in mineral resources, successful economies have boomed thanks to rapid industrialisation. East Asian countries have been remarkably good at reallocating their labour from the countryside to the cities for organised industrial production, as the US and Germany did before (*Rodrik 2018*).

The answer to the question of why the industrial revolution started in Britain is usually that there – and in the countries that followed – wages were high, so mechanisation was profitable, whereas in countries where wages were low there was no interest in mechanisation. However, this is not entirely true because the Netherlands, which also had a high wage level, set out on the path of industrialisation about half a century later, and one only has to think of China to see that low wages do not hinder industrialisation (*Ritter and Trautmann 2020*). Industrialisation enables rapid development because it is relatively easy for poorer countries to copy and adopt foreign models and production technologies (*Rodrik 2018*). *Rodrik*'s (*2018*) research shows that manufacturing is catching up with the technological frontier at a rate of around 3 per cent per year, regardless of policy, institutions and geography. In a country with a dynamic economy with relative freedom of individual opportunity, technological change is rampant and property assets that originated in older industries almost inevitably have a diminishing proportional weight in the total because of the more rapid growth of younger industries. Unless the descendants of a high-income group manage to shift their accumulating assets into new fields and participate with new entrepreneurs in the growing share of the new more profitable industries, the long-range returns on their property holdings are likely to be significantly lower than those of the more recent entrants into the class of substantial asset holders (*Kuznets 1955*).

In the simplest model, the distribution of the income of the total population can be seen as a combination of the distribution of income of the rural and urban population. From what we know about the structure of the income distribution of these two components, it can be concluded that the average per capita income of the rural population is generally lower than that of the urban population, and that the percentage shares of the rural population are somewhat more even, i.e. inequality is less pronounced, within this distribution than those of the urban population – even if we look at annual income; and this difference would probably increase for distributions by world income levels. Consequently, all other things

being equal, an increasing weight of the urban population implies an increasing proportion of the more unequal distribution of the two components. The relative difference in per capita income between rural and urban populations does not necessarily decrease during economic growth. There are indications that this gap is at best stable, but more likely to increase, as the per capita productivity of urban activities is rising faster than that of agriculture. If this is the case, inequality in the overall income distribution should increase. As a result, for example, the differences between large, successful entrepreneurs and Southern farmers in the United States have become sharper. This suggests that countries that are able to successfully shift labour from agriculture to industry will grow faster (*Rodrik 2018*). *Engels*' (*1845*) *State of the Working Class in England in 1844* was an early and famous account of unequal development. Analysing this, *Allen* (*2009*) describes how the industrial revolution led to massive urbanisation and great increases in output. However, while per capita income was rising, real wages remained constant, so the gains from economic development accrued overwhelmingly to property owners. *Allen* (*2009*) termed the period of constant wages in the midst of rising output per worker "Engels' pause". The pause had a progressive side, as the bourgeoisie saved from its growing income and the ensuing investment drove the economy forward. Engels was not alone in his view of British industrialisation. Ricardo, Malthus and Marx all believed that real wages would remain constant during capitalist development. However, they differed in their explanations: Ricardo and Malthus believed that population growth would accelerate in response to any rise in income and ultimately force wages back to subsistence; by contrast, Marx believed that technological progress had a labour saving bias that would eliminate any upward demand pressure on wages even as output per worker surged (*Allen 2009*).

Allen (*2009*) highlights three general findings in his research. First, inequality rose substantially in the first four decades of the 19th century. The share of capital income expanded at the expense of both land and labour income. The average real wage stagnated, while the rate of profit doubled. Second, these trends can be explained without reference to contingent events like the Napoleonic Wars or the settlement of the American West. The main trends can be explained with a simple macroeconomic model. Third, that macro model implies that the explanation of growth cannot be separated from the discussion of inequality since each influenced the other. With these general considerations in mind, we can outline the story of the industrial revolution as follows: the prime mover was technical progress. It was only after 1800 that the revolutionised industries were large enough to affect the national economy. Their impact was reinforced by rising agricultural productivity and the application of further inventions more generally. The adoption of these inventions led to a rise in demand for capital and, concurrently, for cities, housing

and infrastructure as well as for plant and equipment. Consequently, the rate of return rose and pushed up the share of profits in national income. With more income, capitalists saved more, but the capital–labour ratio rose only modestly, the urban environment suffered as cities were built on the cheap and the purchasing power of wages stagnated. Real wages rising in line with the growth of labour productivity was not a viable option since income had to shift in favour of property owners in order for their savings to rise enough to allow the economy to take advantage of the new productivity raising methods. Hence the upward leap in inequality (*Allen 2009*).

According to *Kuznets* (*1955*), the very fact that after a while an increasing proportion of the urban population was "native", i.e., born in cities rather than in the rural areas, and hence more able to take advantage of the possibilities of city life in preparation for the economic struggle, meant a better chance for organisation and adaptation, providing a better basis for securing greater income shares than was possible for the newly "immigrant" population coming from the countryside or from abroad. This can result in greater equality of opportunity as family advantages that result from higher income and wealth are more easily passed on to the next generation (*EC 2017*).

If we look across developing countries, we see a huge gap between the leading and lagging sectors of their economies. This economic dualism has always been present in low income societies. What is new is that the low-output segments of developing economies are not only not declining, they are actually growing. We know that economic development usually takes place when labour flows from low income sectors to modern sectors, such as from agriculture to industry or services. Then the output of the economy as a whole increases, the gap between the traditional and modern forms of economy narrows, and dualism finally discontinues. This process took place in Spain and Portugal after the war, but also later in South Korea, Taiwan and China. The expansion of modern manufacturing led to growth even in countries that produced mainly for domestic markets, as in Turkey, Mexico and Brazil until the 1980s. Today, however, the situation is different. It is true that young people in rural areas are still moving to big cities, but they take up jobs not in factories but in low-productivity services. Industry has recently been replaced by the services sector with the emphasis shifting from tradable to non-tradable activities. Such structural changes are a major impediment to economic development in Latin America, Africa and many Asian countries. Most high-productivity services require a wealth of knowledge and skills that developing countries do not have. It is simple to illustrate: a poor country can easily compete with Sweden in terms of

manufacturing, but it takes a lot for it to catch up with Swedish institutions, and this process can take decades, if not centuries (*Rodrik 2018*).

Rodrik (*2018*) uses the case of India to illustrate what happens when a country relies more heavily on the services sector than on industry in the early stages of economic development. The country is a key player in the IT sector in terms of software and call centres, but the majority of the Indian workforce does not have the knowledge and skills needed to enter this field. In East Asia, on the other hand, unskilled labour has flooded into factories, partly because workers earn several times more than they would in rural areas doing agricultural work. Instead, workers in India have two options: one is to stay on the land, the other is to work on construction sites or engage in non-specialised services. This does not increase productivity.

Rodrik (*2018*) repeatedly stresses that industrialisation is an important step for poor countries towards development in several respects. Some say that the current low-income countries in Africa, Asia and Latin America need to do something similar if they are to achieve rapid and sustainable economic development, but there is no comparison between the world today and the world during the industrial revolution. The combination of globalisation and technological progress has changed the way industries operate, making it very difficult, if not impossible, for developing countries to follow the example of the "Asian Tigers" or the North American and European economies. Industry is increasingly capital and skills-oriented, resulting in a decreasing proportion of the workforce that can move from agriculture to industry (*Rodrik 2018*). *Atkinson* (*2015*) argues that increased inequality is due to the demand for educated workers rising faster than the supply, and that technological progress and globalisation have eliminated jobs for many low-skilled workers.

Rapid global technological progress has reduced the price of manufactured goods relative to services, discouraging developing countries from entering. The peak rates of industrialisation are lower than ever before, and current wages are a fraction of those experienced by previous industrialisers. This means that many (or perhaps most) developing countries are becoming "service economies" without having actually gone through industrialisation – a process *Rodrik* (*2018*) calls "premature deindustrialisation". *Rodrik* (*2016*) found in his research that while early industrialisers were able to reallocate at least 30 per cent of their labour force to industry, later industrialisers were not: The highest rate was 20 per cent in Mexico and even lower, 16 per cent, in Brazil. In India, the share of people working in industry started to fall as it reached 13 per cent.

According to *Kuznets* (*1955*), repetition of past patterns of the then developed countries would, under the markedly different conditions of the developing countries, put a strain on the existing social and economic institutions and eventuate in revolutionary explosions and authoritarian regimes. *Rodrik* (*2018*) believes it is possible that the “Asian Tigers” were the last to experience industrialisation under the conditions we know from history. If this is indeed the case, it is detrimental to economic growth. The gap between earnings and working conditions between bankers and managers, or small-scale industrial or household workers, is significantly larger in developing countries. If they move to the tertiary sector before human capital is accrued and the right institutions are in place, this will greatly exacerbate the problems of inequality and exclusion in the labour market (*Rodrik 2018*).

6. A way out of inequality

There are two major economic theories to underpin our understanding of the evolution of global inequalities in the coming decades. One is that with globalisation, income convergence should intensify, i.e. poor countries’ incomes should catch up with those of rich countries, as emerging economies are expected to have higher per capita growth rates than rich countries. This projection is not invalidated by the slowdown in growth in some emerging economies, such as China. However, two reservations have to be taken into account. First, we are talking about a broad pattern which does not mean that all poor countries are involved in catching up. In fact, one of the surprises of the current globalisation process has been the failure of many countries to catch up and the further decline of some economies.[2] The same cannot be ruled out in the future. Second, when we look at the welfare of individuals, it is the income convergence of the most populous countries that matters most. This approach places particular emphasis on how countries such as China, India, Indonesia, Bangladesh and Vietnam continue the process of catching up.

The other important economic theory concerns changes in inequalities within nations characterised by movement along the different stages of the first or second Kuznets wave. Depending on their income level and structural characteristics, countries may go through different Kuznets waves or different stages of the waves. Thus, in China, inequality may start to decline as it slides down the Kuznets wave, while in some very poor countries inequality may increase – they are moving up the first wave. The richest countries, already advanced in the process of the second technological revolution, will continue to move up the upward section of the second Kuznets wave – as expected for the US – or will soon start the downward phase.

[2] For debates and experiences on distribution in the context of globalisation, see *Halmai* (*2023*).

So there are many different experiences, but the most important patterns will be determined by what happens in the US and China (*Milanovic 2016*).

According to *Atkinson* (*2015*), if we want to reduce inequalities, there are steps we can take. The fact that the factors that create inequality include politics and are not just the inevitable result of economic forces means that there are policies that can mitigate the extremes of inequality and improve opportunities for catching up. At a conference on inequalities organised by *Blanchard and Rodrik* (*2021*), it was widely agreed that removing government interventions or stimulating economic growth alone are not enough. Instead, governments should play a stronger direct role in closing lifestyle gaps. Policymakers must make it a priority to move more people out of poverty, strengthen the middle class and curb the excesses at the top. Most of the policies are clear: more support for education; increasing the minimum wage; strengthening the earned-income tax credit; better financial sector regulation (*Stiglitz 2015*). As exemplified by the welfare states built by rich countries in the 20th century, modern redistribution is based on basic social rights: the right to education, health and pensions. The problem of inequality can therefore be solved not by dismantling redistribution, but by improving it through more effective programmes (*Piketty 2014*).

Brazil, torn by even greater inequality than the United States, has introduced similar measures and shown how concerted policies focusing on education and children can bring down inequality within the span of less than two decades (*Stiglitz 2015*). Development of the education and training system has also been a key to economic growth in the newly industrialised countries of Southeast Asia, with Taiwan being a good example according to *Csáki* (*2018*).

The minimum wage is often seen as an important public policy element in reducing poverty and inequality. Raising the minimum wage should in theory increase the incomes of millions of low-paid workers, thereby reducing inequality of income. However, there is disagreement in the literature of the industrialised countries as to whether the increase in the minimum wage has contributed to lessening earnings inequality (*Lin and Yun 2016*). *Lin and Yun* (*2016*) cite the example of China, which has recently demonstrated rapid economic growth and rising inequality of income. Since China promulgated a new minimum wage law in 2004, the rate and frequency of change in the minimum wage has been significant both over time and across jurisdictions. The growing importance and controversial nature of research on the link between the minimum wage and earnings inequalities has sparked heated debates in the country. In the period 2004–2009, the increase in the minimum wage mitigated inequality by reducing the gap between median and bottom decile earnings.

At a conference held at the Peterson Institute for International Economics, there was consensus that taxes should be raised – at least in the US – but whether they should be focused on the revenue or expenditure side, was the subject of debate. Some would finance public spending on the bottom and middle sections of income distribution with broad taxes such as VAT because it is easy to collect. Others, on the other hand, would prefer to address the great inequality caused by the extremely high incomes of the top classes through wealth taxes and progressive income taxes, seeking a rational middle ground between the two (*Blanchard and Rodrik 2021*).

Looking at the US and other developed countries, we see that they are trying to achieve greater equality in very different ways. In Sweden and the other Nordic countries, for example, progressive taxation, redistribution and strong welfare systems propel these countries towards this goal, while in Japan, greater equality is ensured through a smaller difference in pre-tax income between the top and bottom quintiles. In the US, Vermont and New Hampshire are good examples of states that are doing well in addressing health and social issues – the former follows the Swedish example, and the latter adopts the Japanese approach. It seems that no matter what mechanism societies use to move towards greater equality, the point is to get there (*Kerry et al. 2012*).

Blanchard and Rodrik (*2021*) cover a very wide range of policies that tackle inequality, so for an ease of understanding they break them down into two dimensions. First, policies vary depending on the stage of the economy they target. In this dimension, three orientations are distinguished: policies focusing on the pre-production phase, policies focusing on the production phase and policies focusing on the post-production phase. The second dimension shows the part of the income distribution they want to change. Some policies target the lower classes, others seek to increase the income share of the middle class, but there are also policies that reduce the income share of the top classes. Combining the two dimensions yields a 3x3 matrix (*Table 1*).

Table 1
A taxonomy of policies affecting inequality

		At what stage of the economy does the policy intervene?		
		Pre-production	**Production**	**Post-production**
What kind of inequality do we care about?	**Bottom**	Endowment policies (healthcare, education); universal basic income	Minimum wage, job guarantees	Social transfers (e.g. earned income tax credit); full employment macro policies
	Middle	Public spending on higher education	"Good jobs" policies; industrial relations and labour laws; sectoral wage boards; trade agreements; innovation policies; employee ownership	Safety nets; social insurance policies
	Top	Inheritance/estate taxes	Regulations; antitrust laws	Wealth taxes

Source: Own compilation and using data from Blanchard and Rodrik (2021)

Economics provides some guidance on which cells of the table to focus on to effectively address inequality, but it is not sufficient in itself. The solution requires coupling economic analysis with values and normative judgements – or political philosophy – as well as views on the interaction between economics and politics (*Blanchard and Rodrik 2021*).

Opinions on the role of state redistribution differ in the literature. Research by *Ostry et al.* (*2014*) found surprisingly little evidence for the growth-destroying effects of fiscal redistribution at a macroeconomic level. Some mixed evidence suggest that very large redistributions may have direct negative effects on growth duration, such that the overall effect – including the positive effect on growth through lower inequality – may be roughly growth-neutral. But for non-extreme redistributions, there is no evidence of any adverse direct effect. The average redistribution, and the associated reduction in inequality, is thus associated with higher and more durable growth. We need to be mindful about over-interpreting these results, especially for policy purposes. It is hard to go from these sorts of correlations to firm statements about causality. One important positive conclusion from their look at the big picture is that extreme caution about redistribution – and thus inaction – is unlikely to be appropriate in many cases. On average, across countries and over time, the things that governments have typically done to redistribute do not seem to have led to bad growth outcomes, unless they were extreme. And the resulting narrowing of inequality helped support faster and more durable growth, apart from ethical, political or broader social considerations. Even given these results about average effects, it remains important to try to make redistribution as efficient as possible

(*Ostry et al. 2014*). *Partridge* (*1997*) argues that the important policy implications of the impact of inequality on economic growth suggest that a better understanding of this relationship is warranted. Whether there have been recent changes in the relationship between inequality and economic growth in advanced post-industrial economies, and whether the relationship between countries is different from that within countries, deserves further enquiry.

7. Summary

In this essay, I examined the question of whether social inequalities encourage or hinder economic growth. First, I briefly introduced the key concepts and then pointed out the two-way relationship between global inequality and long-term growth and the differences in opinion concerning the subject. This called for an identification of the optimal level of inequality. It can be concluded that there is no consensus among economists in the relevant literature as regards this relation. In my view, although some inequality can act as an incentive and thus be supportive of the economy, it has an overall negative impact on economic growth, especially when coupled with poverty, as it affects human capital in the form of sub-optimal education and health.

In comparing developed and developing countries, I noted that absolute poverty has started to decline as per the World Bank criteria, yet it remains high. In this chapter, I also discussed the growth of the middle class in Chinese society.

By analysing the context of the industrial revolution, I found that although the process of industrialisation played a decisive role in the growth and development of today's developed countries, developing countries will no longer be able to follow suit because of globalisation and the current technological progress. I introduced the concept of "premature deindustrialisation" and pointed out that the dominance of the service sector over industry is checking economic development in many parts of the world as there is a lack of skilled labour.

Finally, because politics itself can contribute to inequality, I reviewed the economic policy measures that can facilitate the mitigation of inequality and promote economic growth. The clear aim is to reduce the income inequality that affects the global economy and many countries around the world, in both developed and developing societies. Thanks to globalisation and digitalisation, in this century, we have access to an unprecedented wealth of information to explore the world, and so perhaps it will be easier for us to recognise what is already obvious to many: that too much inequality is not only harmful to the wellbeing of society but also to economic performance.

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