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The Globalization of Inequality: Theoretical, Empirical and Policy Aspects

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Renata Targetti Lenti[1]

Abstract

Based on a broad review of authors and data, this paper analyzes the evolution of inequality on a global scale, distinguishing three concepts of inequality: 1) between countries, 2) within countries, and 3) global. The estimates presented by the authors differ, sometimes significantly. All agree that a phase of decreasing global inequality began in the 1990s with the economic rise of China and India reversing a secular trend of increasing inequality between countries. Over the corresponding period, within inequality appears to have increased in some countries and decreased in others, regardless of the economic cycle. The estimates of the population-weighted average of the Gini index for individual countries, used as estimates of global inequality, differ depending on the datasets considered. The paper refers to Thomas Piketty and his theses on increasing capitalist rent in the long run, complemented by the analyses of Branko Milanovic. The thesis of rising within inequality in the long run is based also on Scheidel's work that the global capitalist system is unable to substantially reduce inequality except in the presence of catastrophic events. One of the consolidated trends is, moreover, the progressive concentration of ever-larger shares of wealth in the hands of an ever-shrinking global elite.

The analysis presented in the paper allows us to draw some important conclusions. The relocation of many manufacturing sectors to China, and more generally to the Asian region, has significantly altered the distribution of income and wealth between and within countries. Over the past decade, some developing countries have benefited from these changes and have progressively reduced the gap between their average domestic income and the global average. This process has resulted in a decrease in global inequality since 1993, a year that Bourguignon defines as a true turning point in history. However, the rising within countries inequality produced some economic and political negative effects: slow growth, increasing party polarization, increasing migration flows from poorer to richer countries. In industrialized countries the reduction in the share of incomes of middle-class earners is transforming the institutional setting: a vicious cycle of inequality, abstention, populism, and polarization thus tends to reinforce itself.

Keywords: inequality, globalization, redistribution

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1. Introduction

Since the early 1990s, "inequality" has become a central theme of economic debate from various perspectives: theoretical, applied, and policy-related. The issue has gained relevance within each country in relation to the transformations that have occurred in the economic, political, and social systems and in relation to the processes of accumulation and growth. The issue of inequality has acquired new dimensions with the intensification of globalization and the delocalization of productive activities. It has been emphasized that today, the problem of growing inequality cannot be simply treated as the outcome of a conflict between different social classes within each country, but must instead be considered the result of the transformation of relationships between different nations. The main challenge today concerns, in one way or another, inequality, both within and between nations. The intensification of international integration has significantly altered political and economic relations between industrialized and developing countries. The relocation of many manufacturing sectors to China and, more generally, to Asia has altered the distribution of income and wealth among countries. Over the past decade, some developing countries have benefited from these changes and have progressively reduced the gap between their average income and the global average. In particular, the middle class (workers and employees) in industrialized countries has become impoverished, while the middle class in some developing countries has become richer.

Inequality and the impoverishment of the middle class are becoming a major concern in rich countries due to the potential consequences, weakening not only the economic system but also, and perhaps especially, the political system.

Many commentators have identified the feeling of being left behind and excluded from prosperity as one of the reasons why, in June 2016, the majority of voters in the United Kingdom chose Brexit, or Donald Trump's success in the US in two presidential terms, or the very recent political crisis in France. A very recent report on global inequality, the "World Inequality Report 2026" (World Inequality Lab 2025), notes that internal inequality varies greatly from country to country, but has a common characteristic: it has increased in all the countries studied. In many countries, the growth of very high incomes has led to an increase in the share of income earned by the richest percentile. Inequality in the distribution of income and wealth has increased in two-thirds of the world's countries, with the richest 1% holding a disproportionate amount of wealth (World Inequality Lab 2025, Executive Summary).

The factors that have contributed to the rise in inequality are numerous and varied. Some of the factors underlying this trend are specific and endogenous to different national contexts, and differ depending on whether the countries are industrialized or developing. These factors depend on the institutional context, but also on socioeconomic and demographic variables. Particularly relevant in this regard are the functioning of markets and the distribution of various types of individual and/or family assets (production factors, education level) among those earning capital income versus those earning labor income. However, these factors *alone* do not explain the level of inequality and its relative increase in recent decades. It is also necessary to take into account other factors that have influenced inequality, to varying degrees, also in relation to specific institutional contexts. The process of globalization and the progressive "financialization" of the economy are certainly among the most relevant. The process of increasing international integration has ultimately stimulated, through exports of goods, services, and capital, only certain areas/sectors within different countries, accentuating regional, technological, and employment gaps and, ultimately, distributive inequalities. The growth of inequality as a result of globalization has affected the same social groups differently across countries. For example, the impact

on the middle working class in developed countries has been very different from that in less developed countries. Some income groups have improved their position in the global income distribution. Conversely, “others have suffered relative impoverishment” (Alacevich and Soci 2022, XIV).

2. Inequality in Personal Income Distribution

Personal income distribution has long been considered a stochastic process. Economists' primary goal was to formulate general "laws" to describe the "shape" of the distribution and to measure, based on these laws, the relative degree of inequality: this method of analysis therefore favored statistical aspects over economic ones. Pareto (1896), in particular, had identified a relationship between individual incomes and the number of earners, starting from a minimum income value, so statistically significant that it could be considered a true law.

At the end of the last century, information on income distribution was mainly obtained from statistics based on tax returns collected in countries or cities that had some form of total income taxation. On this statistical basis, Pareto noted that the distribution of taxpayers' income was approximated quite precisely by a simple relationship Linear in logarithms with a right-hand tail indicating that the number of income earners decreases with higher incomes. This empirical regularity is known as the Pareto Law.

The debate over the shape of personal income distribution was quite lively in industrialized countries in the first half of the 20th century, although it was poorly supported by empirical analysis. Very little was known about the actual distribution of income in different countries. However, data collection gradually increased, and information is now abundant and available for many countries. Since Pareto's intuition, most studies on income distribution have shared a descriptive statistical approach that has led to a sort of separation between a theory of personal income distribution and the main corpus of economic theory, specifically theories of the functional distribution of wages, profits, and rents.

Over time, however, personal income distribution has also acquired increasing importance for economic analysis, not only with reference to the concepts of equity and well-being but also in relation to the study of individual behavior and collective inequality (concerning consumption, accumulation of physical and human capital), the characteristics of production organization and the labor market, as well as for the formulation of redistributive policies. The last decade has seen a genuine paradigm shift. It has been observed that high levels of inequality can have negative effects not only on social cohesion but also on economic development. These studies have profoundly shaped the understanding of economic inequality, highlighting its complex nature and the need for comprehensive, long-term solutions.

The revival of studies on personal income distribution by economists, and not just by statisticians, was fostered by two pioneering contributions by Tony Atkinson (who passed away in 2017). The first paper appeared in 1970 in the *Journal of Economic Theory* (Atkinson 1970, 244-263). For the first time, indices for measuring income concentration were considered not only as statistical indicators, but also indexes with a normative value. In particular, the "Atkinson index" contains a parameter that measures inequality aversion, which can vary depending on the researcher's different value judgments. Different societies have different levels of inequality aversion, or the degree of inequality that people are willing to tolerate. Inequality was related to a function of collective well-being, introducing the concept of inequality aversion. From that point on, it was no longer possible to address inequality without a

normative theory of justice as a reference. In a subsequent work in 2015 (p.20), Atkinson argued that inequality must be addressed, not only because the level of inequality "matters to people" and therefore for ethical reasons, but above all because total production, and its growth, are also influenced by income distribution.

The processes that regulate the formation of personal income (individual and/or family) are highly complex. The inequality observed in personal income distribution is the result of the inequalities that arise when the various components of income are formed. These are essentially attributable to the existence of earners of income exclusively from work, as opposed to earners of income derived also or exclusively from the ownership of capital goods and/or natural resources. Inequalities emerge within the distribution of income earned by different groups of workers, determined, among other things, by occupational status, the performance of specific tasks, individual capabilities, educational level, and the technological characteristics of different production sectors. The market, the family, and the state can thus be considered the three stages in which the various factors that give rise to inequality combine. From the functional distribution of income (divided into the three major categories of wages, profits, and rents) we arrive to the personal distribution (primary and secondary) through several steps. The first consists of the formation and distribution of value added to the various factors in relation to the production of the domestic product and within a specific structure of the economic system.

The second step reflects the process of primary distribution of income from factors to families. The direction and magnitude of these flows reflect the ownership structure of the factors by individuals, grouped into family units of varying composition and size.

For each individual, the ways in which factor endowments translate into primary income depend on prices (of employed labor, self-employment, and capital), which are determined by the structural and economic conditions of the various markets. Inequality will be greater the more concentrated ownership of endowments, particularly capital goods, is; the greater the dispersion of factor remuneration, particularly labor; and the more market exclusion and marginalization systematically affect certain components of the workforce, specific production sectors, and individual territorial areas.

The third stage determines the value of disposable income, that is, income derived from primary income, taking into account the equalizing/redistributive action of the public sector, exercised through the collection of direct taxes and social security contributions, the provision of social benefits (pensions, unemployment benefits, wage supplementation funds, and so on), and the payment of interests on public debt. Thus, starting from the primary distribution, the secondary distribution of income is determined. This third stage, logically subsequent to but often contemporaneous with the first, reflects the structure of the redistributive mechanisms linking the household sector to the public administration. The three stages just outlined correspond to a series of steps from the endowment of resources possessed by the various earners to the final stage of personal income distribution. The final inequality will be the result of all the inequalities that arise at these different stages. Analyzing inequality, therefore, requires highlighting the relationships between different income flows and the structural characteristics of the economic system, as well as those between income flows and redistributive policies. As Atkinson argued, "Understanding income distribution is necessary to understand how the economy works" (Atkinson 2015, 20).

Empirical analysis requires addressing the numerous methodological issues that arise when attempting to "measure" inequality, which essentially stem from the choice of reference units and indicators. Only since the 2000s, for example, thanks to the fundamental and pioneering contribution of Branko

Milanovic, have we begun to measure global inequality, defined as the inequality between the incomes of citizens around the world. This has enabled a more systematic analysis of the effects, in terms of income levels and distribution, of the profound transformations in production processes resulting from globalization and the decentralization of many production processes from developed to developing countries. There is no doubt that these processes have had significant implications for the transformation of production activities and the redistribution of employment internationally. Consequently, the effects on inequality within and between countries have been significant.

3. Global inequality in the short and long term

Globalization, the decentralization of many manufacturing firms from industrialized to developing countries, and the intensification of international trade have produced numerous and significant changes in the distribution of income and wealth within countries (within), between countries (between), and globally, that is, considering income earners from different countries as if they were all citizens of a single territory, the world. It is important to distinguish these three different aspects of inequality, each of which corresponds to specific measures - first and foremost, to assess the impact of national inequality on global inequality. Inequality within countries has increased in many parts of the world in recent decades, while inequality between countries has, in most cases, decreased. On the one hand, gaps between countries have narrowed, while on the other, within-country gaps (in income, wealth, and opportunity) are widening and now constitute the largest share of overall global inequality.

Important contributions to the analysis of global inequality have been made by studies on the indices used to measure it and on the short- and long-term trends of these indices. The results and interpretations that can be drawn from them are often conflicting, not only due to the calculation methods and indices used to measure inequality, but above all due to differences in the source data, the methodological characteristics of the surveys, the assumptions needed to estimate the different national distributions, the number of countries included in the sample, and, finally, the time period considered. Regardless of the interpretative model chosen, all investigations into inequality in personal income distribution are based on specific empirical evidence, most often drawn from sample surveys. The statistical significance of the sample, the data processing method, and the definition of the variables (reference unit, income components, reference time period) influence the interpretation of the results. The definition of income itself is not free of ambiguity.

Following the classification proposed by Milanovic (Milanovic 2005, 9), we can refer to three different concepts of global inequality, each corresponding to three different, complementary measures, each suitable for measuring a specific aspect. The first (Concept 1) refers to "inequality between countries" (intercountry inequality) and measures the gaps in per capita income between different countries, regardless of population size. Since population is not included in the calculation of the index, each country has the same weight in the global income distribution. This means, for example, that an increase in the income of a "small," sparsely populated country has the same effect on the change in global inequality as a larger, more populous country.

The second concept (Concept 2), defined by Milanovic as "international inequality," measures global inequality as the gap between per capita incomes of different countries, taking into account population size and therefore weighting the different values of average income accordingly.

The third concept (Concept 3), "global inequality," finally measures the inequality in income distribution among citizens (individuals or families), considered as all belonging to a single territory: the world. The index measures the differences between individual/family incomes, not just the average income of nations. Global inequality is calculated based on the distribution of individual incomes, estimated globally regardless of country. The index thus constructed can be considered the "true" indicator of global inequality, understood as the gap between the incomes of income earners in different countries, in a world composed of individuals, not just nations.

The first concept of global inequality, which measures the gap between average incomes of different countries, is the index generally used in macroeconomics, and also the simplest to calculate. The first empirical analyses that used this type of index were within growth studies. These studies were generally dedicated to analyzing the theme of convergence, or the divergence between per capita incomes of developing countries compared to industrialized ones. More precisely, this refers to the attempt to verify the hypothesis, as predicted by the neoclassical model in the Solow version (1956), of conditional convergence. Convergence because, if this hypothesis were verified, poor countries would, sooner or later, converge to the same per capita income as rich countries. Conditional because it is true, provided that some of the parameters that characterize the different economies, and in particular the savings rate and the capital-product ratio, are the same.

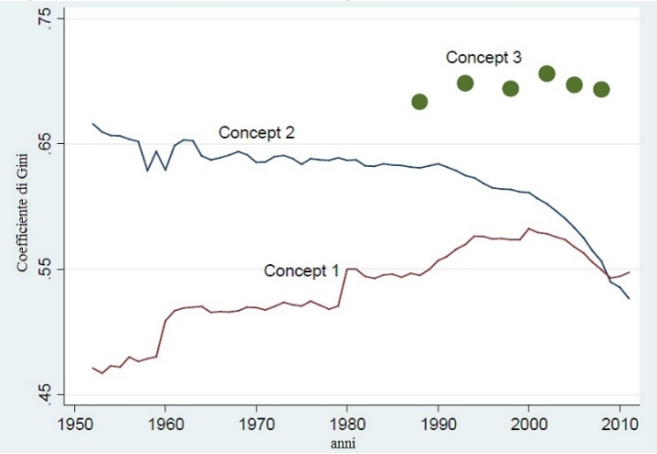
However, the calculation of "global inequality" in its third sense faces numerous challenges, both empirical and conceptual. The ability to empirically estimate this measure is relatively recent. Indeed, calculating it requires not only comparable data on average incomes across different countries, but also harmonized sample survey data that allow us to reconstruct the function representing the personal distribution of income among "citizens of the world," as if they belonged to a single territorial entity. This distribution requires comparability, in terms of the definition of the reference units, between values from very different sources. Comparability is difficult because it depends on both the heterogeneity of the definition of income (primary market or available secondary), the data collection methods (different sample sizes), and the time period. Considerable effort has been directed, in recent years, at building databases containing harmonized and comparable information. Examples of these initiatives include the databases built within the Luxembourg Income Study (LIS) and the Wealth Luxembourg Study (WLS) for OECD countries, the World Income Inequality Database (WIDER), and the Living Standards Measurement Survey (LSMS) conducted within the World Bank. However, the number of countries considered for this homogenization process is currently small compared to the number of existing countries. For many of them, the data necessary to perform the calculation do not exist.

Milanovic discusses the methodology, or rather, alternative methodologies that could be used to estimate the distribution function of individual incomes at the global level (Milanovic 2006a). The simplest method involves combining information from sample surveys for each country with national accounts data. The starting point is to calculate the "international inequality" corresponding to Concept 2 using GDP per capita and population values for as many countries as possible. Once the hypothesis that income distributions within each country tend to follow a log-normal pattern has been accepted, it is possible to combine the value of "international inequality" with a synthetic measure of inequality, such as the Gini index, which corresponds to the actual empirical distribution, to obtain the distribution function for each individual country. Inequality indices, particularly the Gini index, are readily available as they are published in institutional databases such as WIDER or the Deininger-Squire database (Milanovic 2006a, 134). Thanks to the log-normality assumption of the distribution function, "inequality statistics allow us to obtain an estimate of the variance of each national distribution. Once the variance and mean are known, and given the assumption of log-normality, we can estimate the entire

distribution of each country, that is, the income of each fractile. It therefore becomes relatively simple to combine these national distributions into a single global income distribution, especially if one uses a precisely decomposable measure of inequality such as the Theil index or the variance of the logarithms. This was precisely the approach followed by many early studies, and some of the more recent ones, on global inequality (Milanovic 2006a, 133). Sometimes, this approach can be refined by using slightly more detailed information than that contained in a Gini or Theil index. Sala-i-Martin (2002) and Bhalla (2002) used income distribution quintiles to obtain a better approximation of national distributions and thus obtain a more precise estimate of the global distribution. All these methods, however, can only be considered as *tâtonnements*, that is, attempts to estimate the actual global distribution (Milanovic 2006a, 133). It is not excluded that the calculation can be done, provided its limitations are highlighted, as has been done in the various works cited. The estimates provided by Milanovic (2012), shown in Figure 1, highlight the differences in global inequality dynamics over the period 1952-2011 depending on whether one refers to "inequality between countries" (concept 1), "international inequality" (concept 2), or, finally, "global inequality." The horizontal axis indicates the years. The vertical axis shows the Gini index as a measure of inequality. The composition of the sample of countries considered has remained virtually constant since 1960. The values are calculated in purchasing power parity.

The index of inequality "between countries" (Concept 1) increased in the period 1950-1960 and between 1980 and 2000. However, a certain stability was observed around a Gini value of 53 between 1960 and 1980. Starting in the early 1980s, coinciding with the rise in real interest rates and the emergence of the debt crisis in many developing countries, a process of significant divergence between the per capita incomes of different countries occurred and therefore a growth of the index in the sense of Concept 2. The so-called "lost decade" in Latin America, the stagnation and then the actual decline in the countries of Eastern Europe and the countries of the former Soviet Union, and the poor performance of many African countries were the factors that, together with the performance of rich countries, explain this divergence. In a period of increasing globalization, rich countries have grown faster than poor ones.

Figure 1. Indices of inequality "between countries", "international" and "global" (1952-2011)

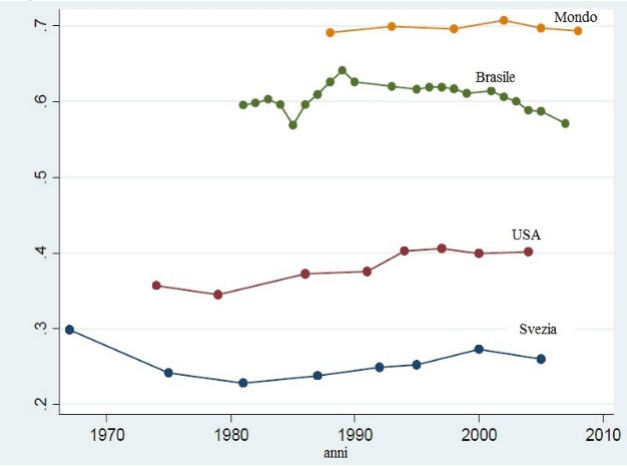


Source: Milanovic (2012, 6). Values calculated using current prices at purchasing power parity.

Global inequality (Concept 3) has only been calculated since the 1980s. Previously, the sample surveys on household income required for its calculation were not available. A cyclical upward trend is observed between 1988 and 1993, and a further upward trend between 1998 and approximately 2003, before declining (Figure 1). From approximately 1993, inequality between countries (Concept 1), international inequality (Concept 2), and global inequality (Concept 3) began to decline, and the trend reversed. The decline in global inequality (Concept 3) accelerated particularly after 2001. The period after 2001 was

one of growth not only for the global economy (driven by the largest and richest countries), but also for many developing countries, African countries, former communist countries, and Latin American countries. The growth rate of these countries explains the reversal in the index's trend. Despite the reversal in the trend of inequality, its level is, today, significantly higher than it was in the 1960s and 1970s (Figure 1).

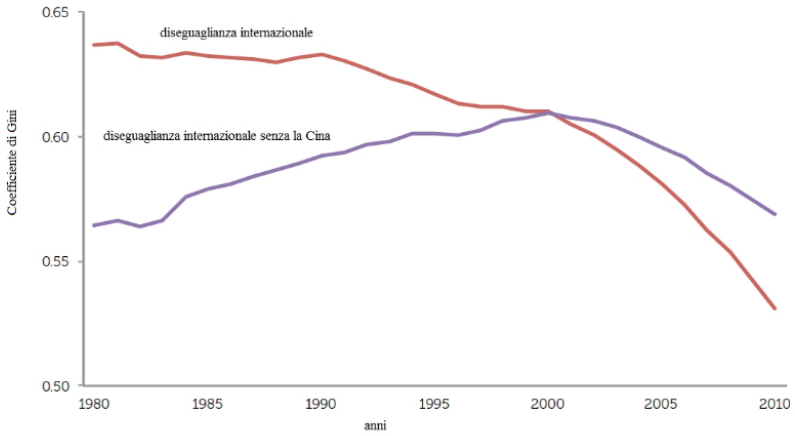
Figure 2. What does a Gini index of 0.70 mean?



Source: Milanovic (2013, 201). The Gini index is calculated on incomes from the "World Income Distribution database".

The analysis of the dynamics of "international" inequality (Concept 2) can also be carried out on the basis of two different samples, one that includes and one that excludes China (Milanovic 2009, 9). This allows us to understand the important role of China's growth in achieving a true convergence between the average incomes of different countries (Figure 3).

Figure 3. International inequality "without" and with China, 1980-2010



Source: Milanovic (*2009, 9*).

When China is included in the sample of countries, the international inequality index has been steadily decreasing since 1980, with an acceleration starting in 2000. The index's value in 1960 was very high, equal to 0.65, and by the end of 2006 it had fallen to 0.55 (Figure 3). If the "international" inequality index is calculated excluding China (purple line), it grows between 1980 and 2000. In that year, a reversal occurs, with the decline beginning in 2000. The decline in the index since 2000 is more accelerated when China is included. In this country, in fact, average per capita income has increased since 1980 from a very low level, not only more than the world average, but also more than in rich

countries, particularly the United States. In the post-2000 period, India's growth also provided a significant impetus to the decline in the inequality index. For this reason, the index declines even when China is excluded.

Numerous authors have contributed to the debate on trends in "global inequality," in its third meaning of "global inequality," starting with the pioneering work of Sala-I-Martin (2002). There appears to be agreement among various authors regarding the value of the Gini index. This agreement is particularly significant given that the estimation methodologies used by the various authors have been quite different. The Gini index values, with two extreme exceptions, fall within a very narrow range between 0.63 and 0.68 (Milanovic 2006a, 140). Milanovic (2013, 201), using data from sample surveys, has also calculated the value of the dynamics of the Gini index for global inequality. This index exhibits a slightly cyclical trend (Figure 2).

The index increased between 1988 and 1990, reaching a value of approximately 0.72, before declining to approximately 0.70 in 2008. It decreased slightly further, reaching a value of approximately 0.68 in 2010 (Figure 2). These changes are explained in the early 1990s by slow income growth in rural areas of India and China and the collapse of Eastern Europe. Both of these factors contributed to the rise in global inequality. When both of these trends reversed in the following five years, global inequality declined.

The most widely accepted hypothesis is that the reduction in global inequality is attributable to the faster growth of developing countries than that of industrialized countries. According to Bourguignon (2011, 58), "The factor that best explains the decline in global inequality in recent years is this divergence in growth rates, thanks to which developing countries are growing much faster than high-income countries. This was true even during the global recession of the late 2000s... it seems that for the last 10 years or so, there has been a gap in growth rates between the North and the South, the size of which has not changed significantly in the last 5 years. If this trend were to continue, it would certainly be a major novelty in the history of the global economy."

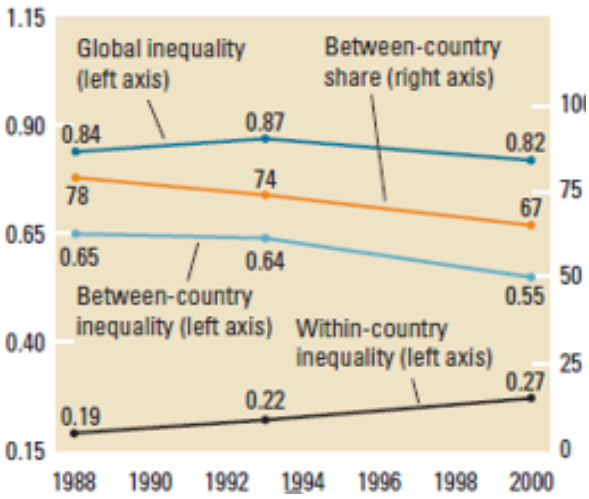
One of the questions that arises from observing Figure 1 is how it is possible to reconcile the trend of the index measuring "international inequality" (Concept 2), constant in the period 1980-1990 and decreasing in the subsequent period, with the dynamics of the index measuring global inequality, which, over the same period, has been constantly increasing, albeit slightly (Figures 1 and 2). To understand this paradox, it is necessary to consider not only the dynamics of inequality between countries (between), but also that within individual countries (within). Global inequality can be considered the result of both inequalities: between and within. The former is measured by the gaps in average incomes between countries. The latter, however, is measured as the gap between individual incomes within countries. In calculating the "international inequality" index (Concept 2), each citizen is assigned the average income of their country; in calculating the "global inequality" index, however, each citizen is assigned their own income.

In its 2006 World Development Report (World Bank 2005), the World Bank discussed the various aspects of global inequality, emphasizing how the debate in the early 2000s had been lively due to conflicting empirical evidence (World Bank, 2005, 64). Some authors had claimed that global inequality had increased slightly in the last decades of the 20th century (Milanovic 2005), while others had argued that it had decreased (Sala-i-Martin 2002). These contrasting results appeared to be a real puzzle. This paradox, in reality, can be understood on the basis of data published at the time by Bourguignon and Morrisson (Bourguignon and Morrisson 2002). These data were reworked by the authors of the World

Development Report 2006 (World Bank 2005) to distinguish the percentage weight of the two components of global inequality measured by the Theil index: between-country inequality and within-country inequality. The Theil index values are on the left axis. The weights of the two components are on the right axis. As is clearly shown in Figure 4, for the period 1988-2000, between-country inequality remained essentially stable from 1988-93 and then decreased from 1993 to 2000. Within-country inequality, however, systematically increased. Combining the two components, we observe a slight increase in global inequality in the first period and a slight decrease in the second.

In the first period, the reduction in between-country inequality was unable to counteract the growth in within-country inequality. Consequently, global inequality increased. Since 1993, however, the reduction in between-inequality has been so strong that it has counteracted the growth of within-inequality. The overall effect has been a real turning point and a decrease in global inequality since 1993. Average incomes in developing countries have begun to converge towards those of rich countries at least since the second half of the 1980s. However, the incomes of different income groups within individual countries have never experienced a process of convergence. In short, a process of convergence between countries has not been matched by a decrease in within-inequality, which, instead, has always grown up.

Figure 4. Inequality between and within countries and global inequality (1988-2000)



Source: World Bank 2005, 64

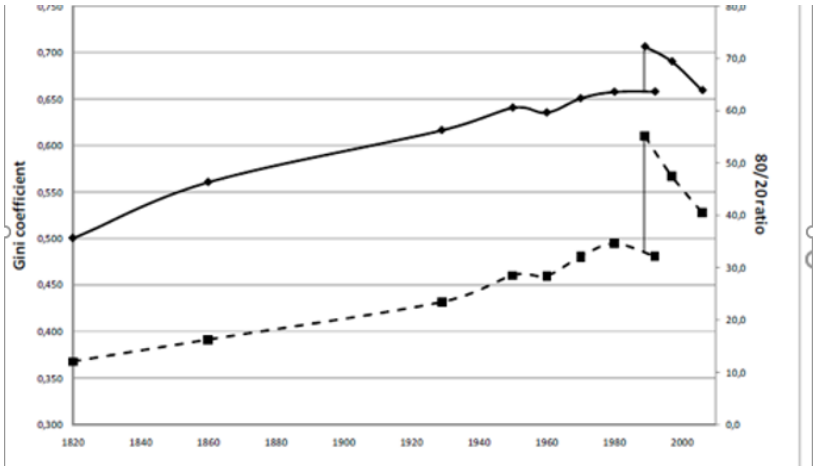
The incomes of different income groups within individual countries have never experienced a process of convergence. In short, a process of convergence between countries has not been matched by a reduction in within-country inequality, which, instead, has always grown up. Bourguignon (2011, 55) emphasizes that we are "at a turning point in history. A secular trend of rising inequality is reversing. Global inequality has increased steadily for a century and a half since the beginning of the Industrial Revolution. It is now declining, while global growth is accelerating.... Considering that inequality appears to be increasing in several countries, is it possible that domestic inequality is replacing international inequality to some extent? If rising domestic inequality were somehow associated with globalization in public opinion, could it pose a threat to the global development process as a whole?"

A second question that immediately arises is whether the growth in global inequality outlined in Figure 1 for the period 1980–2010 represents a long-term historical trend. The answer comes from a work by

Bourguignon and Morrisson (2002). This was one of the first ambitious attempts to reconstruct the trend of global inequality over the long period between 1820 and 1990, using both data on per capita income derived from national accounts sources and data on the shares distributed to different groups of income earners derived from a variety of micro sources. The results obtained by the two authors are very eloquent: income inequality among world citizens, measured by the Gini index, recorded a drastic increase in the period between 1820 and approximately 1950, while subsequently its growth rate decreased significantly until it stopped in the most recent period. Throughout the nineteenth century and much of the twentieth, a real explosion of global inequality can be observed. "The industrial revolution, at the beginning of the nineteenth century, marked the 'take-off' of the major economies of Western Europe and the emergence of greater inequality" (Bourguignon 2012, 11), compared to the previous period when income and wealth gaps were limited within national boundaries. This increase continued until around the end of the 1990s. The only exception was a brief period of reduction in the years immediately following the Second World War, mainly due to the introduction of redistributive policies in many countries. The increase is impressive" (Bourguignon 2012, 12). The Gini index had risen from around 0.50 in 1820 to 0.60 in 1980, a value higher than any other Gini index at the national level (Figure 5).

Starting in the late 1980s, according to the historical series calculated by Bouguignon, an "undeniable and... surprising" decrease can be observed. The turn of the millennium marks a historic reversal of inequality in the world" (Bourguignon 2012, 12). This has already been observed, with reference to the historical series calculated by Milanovic, but it is worth reiterating (Figure 5). This change, a true "turning point," is due to the growth of non-European countries such as China and then also India. Above all, it reveals how significant the relationship is between changes in the international economy and changes in inequality. This cannot be considered merely a statistical phenomenon, but rather the effect of what is happening in the economic system.

Figure 5. Evolution of global inequality, 1820-2006 (various measures)



Source: Bourguignon 2012, 11

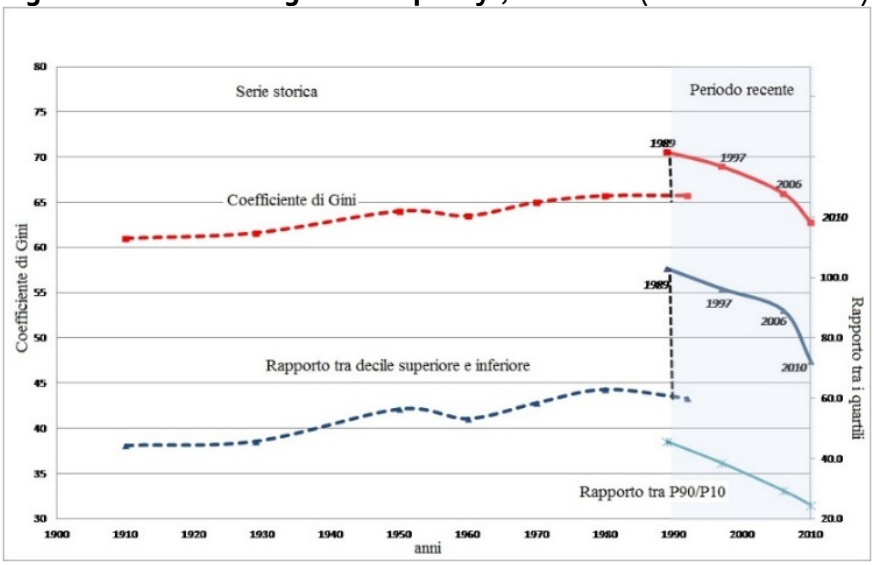
Bourguignon (2013) also calculates the evolution of global inequality over a shorter period, from 1910 to 2010, using two different measures of inequality: the Gini index and the ratio of the income share of the richest decile to the poorest decile (Figure 6). Both quantiles include individuals from both rich and poor countries. The two periods, 1910-1989 and 1989-2010, are only partially comparable. A break in the time series can be observed in 1989 due to a change in the sample. In the first period, the sample contained a smaller number of countries. Furthermore, income values in the two periods were made

comparable using different purchasing power parities (Bourguignon 2011, 5). The y-axis shows the Gini index on the left and the ratio of the income of the richest 10% to the poorest 10% on the right.

Both indices increased until 1989, with the exception of a slight decrease between 1950 and 1960. A decrease also appears between 1980 and 1990 if the index is considered as the ratio between the two income quantiles. Starting in 1990, the growth trend reverses for both indices. Global inequality is decreasing at a very rapid pace (Figure 6). The hypothesis, as already noted, is that the reduction in global inequality is attributable to the growth of developing countries, which has been faster than that of industrialized countries (Bourguignon 2011, 3).

Ravallion (2018) questions the hypothesis supported by both Milanovic and Bourguignon that globalization has been at the origin of convergence between countries, which has subsequently led to a decrease in global inequality since 1993. Both the robustness of empirical estimates and the use of standard measures of inequality when these are used to measure inequality at the global level are called into question.

Figure 6. The trend of "global inequality", 1910-2010 (various measures)



Source: Bourguignon 2013, 5.

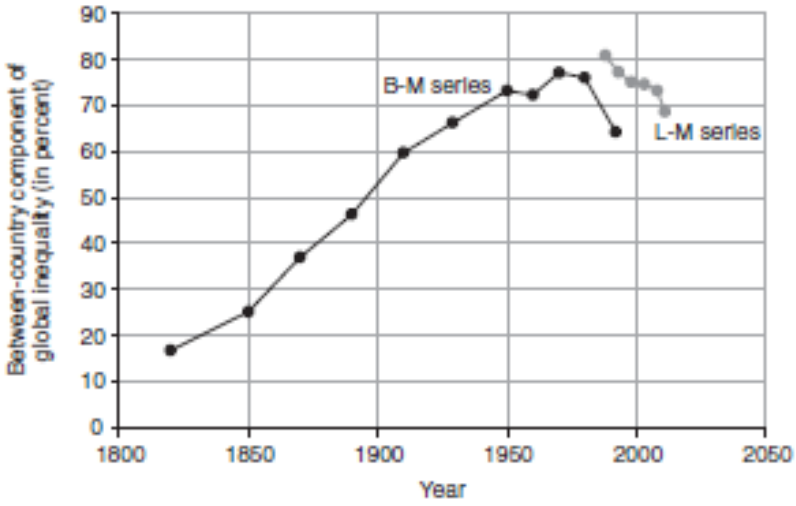
"Global inequality," as previously emphasized, is estimated by calculating the Gini index on an income distribution referred to the entire world. This methodology deserves at least two clarifications, one conceptual and the other empirical. It should be emphasized that the Gini index is not only a statistical measure of concentration in income distribution, as it is traditionally attributed, but can also have a normative meaning. This index measures the sense of relative deprivation each earner experiences when comparing their income position with that of all others. It might be difficult to imagine, then, that this meaning can be preserved when the comparison is made between citizens living in countries as distant from each other as sub-Saharan Africa versus Canada or the United States. This has certainly been the case in the past. Today, however, this objection seems to have lost much of its relevance. Globalization and progressive international integration have changed the perception of each citizen's relative income position compared to other citizens of the world. The hypothesis that individual income comparisons occur not only within national borders, but also beyond them, seems to have become not only acceptable today, but even explanatory of important phenomena related to globalization

(Milanovic 2006a, 149). The acceleration of migration flows that has occurred in recent years is certainly one of these.

4. Inequalities "Between Countries": The Citizenship Premium and the Incentive to Migrate

The change in global inequality over time reflects, as already emphasized, the composition of inequality itself: the shift in the relative weight of the within and between-country components. Within-country inequality can be interpreted as the component attributable to differences in income among income earners of different classes within each country. Between-country inequality, on the other hand, that is, the inequality between the average incomes of different countries, can be interpreted as the component of global inequality that depends on the "location" of those countries. Following Milanovic (2016a,130) one can define the first as "class-based equality" and the second as "location-based equality".

Figure 7. Share of the between component in global inequality, 1820-2011

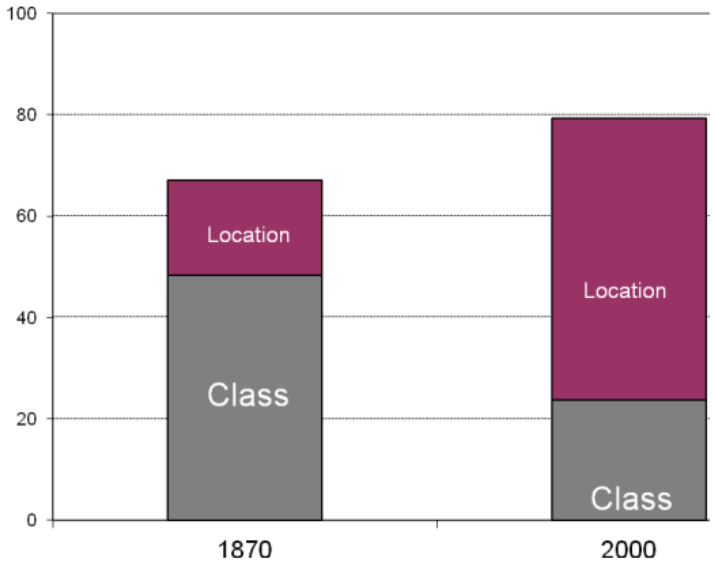


Source: Milanovic 2016a, 129; The B-M series is taken from Bourguignon and Morrisson (2002); The L-M series is taken from Lakner and Milanovic (2013)

Following Milanovic (2016a), we can observe how, over the long term, global inequality has changed in its two components, moving from a value primarily attributable to class differences "within" each country to a value linked primarily to income gaps "between countries." It is possible to break down the Theil inequality index into its two components. Milanovic estimates that starting in 1820, the between component systematically grew until peaking in 1970 and then declining (Figure 7).

Figure 8 highlights the differences in the composition of the Theil inequality index in 1870 and 2000. Location, and therefore differences in average incomes between countries, explained a significant share of global inequality in 2000—approximately 85%—compared to 1870, when the highest component of inequality was within-country inequality. This is a very significant change compared to the past (Milanovic 2012). As Milanovic (2012, 20) observes, today we live in a "non-Marxist" world.

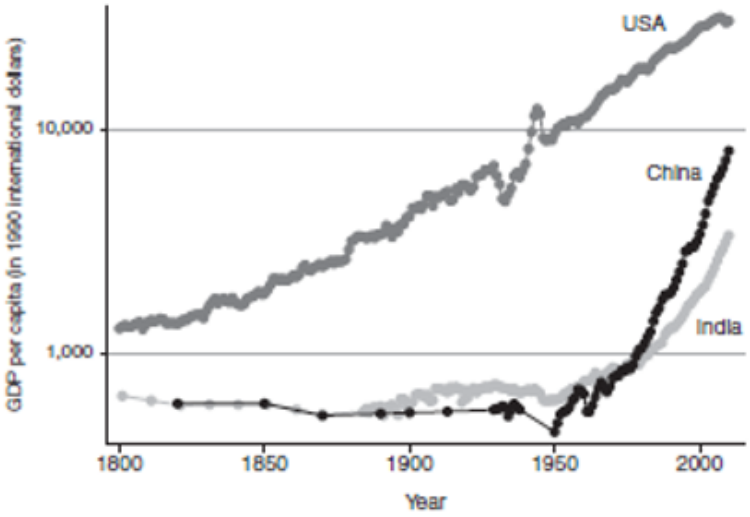
Figure 8. Level and composition of global inequality in the 19th century and around 2000 as measured by the Theil index



Source: Milanovic 2012, 18.

The graphic in Figure 9 shows how the growth of the between component is explained by the dynamics of per capita incomes in China and India compared to the United States. We can see a gradual convergence of these values starting in 1950, with a progressive acceleration in China.

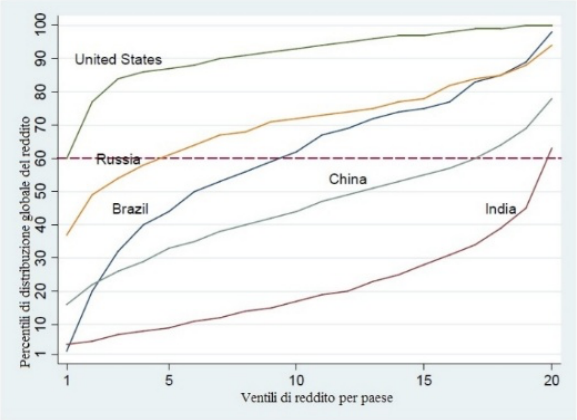
Figure 9. GDP per capita in the USA, China and India over the period 1820-2010



Source: Milanovic 2016a, 131.

If the level of personal income depends, as the data seems to show, to a large extent on location, one could argue that there is no global equality of opportunity and that citizenship corresponding to location constitutes a true positional rent acquired at birth. The actual level of personal income would be partly independent of individual efforts (Milanovic 2016a, 131).

Figure 10. The United States versus the BRICS countries in global income distribution, 2005



Source: Milanovic 2012, 127.

To better highlight differences in the income position of individuals living in different countries, the population of each country can be divided into groups comprising the top 5% of their respective income earners, ranked from the poorest to the richest, i.e., into population ventiles. This division is shown on the x-axis of Figure 10. "The value 1 corresponds to the poorest 5% of the population in a given country, and the value 20 to the richest 5%" (Milanovic, 2012, 127). The vertical axis (y-axis) instead shows "the global income percentile position of each national ventile." The average income of each country's ventiles corresponds to one of the global income percentiles located on the vertical axis. The income percentiles compared to world income were obtained by ranking the average incomes of each country's income ventiles in a non-decreasing order: that is, starting from the global distribution of average incomes of each ventile regardless of country.

In other words, if N are the countries in the world considered, the percentiles of the global income distribution were determined based on the average incomes of N x 20 population groups. Figure 10 illustrates the enormous income differences that exist between countries, and particularly among the poorest segments of the population. While the poorest Americans are at the 60th percentile globally, the poorest Indians are at the 3rd or 4th percentile globally; that is, among the poorest people on the planet. The poorest Chinese are around the 16th percentile globally, the poorest Russians around the 37th percentile. On the other hand, the richest 5% of Americans rank with the richest 1% in the world.

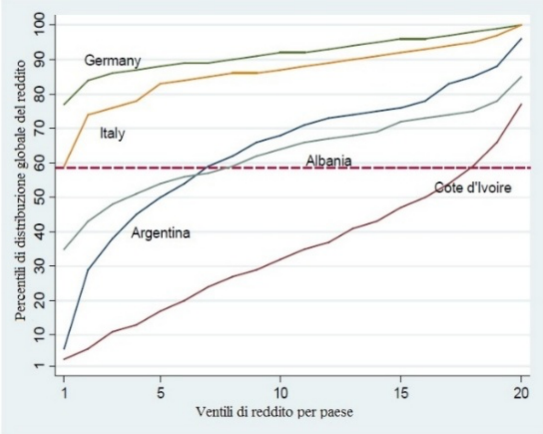
If we consider a country like India (the poorest country represented in Figure 10), we observe that it reaches the 60th percentile (and, therefore, the position of the poorest 5% in the United States) only starting from its 20th ventile. This means that, although some individuals in this country are certainly very rich, the average income of the richest ventile in India still does not rank above the 60th percentile of the global income distribution. The number of Indian citizens with incomes comparable to those of the American middle class is therefore still very limited. If we focus on Russia (the country that ranks second), Figure 10 indicates that the poorest 5% ranks around the 38th percentile and that the 60th percentile is only exceeded starting from the fourth ventile.

Income distribution in China dominates that of India across the entire range of values on the horizontal axis. This means that individuals at a given percentile level in the Chinese distribution always have a higher income than those at the same percentile in the Indian income distribution, and that the richest

percentile of income earners in China is practically at the 80th percentile of the global income distribution (Milanovic 2012, 23). In the case of Brazil, the poorest group is at the bottom of the global income distribution. However, there is a sizable middle class in this country that is located between the 70th and 80th percentiles of global income. Likewise, the richest Brazilians are located at the upper percentiles.

Figure 11 compares the income distributions of the ventiles of some countries that can be considered the source of migratory flows (Ivory Coast, Albania) to Italy and those that can be considered the destination of these same flows (Italy, Germany). The comparison could, of course, also be made with the rest of the world and with other European countries. Although Italy can be considered primarily a transit country, it remains a point of comparison and reference for the decision to emigrate. The poorest groups in Italy are positioned immediately below the 60th percentile, similarly to the situation in the United States. At the same time, the richest 5% of Italians are positioned in the upper percentiles. Poor citizens of countries like Germany, or other Nordic countries, instead rank in the 80th percentile of global income. In Italy, too, the poorest ventile ranks in the 60th percentile, like the United States. Comparing Ivory Coast with two countries like Germany or Italy, we see that the poorest group in these two countries ranks higher than the richest in Ivory Coast. In Ivory Coast, as much as 80% of the population lives on an income below the poverty line in Italy. The same is true in Albania.

Figure 11. Italy and other countries



Source: Milanovic 2012, 24.

These income differences between countries at different levels of development are important factors in understanding migration flows to Italy and other European countries. Differences in monetary income distributions translate into even more pronounced differences in living standards due to the different redistributive policies implemented by different countries to reduce inequality. From the perspective of redistributive policies, there is a strong asymmetry between industrialized and developing countries. Many countries in the former group, particularly European ones, are characterized by welfare state systems designed to reduce inequality within the economy. However, recent experience shows that, in times of crisis, the ability to implement effective redistributive policies is limited by the constraints of reducing public debt levels and maintaining budgetary balance. At the same time, the reduction in marginal tax rates on higher incomes, adopted to align taxation, combat tax evasion, and prevent capital flight to tax havens, has ultimately increased inequality in personal income distribution within industrialized countries. In developing countries, on the other hand, redistributive policies are very

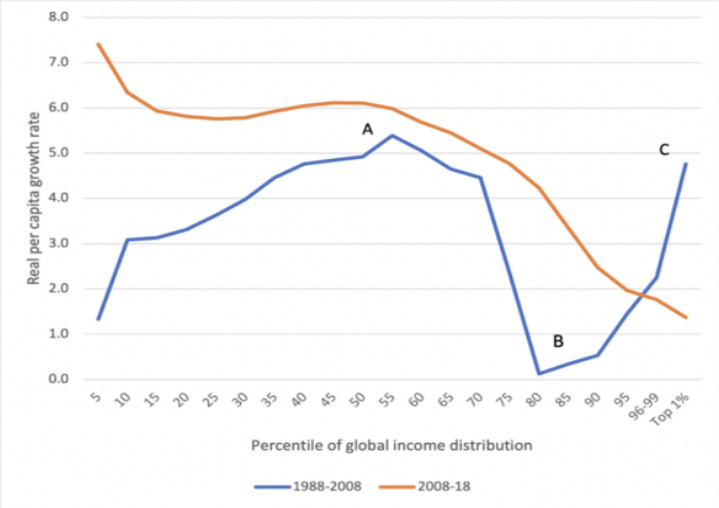
limited and ineffective. The problem is all the more serious given that poverty levels remain very high in these countries.

We must therefore ask ourselves whether it is possible, and ethically justifiable, to identify and implement policies that reduce global inequality. Just as occurs within individual nations, redistributive mechanisms should also be implemented at the international level to reduce not only domestic income inequalities but also the large differences in income distribution between countries, such as those highlighted in Figures 10 and 11. The question that immediately arises, therefore, is what policies could be implemented to reduce gaps based on location and citizenship. These gaps are certainly destined to narrow, thanks to the growth of countries like China and India, but also of other developing countries. In the absence of this spontaneous convergence, it would be necessary to identify and implement appropriate redistributive policies at the international level. A reflection on the nature of aid and the direction of its flows by international institutions such as the International Monetary Fund and the World Bank seems appropriate. However, this is not the place to discuss policy issues, or rather, international cooperation.

Suffice it to emphasize here, as Milanovic (2012, 25) does, that one way, in a certain sense "spontaneous," through which income differences can be attenuated is certainly emigration. Emigrants' remittances are now an important component of the income of some poor countries. Migration flows, however, generate negative externalities in both the countries of departure and the countries of arrival. The effects on per capita income in the country of origin are varied and partly contradictory. National income could grow thanks to the arrival of emigrants' remittances. However, that same income could decrease due to a real impoverishment of human capital. In fact, it is generally the share of the population that emigrates that is best prepared or at least possesses the greatest spirit of initiative. In the countries of arrival, significant integration problems can arise that are not always easy to manage. An important consideration concerns the actual improvement in immigrants' standard of living, which is often lower than expected. This is either because it is not easy to find a new job or simply because the purchasing power of the income earned in the host country is actually lower than what can be estimated by calculating income at purchasing power parity (PPP).

The estimates provided by Milanovic in his numerous works allow us to identify the classes of income earners who have benefited from changes in global inequality in the two periods 1988-2008 and 2008-2018. Figure 12 highlights the cumulative growth in real income (income adjusted for inflation and differences in price levels across countries) received by different percentiles of the population in the global income distribution (on the x-axis). The first twenty years (blue line) coincide almost exactly with the years from the fall of the Berlin Wall to the global financial crisis. It covers the period that can be defined as "high globalization" with China's entry into international trade. Two groups appear to have benefited from global income growth and can be considered the main "winners" of globalization: the wealthiest income earners and those belonging to the middle class in developing countries such as China, India, Indonesia, and Brazil. The real income of the richest 1% has grown by more than 60% over the last two decades (point C in Figure 12). On the other hand, significant increases have also occurred around the median (point A). "It is there, between the 50th and 60th percentile of the global income distribution, that we find approximately 200 million Chinese, 90 million Indians, and approximately 30 million people from Indonesia, Brazil, and Egypt" (Milanovic 2012, 11).

Figure 12. Cumulative growth in real income over the periods 1988-2008 and 2008-2018 at different percentiles of the global income distribution (calculated in 2005 dollars)



Source: Milanovic 2011, 2023.

Even those in the top three percentiles have made significant gains. Real incomes for these groups have grown by between 40% and 70%. The only exception is the bottom 5%, whose real incomes have remained virtually unchanged. The groups between the 65th and 75th percentiles are considered the losers (trait B). These earners, who can be defined as a "global upper-middle class," include citizens of industrialized countries, former Soviet states, and Latin America who have experienced no income growth. In short, it can be said that a middle class is forming globally, thanks primarily to the contribution of some particularly dynamic developing countries. At the same time, income polarization has increased due to the faster growth of the highest incomes.

Milanovic has updated his work on changes in global income during the period following the 2008 financial crisis (Milanovic 2023). Data from sample household income surveys between 2008 and 2018 show an acceleration in income growth among the poorest percentiles. The elephant curve disappears (orange line in Figure 12). These changes were driven by the 2008 international crisis. Growth in rich countries in Europe and North America slowed or even turned negative (for members of the Organisation for Economic Co-operation and Development as a whole, it was negative in both 2008 and 2009), while growth in Asia, particularly China, remained virtually unchanged.

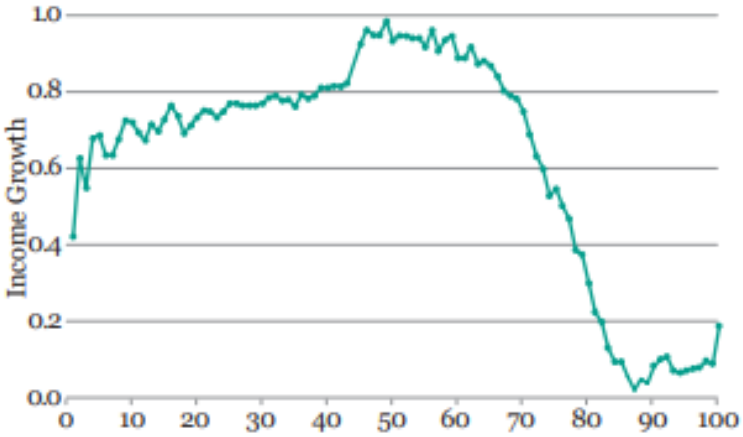
According to US income surveys (further harmonized by the Luxemburg Income Study), the top 5% of the US population lost about 10% in real terms between 2008 and 2010, and the richest 1% saw their income decline by almost a fifth. The 2007 level was only reached in 2015. This explains why the elephant's trunk (representing the income growth of the global rich) has decreased compared to the period of great globalization. The trend for the United States has continued in subsequent years. The extensive support program provided by the CARES (Coronavirus Aid, Relief, and Economic Security) Act, enacted in 2020, led to a substantial decrease in post-transfer and post-tax income inequality. The Gini coefficient for the United States decreased by more than one point, the largest decline in half a century (Milanovic 2023).

The curve in Figure 12, known as the elephant curve, has also been estimated by other authors with data different from those used by Milanovic. In particular, Kharas and Seidel (2018) estimated

alternative figures of the elephant with data drawn from different sources and for a reference period (1993–2013) different from the first period analyzed by Milanovic. Some data are drawn from the World Bank database and the "World Inequalitylab. Database" (wid.world). The new reference sample includes a larger number of countries and refers to a period following the 2008 recession. The new graph in Figure 13 shows, first of all, that the elephant's trunk (the segment between the 90th and 99th percentile) had almost completely disappeared. In 1993, the richest 1% in the world (about 38 million in the sample) was largely composed of the richest 10% of Americans, as well as Europeans and Japanese. In 2013, each of these groups faced significant challenges: Europe's failure to recover from the 2008 financial crisis, Japan's lost decade of economic stagnation, and the squeeze on Americans outside the top 1%.

The tail relating to the poorest percentiles shows a rather significant growth. In 1993, people at this bottom end of the global income distribution actually experienced relatively rapid income growth (Figure 13). "This is consistent with the general observation that extreme poverty declined rapidly during this period. Chinese and Indians, whose incomes grew rapidly, constituted one-fifth of this group in 1993. Mexicans, Nigerians, and residents of other African countries such as Ethiopia constituted most of the remainder. Rapid growth in these countries explains the high growth on the left side of the graph" (Kharas and Seidel 2018, 15).

Figure 13. Cumulative growth in real income over the period 1993-2013 at different percentiles of the global income distribution



Source: Kharas Homi and Brina Seidel 2018, 8.

An analysis of the intermediate percentiles (between the 40th and 60th percentiles) confirms the growth in incomes of the Chinese and Indian middle classes. However, Brazilian, Mexican, Russian, and South African income earners also largely fall within these percentiles around the mean. Their inclusion reduces the average growth rate of this group. The incomes of the final group, which falls between the 80th and 90th percentiles, have been virtually stagnant. This group includes upper-middle-class Americans, Europeans, and Japanese citizens. Figure 14 clearly illustrates this decline for the United States and Germany from 2000 to 2010.

Figure 14. Income share of the middle four deciles in the United States and Germany

Source: Milanovic 2016b. 71.

The growth of Asian countries has radically transformed global income distribution in two ways. It has increased the size of the global "middle" class and has led to a reshuffling of the global income distribution. The first effect implies a greater "thickness" in the middle of the global distribution. The second is that, as their incomes grew, many Asians have overtaken a significant number of low-income earners in richer countries in the global rankings. A similar downward movement has also affected the poorest third of the German and Italian populations.

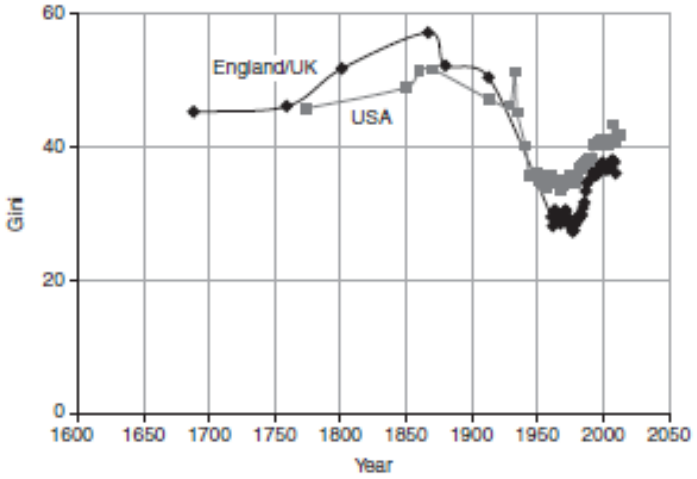
This effect is well illustrated by Italy, which has not grown for over two decades. In 1988, the poorest decile of Italians ranked at the 73rd percentile of the global distribution; 20 years later, as a result of Asian income growth and the fact that the incomes of many Italians have been overtaken by those of a large group of urban Chinese, low-income Italians have slipped down the global rankings, to the 56th percentile (Milanovic 2022). The current reshuffle is probably the greatest since the Industrial Revolution. It introduces a completely new global dynamic, because for the past two centuries, people from Western countries and Japan have had almost complete 'control' of the top quintile globally.... This 'control' had already weakened with China's entry into this 'circle,' and if the differentials in growth rates between 'emerging' Asia and the West continue, it will weaken further (Milanovic 2022).

The reshuffle does not in itself imply a reduction in global inequality. It has already been observed that the 1993 'turning point' in global inequality was largely attributable to rapid Chinese growth. Now, however, this very growth may "begin to contribute to rising global inequality, as the income gap between China and populous African countries widens" (Milanovic 2022).

5. Inequality within different countries

In the previous section, we observed how, starting in the mid-1980s, and especially starting in the early 1990s, the within-country component of global inequality began to increase and has continued to do so ever since. Figure 15 shows the long-term evolution of the Gini coefficient in England (the United Kingdom in the 20th century) and the United States.

Figure 15. Gini index in the UK and USA over the period 1700-2010



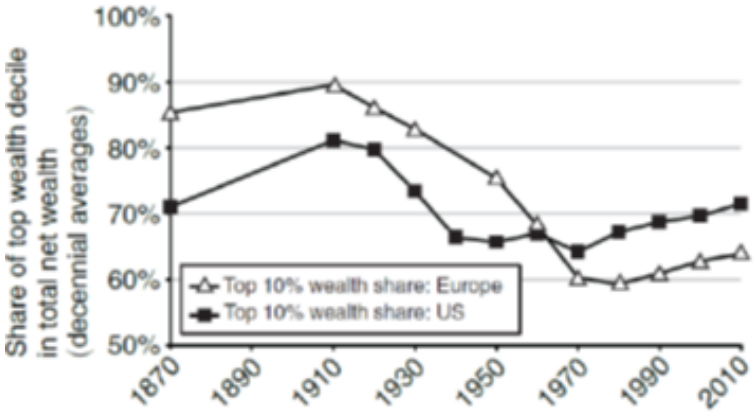
Source: Milanovic 2016a, 49.

It appears very clear that there was a phase of strong decrease from the beginning of the 20th century until around the end of the 1980s followed by growing inequality until around 2020. According to Milanovic (2016a, 47), "The undoubted increase in inequality in the United States, the United Kingdom, and even in some quite egalitarian countries such as Sweden and Germany, is simply incompatible with the Kuznets hypothesis." As it is known, according to the Kuznets hypothesis (1955), in the second phase of the development process, and therefore with the increase in per capita income, the Gini index should have decreased. In reality this hypothesis has not stood up to empirical verification. Periods of growth in per capita income have been matched by an increase, not a decrease, in inequality.

An important contribution to the debate on the growth of inequality, with particular reference to the "sustainability" of capitalist systems in which inequality is growing, is offered by "Capital in the 21st century" by Thomas Piketty (2014). The volume is the result of research, begun by Piketty in the early 1990s, with reference to France, and subsequently continued with some colleagues (Atkinson at Oxford, Saez at Berkeley) to analyze the cases of the US and the United Kingdom. The result is a real "revolution" in the analysis of inequality, or rather "of" inequalities in the long term. Never before has the dynamics of inequality in the distribution of wealth in the long term been estimated on the basis of such rich empirical evidence as that presented in this work (Targetti Lenti 2014). Thanks to a simplified model of the Harrod-Domar type (Piketty, 2014, 353; Targetti Lenti 2014,), Piketty demonstrates that in a stagnant society where the return on capital increases faster than income, the share of capital income in overall income increases, and consequently the inequality in its distribution grows. Inherited assets will recapitalize more quickly than newly created assets, obtained through work and current production. The past "devours" the future.

Also for Piketty, the dynamics of inequality in the distribution of wealth, measured not by Gini but by the share of wealth perceived by the bottom decile of the population, within two countries such as the United States and Great Britain (Figure 16), shows, starting from 1910, a U-shaped curve and not an inverted U-shaped curve corresponding to a growth in inequality up to a maximum reached around the 1930s, a subsequent fall until 1940, and growth again. After a long period of stability, inequality in the distribution of wealth began to grow systematically again starting from the 1970s.

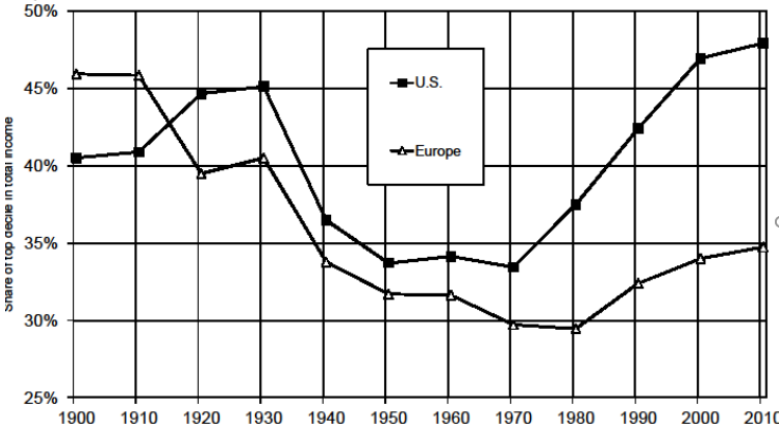
Figure 16. Global wealth share of the bottom decile



Source: Piketty 2014, 538.

A similar pattern to that of wealth concentration is documented, again by Piketty, for income concentration in Europe and the United States (Figure 17). Here too, we observe a decrease in inequality in the period 1930-1950, a subsequent stability until 1970, and then, subsequently, a growth.

Figure 17. Share of national income of the bottom decile



Source: Piketty 2014, 497.

Thomas Piketty argues that the reduction in inequality between the 1930s and 1950s was driven first by the extremely high taxes required to finance the two world wars and then by the emergence of the welfare state. These were one-off, unrepeatable episodes. Evidence of this is that in the subsequent period, between 1975 and 2010, the capital income ratio, the share of capital income, and inequality increased simultaneously in all industrialized countries. The welfare state's redistributive policies were insufficient to counteract the impact of technological progress, globalization, and the financialization of the economy. For Piketty, high inequality constitutes the main "contradiction" inherent in "patrimonial" capitalism. In societies characterized by patrimonial capitalism, i.e., based on the accumulation of wealth for the few, inequality is destined to increase. This will result, as has already occurred, in a decrease of the "middle class."

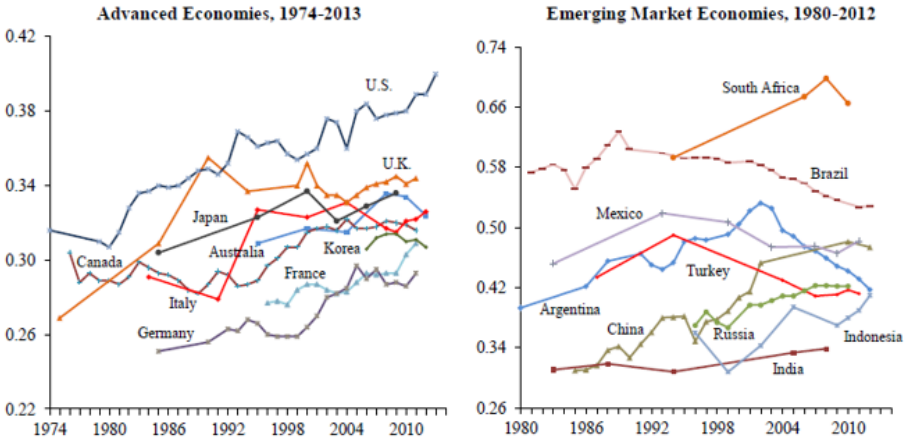
Scheidel (2019) also argues that history presents itself as a follow one another of long phases in which inequality increases or remains high, and periods in which a slight reduction is observed. This author observes that over the long term, income and wealth inequality have increased almost everywhere in Western countries. The concentration of income and wealth has proceeded hand in hand with

civilization. A wealth of empirical evidence has demonstrated that it is impossible to reduce inequality in peacetime, and that not even a process of rapid development is able of doing so. Over the course of thousands of years, only four "forces," all traumatic events, have proven effective in reducing inequality. Great wars, state failures, revolutions, and epidemics have produced destructive effects on assets and great wealth, and consequently have leveled incomes. In modern capitalist industrial societies, where revolutions and wars do not occur, it is inevitable that high levels of inequality will be observed, as it is currently happening.

It is now possible to analyze the dynamics of inequality within many countries in the period following the so-called 1993 turning point with data from various sources and for almost all countries, both developed and developing. Since the 1990s, significant efforts have been made to provide harmonized data collections from various sources (Ferreira et al. 2015). The UNU-WIDER World Income Inequality Database (WIID) gathers information from numerous primary sources, such as the Luxembourg Income Study (LIS), the World Bank (PovCalnet), and other organizations. A source that has recently become very important is "The World Inequality Report" (WID.world). It is probably the richest and most up-to-date database for obtaining estimates of inequality within different countries. This Report is prepared, not every year, by a group of researchers from various countries working together within the World Inequality Lab (WID) at the Paris School of Economics (PSE), coordinated by Thomas Piketty. The group's main activity is managing the World Inequality Database to collect, standardize, and analyze inequality dynamics for a very large number of countries. This initiative pursues an ambitious research program that includes the production of new empirical evidence combining survey data, administrative data, and national accounts, with a particular focus on concentration at the top of the distribution.

Most empirical evidence agrees that since the early 1990s, within-country inequality has increased to very high levels. It is well documented, as noted above, that the United States has seen a sustained increase in top income shares, and it is argued that many developing countries, including China and India, have followed suit. Numerous studies document this phenomenon today. Three recent books: Bourguignon (2012), Milanovic (2016a), and Gradín, Leibrandt, Tarp (2021) are excellent examples.

Figure 18. Gini index on the ordinate



Source: Kemal, Kureshi, 2016.

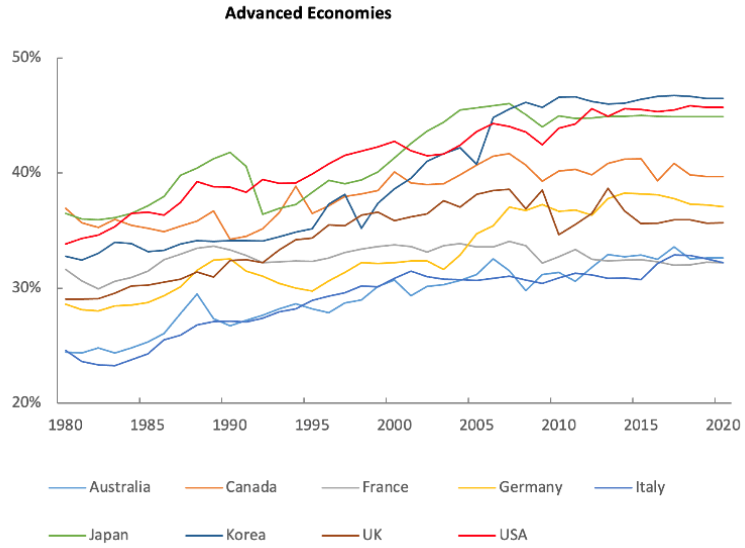
Using data from various sources (OECD, World Bank) and calculating the Gini coefficient on the distribution of household disposable income, Dervis Kemal and Zia Qureshi (2016) state, "The general picture that emerges from an analysis of the evidence on income distribution is one of a steady and

often significant increase in inequality within countries over the last thirty years. Different measures of inequality do not substantially change the situation. Inequality within countries has increased at different rates, but almost uniformly across major economies, and this trend has been particularly marked in the group of advanced economies" (Figure 18). There is, however, considerable heterogeneity in the dynamics of inequality. In some countries, such as those in Latin America (Mexico, Argentina, Brazil) or South Africa, inequality has decreased, although the turning point is different.

According to some authors, the forces that after 1993 contributed to reducing inequality between countries, and therefore global inequality, such as globalization, have then contributed to increasing it both within developed and developing countries. Gradín, Leibrandt, and Tarp (2020), editors of the volume "Inequality in the Developing World," part of the WIDER project (United Nations University-World Institute for Development Economics Research), emphasize that, in addition to globalization, "Other forces, such as technological progress, have contributed to increasing market inequality everywhere and increasing profit shares. Some countries have been more successful in using active policies to curb the market processes that drive greater inequality or, at least, to offset them through taxes and subsidies. In this regard, developing countries—traditionally small states with weak political capacity and generally regressive welfare regimes—present clear disadvantages" (Gradín, Leibrandt, and Tarp 2020, 4).

Also according to Zia Qureshi (2023), and based on data from the WID.world Report, inequality in personal income distribution has increased since 1980 in most advanced economies and major emerging economies, which together account for approximately two-thirds of the world's population and 85 percent of global GDP. Figure 19 shows the increasing trend in the income share held by the richest 10 percent in developed countries. The United States and most European countries are those that have seen a strong increase in the highest income shares in recent decades.

Figure 19. Income share of the top 10%. 1980-2020

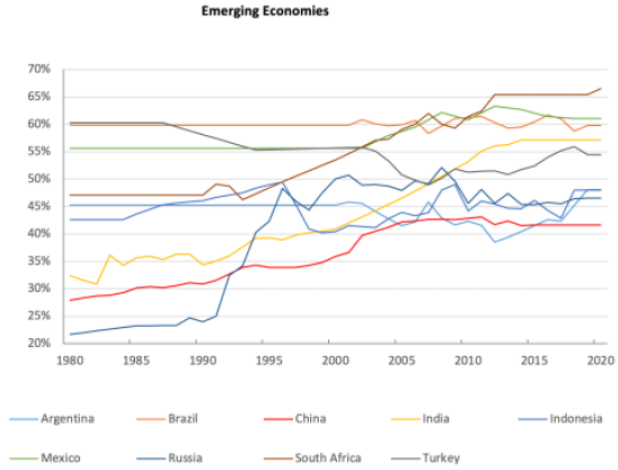


Source: Zia Qureshi 2023. WID.world Report.

Figure 20, similarly, shows the increasing trend in the income share held by the richest 10% of emerging economies since 1980. Before that year, inequality had declined. Growth appears to be steady for some countries, albeit with some fluctuations and differences between countries. If current inequality trends within individual countries were to continue, according to these analyses, global inequality could stop

decreasing and start increasing again. This would obviously happen if the process of convergence between countries were to slow.

Figure 20. Income share of the top 10%. 1980-2020



Source: Zia Qureshi 2023. WID.world Report.

In some countries, such as Latin America and sub-Saharan Africa, inequality has decreased or remained stable. However, inequality has increased significantly in the most populous countries, such as China, India, and Japan.

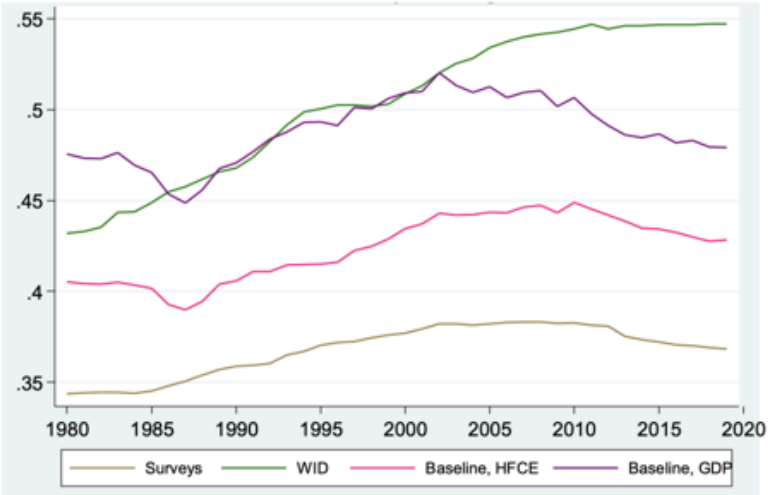
To gain a comprehensive picture of the dynamics of within-country inequality, a Gini index can be calculated as a weighted average of the Ginis calculated for each country under consideration. Pinkovskiy Maxim, Xavier Sala-i-Martin, Kasey Chatterji-Len, and William H. Nober (2024) calculated this average index for the period 1980–2020 using various data sources (Figure 21). Comparing data from different sources is difficult due to differences in survey methodologies, such as the definition of income (market income vs. disposable income, i.e., including or excluding transfers and taxes) or whether they come from sample surveys or fiscal sources. While these data are adequate for estimating income distribution in developed countries, tax data are only available for a very small fraction of the population in developing countries.

These authors use a novel method to estimate the extent to which the rich report a lower fraction of income than the poor. They can then calculate the trend in global inequality within a number of countries representing 75% of the world's population over the past 40 years with adjusted data. The trend of this average Gini index varies depending on the different sources used. They highlight that not only "overall global inequality has declined, but that inequality within many countries has stopped rising and has been declining for nearly a decade, if not longer" (Pinkovskiy et al., 2024b, 1).

The data drawn from World Bank surveys have several limitations. They almost certainly suffer from a substantial underestimation of higher incomes. The rich likely report much lower income levels than the poor, both because of the greater difficulty in fully estimating their income from multiple sources and because of the fear that this data might be disclosed. These data have been adjusted by the authors to account for underreporting. The World Inequality Database (WID) (WID.world), on the other hand, collects data focusing on the highest incomes and using tax data (pre- or post-tax income). These

sources report higher and faster-growing levels of inequality than other sources, particularly the World Bank, with particular reference to developing countries.

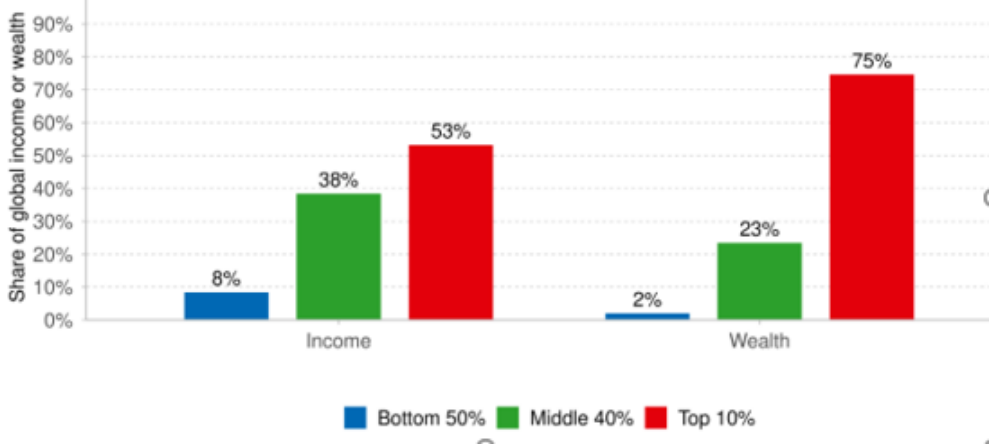
Figure 21. Average Gini index of within-income inequality



Source: Pinkovskiy et al. 2024b. Figure 2.

Figure 21 shows the Gini index values obtained as a population-weighted average of the Gini indices of individual countries using data from various sources. The brown line shows estimates over time based only on World Bank sample surveys. According to these estimates, inequality has steadily increased since the late 1980s, peaked shortly after the 2008 global financial crisis, and began to decline starting in the second half of the 2000s. Similarly, inequality declines slightly if we consider the purple and pink lines. These two lines reflect estimates based on income distribution drawn from sample surveys of household income, once they have been corrected to eliminate the underestimation of GDP that generally characterizes them. The correction is based on alternatively using national accounts data (GDP) or data from surveys of consumption expenditure as the correction element. Only the green line obtained from the estimates of the latest World Inequality Report (WID.world Report, Executive summary) of 2026, based on data from 2025, shows a constantly increasing trend starting from 1980, with a period of almost stability after 2010.

Figure 22. Share of income and wealth of different groups of earners

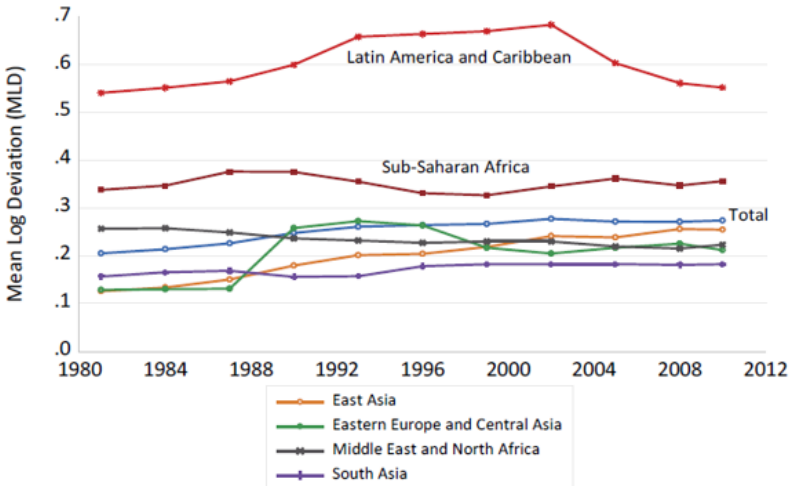


Source: WID Report 2026.

According to the "WIDReport," within-country inequalities (in income, wealth, and opportunity) are widening and, as highlighted in the previous paragraph, now constitute the largest share of overall global inequality. In many cases, they have reached levels not seen since the pre-war period. The richest 10% of the world's population currently holds 53% of global income, while the poorest half holds only 8% (Figure 22). Global wealth inequalities are even more pronounced than income inequalities. The poorest half of the world's population owns barely 2% of the total. In contrast, the richest 10% of the world's population owns a whopping 75% of all global wealth.

Ravallion (2018) used World Bank data and highlighted a differentiated trend in the dynamics of within-country inequality, as measured by the Theil index, in some developing and emerging countries over the period 1980-2008 (Figure 23).

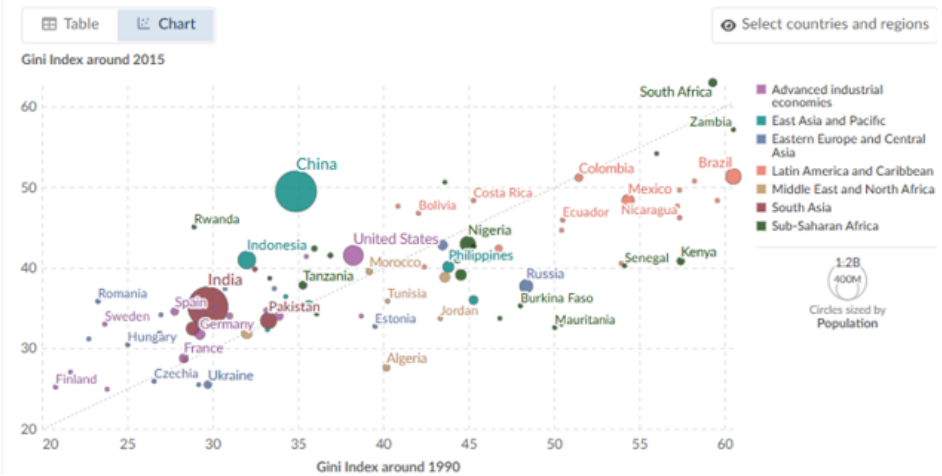
Figure 23. On the ordinate the MLD (mean logarithmic deviation)



Source: Ravallion. 2018

In Latin America, internal inequality has decreased since the mid-2000s. In sub-Saharan Africa, it has increased. Overall, if we calculate a comprehensive Theil index, weighting each country by its population (Figure 23, blue line), we observe a slight increase first, and then, starting in the 1990s, stability.

Figure 24. Gini indices in 1990 and 2015



Source: Atkinson et al. 2017.

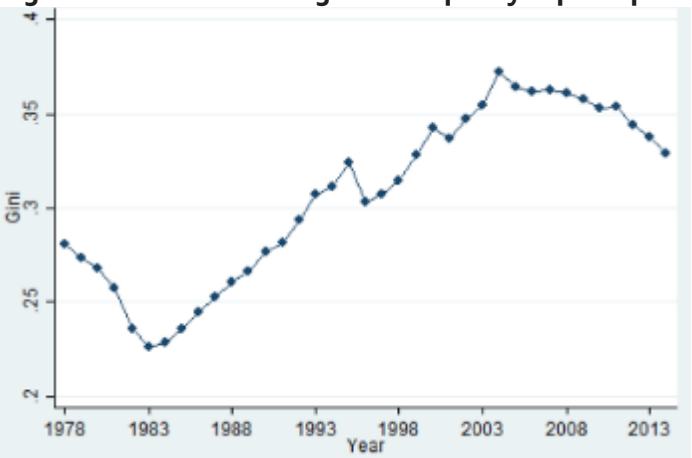
If we further consider World Bank data, reworked by Hasell (2018), we observe trends similar to those just highlighted: a significant decrease in inequality starting in the early 2000s in the most unequal countries, such as Latin America, and in the late 1990s in sub-Saharan Africa. The estimates are based on two online databases: PovcalNet2, managed by the World Bank, and the Chartbook of Economic Inequality, published by Tony Atkinson together with Hasell, Salvatore Morelli, and Max Roser (Atkinson et al., 2017). This work calculates the Gini index for a sample of 83 countries, covering approximately 85% of the population, for just two years, 1990 and 2015 (Figure 24).

The sample countries in Sub-Saharan Africa, East Asia, and the Pacific are evenly split between rising and falling levels of inequality, but they still fall within a pattern of progressive convergence. In East Asia and the Pacific, trends are less homogeneous. In almost all Latin American countries, the Gini coefficient was initially very high, but all experienced a decline over the period (right-hand side of Figure 24). Among the countries with a Gini index above 40 in 1990 (right-hand side of the chart), almost none experienced substantial increases. Among the countries with a Gini index below 40 in 1990 (left-hand side of the chart), almost none experienced significant declines. China is the most notable example: its Gini coefficient increased from 0.35 to 0.53 between 1990 and 2015.

Some recent studies on the Chinese experience, however, have highlighted a different reality. A recent study using very recent datasets, including household surveys and regional government statistics (Kanbur et al. 2017, 1), found that inequality has stabilized or even declined. "It does indeed appear that a reversal in Chinese inequality has occurred since the second half of the 2000s." The income share of the top 10% peaked in 2010, around 0.4, and has since declined. Similarly, the ratio of the richest to the poorest decile's income increased from 1995 to 2012, before declining slightly thereafter.

Figure 25 shows the dynamics of the Gini index (estimated on the regional distribution of per capita consumption) in China. The index began to rise after 1985, peaked in the mid-2000s, and subsequently declined. The explanations lie in political changes and the nature of structural transformation in China. The primary driver of this reversal is urbanization, with the shift from an essentially rural to an urban/industrial society. At the same time, the income/consumption gap between the agricultural and urban sectors has narrowed, as has the gap within the two sectors. Zhang et al. (2011) have argued that China has now reached the "Lewis turning point," where rural-urban migration begins to reduce the weight of rural labor markets and thus narrow the rural-urban wage gap.

Figure 25. Gini index of regional inequality in per capita consumption



Source: Kanbur et.al. 2017.

Massive government investment in infrastructure in rural areas and lagging regions, a hallmark of Chinese policy since the 2000s (Fan et al. 2011), has stimulated economic activity and contributed to rising incomes in these areas. Another important factor in reducing inequality has been the introduction of the minimum wage law, combined with substantial improvements in compliance (Kanbur et al. 2017). Government transfers, increased compliance, and a reduction in the burden of labor markets in rural areas have helped reduce inequality in China. Another important factor, undoubtedly, is the rapid pace of urbanization driven by industrialization, which has contributed to reducing inequality. This is a very important achievement that, for example, India has not yet achieved (Kanbur and Zhuang, 2013).

Kanbur (2019) reviewed the empirical evidence available for developing countries. Based on these studies, which use data from different sources, he concludes that inequality has not increased in all countries. He highlights how, starting around the mid-1990s, inequality has decreased in most Latin American countries. For example, the Gini coefficient in Brazil decreased after 1998. Between 2001 and 2007, it fell by 4 percentage points, from 0.59 to 0.54. In Argentina, it fell from 0.53 in 2002 to 0.46 in 2009. In Mexico, it fell from 0.56 in 1994 to 0.51 in 2006 (Gasparini and Lustig, 2011). According to some authors (Lopez-Calva and Lustig 2013; Lustig 2014), this decline is linked to targeted policies: redistributive taxes and spending, minimum wages, and an increased supply of workers with secondary education. A decline is also observed in the Middle East and North Africa (six regions). In Sub-Saharan Africa and East Asia, however, trends are less uniform. Even in Sub-Saharan Africa, the inequality picture is heterogeneous. As a recent World Bank report (Beegle et al. 2016, 15) concludes: "For the subset of 23 countries for which surveys are available to assess inequality trends, half the countries have seen a decline in inequality and the other half have seen an increase. No clear trends are observed in terms of resources, income, or the countries' starting level of inequality."

Overall, as Hasell (2018) concludes in his review: "It is a mistake to think that inequality is rising everywhere. Over the past 25 years, inequality has increased in many countries and decreased in many others." On the other hand, it should be remembered that the 2019 Human Development Report concludes that the decline in inequality between countries has not been sufficient to counteract the rise in inequality within countries. It emphasizes that, although the gap in basic living standards between nations is narrowing, inequalities within individual countries remain "enormous" and are even widening in areas such as education and technology (UNDP 2019). Although some countries have made progress, this reduction in inequality between countries has not translated into equitable improvements for all, with 20% of human development progress lost due to inequality.

One can therefore agree with Ravallion (2018) that, “The idea of a common global force of economic integration that increases inequality everywhere can be easily discarded. Inequality appears to decrease in some developing countries when they open up to trade and grow overall, while it increases in other countries... And there are clearly many other forces at play. Indeed, during periods of economic growth we have seen a decrease in inequality in developing countries as often as we have seen an increase in inequality” (Ravallion 2018, 5). It therefore seems that, at least on the basis of this evidence, the regularity reported by Kuznets has been confirmed.

In emerging economies, technology is reshaping the way international trade impacts national inequality. New technologies, created in advanced economies, are shifting production and global value chains toward greater capital intensity and higher-skilled skills. Major export-focused manufacturing firms located in emerging economies are adopting these technologies to compete, reducing job creation and wage growth prospects for lower-skilled workers. This progressively limits the potential

for international trade to reduce inequality within these economies. This would require increased demand for their more abundant factor endowments (lower-skilled workers). At the same time, smaller firms, which absorb the majority of low-skilled workers in emerging economies, have remained engaged in low-productivity activities, many in the informal economy and small-scale service sectors.

Globalization has been the force that has helped reduce inequality between nations, but at the same time has fostered the growth of inequality within these same countries. Globalization, the growth of international trade, and the relocation of industries from industrialized to developing countries have contributed to increasing inequality within advanced economies, negatively impacting wages and the employment of low-skilled workers in export-dependent sectors. These sectors are increasingly extending beyond manufacturing as digital globalization expands the range of activities, including services, that can be provided across borders. Significant changes have occurred in production processes, with a progressive increase and replacement of jobs requiring higher levels of specialization. Labor market balances have also shifted, with the growth of oligopolistic firms (Zia Qureshi 2023).

Advanced economies have seen the greatest increases in inequality and greater polarization in income distribution. These trends have been associated with an erosion of the middle class and a decline in intergenerational mobility. This was particularly true until the global financial crisis of 2008-2009. Lower-middle-income groups suffered a decline in income share, and those in the bottom 50% suffered even greater losses. Numerous factors are responsible for these changes. The most significant is likely technological progress and the progressive use of artificial intelligence in some sectors and countries, which has altered production methods and increased factor productivity in a way that is uneven across sectors and countries.

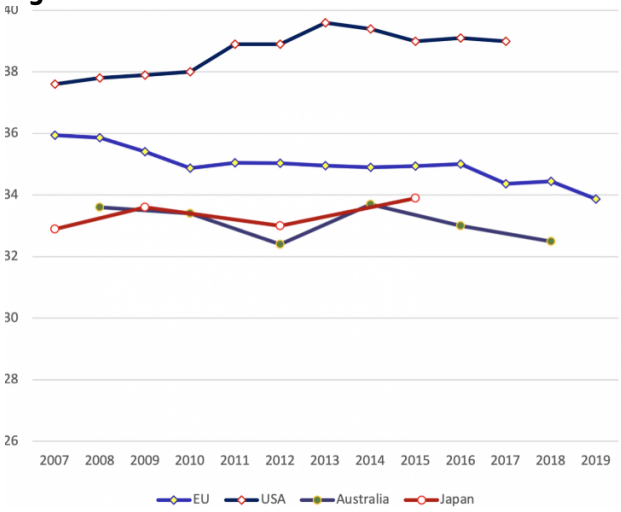
Other factors explaining the rise in inequality, especially in advanced countries, are linked to institutional changes such as the progressive financialization and deregulation of economies. At the same time, there has been a weakening of trade unions, which has ultimately reduced the role of collective bargaining and the minimum wage. Furthermore, the state's redistributive role has weakened with the decline of tax progressivity and with transfer programs under pressure from more stringent fiscal constraints.

Using data from the EU-SILC survey of household income (EU-SILC), Fischer and Filauro (2021) estimate inequality levels and trends not only within individual European states but also at the level of the EU as a whole, as if it were a supranational entity. Its institutions (the market and the single currency) allow it to be considered on a par with a federation, and therefore inequality among all EU citizens can be estimated as if they belonged to a single territorial entity. This involves performing an operation similar to that used to estimate global inequality. In this case, too, its value will depend simultaneously on inequality between and within individual states. Figure 26 highlights that inequality among EU citizens is significantly lower than that among US citizens, but slightly higher than that of countries "with more consolidated welfare models such as Australia and Japan" (Fischer and Filauro, 2021, Figure 2). This is "despite being the result of the aggregation of countries with heterogeneous income levels and within-country inequality, with Sweden and Bulgaria at the two extremes."

A decrease in inequality levels in the EU as a whole has been observed since 2010, due to the convergence of per capita incomes among its member countries. An individual's position in the EU distribution is determined by their position in the national distribution and their country's position in the distribution of EU countries. Compared to the United States, the EU has lower levels of inequality within its member states, combined with higher levels of income inequality between them. This is a

consequence of the formation of the EU, which has included countries with heterogeneous income levels since its founding, with Sweden and Bulgaria at the two extremes. The Gini index in the US increased from 38 in 2007 to around 40 in 2013, then declined to around 39 in 2017. The EU Gini index, on the other hand, remained around 35 from 2010 to 2016, with a slight decline starting that year.

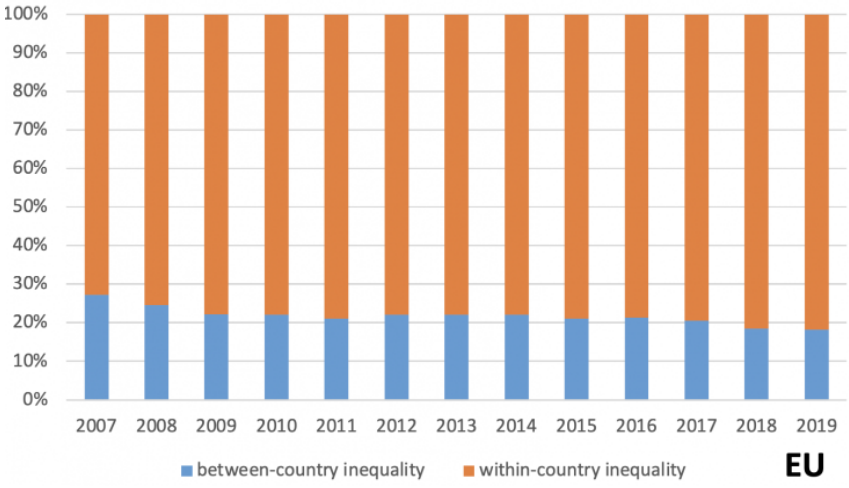
Figure 26: Gini indices for various countries



EU-SILC data, Source: Fischer e Filauro 2021.

Within-income inequality constitutes the main part of EU inequality (Figure 27).

Figure 27

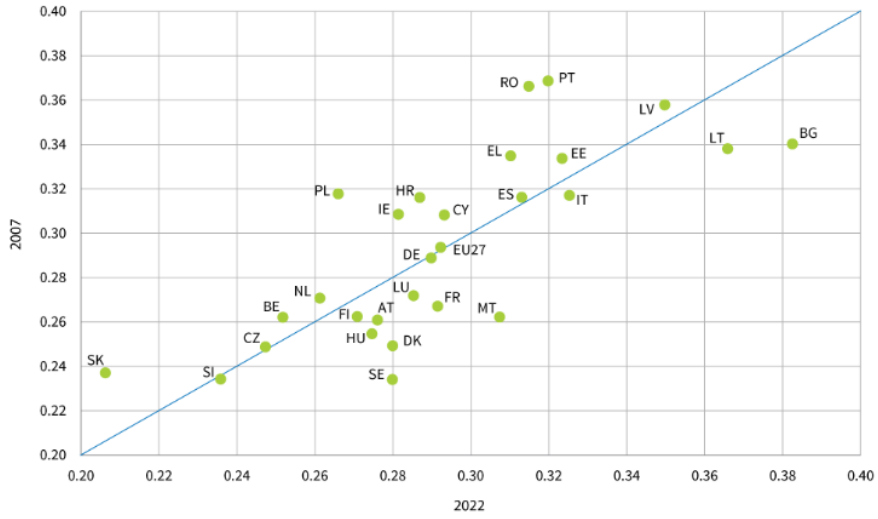


Source: Fischer and Filauro 2021.

This component remained essentially stable between 2007 and 2019. Twenty percent of inequality, however, could be attributed to income differences between EU Member States. This analysis is important for adopting differentiated inequality reduction policies depending on whether the highest component of overall inequality at the EU level is between-income or within-income. Furthermore, levels and trends in income inequality at the EU level can influence trust in EU institutions and its citizens' mobility decisions.

Comparing inequality levels at the beginning and end of the 2007 and 2022 periods reveals divergent trends in within-inequality across countries (see Figure 28). The y-axis shows the Gini value for within-inequality 2007. The x-axis shows the value in 2022. The picture is mixed: inequality has increased significantly in about half of the countries (the 13 countries below the diagonal line in the figure), particularly in Sweden, Denmark, France, Italy, Belgium, Malta, and Bulgaria; while inequality has decreased in the other half (the 14 countries above the diagonal line), significantly in Poland, Romania, Portugal, and Slovakia.

Figure 28. Gini index in 2017 and 2022

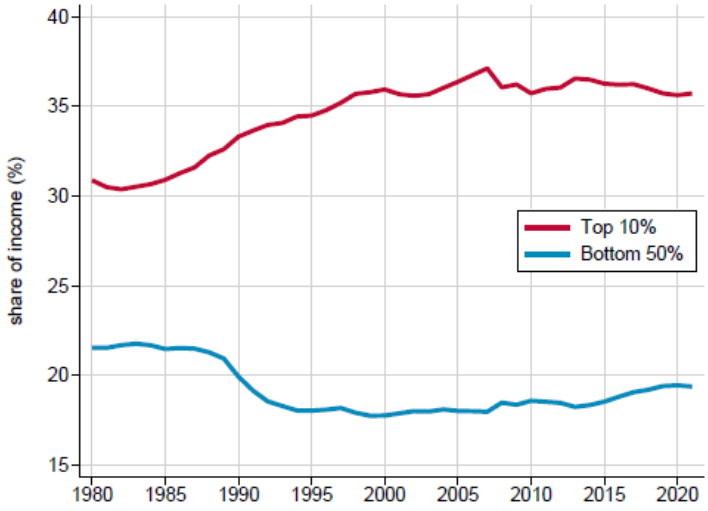


Source: Fischer e Filauro 2021.

Income inequality at the EU level has decreased thanks to a strong process of income convergence among countries, largely due to the significant growth and closing of the income gap among the EU-13 countries, that is, following the 2007 enlargement. Inequality within the EU has increased in only about half of the 27 EU countries. The most positive picture is seen among the EU-13 countries, that is, those that were the subject of 2007s' enlargement. Most have experienced strong income growth, and many of them have managed to reduce inequality and expand their middle classes (Romania, Poland, Croatia, Slovakia, and Latvia). A less positive trend, however, characterizes the EU-14 countries, that is, those that constituted the EU before enlargement. Many of them have experienced rising inequality and a shrinking middle class (the three Scandinavian countries and Austria, Germany, France, and Luxembourg among the continental countries). In Mediterranean countries (Greece, Italy, Portugal, Spain), where this has not occurred (except in Italy), the reduction in inequality has occurred in a context of low income growth, which has prevented significant convergence of these countries towards higher income levels. A generalized contraction of the middle class has been observed, resulting primarily in a downward movement of people towards the low-income class.

A study using data from the WID. Lab. (Neef, Sodano, 2022) highlights an increase in inequality at the EU level until 2008, then stabilizing (Figure 29). The income share of the richest 10% has placed around 36% since the financial crisis, while the share of the poorest 50% has shown an upward trend but has yet to reach the levels of the 1980s, reaching 19% in 2021.

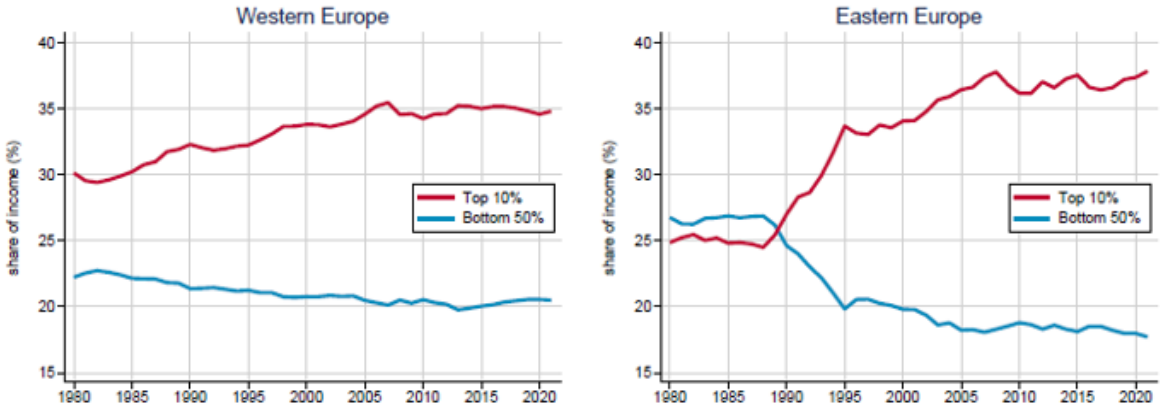
Figure 29. Income share of the top 10% and bottom 50%



Source: Neef, Sodano, 2022, wid.world data, Eurostat.

The marked change between the 1980s and 1990s was driven primarily by dynamics in Eastern Europe following the breakup of the Eastern bloc. The increase in the income share of the richest 10% has been very significant for these countries since the late 1980s (Figure 30). Correspondingly, the income share of the poorest 50% has declined.

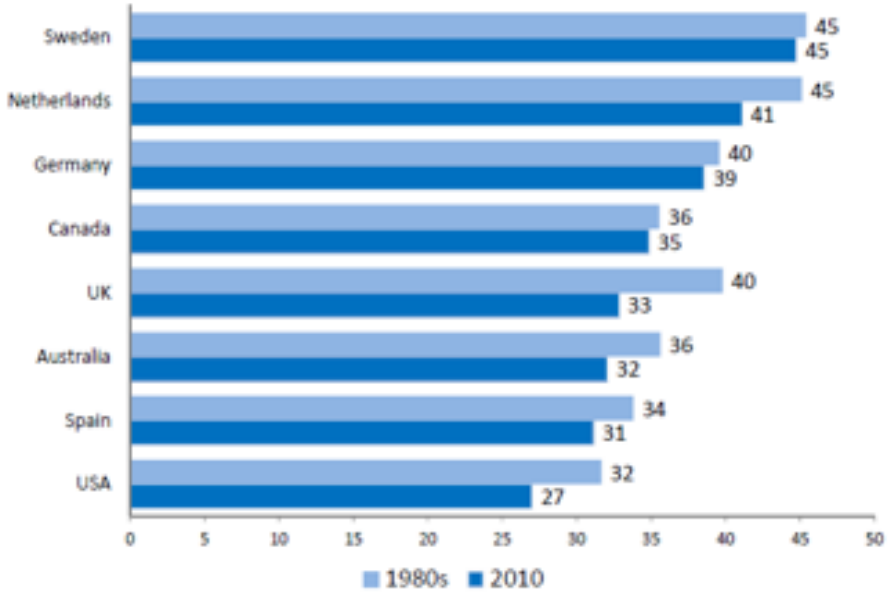
Figure 30. Income share of the top 10% and the bottom 50%



Source: Neef. Sodano 2022.

Figure 31 shows the decline in the share of the middle class in some Western democracies between the early 1980s and 2010. The middle class shrank in nearly two-thirds of EU countries. If the middle class is defined as the share of earners between 25% above and below the median income, using LIS data, between 1980 and 2010, a reduction is observed in many European countries and the United States. More specifically, the United States is the country where the reduction was greatest: from 32% to 27%. "As with other indicators of inequality, the changes in the United States have been more dramatic than elsewhere in the West, and the data to study them are more abundant. But often the United States simply exhibits, in a more extreme form, the same changes that have occurred in all advanced economies" (Milanovic 2016a, 196).

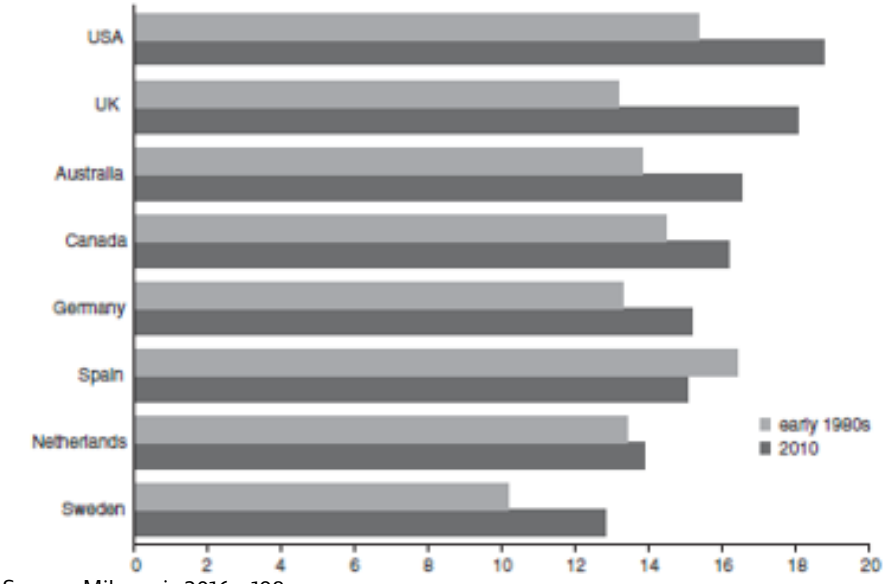
Figure 31. Middle class income share in 1980 and 2010



Source: Milanovic 2016a, p.196.

Corresponding to the shrinking of the middle class within each country, we observe an increase in the income share of the richest. This was already highlighted with reference to the elephant curve. In particular, the richest 5% in the United States have almost the same income as the entire US middle class (Figure 32). An interesting case is Sweden, where the share of the middle class has decreased very little, but the richest 5% has become much richer and has seen its income share increase by 3 percentage points. The shift in economic power from the middle to the top has significant implications for overall consumption patterns, with a shift in favor of luxury goods.

Figure 32. Income share of the top 5% in 1990 and 2010



Source: Milanovic 2016a, 198.

6. Summary Considerations

The analysis presented in the previous pages allows us to draw some important conclusions. The relocation of many manufacturing sectors to China, and more generally to the Asian region, has significantly altered the distribution of income and wealth between and within countries. Over the past decade, some developing countries have benefited from these changes and have progressively reduced the gap between their average domestic income and the global average. This process has resulted in a decrease in global inequality since 1993, a year that Bourguignon defines as a true turning point in history (Bourguignon 2011, 55). The secular trend of increasing global inequality is therefore reversing. Since 1993, the decrease in between-country inequality has been so strong that it has counteracted the increase in within-country inequality (Figure 4). According to Bourguignon and Morrisson's estimates, revised by the World Bank, the convergence of average incomes between countries has not been matched by a reduction in inequality within them: in fact, it has steadily increased. This assertion is explored in more detail in the fifth section. It has been observed that, in recent decades, there has been an average increase in within inequality, although not across the board. In some countries (Latin America and Eastern Europe), within inequality decreased between 1990 and 2015 (Figure 23). In others (the United States and many Western European countries), however, it increased. In industrialized countries, including Italy, the gap between the living standards of the poorest and the richest has become so wide that traditional redistributive policies based on taxes and monetary transfers are no longer sufficient to bridge it. The transfer of parts or entire production processes from industrialized to developing countries, on the other hand, has weakened the bargaining power of workers in rich countries. The reduction in global inequality has been accompanied by the impoverishment of the middle class (workers and employees) in industrialized countries and the progressive enrichment of the middle class in some major Asian countries such as China and India, a phenomenon well represented by the "torso" of the elephant curve introduced by Milanovic (Figure 12).

A process opposite to that which occurred in Western countries during postwar industrialization is occurring today. At that time, rapid industrialization, combined with progressive fiscal and public spending policies, fostered the formation of a middle class, simultaneously leading to the consolidation of democracy and rapid growth in all Western countries. Such a high level of inequality (which also affects the middle class) as highlighted by the "World Inequality Report" can today become a factor that hinders growth, resulting in fewer opportunities for future generations (due to the high intergenerational transmission of inequality) and thus in an impoverishment of human capital. Access to higher education is expensive, and the poorest groups, including today's large portion of the middle class, are excluded.

Globalization and the liberalization of capital and labor movements also largely explain another recent phenomenon: the presence of very wealthy labor income earners among the top 10 percent (or even 1 percent) of the population. Among the possible explanations for this phenomenon is the functioning of the international labor market for managers and so-called "superstars." The growth in incomes of the top 1 percent and 5 percent, and the corresponding reduction in the share of incomes of middle-class earners, is also transforming political systems. In the United States, a system based on the wealth of a few is emerging, a phenomenon Milanovic defines as "plutocracy" (Milanovic 2016a, 199). In European countries, however, we observe a fragmentation of political parties and a shift toward right-wing, nationalist, and populist parties.

Numerous recent studies have highlighted the effects of economic inequality and the growth of high incomes on a country's political institutions and democratic setting, with particular reference to citizen political participation, increasing party polarization, and the growth of populist movements. In the United States, high economic inequality has resulted in the wealthiest seeking a share of power corresponding to their share of resources, resulting in a weakening of the democratic system. The most direct way in which money can be used to influence politics is through campaign financing: legislators' dependence on donations thus leads them to give greater weight to the political preferences of economic elites, ignoring the demands of less advantaged classes. Empirical evidence confirms this phenomenon.

In European countries, rising inequality, often accompanied by economic and financial crises, tends to reduce the political participation of the most vulnerable citizens and shift preferences toward populist and national-conservative options. A vicious cycle of inequality, abstention, populism, and polarization thus tends to reinforce itself. Policies to protect and support the most vulnerable workers, on the other hand, are costly: in countries with limited fiscal space, financial crises and rising unemployment have ultimately undermined trust in liberal representative democracy (Milanovic 2016, 204-211). In some cases, rising unemployment has fueled support for far-left parties, such as Podemos in Spain; in others, it has encouraged far-right nationalist and xenophobic parties, as in Hungary and the Netherlands.

Another phenomenon discussed in section 4 is what Milanovic calls the "citizenship premium" (Milanovic 2016a, 131). Global inequality driven by relocations and differences in income distributions particularly explain migration flows. Many skilled workers, for example, move between European countries not so much in search of general employment as of better-paid jobs or higher qualifications. The search for better employment also explains the flow of low-skilled workers from North Africa or the Middle East to Europe, or from Mexico, South America, or Asia to the United States. As shown in section 5, it is precisely the income differentials resulting from living in one country rather than another, as well as political factors, that explain migration from poorer to richer countries. These phenomena pose a major challenge to future economic equilibria, both economic and political, and domestic and international.

References

Alacevich, Michele e Anna Soci. 2022, *Breve storia della diseguaglianza*. Bari: editori Laterza.

Atkinson, Anthony. 1970. On the Measurement of Inequality. *Journal of Economic Theory* 2 (3): 244-263.

Atkinson, Anthony. 2015. *Inequality. What Can Be Done*. Cambridge MA.: Harvard University Press.

Atkinson Tony, Joe Hasell, Morelli Salvatore, and M. Roser. 2017. The Chartbook of Economic Inequality.The Institute for New Economic thinking of the Oxford Martin School. Consultato il 5 febbraio 2026. https://www.chartbookofeconomicinequality.com/

Beegle, Kathleen, Luc, Christiaensen, Andrew, Dabalen and Isis Gaddis. 2016. *Poverty in a Rising Africa*. Washington, DC: World Bank.

Bhalla, Surjit. S. 2002. *Imagine there's no country: Poverty, inequality and growth in the era of globalization*. Washington, D.C.: Institute for International Economics.

Bourguignon, François. 2011. "A turning point in global inequality.....and beyond." in *Research and Responsibility. Reflections on our Common Future*. Wilhem Krull (ed.), Leipzig: CEP Europaische Verlagsanstalp, pp. 55-72.

Bourguignon, François. 2012. *La globalizzazione della diseguaglianza*. Torino: Codice edizioni, (trad.it. di *La mondialisation de l'inégalité. Parigi:*Editions de Seuil et la République des Idées)

Bourguignon, François. 2013. *Inclusive global growth: a framework to think about the post – 2015 agenda*. Angus Maddison Lecture, Oecd, Paris, April. Consultato il 5 febbraio 2026. https://web archive.oecd.org/pdfViewer?path=/2013-04-29/233073-Maddison-Oecd-April13_v2.pdf

Bourguignon, François and Cristhian Morrisson. 2002. "The size distribution of income among world citizens, 1820-1990." *American Economic Review* 92 (4):727-744.

Eurostat. Eurostat data base. Consultato il 7 febbraio 2026.https://ec.europa.eu/eurostat/web/main/data

Fan Shenggen, Kanbur, Ravi and Xiaobo Zhang. 2011. China's regional disparities: Experience and policy, *Review of Development Finance*, 1(1): 47–56.

Ferreira, Francisco H. G, Lustig, Nora e Daniel, Teles. 2015. Appraising cross-national income inequality databases:An introduction.*The Journal of economic inequality* 13 (4): 497-526.

Fischer, Georg and Stefano Filauro. 2021. Income inequality in the EU: General trends and policy implications, VoxEU.org, 17 April.

Gasparini, Leonardo and Nora Lustig. 2011. *The Rise and Fall of Income Inequality in Latin America*. Documento de Trabajo Nro. 118. Mayo, 2011.

Gradín, Carlos, Leibbrandt, Murray and Finn Tarp 2021. *What Might Explain Today's Conflicting Narratives on Global Inequality*, Oxford, U.K.: Oxford University Press.

Hasell, Joe. 2018. Is income inequality rising around the world? Consultato il 5 febbraio 2026. https://ourworldindata.org/team/joe-hasell

Human Development Report 2019. Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century. New York: UNDP 2019.

Lakner, Christoph e Branko Milanovic. 2013. *Global Income Distribution : From the Fall of the Berlin Wall to the Great Recession*. Policy Research Working Paper No. 6719. Washington, D.C.:World Bank.

Lopez Calva, Luis F., Lustig, Nora and Eduardo, Ortiz-Juarez. 2013. Declining Inequality in Latin America in the 2000s: The Cases of Argentina, Brazil, and Mexico. World Development. Volume 44, April 2013 :129-141

Kanbur, Ravi, Wang Yue and Xiaobo Zhang. 2017. The Great Chinese Inequality Turnaround', CEPR Discussion Paper No. 11892. CEPR Press, Paris & London.

Kanbur, Ravi, and Juzhong Zhuang. 2013. Urbanization and Inequality in Asia. Asian Development Review, 30, 131-147.

Kemal, Derviş and Zia, Qureshi. 2016. *Income distribution within countries: Rising inequality*. Brookings edu. Articles. Consultato il 5 gennaio 2026. https://www.brookings.edu/articles/income-distribution-within-countries-rising-inequality/

Kharas, Homi and Brina Seidel. 2018. *What's happening to the world income distribution the elephant chart revisited*. Global Economy and Development Working Paper 114. Brookings.edu.

Milanovic, Branko. 2005. *Worlds Apart: Measuring International and Global Inequality*. Princeton: Princeton University Press.

Milanovic, Branko. 2006a. *Global income inequality: what is and why it matters*. World Bank Policy Research Working Paper 3865. Washington, D.C.: World Bank.

Milanovic, Branko. 2006b. "Global Income Inequality: a Review." *World Economics* 7 (1): 131-157.

Milanovic Branko.2009. *Global inequality recalculated: The effect of new 2005 PPP estimates on global inequality*, Policy Research Working Paper 5061. Washington, D.C.: World Bank.

Milanovic, Branko. 2012. *Global Income Inequality by the Numbers: in History and Now, An Overview*, World Bank Policy Research Working Paper 6259. Washington, D.C.: World Bank..

Milanovic, Branko. 2013. Global Income Inequality by the Numbers: in History and Now. *Global Policy* 4 (2): 198-208.

Milanovic, Branko. 2016a. *Global inequality: A new approach for the age of globalization*. Cambridge, Massachussetts: The Belknap Press, Harverd University Press.

Milanovic, Branko. 2016b. Recent trends in global income inequality and their political implications. Consultato il 5 febbraio 2026. https://www.unibocconi.it/sites/default/files/media/attachments/Milanovic_Recent-trends-in-global-income-inequality.pdf

Milanovic, Branko. 2022. Global income inequality: time to revise the elephant, *Social Europe*, December 2022. Consultato il 5 febbraio 2026. https://www.socialeurope.eu/global-income inequality-time-to-revise-the elephant#:~:text=New%20data%20on%20inequality%20show,the%20global%201%20per%20cent .

Milanovic, Branko. 2023. La diseguaglianza di reddito a livello globale: tempo di rivedere l'elefante, *Etica ed economia, Menabò*, 14 gennaio. 185

Neef, Theresa, e Alice Sodano. 2022. Inequality Trends in Europe. World Inequality Lab – Issue Brief 2022/04.

Pareto, Vilfredo. 1896. *Cours d'économie politique*, Lausanne: Rouge éditeur.

Piketty, Thomas. 2014. Il Capitale nel XXI secolo. Milano: Bompiani/R.C.S. libri S.p.A.

Pinkovskiy Maxim. Xavier Sala-i-Martin, Kasey Chatterji-Len, and William H. Nober. 2024a. *Inequality within countries is falling: underreporting-robust estimates of world poverty, inequality and the global distribution of income.* Working Paper 3220. Cambridge, MA: National Bureau of Economic Research.

Pinkovskiy Maxim. Xavier Sala-i-Martin, Kasey Chatterji-Len, and William H. Nober. 2024b. Inequality within countries is falling: underreporting-robust estimates of world poverty, inequality and the global distribution of income.Consultato il 5 febbraio 2026. https://cepr.org/voxeu/columns/inequality-within-countries-falling

PovcalNet Online Poverty Analysis Tool. Washington D.C.: World Bank. Available at: http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp

Qureshi, Zia. 2023. Rising inequality: a major issue of out time, Brookings.edu. articles. Consultato il 5 febbraio 2026. https://www.brookings.edu/articles/rising-inequality-a-major-issue-of-our-time/

Ravallion, Martin. 2018. *What might explain today's conflicting narratives on global inequality?*, WIDER Working Paper 2018/141.

Sala-i-Martin, Xavier. 2002. *The disturbing 'rise' of world income inequality*, NBER Working paper No. 8904.

Scheidel, Walter. 2019. *La grande livellatrice. Violenza e diseguaglianza dalla preistoria a oggi*. Bologna. Il Mulino.

Solow Robert. M. 1956. A contribution to the Theory of Economic Growth*, The Quarterly Journal of*

Economics, 70 (1), pp. 65-94.

Targetti Lenti, Renata. 2014. Crescita e diseguaglianza nel lungo periodo. L'analisi di Thomas Piketty. *Rivista di diritto finanziario e scienza delle finanze,* LXXIII, (4): 507-532

Zhang, Xiaobo, Yang, Ji, and Wang, Shenglin. 2011. China has reached the Lewis turning point. *China Economic Review*, 22(4): 542-554

WIID. *World Income Inequality Database*. UNU-WUNDPIDER. Consultato il 5 febbraio 2026 https://www.wider.unu.edu/project/wiid-world-income-inequality-database

World Inequality Lab. 2025. *World Inequality Report 2026, Executive Summary*. Wid.world

World Bank 2005. *Equity and Development. World Development Report 2006.* The World Bank. New York: The World Bank and Oxford University Press

World Bank Poverty and Inequality Platform. *Povcalnet*. Consultato l'8 febbraio 2026. https://pip.worldbank.org/