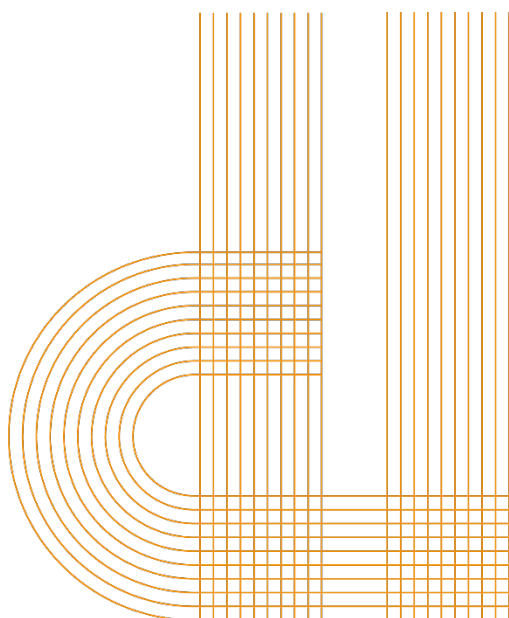


The Rising Global Middle Class

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Abstract. In this paper, I analyze historical trends in the size and composition of the global middle class. To reduce arbitrariness in prior definitions, I propose a new definition of today's middle class based on the two central income classes in the four-group simplified representation of the world distribution, thereby minimizing information loss (i.e., maximizing class inequality). So defined, the global middle class comprises approximately half of the world's population and income, roughly encompassing a rising developing middle class (the global lower-middle class) and those aligning with Western European lower-middle-class living standards (the global upper-middle class). I investigate its historical trends using both absolute and relative approaches. I show that the significant expansion of people living with today's middle-class standards, particularly over the last two decades, was driven by stronger economic growth in emerging economies such as China, only partially offset by changes in income distribution within countries. This expansion resulted in a dramatic shift in the composition of the middle class, which I also document. I compare these trends with alternative approaches to defining the middle class and assess their robustness.

JEL classification: D31, D63, F63, I31, O15.

Keywords: Global income distribution, global middle class, income growth, income inequality

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1. Introduction

The world has undergone an unprecedented shift in income distribution over the past few decades, driven primarily by globalization and the rise of China and other emerging economies. This has led to a significant decline in global inequality over at least the past twenty-five years, as countries have converged in per capita income, although inequality remains more persistent within countries (e.g., Chancel and Piketty, 2021; Gradín, 2024; Milanovic, 2024; Niño-Zarazúa, Roope, & Tarp, 2017). The global distribution, which once showed two distinct modes for the developing and developed worlds, has recently become unimodal and less polarized (Gradín, 2024; Roope, Niño-Zarazúa, & Tarp, 2018). This strong economic growth has significantly reduced global poverty (World Bank, 2022, 2025), while the ultrarich have accumulated a disproportionately larger share of global income and wealth (e.g., Piketty, 2014; WIL, 2022).

A key element of this outstanding process has been the rise of a new global middle class in developing countries over the past few decades (e.g., Ravallion, 2010; Kharas, 2023). This trend coincides with growing concern that recent technological advances and international trade patterns have contributed to the decline of middle-class jobs in developed economies, especially in the US.¹

This issue is important because a strong, wealthy middle class is widely regarded as a crucial factor in development. A national context with limited class polarization is associated with better economic, social, and political outcomes (Easterly, 2001). A stronger middle class increases investment in human capital in imperfect capital markets (Galor & Zeira, 1993), expands domestic markets (Murphy, Shleifer, and Vishny, 1989; Todaro, 1997), and promotes political stability (Alesina & Perotti, 1996). Therefore, a thriving middle class drives economic growth and, more broadly, human development (e.g., Castells-Quintana, Royuela, & Gradín, 2025).

In this context, despite its complexity, the economic literature often defines a country's middle class as the population between the poor and the rich, using two arbitrary income thresholds. In developed economies, these thresholds are typically set as percentages of median income (e.g., 75 and 125, or 200). In developing countries and, more broadly, in global studies, where the median income may reflect low living standards (Ravallion, 2010), it is more common to use an absolute approach with ad hoc thresholds expressed in constant international dollars (e.g., \$10, \$50, or \$100 a day).

¹ From earlier studies on the shrinking middle class in the 1980s (e.g., Foster & Wolfson, 2010; Horrigan & Haugen, 1988; MacMahon & Tschetter, 1986; Rosenthal, 1985; Thurow, 1987) to the more recent literature on employment polarization (initiated by Autor, Katz, & Kearney, 2006, or Goos & Manning, 2007).

This paper contributes to the literature by using existing global income and wealth distribution datasets to examine the historical trend of the global middle class. It employs a flexible approach that combines relative and absolute references while reducing arbitrariness. Instead of defining ad hoc income boundaries, I determine income-class boundaries that maximize between-class alienation and within-class cohesion, following Esteban, Gradín, and Ray (2007) in their analysis of polarization based on optimal reporting of income distributions (Aghevli & Mehran, 1981; Davies & Shorrocks, 1989). The resulting classes minimize information loss when aggregating the population into four groups (only 6 percent of inequality is lost, as measured by the Gini index), yielding the most homogeneous income classes. This allows middle-class thresholds to adapt to the distribution, particularly for the upper class, which is more isolated from the rest of the distribution in contexts of high inequality. This is critical in global studies, as the global distribution not only reveals a low median but also significantly greater inequality than that in most countries.

The results show that the optimal global lower-middle class in 2022 roughly corresponds with the developing middle class (those not considered poor in upper-middle-income countries, but who would be poor in Western Europe). The optimal global upper-middle class roughly aligns with the living standards of the Western European lower-middle class. Altogether, the global middle class accounts for approximately half of the world population, roughly those between the bottom 40 and top 10 percent, and also accounts for half of global income.

To analyze historical trends, I primarily use an absolute approach, anchoring current income thresholds in constant dollars to track how the share of people living at what is considered today's middle-income level has changed over time. I complement this with a relative approach, in which the percentage range around the median is fixed at its current optimal value, and a fully optimal approach, in which the thresholds adjust to yearly shifts in the income distribution. I also compare these trends with other definitions used in the related literature and assess their robustness.

I further document the dramatic shift in the composition of the middle class as the world became less stratified between developed and developing economies, with the emergence of China and India in the global middle class. To understand the drivers, I investigate the distinct roles of income growth, income inequality, and population growth in shaping the evolution of the global middle class. I show that strong growth in emerging economies, rather than uniform global growth, has been the primary driver of the expansion of the middle class, only partially offset by changes in income inequality within countries, and that differences in population growth patterns across countries produce no significant compositional effect.

The following section reviews the literature on identifying the middle class, introduces the concept of an optimal global middle class, and outlines approaches for assessing trends within this class. It also defines a global middle class using Western European living standards. The following two sections present the data and discuss the results across the various approaches. The final section concludes.

2. Measuring the global middle class

2.1 Previous literature

The middle class is typically defined using various methods, based on an individual's access to resources (e.g., income, property, and wealth) or on other credentials (e.g., job status or employment relations) (Atkinson & Brandolini, 2011). The most common approach among economists is to identify the middle class by income or earnings. This is likely due to the close link between income and other middle-class indicators, which directly relates to the study of monetary poverty, vulnerability, and economic inequality. Additionally, the availability of comparable data, particularly in global research, is significant.

The meaning of being middle class varies across social contexts. One can be considered middle class in a poorer country, even with a lower income, if one has better material conditions, higher-quality jobs, and greater economic security than the poorest individuals in that country. Linking income boundaries to the country's median in relative terms explicitly recognizes this. In developed countries, the middle class is thus typically defined as the group falling within an interval centered on the median of the income distribution. For example, middle-income male jobs are those paying between 75 and 125 percent of the median male earnings (Thurow, 1987). This definition has also been applied to income distributions (e.g., Birdsall, Graham, & Pettinato, 2000). Recently, a broader range, from 75 to 200 percent of the median income, has become more widely accepted (e.g., OECD, 2019).

The middle class also entails a minimum set of material conditions and economic security, thereby introducing an absolute dimension. For this reason, a fixed range around the median that works well in advanced economies may not be suitable for developing countries, where the median income reflects significantly lower living standards (Ravallion, 2010). Therefore, the literature on developing economies has taken a different approach, usually adopting absolute thresholds. These thresholds are typically defined in constant international dollars using the most recent purchasing power parity (PPP) and refer to annual or daily per capita income or consumption. However, there is no agreement on which references to use. The lower bound has often been justified as an absolute or relative poverty line in the baseline year. Meanwhile, there has been more variation in the references used to determine the upper bound due to the lack of a widely accepted equivalent richness line.

For example, Ravallion (2010) describes the developing middle class as those with incomes between \$2 and \$13 per day in 2005, who are not poor by median developing-country standards (using the median of national poverty lines in developing countries) but are still considered poor by developed-country standards (using the US poverty line). Those above this latter threshold are considered part of the Western middle class. Additionally, Banerjee and Duflo (2008) defined two middle classes in developing countries: those earning between \$2 and \$4 per day and those earning between \$6 and \$10 per day in 1993.

Other studies have used broader income ranges. For instance, Milanovic and Yitzhaki (2002) described the global middle class as having an average annual income between Brazil's and Italy's, ranging from \$3,470 to \$8,000 (or \$10 to \$22 per day) in 1993. A standard threshold is \$10-\$50 per day, though it is applied across different time frames (e.g., López-Calva & Ortiz-Juárez, 2014; Pew Research Center, 2015, 2021; World Bank, 2007). This range has been expanded to \$10-\$100 (e.g., Bhalla, 2007; Kharas, 2010), encompassing the Western middle class.²

In other approaches used in different contexts, the middle class is often defined by the middle quantiles of the distribution. This generally provides a straightforward and reasonable proxy for middle incomes, emphasizing variation in their share of total income because the size is predetermined. Therefore, the middle class can be represented as the middle 60 percent, between the bottom 20 percent and the top 20 percent (Easterly, 2001). Alternatively, it can be the middle 50 percent between the bottom 40 percent and the top 10 percent, which underpins the Palma index (e.g., Castells-Quintana, Gradín, & Royuela, 2025; Gradín, 2024; Palma, 2011), or the middle 40 percent between the bottom 50 percent and the top 10 percent (Chancel & Piketty, 2021).³

Both relative and absolute approaches are important when studying the middle class. We can apply Sen's (1983, 181) discussion of the absolute or relative nature of poverty to the middle class, noting that "at the risk of oversimplification," the middle class, like poverty, "is an absolute notion in the space of capabilities but very often it will take a relative form in the space of commodities or characteristics." A person in a poorer country may require less income to afford sufficient goods to perform the same social functions, such as appearing in public without shame or

² Kharas (2010) used \$10 and \$100 a day as references in 2005 (respectively, the average poverty line in Portugal and Italy, and twice the median income of Luxembourg), similar to the thresholds used by Bhalla (2007), who used \$10 and \$100 a day in 2006. Other reports have used other absolute thresholds (see Pew Research Center, 2015).

³ The earlier literature on the disappearance of middle-class jobs in the US also used the middle-third occupational earnings group in the reference year (e.g., Kusters & Ross, 1988; MacMahon & Tschetter, 1986; Rosenthal, 1985). In this case, the employment share could differ from one-third and vary over time.

participating in community life (Sen, 1992). Therefore, we require a flexible framework that recognizes the diversity in how the global middle class is defined.

Existing definitions of middle-income groups, whether relative or absolute, are often justified as falling between the poor and the rich; however, they involve significant arbitrariness, and analyses of poor and rich countries are not always well integrated into a consistent framework. Furthermore, using fixed boundaries, whether percentages of the median or dollar amounts, regardless of the shape of the distribution, does not account for, for example, the fact that the wealthy tend to be more isolated in highly unequal contexts, where the reasonable threshold for qualifying as part of the upper class might therefore be higher.

2.2 An alternative procedure to identify the middle class based on class inequality

Consistent with previous literature, this study uses per capita net income as the primary measure to define the middle class. I will also include pre-tax national income and net wealth per adult for a sensitivity analysis. This is despite the consensus that being middle class also entails credentials such as education and occupational status, as well as economic security, self-perception, specific social values, aspirations, and other characteristics (Goldthorpe & McKnight, 2006; López-Calva & Ortiz-Juarez, 2014; and others). Extending the definition of the middle class beyond income is sensible when referring to a specific geographic area or period. However, using more complex definitions of the middle class on a global scale with a broad temporal perspective is not straightforward due to insufficient and non-comparable data.

Although the approach applies to any number, I assume the global distribution comprises four income classes at any given time. The number is arbitrary but aligns well with the distinction between lower- and upper-middle classes, reflecting the significant diversity in a world largely divided among countries at various stages of development. The other two groups are the lower and upper classes, broader categories than the terms 'poor' and 'rich.'

The three thresholds defining these four income classes will be expressed in constant international dollars and as a percentage of the median income. However, rather than setting these thresholds discretionarily as in the prior literature, they will be set endogenously to maximize within-class cohesion and interclass alienation, in line with the polarization analysis by Esteban, Gradín, & Ray (2007). This approach draws on the literature on optimal income distribution, which chooses the partition that minimizes the loss of information in reported aggregate income intervals.

Let $y = (y_1, \dots, y_N) \in \mathbb{R}^N$ be the global income distribution in the reference year. I define a set of three income thresholds, $z = (z_1, z_2, z_3)$, delimiting four global

income classes (regardless of the country of residence) based on the level of each income $y_j \in y$, namely the lower class (if $y_j < z_1$), lower-middle class (if $z_1 \leq y_j < z_2$), upper-middle class (if $z_2 \leq y_j < z_3$), and upper class ($y_j \geq z_3$). The total middle class will be the sum of the two central classes.

The optimal partition, z^* , maximizes inequality (alienation) between classes (i.e., in the smoothed distribution) or, equivalently, minimizes the reduction in inequality after smoothing within-class differences:

$$z^* = \max_z I(y_{bc}) \equiv \min_z \{I(y) - I(y_{bc})\}$$

Where the between-class counterfactual distribution, y_{bc} is obtained by smoothing the distribution within each class so that everyone has their corresponding class mean, reflecting only inequality between classes. This is a four-spike simplified representation of the overall distribution, with each class having a mean income m_i and population share p_i , $i = \{1, 2, 3, 4\}$.

This problem is equivalent to minimizing the error (information loss) incurred by grouping when estimating an inequality from grouped data, as statistical agencies and tax administrations typically do when reporting.⁴

Suppose the average income distance between their members can measure the alienation between any two classes. In that case, this approach implies using the Gini index, for which a necessary optimal grouping condition is that the thresholds must be equal to the average income of the population in its two adjacent groups (Aghevli & Mehran, 1981):⁵

$$z_i^* = \frac{m_i p_i + m_{i+1} p_{i+1}}{p_i + p_{i+1}}$$

Figure 1 shows the procedure applied to the 2022 global income distribution, using the data described in the next section. The simplified four-class representation retains 94 percent of the original Gini index.

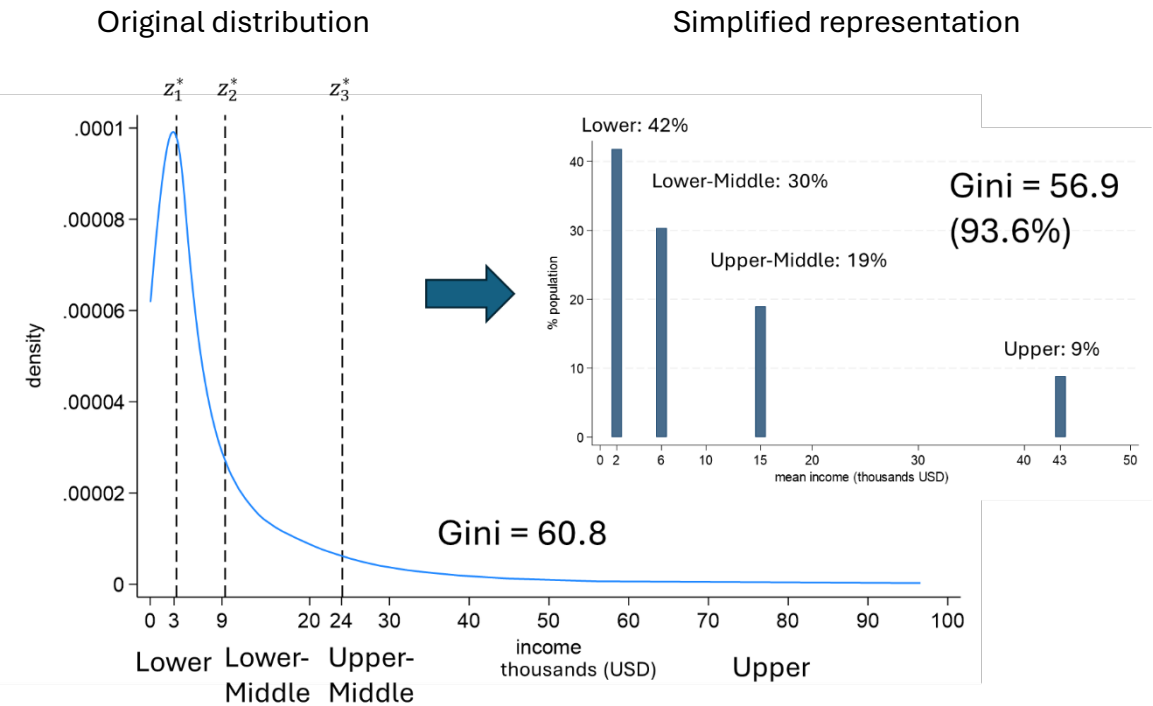
⁴ Note that $I(y) - I(y_{bc})$ for the Gini index is generally much lower than inequality within classes measured as inequality in the standardized distribution in which incomes are re-scaled so that classes share the same average income (e.g., Gradín and Zapata-Román 2024 in the context of inequality of opportunity). The latter, which is close to the population-weighted average inequality across classes, would be a better measure of the extent to which classes are internally heterogeneous (e.g., 40 percent of overall inequality in 2022, as compared to only 6 percent). However, the focus here is on the information loss using the simplified distribution.

⁵ In geometric terms, this implies minimizing the area between the overall and grouped Lorenz curves, which occurs when, at each threshold, the tangent to the Lorenz curve is parallel to the line connecting the two adjacent thresholds. Davies & Shorrocks (1989) slightly reformulated this condition as follows: the upper bound for incomes in group i and the lower bound for incomes in group $i+1$ are given by the mean income of the two groups combined.

For two groups, the optimal threshold is always the population’s average income. For three or more groups, the optimal grouping depends on the underlying distribution; however, Davies & Shorrocks (1989) proposed an iterative algorithm to compute the optimal distribution efficiently. Empirically, the central threshold tends to be approximately equal to the mean income when the number of groups is even.⁶

Thus, in the four-group case, the threshold z_2^* dividing the middle class into lower- and upper-middle will fall near the mean, with z_1^* and z_3^* approximately equal to the combined mean of those below and above the mean, respectively. As a result, the income share of the total optimal middle class will be approximately equal to its population share. This configures the middle class as neither under- nor overrepresented in total income, unlike the misrepresentation of the lower and upper classes. Other optimal grouping conditions exist for continuous distributions when alternative inequality measures are used (Aghevli & Mehran, 1981). These would allow us to use different measures of alienation (inequality). However, their implementation requires the design of an iterative procedure for each case (Davies & Shorrocks, 1989).

Figure 1. Optimal approach to identify the 2022 global income middle class



Note: Optimal boundaries (USD and % global median) are 3,325 (77%), 9,362 (215%), 24,092 (555%) annual income.
Source: Own construction using the WIID (see data).

⁶ This is observed in actual income distributions and simulations with log-normal density functions.

2.3 Obtaining the historical trend

I use the procedure described above to determine the optimal thresholds for the baseline year (i.e., 2022). For other years (earlier or projected), I will employ three complementary approaches—absolute, relative, and optimal—to address a distribution whose median income has risen significantly over the past few decades and that has been drastically reshaped.

The first and main approach uses *absolute* thresholds anchored to the exact amounts in constant international dollars from the baseline year, which are held constant over time. This approach will best capture the population in past or future years with income levels similar to today's middle class, consistent with other global studies.

A second approach uses *relative* thresholds, with boundaries anchored to today's levels not in dollars but as a proportion of each contemporary median. This approach adjusts class boundaries in response to changes in overall living standards (as measured by the median) but not to changes in the distribution's shape. It best captures the middle class, understood as a status in the income distribution (i.e., 'close' to the median) over time, in line with previous relative approaches in developed economies (but extending today's endogenous interval rather than setting it discretely). Finally, a third approach uses *optimal* thresholds computed for each year's distribution, thereby adjusting to changes in the median and inequality to reflect the population's clustering across strata each year. Notably, the middle-income strata may reflect substantially different living standards from those currently considered the middle class under the relative and optimal approaches, but not under the absolute approach.

Given the high level of global inequality and low median incomes, today's middle-class living standards do not yet align with the typical understanding of the middle class in advanced economies, particularly in Western European countries. For this reason, I also estimate an alternative global middle-class concept that aligns most closely with these Western views. Transposing the national middle class in these countries to global terms is not straightforward, as boundaries are always country-specific.

At the extreme, one possible definition would treat the global Western middle class as everyone classified as middle class across all selected countries (an intersectional approach), using the most common relative interval (i.e., 75/125/200 percent of the median). However, if the lower and upper bounds are too close, as is often the case, this yields an extremely narrow middle class. In contrast, a broader definition would include anyone regarded as middle class in any selected country (a union approach). I follow the latter approach and define the global Western Middle Class as the world population with incomes between the lower and upper

bounds of the national middle class in selected countries in the baseline year. By selecting 16 Western European economies (13 Western European Union current members, plus Norway, Switzerland, and the UK), the interval is set between 75 percent of Portugal's median income (the poorest country) and 200 percent of Luxembourg's median income (the richest). The median of the intermediate 125-percent threshold across these 16 countries separates the lower and upper segments of this Western European middle class.

3. Data

The primary source for this study's global income distribution is the standardized version of the World Income Inequality Database (WIID companion, wiidglobal dataset, UNU-WIDER, 2025). It is a panel covering all economies from 1950 to 2022, thus spanning the period for which household survey data are available. The year 2022 serves as the baseline for the historical trend, and the series is extended through 2030 using average-income and population projections, assuming constant country-level income distributions.

The WIID compiles information on income distribution from household surveys, either directly from microdata (LIS and Eurostat) or from reported data (the World Bank's Poverty and Inequality Platform, SEDLAC, Eurostat, various United Nations institutions, National Statistical Authorities, research studies, and others). The original welfare measure is heterogeneous, reflecting the lack of harmonization over time and across countries in how distributional data is collected (e.g., consumption in some countries and net income in others), and may come from multiple sources. Therefore, the WIID companion selects the best and most comparable data and standardizes the distributions to reflect the net income per capita distribution typically obtained from household surveys (e.g., without correcting for the underestimation of top incomes). Country income distributions are expressed as percentile income shares and then aggregated globally. The distribution across survey years has been standardized, exploiting the empirical relationship between different welfare concepts in LIS (e.g., upgrading per capita consumption distributions in Sub-Saharan Africa or South Asia to per capita net income).⁷ Although the original dataset uses per capita GDP to measure average income by country, this has been replaced here with an estimated per capita net income in 2022 constant dollars to capture individual living conditions better.⁸

⁷ See Gradín (2024) and references therein for a more detailed explanation of the original data sources, the construction of the standardized dataset, and the global trends in income distribution that it reflects.

⁸ The WIID global dataset uses a chained GDP series based on the World Development Indicators since 1990, complemented by the Maddison project, and, to a lesser extent, the Penn World Tables for earlier years and missing countries. The GDP series has been updated with the latest information

For the sensitivity analysis, I used two additional panels from the World Income Distribution (WIL, 2025), covering pre-tax national income from 1980 to 2024 and net personal wealth from 1995 to 2024. These distributions are based on adults (at least 20 years old), with equal splits for couples. The key distinguishing feature of these two datasets is that they are heavily corrected using a complex combination of household surveys, administrative data, and national accounts, employing various statistical methods within the Distributional National Accounts (DINA) approach. Alongside the other 99 percentiles, they provide a more detailed distribution within the top 1 percent.⁹ Therefore, the resulting distributions differ substantially from typical household survey estimates, generally showing higher inequality, particularly at the top.

All these global datasets must address the challenge of making the most of limited distributional information. To that end, missing country/year income distribution data points are imputed to varying extents using procedures such as interpolating between years with available data, extrapolating before the earliest or after the latest available year, or inputting from similar countries. Acknowledging the uncertainty introduced by the limitations inherent in this approach, particularly in earlier years when information was scarcer and of lower quality, these imputations are necessary to address significant information gaps in global studies. No true estimate of the global income distribution can be obtained without these or other imputations, whether done explicitly or implicitly. The analysis will be run using the most detailed distribution in each case.

4. The global middle class

4.1 The optimal global middle class

The optimal global middle class in 2022 consists of individuals living in households with annual per-capita net incomes between \$3,325 and \$9,362 (the lower-middle class) and between \$9,362 and \$24,092 (the upper-middle class) (Table A1). For context, these thresholds roughly correspond to the average incomes of lower-middle-income countries (e.g., Ghana, Morocco, Bangladesh), upper-middle-income countries (e.g., Argentina, Vietnam, China), and high-income countries (e.g., South Korea, Finland), respectively.

for 1950-2024 and extended to 2030 using the IMF's (2025) GDP forecasts and UNDESA's (2024) population projections. Net income for all countries and years is then estimated from this GDP series by applying the average ratio of per capita net income to GDP in the LIS sample, using either the same-country estimates (if included in LIS) or those from countries in the same geographical region (the rest). LIS net income was initially reported in 2021 constant international USD and converted to 2022 USD using US inflation data (PPP and CPI data were obtained from LIS). Income distribution projections assume constant within-country distributions.

⁹ This dataset provides a more detailed disaggregation for income and wealth from 99.1 to 99.9, 99.91 to 99.99, and 99.991 to 100. See WIL (2022) for more details on how these series were constructed and the resulting global income and wealth distributions.

Overall, the global middle class accounted for about half of the world’s population (49 percent) and global income (51 percent). The two middle-class tiers mirror one another in their population and income shares (Table 1): the lower-middle class accounts for 30 percent of the world’s population and 19 percent of global income, while the upper-middle class accounts for 19 percent of the population and 32 percent of global income. Average incomes in these two groups are \$5,772 and \$15,109, respectively (Table 2).

A similar mirror pattern appears at the extremes. The lower class is the largest group—42 percent of the global population—but it receives only 7 percent of total income (average income: \$1,553). In contrast, the upper class, with an average income of \$42,389, comprises 9 percent of the population but accounts for 42 percent of global income.

In this framework, today’s global middle class roughly corresponds to the middle 50 percent of the world’s income distribution, situated between the bottom 40 percent and the top 10 percent. These two extreme groups are central to the Palma inequality index (Cobham & Sumner, 2014; Palma, 2011, 2014) and feature prominently in global distributive analyses (e.g., Gradín, 2024). The income share of the bottom 40 percent—broadly aligned with today’s lower-middle class—is also a key metric for tracking shared prosperity (World Bank, 2022) and progress toward SDG 10 (Reduced Inequalities). Similarly, the global top 10 percent, which approximates the optimal upper class, is a commonly used indicator of inequality, particularly in studies of the upper tail of the income distribution (e.g., WIL, 2025).

Inequality across these four classes (i.e., the simplified smoothed distribution) accounts for 94 percent of overall inequality, as measured by the Gini index, implying a 6 percent information loss after aggregation (see Figure 1).¹⁰ With a group inequality around 15-17 percent, the two global middle-class segments are significantly more internally homogeneous than the lower (34) and upper (25) classes (Table A5).

¹⁰ Due to the path-dependence of the Gini index, inequality in the standardized (between-class) and smoothed (within-class) distributions exceeds total inequality. Using the Shapley decomposition, which ensures that the sum of the contributions equals the overall inequality, we estimate that class inequality (between-group) accounts for approximately 76 percent of the total global inequality. Figure A3 displays the trend in inequality between and within classes.

Table 1. Population and income shares (%) by global income class (absolute approach)

	% Population by class					% Income by class				
	Lower	Lower-middle	Upper-middle	Upper	Total Middle class	Lower	Lower-middle	Upper-middle	Upper	Total Middle class
1950	81.2	14.4	3.9	0.4	18.3	30.3	36.9	25.6	7.2	62.5
1980	68.2	15.5	13.2	3.1	28.7	12.8	20.1	42.3	24.8	62.4
1990	69.3	14.3	12.0	4.3	26.3	14.0	16.5	36.2	33.3	52.7
2000	66.9	16.7	11.0	5.4	27.7	14.7	15.9	29.6	39.8	45.5
2010	53.0	26.2	14.3	6.5	40.5	10.8	20.5	30.2	38.5	50.7
2022	41.8	30.4	19.0	8.9	49.4	7.1	19.2	31.5	42.2	50.7
2030	37.0	30.5	21.4	11.1	51.9	5.7	17.2	31.5	45.6	48.7

Notes: Income classes are defined using the 2022 optimal boundaries (anchored in constant international dollars). 2030 is a projection.

Source: Own construction using the WIID (see data section).

Table 2. Income means (USD) by global income class (absolute approach)

	Lower	Lower-middle	Upper-middle	Upper	Total Middle class
1950	790	5,436	13,798	34,528	7,232
1980	862	5,955	14,649	37,012	9,959
1990	1,016	5,761	15,109	38,389	10,025
2000	1,257	5,457	15,353	41,743	9,390
2010	1,463	5,598	15,092	42,235	8,953
2022	1,553	5,772	15,109	43,389	9,364
2030	1,590	5,790	15,101	44,078	9,636

Notes: Income classes are defined using the 2022 optimal boundaries (anchored in constant international dollars). 2030 is a projection.

Source: Own construction using the WIID (see data section).

4.2 The evolution of the global middle class over time: an absolute approach

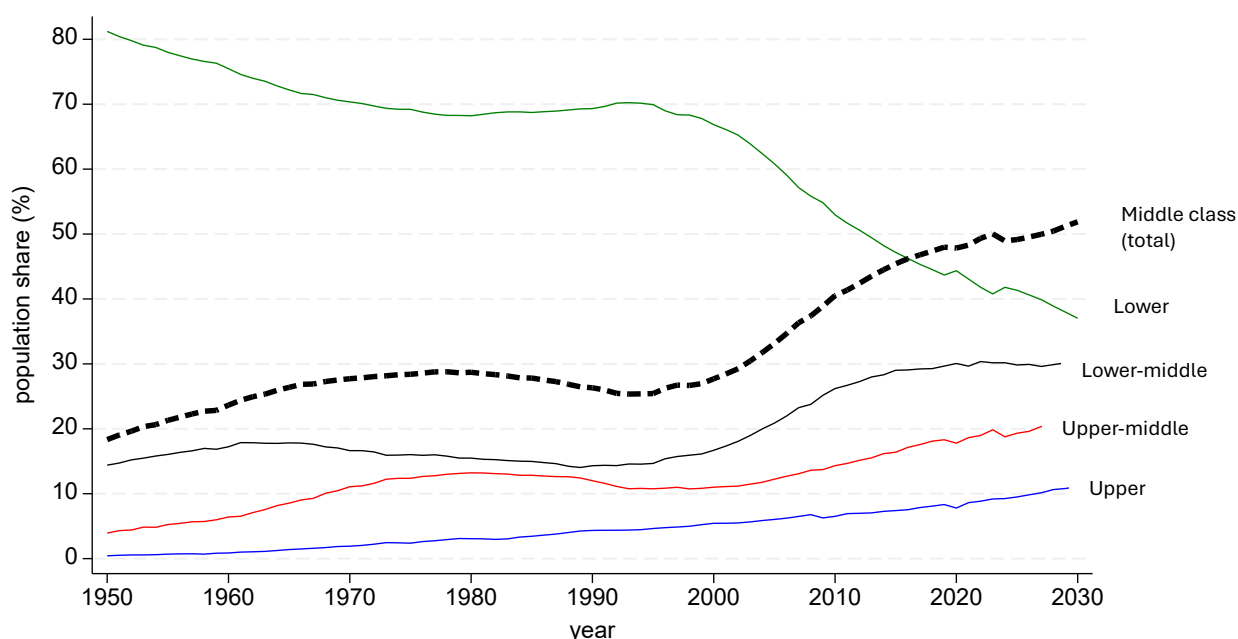
Overall trend

The global middle class, as defined by today's living standards (an absolute approach keeping the 2022 boundaries in constant dollars), has nearly tripled in size from 18 percent of the population in 1950 to its current 49 percent (i.e., 15 and 14 percentage points each segment, Tables 1 and A2, and Figure 2). However, it has not been a linear process. There was modest progress during the postwar period, when developed economies outperformed the rest and inequality within countries generally declined, with the middle class reaching 29 percent of the global population by 1980. It then declined until the mid-1990s, as the extremes of the distribution advanced their share of total income at the expense of the middle class. This period saw the collapse of socialist Eastern Europe, the initial take-off of China and other emerging economies, and rising inequality in most regions. Later, the middle class experienced more sustained growth, taking off after the early 2000s,

when China joined the World Trade Organization and accelerated its economic growth alongside other developing economies, thereby reducing the gap with developed economies.

This trend paralleled the expansion of the upper-class population under current living standards, from less than 0.5 percent around 1950 to 9 percent in 2022. The middle and upper classes generally expanded at the expense of the lower class, which declined from 81 to 42 percent. This decline of the lower class was steady, except during the 1980s and early 1990s. By today's standards, the world was disproportionately lower class, and it became middle class only after the late 2010s, when the population with current middle-class living standards overtook those with lower-class material conditions. Importantly, projections suggest that this process will continue slowly over the coming years, adding 2.5 percent of the population to live at today's upper-middle-class standards by 2030, alongside another 2 percentage points to the upper class. Both increases will only modestly reduce the share of the lower class to 37 percent, indicating that many people will still live in extreme hardship at this pace.

Figure 2. The global middle class (absolute approach)



Note: Income classes are defined using the 2022 optimal boundaries (anchored in constant international dollars). 2023-2030 is a projection. The middle class (total) comprises the lower-middle and upper-middle classes.

Source: Own construction using the WIID (see data section).

Changing composition

The rise of the middle class in recent decades has been accompanied by a dramatic shift in its composition (Tables 4 and A6; Figure 3). In 1950, the world was largely

stratified by countries' level of development: people in a few *developed economies* accounted for nearly 90 percent of the upper and upper-middle classes and two-thirds of the lower-middle class, while the rest of the world was disproportionately concentrated in the vast lower class.¹¹ In subsequent decades, people in these developed countries increasingly moved out of the lower-middle class; by 1990, they accounted for barely 19 percent. This class then comprised people from Latin America and the rest of the world, with a still limited presence of individuals from China, India, or Sub-Saharan Africa. However, developed countries still accounted for two-thirds of the upper-middle class and 85 percent of the upper class.

In the decades that followed, a significant portion of the Chinese population progressively became part of the lower-middle class in the 1990s and 2000s, the upper-middle class in the 2000s and 2010s, and the upper class in the 2010s, making up approximately 25, 30, and 10 percent of these classes by 2022. This process is expected to continue in the years to come. Chinese participation in the upper class is projected to increase to 15 percent by 2030, approaching its population share (16 percent), while declining in the lower and lower-middle classes.

The upward mobility of Indians began later than that of the Chinese and is progressing much more slowly. By 2022, India accounted for 19 percent of the global lower-middle class, consistent with its share of the global population. However, it remained overrepresented in the lower class (26 percent) and underrepresented in the upper-middle and upper classes (6 percent and 2 percent, respectively). By 2030, India is expected to account for 18 percent of the global middle class, the same as its overall population share.

At the same time, Sub-Saharan Africa has been growing overrepresented in the lower class, with a minimal presence in the middle and upper classes, consistent with its growing prominence in global extreme poverty (e.g., World Bank, 2022, 2025).

As a result, by 2022, the population in developed countries is essentially split between the global upper (49 percent) and upper-middle (42 percent) classes (Tables 4 and A7). Most of the population in China is distributed across the lower (20), lower-middle (43), and upper-middle (32) classes, after being entirely lower class before 2000. In India and Latin America, most of the population is concentrated in the lower (60 and 41 percent, respectively) and lower-middle (33 and 42 percent) classes, whereas in sub-Saharan Africa, most fall within the lower class (83 percent).

¹¹ For this study, I included under the label of *developed economies* 16 Western European countries, the US, Canada, New Zealand, Australia, and Japan.

The drivers of the rising global middle class

A rising middle class with fixed boundaries can be seen as the result of the interplay of income growth, inequality dynamics, and uneven population growth across countries. The direction of these effects is a priori ambiguous. A uniform rate of income growth across the global distribution of incomes will tend to drive population movement from lower to higher classes, thereby expanding the middle class from the bottom but also shrinking it from the top. Given the disproportionately larger size of the lower class, one can expect mostly a positive net effect of uniform growth on the size of the middle class. This can be accelerated through asymmetric growth across countries. Particularly, if lower-income countries grow faster on average than developed economies, thereby reducing cross-country inequality. Otherwise, higher growth in rich economies may reduce the middle class. Similarly, greater inequality within relatively poor countries may intensify the expansion of the middle class from the bottom, whereas higher inequality in richer countries may contribute to the expansion of the upper class instead. Even if there are no changes in income distribution between and within countries and no income growth, the middle class can expand through a compositional effect if the population grows faster in predominantly ‘middle-class’ countries.

To disentangle the contributions of these competing drivers, I decompose changes in the size of the middle class over time into various effects, as shown in Figure 4. In the procedure, I initially separated the contribution of three factors: per capita income growth, inequality within countries, and population composition.¹² These factors are sequentially changed from their initial to their final values. A factor’s contribution is the change in the size of the middle class after the factor is updated. To correct path dependency (i.e., the contribution of a factor depends on the order in which the factors are accounted for), this is done by averaging over all possible sequences following the Shapley approach widely used in distributive analyses (Chantreuil & Trannoy, 2013; Shorrocks, 2013). In a second stage, income growth was further broken down into uniform versus asymmetric growth across countries.

These results show that growth in per capita income has been the primary engine behind the global expansion of the middle class during its two major periods of increase (1950 to 1980 and 2000 to 2020). In contrast, the middle class stagnated between 1980 and 2000, when income growth contributed much less and was fully offset by rising inequality within countries. Specifically, rising incomes explain a 14-percentage-point increase in the middle class from 1950 to 1980, and a further 25-percentage-point rise after 2000. The relative importance of uniform and

¹² Figure A1 shows the trend in the global mean and median income, and Figure A2 the trend in inequality between and within countries.

asymmetric growth also shifted across these periods. In the earlier decades, most of the expansion (10 percentage points) stemmed from uniform global growth, with differing national growth rates accounting for the remaining 4 points. More recently, however, the decline in inequality between countries has played the dominant role, contributing 17 percentage points, while uniform global income growth has added another 8 percentage points.

The contribution of inequality within countries was slightly positive when it declined in the first decades, accounting for a one-percentage-point increase in the population share of the middle class. However, it turned negative when inequality increased in the 1980s and 1990s, contributing to a 5-percentage-point decline in the middle class and fully explaining that decline during that period. It also remained negative after 2000, reducing the middle class by 3 percentage points. In this period, overall inequality became more stable, with some key areas still experiencing rising inequality, particularly in China and India, following their structural transformations. In contrast, other regions, such as Latin America, experienced declines.

Higher population growth in countries that disproportionately represented the lower class had a significant negative composition effect during the postwar period (accounting for a decline in the size of the middle class of nearly five percentage points). However, it had a smaller effect during the 1980s and 1990s (a near one-percentage-point reduction) and no effect after 2000.

Table 3. Composition (%) of global income classes by area, 2022

Area	Global class				Middle class (total)	World
	Lower	Lower-middle	Upper-middle	Upper		
Developed countries	0.3	3.1	26.4	65.6	12.0	11.9
China	8.5	25.3	30.1	10.1	27.2	17.9
India	25.5	19.3	5.6	2.0	14.1	17.8
Latin America and the Caribbean	8.1	11.3	5.9	2.8	9.2	8.2
Sub-Saharan Africa	30.1	6.8	2.4	0.9	5.1	15.2
Other	27.5	34.2	29.6	18.6	32.4	29.1
All areas	100	100	100	100	100	100

Note: Income classes are defined using optimal boundaries. The middle class (total) comprises the lower- and upper-middle classes—percentage of the population in each global class residing in each area (columns sum to 100). The last column reports world population shares by area.

Source: Own construction using the WIID (see data section).

Table 4. Area composition (%) by global income class, 2022

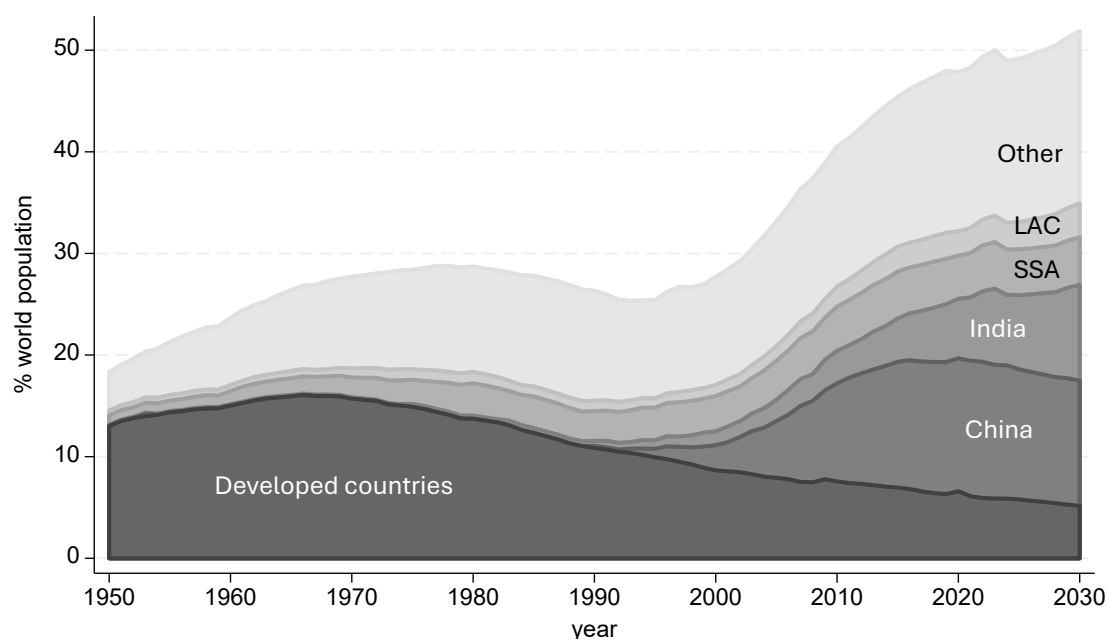
Area	Global class				Middle class (total)	World
	Lower	Lower-middle	Upper-middle	Upper		
Developed countries	1.0	7.8	42.2	48.9	50.0	100
China	20.0	43.0	32.0	5.0	75.0	100
India	60.0	33.0	6.0	1.0	39.0	100
Latin America & the Caribbean	41.3	42.0	13.7	3.0	55.7	100
Sub-Saharan Africa	82.8	13.6	3.0	0.5	16.6	100
Other	39.4	35.7	19.3	5.7	55.0	100
All areas	41.8	30.4	19.0	8.9	49.4	100

Note: Income classes are defined using optimal boundaries. The middle class (total) comprises the lower- and upper-middle classes. Percentage of the population in each area belonging to each class (rows sum to 100). The last row reports the world population share by class.

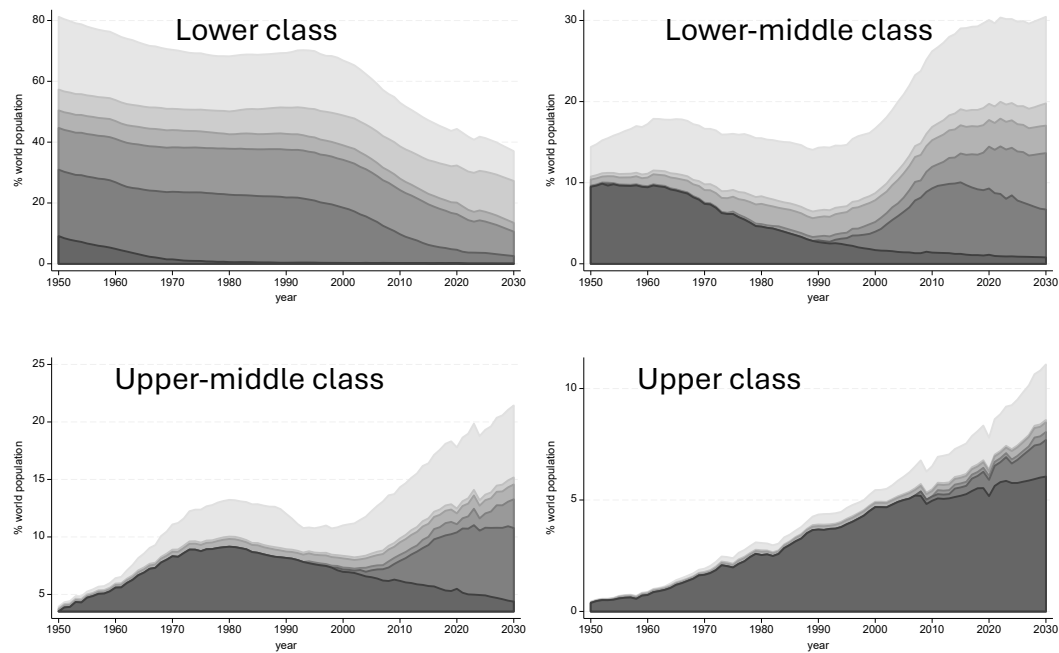
Source: Own construction using the WIID (see data section).

Figure 3. Changing composition of the Global Middle Class by area

3a. Total middle class

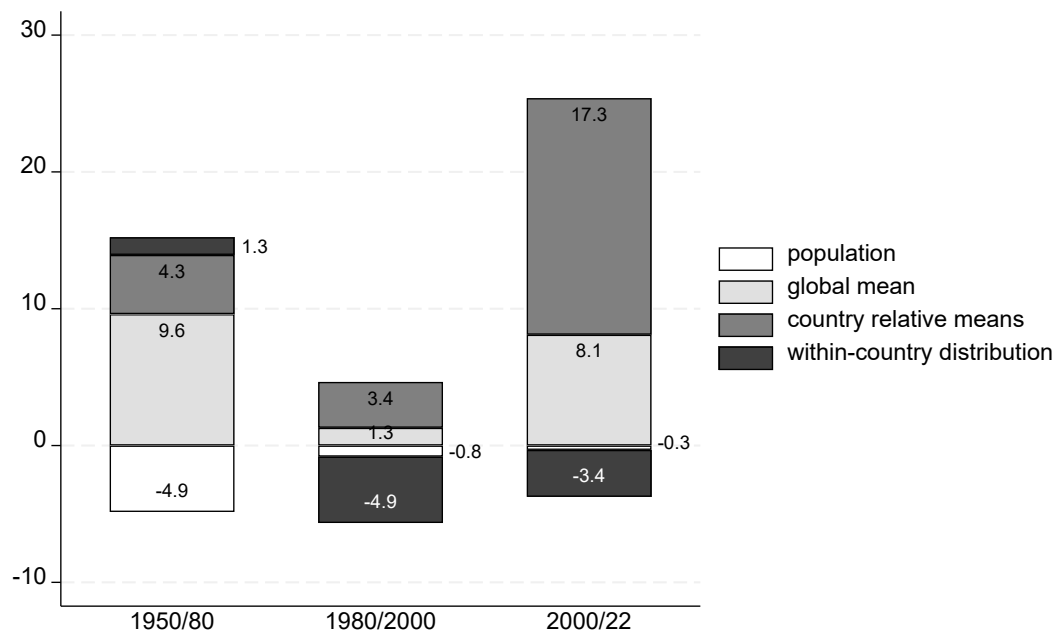


3b. By class



Note: Global income classes are defined using the 2022 optimal boundaries (anchored in constant international dollars). 2023-2030 is a projection. The middle class (total) comprises the lower- and upper-middle classes. a) Developed countries: Sixteen Western European countries, the US, Canada, New Zealand, Australia, and Japan. LAC = Latin America and the Caribbean; SSA = Sub-Saharan Africa. b) Country income group based on the most recent World Bank classification. Source: Own construction using the WIID (see data section).

Figure 4. Decomposition of changes in the global middle class over time by source



Note: Estimates reflect the contributions to the change in the global middle-class share by source (Shapley decomposition, see the methods section). The sum of contributions equals the percentage-point change in the middle class over the corresponding period. The middle class

comprises the lower- and upper-middle classes, and is defined using the 2022 optimal boundaries (anchored in constant international dollars).

Source: Own construction using the WIID (see data section).

4.3 How does the optimal global middle class compare with other approaches?

Prior definitions

The optimal global middle class largely corresponds to similar ad hoc classes proposed in prior literature (Table 5). With income thresholds of approximately \$9, \$26, and \$66 per day, it largely overlaps with the Pew Research Center's (2015, 2021) boundaries.¹³

The optimal global lower-middle class can also be seen as a *developing middle class*, in which the population is richer than the developing poor but still poor by developed-country standards (Ravallion, 2010; Banerjee and Duflo, 2008). Indeed, the optimal bounds of the lower-middle class (\$9-\$26) are comparable to the international poverty line for upper-middle-income countries and a plausible relative poverty line in advanced economies.¹⁴ Ravallion (2010) uses more frugal boundaries: the international poverty line for low-income countries and the per capita official U.S. poverty line for a family of four (i.e., \$3.2 and \$21 per day per person in 2022). As a result, 81 percent of the optimal lower-middle class would be classified as the developing middle class under Ravallion's criteria. In comparison, a large portion (61 percent) of the optimal lower class also falls within Ravallion's middle class limits.¹⁵

Similarly, the optimal upper-middle class largely overlaps with Milanovic and Yitzhaki's (2002) middle class, which goes beyond the developing class. Approximately 77 percent of the upper-middle class and the top 22 percent of the lower-middle class fall between the average incomes of Brazil and Italy.

The optimal global middle class and Kharas' (2010) are similar in size and largely overlap. However, the latter defined a much broader middle class than Milanovic and Yitzhaki, encompassing the Western middle class: those between the lowest poverty lines among advanced economies (Portugal and Italy) and the usual

¹³ \$10–\$20–\$50 (PPP 2011), corresponding to approximately \$13–\$26–\$65 in 2022. The \$10-50 has been used with prices of different years and PPP methodologies.

¹⁴ The international poverty line is \$8.30 in 2021 (Foster et al., 2025). The global lower-class population is roughly comparable to the World Bank's (2025) estimate of global poverty in 2022 (47.7 percent). Note that our estimates are based on predicted net income for all countries, whereas the World Bank uses a combination of consumption (its primary welfare measure) and income data. The upper bound is comparable to the relative poverty line (i.e., 60 percent of the national median) for a single-person household in some high-income countries (e.g., Italy).

¹⁵ The international poverty line for low-income economies is \$3 in 2021 (Foster et al., 2025), updated to 3.24 in 2022 after accounting for US inflation. According to the [Census Bureau](#), the total poverty threshold for a family of four without children, the same reference used in Ravallion (2010), was \$30,186 annually in 2022.

richness line (twice the median) in one of the richest countries (Luxembourg). As a result, it leaves out the bottom 28 percent of the optimal lower-middle class and includes nearly 90 percent of the optimal upper class.¹⁶

Regardless of the definitions, the middle class, as defined by Milanovic and Yitzhaki (2002) and Kharas (2010), updated to 2022, exhibits a trend parallel to that of the optimal middle class previously discussed. Only the developing middle class, as defined by Ravallion (2010), exhibits a different pattern: rapid growth between 1980 and 2010, followed by a decline, consistent with the stagnation of the optimal lower-middle class and the decline of the optimal lower class (Figure 5).

The Western European Middle Class

The difference between the global middle class and Kharas' raises an important issue. The living standards of the optimal global middle class do not necessarily align with the typical understanding of the middle class in advanced economies, particularly in Western European countries. A significant portion of the national middle class in these countries, as usually understood, would be classified as part of the global upper class. In contrast, a substantial portion of the global middle class would be part of the national lower class in advanced economies.

This misalignment between the global and Western middle classes is a common feature of most studies that include developing countries. It is congruent with the relativity of the middle class across countries, even within developed economies. With the most common relative approach, the 75-200 percent interval, the entire Portuguese middle class would roughly fall into the lower class in Luxembourg, a more affluent country. Since the world remains relatively poor, at least by Western standards, it is natural that the global and Western middle classes are not aligned, just as those in Portugal and Luxembourg are not. However, many may believe that the middle class also has an absolute dimension, requiring a minimum set of material conditions, as exemplified by those currently enjoyed by the national middle class in Western economies. This aligns with Ravallion's (2010) views of the Western middle class in opposition to a more frugal developing middle class.

For these reasons, I consider an alternative concept of a global middle class that most closely aligns with the Western standards typically defined in the literature. This enables us to more thoroughly examine the disparity between this and the global middle class. However, the direct transposition of the national middle class

¹⁶ Something similar would happen using 10-100\$ boundaries, in line with Bhalla (2007) – but with 2017 dollars.

from Western countries to a global context is not straightforward, as income thresholds vary across countries.

I used the broadest definition, including anyone regarded as middle class in any Western European country, based on common relative boundaries (75-200 percent of the median in each country).¹⁷ This comprises the population with incomes between the minimum national lower bound and the maximum national upper bound in selected countries. That is, between approximately \$26 and \$166 a day (i.e., 75 percent of the median in Portugal, \$9,214 annually, and 200 percent of the median in Luxembourg, \$62,716 annually). I use \$78 as the boundary to separate the lower-middle and upper-middle groups (i.e., the median of the 125-percent threshold across the selected countries, \$30,997 annually).

This global *Western European middle class*, so broadly defined, comprises only about 27 percent of the world's population, with the majority (22 percent) in the lower-middle class and only 5 percent in the upper-middle class. With this approach, almost the rest of the world's population (72 percent) falls into the global lower class (i.e., people who would not meet the minimum income required to be middle class in any Western European country). In contrast, only the world's top 1 percent, recently attracting so much public attention, comprises the still small upper class (i.e., people who would be upper class in any Western European country) (Table 5).

Thus, by Western European standards, the world is still lower-class. The optimal global lower and lower-middle classes are not yet part of the Western middle class, whereas the optimal upper-middle class and one-third of the optimal upper class correspond to the Western lower-middle class. The remainder of the optimal upper class, other than the world's richest 1 percent, is part of the Western European upper-middle class.¹⁸

However, the difference between the optimal and Western European middle classes is more a matter of level than of trends. The evolution of the latter parallels that of the optimal middle class, anchoring the 2022 dollar boundaries (Figure 6 and Table A9). From an initial value of less than 5 percent by 1950, it stagnated between the mid-1970s and 1990s, reaching 27 percent by 2022, and is expected to reach near 31 percent by 2030.

¹⁷ The union approach is also implicit in Kharas (2010) or Ravallion (2010). The intersection of ad hoc national middle classes is not an option because the highest lower bound (Luxembourg) and the lowest upper bound (Portugal) are very close.

¹⁸ See composition by area in Tables A8 and A9. Any narrower definition of the Western European middle class, such as using national boundaries as a reference, would yield an even smaller class.

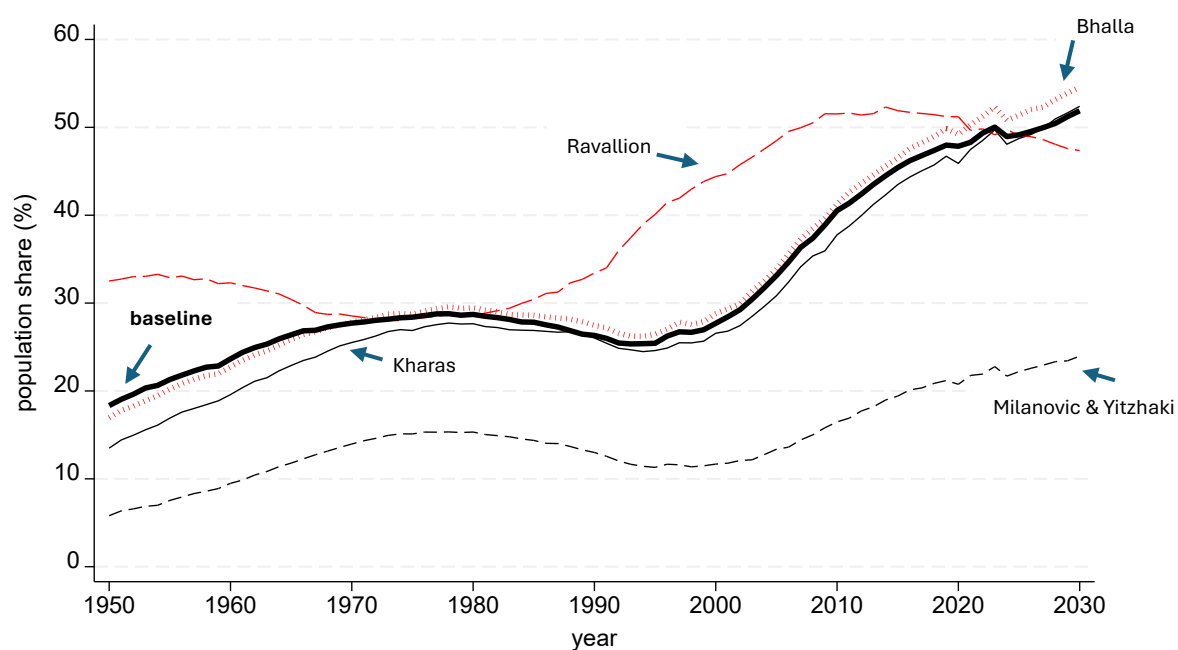
Table 5. Comparing the optimal global middle class in 2022 with ad hoc approaches

	Optimal income classes				Total
	Lower (<\$9)	Lower-middle (\$9-\$26)	Upper-middle (\$26-\$66)	Upper (>\$66)	
Ravallion (2010)					
Lower (<\$3)	39.4				16.4
Middle (\$3-\$21)	60.6	80.6			49.8
Upper (>\$21)		19.4	100	100	33.7
Total	100	100	100	100	100
Milanovic & Yitzhaki (2002)					
Lower (<\$20)	100	77.1			65.2
Middle (\$20-\$52)		22.3	78.8		21.9
Upper (>\$52)			21.2	100	12.9
Total	100	100	100	100	100
Kharas (2010)					
Lower (<\$12)	100	28.3			50.4
Middle (\$12-\$172)		71.7	100	87.5	48.5
Upper (>\$172)				12.5	1.1
Total	100	100	100	100	100
Western European					
Lower (<\$26)	100	98.9			71.8
Lower-Middle (\$26-\$78)		1.1	100	34.7	22.4
Upper-Middle (\$78-\$166)				52.8	4.7
Upper (>\$166)				12.5	1.1
Total	100	100	100	100	100

Note: All approaches are updated to 2022 but differ in their boundaries (approximate daily dollar amounts in parentheses). Ravallion's (2010) developing middle class: between the international poverty line for low-income countries and the per capita US official poverty line for a household of four. Milanovic and Yitzhaki's (2002) middle class: between the average incomes of Brazil and Italy. Kharas' (2010) middle class: between Portugal's and Italy's average poverty lines, and twice Luxembourg's median income. The Western middle class: between 75 percent of the median in Portugal and twice that in Luxembourg (the two segments separated by the median of the 125-percent bound in selected countries).

Source: Own construction using the WIID (see data section).

Figure 5. The global middle class with various absolute approaches

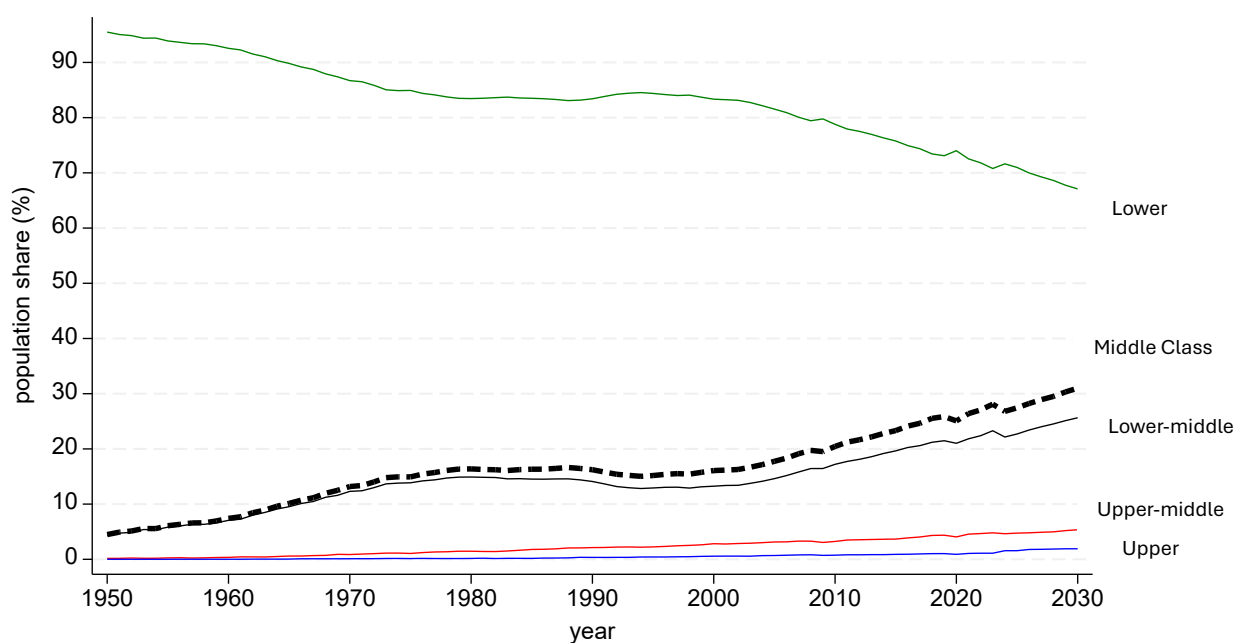


Note: All approaches are anchored to 2022 USD income boundaries. Baseline (2022 optimal boundaries). Ad hoc approaches (see the note in Table 5).

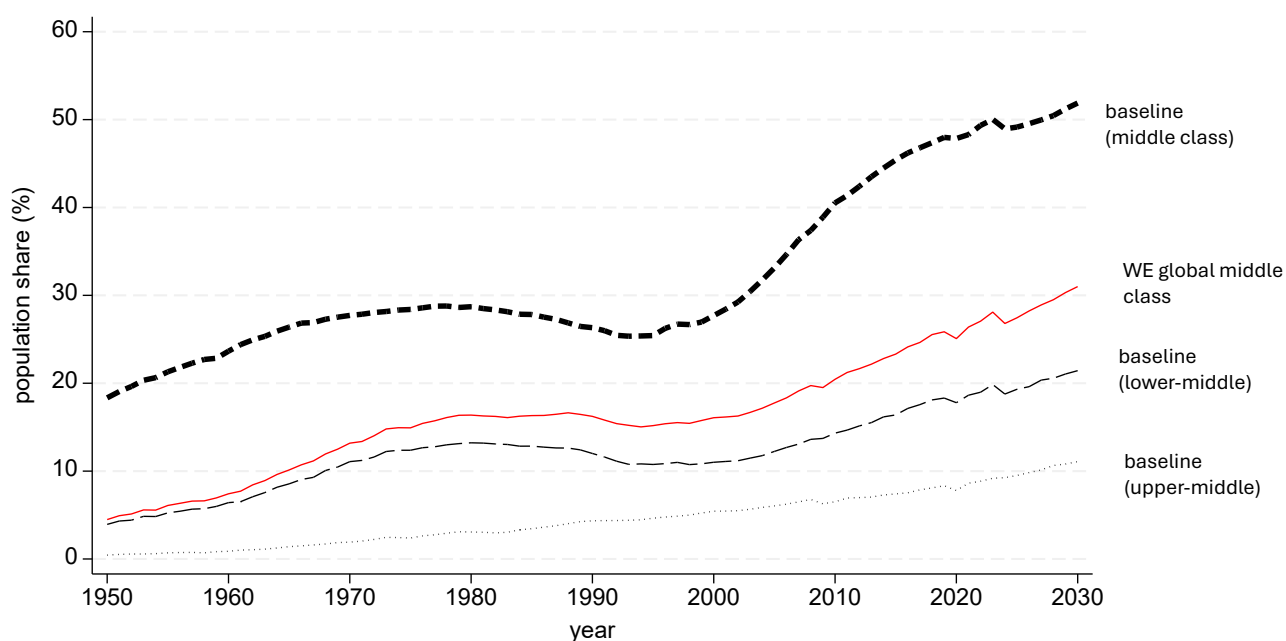
Source: Own construction using the WIID (see data section).

Figure 6. The Western European global middle class (absolute approach)

a) Income classes



b) Comparing the Western European (WE) and baseline global middle classes



Note: All approaches are anchored to 2022 USD income boundaries. Baseline (2022 optimal boundaries). The Western European global middle class: between 75 percent of the median income in Portugal and twice that in Luxembourg.

Source: Own construction using the WIID (see data section).

4.4 The evolution of the global middle class using relative and optimal approaches

Relative approach

The optimal lower-middle class ranged from 77 to 215 percent of the 2022 median, and the upper-middle class ranged from 215 to 555 percent (Table 1). Interestingly, the most common ad hoc interval used to identify the middle class in developed countries, 75-200 percent, roughly corresponds to the optimal global lower-middle class only. This interval may effectively define the national middle class in advanced economies.¹⁹ However, because greater inequality persists in the global distribution, the global upper class must be defined as those who exceed a significantly higher percentage of the median.

We can assess the evolution of the middle class by anchoring the boundaries to this percentage range around the median, as in typical analyses of developed economies, rather than to dollar amounts. This *relative* approach effectively neutralizes the impact of rapid uniform growth (i.e., in the median income) on the middle class. It emphasizes convergence toward the median, only driven by changes in inequality both between and within countries.

Using this relative approach, the global middle class declined from 40 to 32 percent between 1950 and 1980, primarily driven by the upper-middle class (Figure 7 and Table A2). During this period, as postwar progress in developed countries intensified, the share of the upper class expanded from 16 to 23 percent, whereas the lower class remained stagnant. However, the middle class increased by 17 percentage points between 1980 and 2022, primarily driven by the lower-middle class (11 percentage points), while the upper class declined significantly (from 23 to 9 percent). This relative middle class is projected to remain stable over the coming years unless there are significant changes in the distribution within countries.

Optimal approach

The optimal global middle class shows greater stability year over year because the boundaries defining the income classes are fully flexible and adapt to changes in the distribution, raising the upper bound when the rich move away from the center. Thus, we neutralize the effects of a growing median and changes in inequality over time on the interval that defines the middle classes. In particular, the boundaries defining the optimal upper class increased between 1950 and 1980 (from 9 to 14

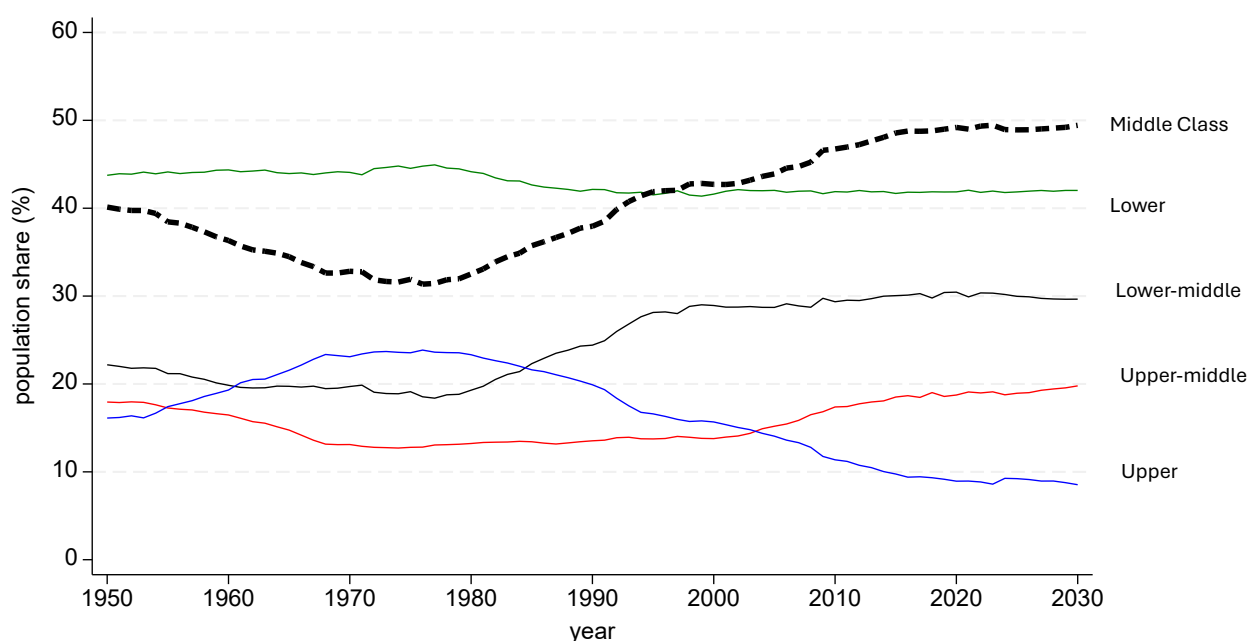
¹⁹ On average, the optimal national middle class boundaries for high-income countries in 2022 are 74/125/219 percent of the corresponding national median.

times the median) and subsequently declined, mirroring global inequality, reaching 5.6 by 2022 (Table A1).

The size of the optimal middle class thus declined by nearly 5 percentage points between 1950 and 1980 and increased by 9 percentage points between 1980 and 2022 (Figure 8 and Table A2). These changes mainly affected the lower-middle class, which has also become an increasingly cohesive group, with within-class inequality dropping from 26 percent around 1980 to 17 percent in 2022. Notably, the lower-middle class was almost indistinguishable from the lower class before the 2000s (Figure A5), suggesting it was not part of the ‘middle class’ until it later emerged as a distinct class. Also, the upper-middle class has become more homogenous since around 2000 (from 20 to 15 percent). The lower class declined between 1950 and 2000 and then increased thereafter, whereas the upper class accounts for about 8-10 percent of the population every year, with intra-class inequality around 25 percent.²⁰

Figure 9 summarizes the trend in the global middle class with all three approaches.

Figure 7. The global middle class (relative approach)

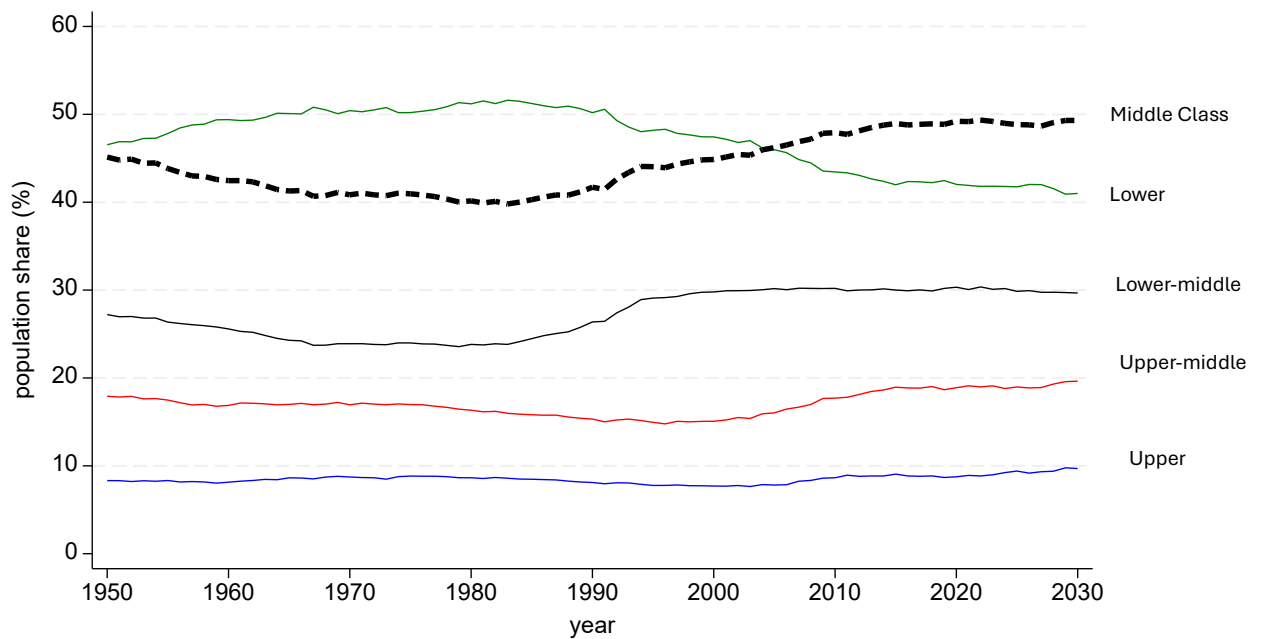


Note: Income classes are defined using the 2022 optimal boundaries (anchored as the same percentage of the contemporary median income). 2023-2030 is a projection. The middle class (total) comprises the lower- and upper-middle classes.

Source: Own construction using the WIID (see data section).

²⁰ Figure A4 shows the trend in polarization between classes.

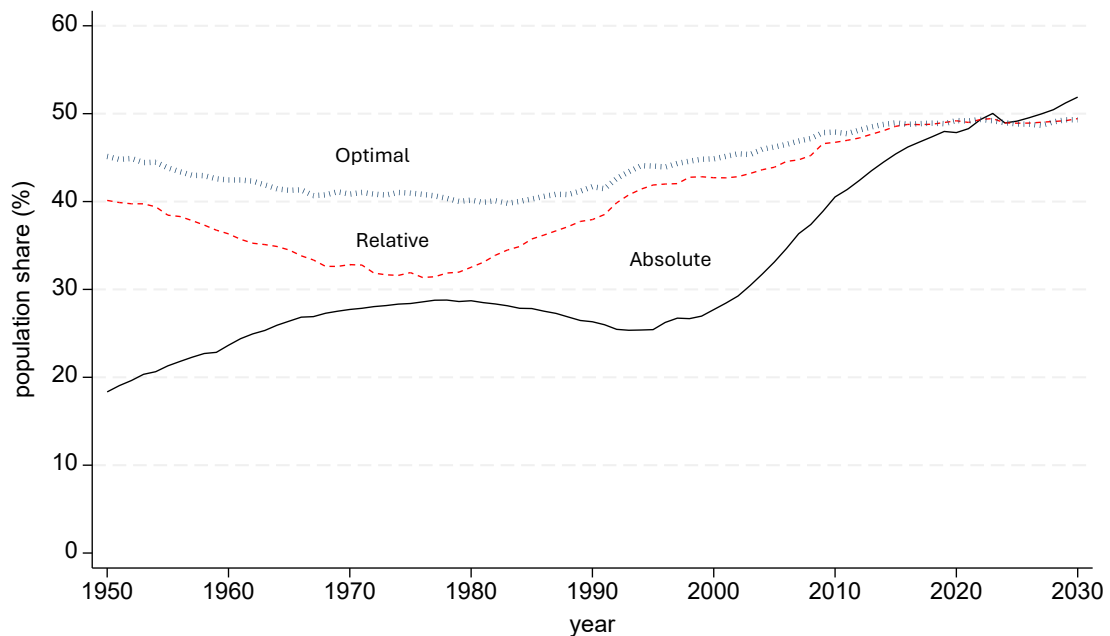
Figure 8. The global middle class (optimal approach)



Note: Income classes are defined using contemporary optimal boundaries. 2023-2030 is a projection. The middle class (total) comprises the lower- and upper-middle classes.

Source: Own construction using the WIID (see data section).

Figure 9. The global middle class: absolute, relative, and optimal approaches



Note: The three approaches use the same optimal boundaries in 2022 but differ in pre- and post-trends. Income classes are defined using contemporary optimal boundaries (optimal), and anchored as a percentage of the median (relative) or in constant dollars (absolute). 2023-2030 is a projection. The middle class (total) comprises the lower- and upper-middle classes.

Source: Own construction using the WIID (see data section).⁵

5. Sensitivity analysis: the global income and wealth middle class based on DINA

The trends in the size of the global middle class using DINA-based series (i.e., WIL-WID pretax national income and net wealth per adult) and survey-based WIID (net income per person) in Figure 10 show strong similarities in level and trend over the overlapping periods, despite the generally higher concentration of income or wealth at the upper tail of country distributions in the DINA cases.

The global middle class, based on pretax national income (between approximately 9,000 and 89,000 dollars annually), also represents around half the world's population, with an ascending trend in the past decades, from 34 percent in 2000 to 48 percent in 2022. This, however, results from a slightly larger lower class (46 percent) and a smaller upper class (5.5 percent) than with the WIID net income series. Also, the trend indicates that the stagnation of the middle class in the 1980s and 1990s persisted longer than it did in the WIID, and was initially larger (and therefore the subsequent increase was smaller).²¹

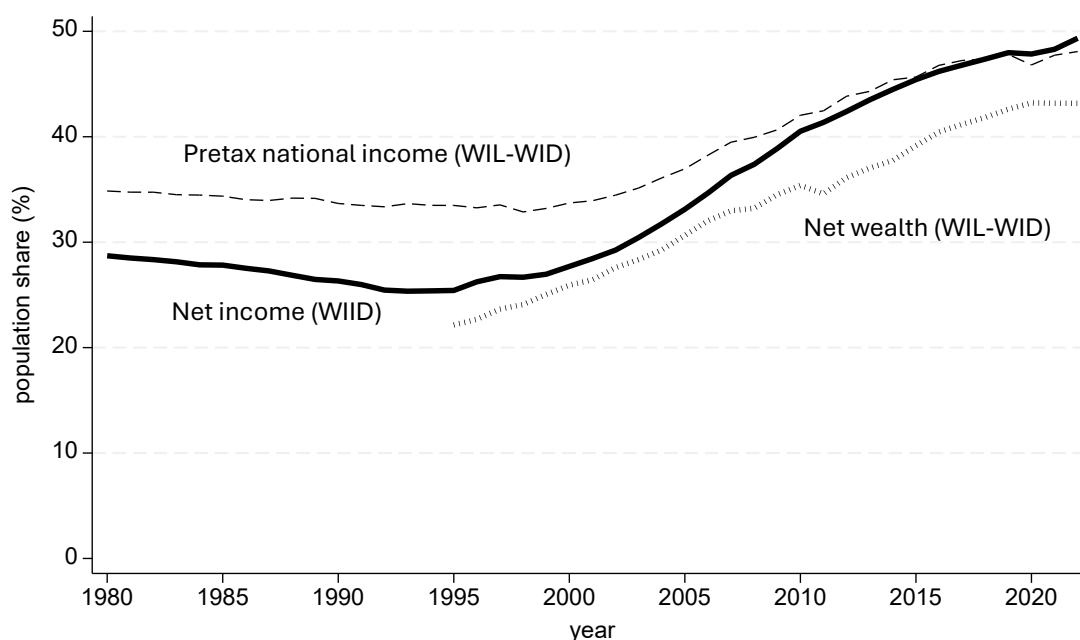
The global wealth middle class (adults with net wealth between approximately 27,000 and 664,000 dollars) also shows an increasing share of the global population, almost doubling from 23 percent in 1995 to 45 percent in 2022. The wealth middle class is smaller than the income middle class, due to the larger lower class (52 percent) and the smaller upper class (less than 4 percent).

Table 6 shows similar patterns in composition by area and their trends since 2000 across the three series. The main difference is the lower proportion of Indians and Latin Americans and the larger proportion of people from developed countries when using the DINA series. Table 7 compares the driving factors and shows strong similarities between the two income series in explaining the decline of the middle class in the 1980s-1990s and its substantial expansion in the 2000s, primarily driven by convergence in per capita income across countries. Unlike the income case, a uniform increase in net wealth across countries appears to explain this expansion better than asymmetric growth.

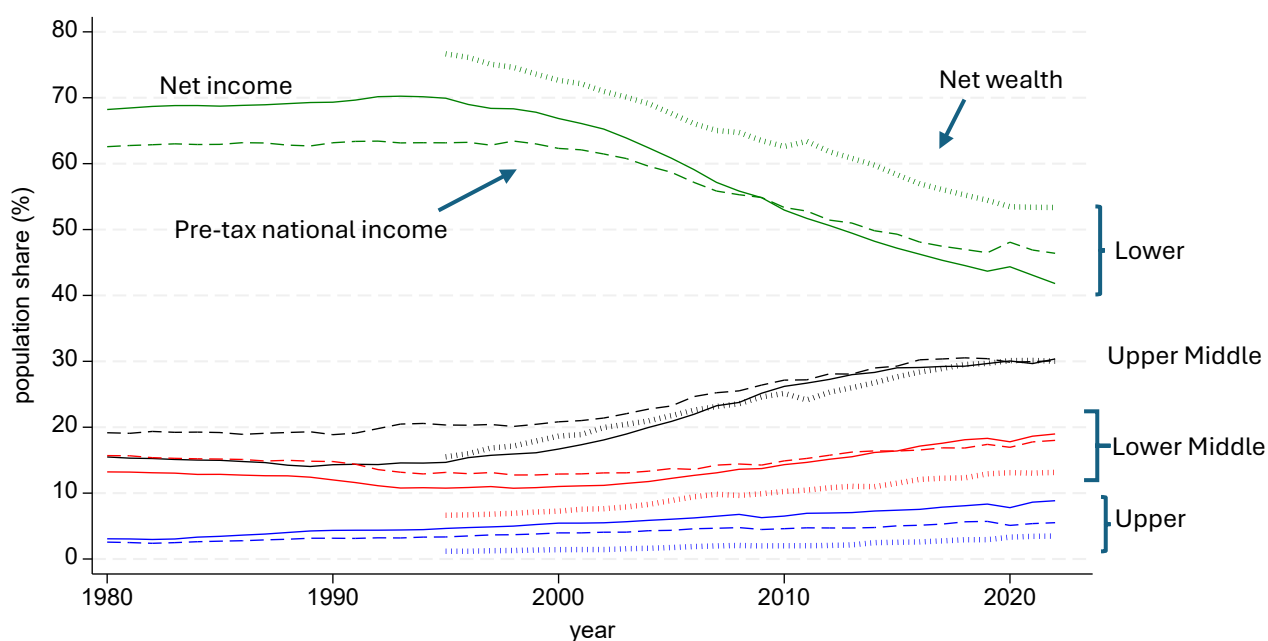
²¹ This is likely driven by the discrepancies in China's initial income level and its evolution from various sources (World Development Indicators, Madison project, Penn World Tables), as discussed in Gradín (2024), even when using the same macromagnitude (e.g., GDP), rather than the use of a different income concept or the correction of top incomes.

Figure 10. The global middle class using WIID (net income) and WIL-WID (pre-tax income and net wealth): absolute approach

a. The global middle class (total)



b. All classes



Note: Income classes are defined using the 2022 optimal boundaries (anchored in constant international dollars) in the corresponding dataset. The middle class (total) comprises the lower-middle and upper-middle.

Source: Own construction using the WIID and WIL-WID (see data section).

Table 6. Composition of the optimal global middle class using various datasets (absolute approach)

Period	Series	Developed	China	India	LAC	SSA	Other	Total
2000	Net income (WIID)	31.2	8.9	4.9	12.5	3.9	38.4	100
	Pre-tax national income (WIL-WID)	35.6	12.4	4.9	10.4	3.2	33.5	100
	Net wealth (WIL-WID)	35.3	14.5	7.9	8.3	2.5	31.5	100
2022	Net income (WIID)	12.0	27.2	14.1	9.2	5.1	32.4	100
	Pre-tax national income (WIL-WID)	19.4	27.3	8.0	8.5	4.8	32.0	100
	Net wealth (WIL-WID)	17.0	28.3	12.9	6.5	4.2	31.1	100

Note: Income classes are defined using optimal boundaries in the corresponding dataset. The middle class (total) comprises the lower- and upper-middle classes. Developed countries: Sixteen Western European countries, the US, Canada, New Zealand, Australia, and Japan. LAC = Latin America and the Caribbean; SSA = Sub-Saharan Africa.

Source: Own construction using the WIID and WIL-WID (see data section).

Table 7. Comparing the contribution to changes in the global middle class using various datasets (absolute approach)

Period	Series	Factor contribution				Total
		Population	Global mean	Country relative mean	Within-country distribution	
1980-2000	Net income (WIID)	-0.8	1.3	3.4	-4.9	-1.0
	Pre-tax national income (WIL-WID)	-2.0	1.3	4.2	-4.6	-1.1
2000-2022	Net income (WIID)	-0.3	8.1	17.3	-3.4	21.6
	Pre-tax national income (WIL-WID)	-1.1	5.3	16.0	-5.8	14.4
	Net wealth (WIL-WID)	-0.9	12.9	10.0	-4.4	17.6

Note: Estimates reflect the contributions to the change in the global middle-class share by source (Shapley decomposition, see the methods section). The total indicates the percentage-point change in the middle class over the corresponding period. The middle class comprises the lower- and upper-middle classes and is defined using the 2022 optimal boundaries (anchored in constant international dollars) in the corresponding dataset.

Source: Own construction using the WIID and WIL-WID (see data section).

6. Concluding remarks

A rising global middle class is one of the most striking distributional changes the world has witnessed in the last two decades, having overcome the decline of the 1980s and 1990s and outperforming the postwar period thanks to its higher impact in the developing world. This trend has the potential to yield positive spillovers across many areas, from economic growth to social cohesion and political stability. This paper has contributed to conceptualizing a global middle class by exploring various approaches grounded in the existing literature, thereby reducing the extent of arbitrariness that characterized these studies.

Global income classes have been defined endogenously with respect to the baseline income distribution. In sum, the optimal global lower class corresponds to the global poor measured by middle-income countries' standards. The optimal lower-middle class largely corresponds to the developing middle class (not poor in middle-income countries but poor in developed economies). The global upper-

middle class essentially corresponds to the lower-middle class by Western European standards. The upper class comprises the upper-middle class by Western European standards, plus the top 1 percent, those who are wealthy even by the most demanding Western European standards.

The expansion of the share of the world population living on current middle-class incomes, particularly over the last two decades, was driven by economic growth, fueled by faster growth in China, India, and other emerging economies. Changes in income distribution within countries have offset this expansion by a cumulative 8 percentage points since 1980. Within-country inequality grew in the 1980s and 1990s, contributing directly to the decline of the middle class during that period. Since 2000, within-country inequality has been more stable overall—growing in the most populous countries but declining in others—yet it has continued to slow the expansion of the middle class. Changes in population composition across countries have had no effect on the size of the middle class over the last four decades, whereas this compositional effect substantially reduced middle-class expansion in the postwar period.

In the coming years, China's share of the global middle class will remain stable, with approximately 75 percent of the population, although a larger share is in the upper tier. A significant portion of the 2.6 percentage-point expansion of the middle class between 2022 and 2030 will stem from India's higher participation, which is expected to increase from 39 percent to 53 percent of its population.

This paper has also provided support for using ad hoc middle strata to proxy the global middle class, particularly the middle 50 percent between the bottom 40 (lower class) and the top 10 (upper class), of whom the top 1 percent are roughly the rich by Western European standards.

This analysis has several limitations that should be acknowledged. First, it keeps some degree of arbitrariness in the number of groups and the inequality measure used for the optimal partition. Furthermore, the results exhibit some uncertainty, particularly for earlier periods, due to the lower quality of the available information. Finally, the analysis is restricted to monetary income or wealth, leaving aside other dimensions widely regarded as constitutive of middle-class status, such as education, occupational quality, economic security, and self-identification. Overcoming these limitations would be desirable, but it remains constrained by the availability of globally comparable data over long time horizons.

These findings carry implications for global development policy. The close correspondence between the optimal middle class and the middle 50 percent of the distribution—between the bottom 40 percent and the top 10 percent—provides empirical support for using these population groups as proxies for global classes in international monitoring frameworks. The results also suggest that sustained

income growth in developing economies remains the most powerful driver of middle-class expansion, reinforcing the case for policies that promote broad-based growth and economic convergence. At the same time, the persistent drag of within-country inequality, which has offset the expansion of the middle class by 13 percentage points since 1980, highlights the importance of complementary redistributive policies, particularly in large emerging economies undergoing rapid structural transformation. More broadly, the dramatic compositional shift documented here—from a middle class dominated by developed countries to one increasingly centered on China, India, and other emerging economies—will reshape the political economy of the global middle class in the decades ahead, with consequences for consumption patterns, domestic demand, and the political constituencies that support inclusive institutions.

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APPENDIX: ADDITIONAL FIGURES AND TABLES

Source for all: Own construction using the WIID

Figure A1. Global mean and median net income per capita

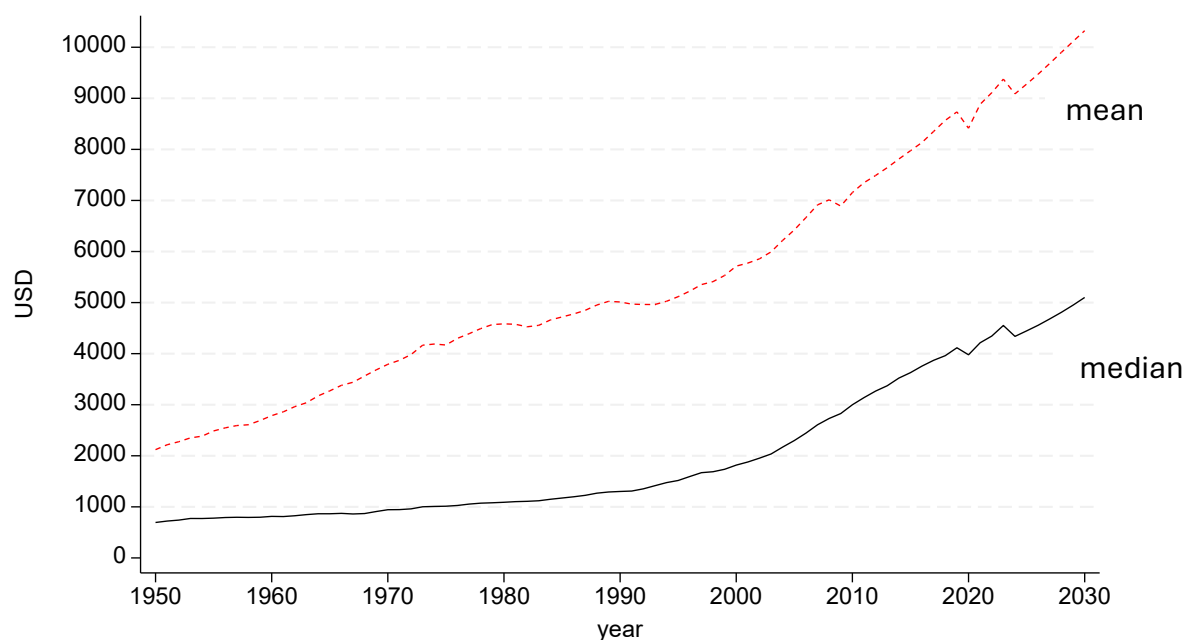
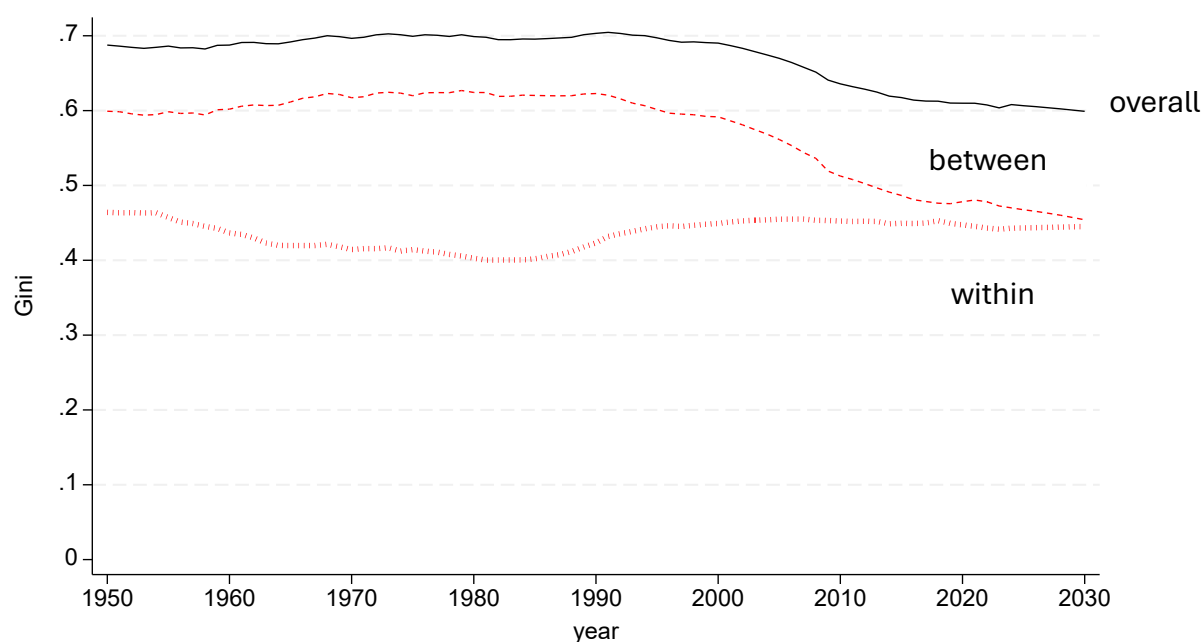
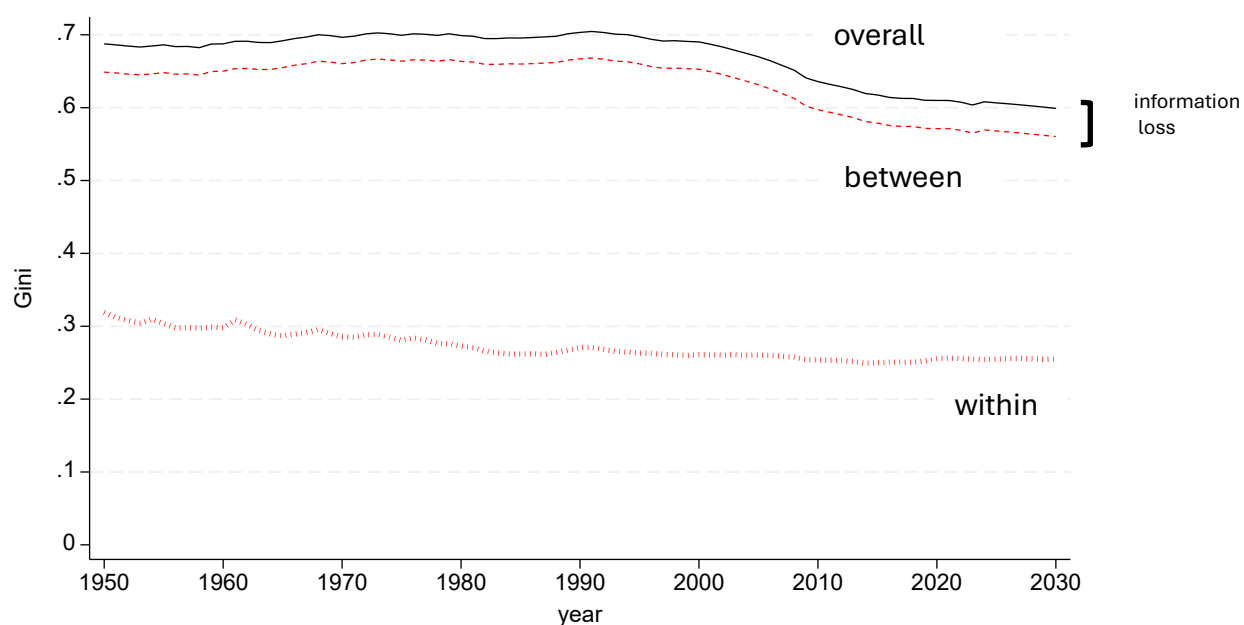


Figure A2. Global net income inequality: Overall, between and within countries



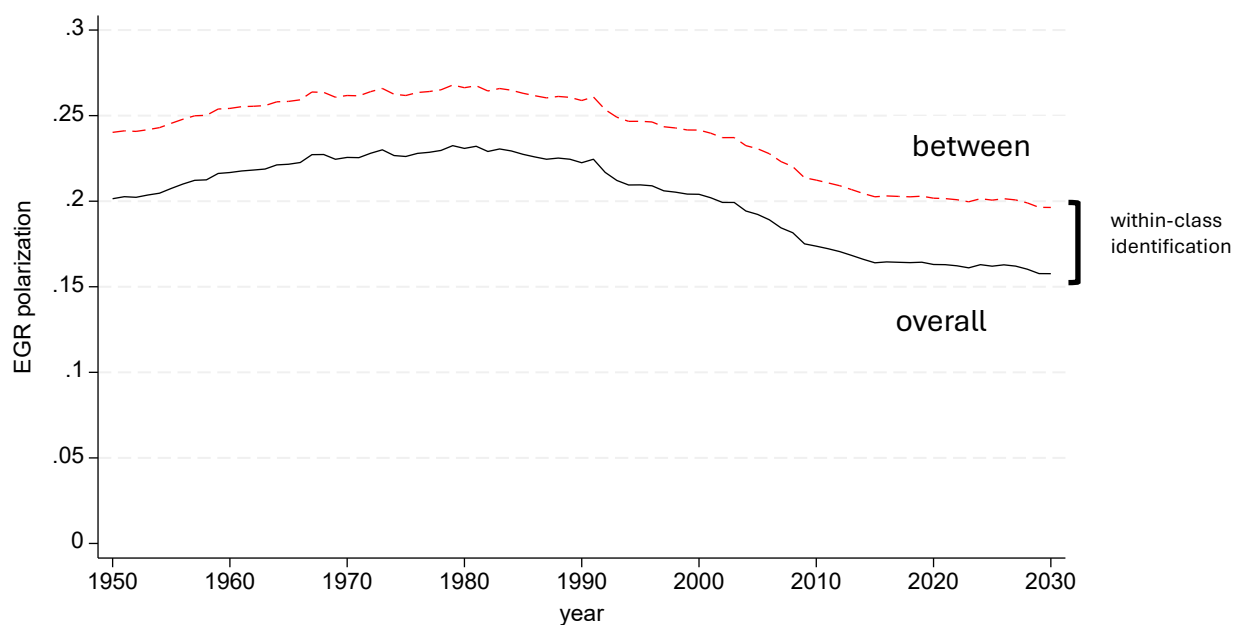
Note: between = inequality in the smoothed distribution (i.e., no inequality within countries); within = inequality in the standardized distribution (i.e., no inequality between countries).

Figure A3. Global income inequality between and within classes (optimal approach)



Note: between = inequality in the smoothed distribution (i.e., no inequality within classes); within = inequality in the standardized distribution (i.e., no inequality between classes). The difference between ‘overall’ and ‘between-class’ inequality is the information loss associated with the 4-spike simplified distribution.

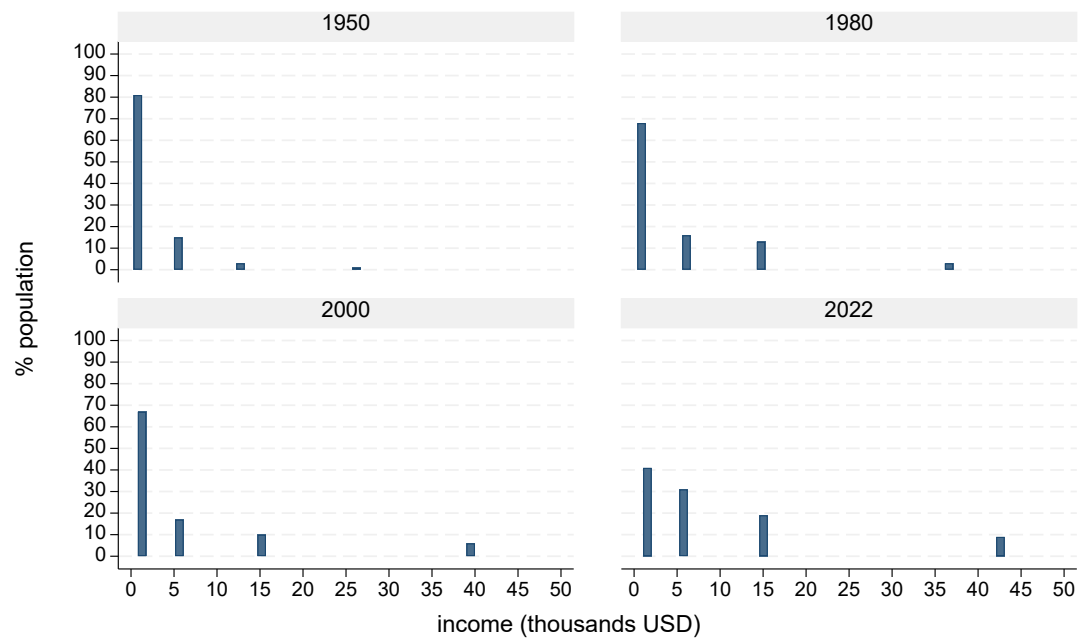
Figure A4. Global income polarization between classes (optimal approach)



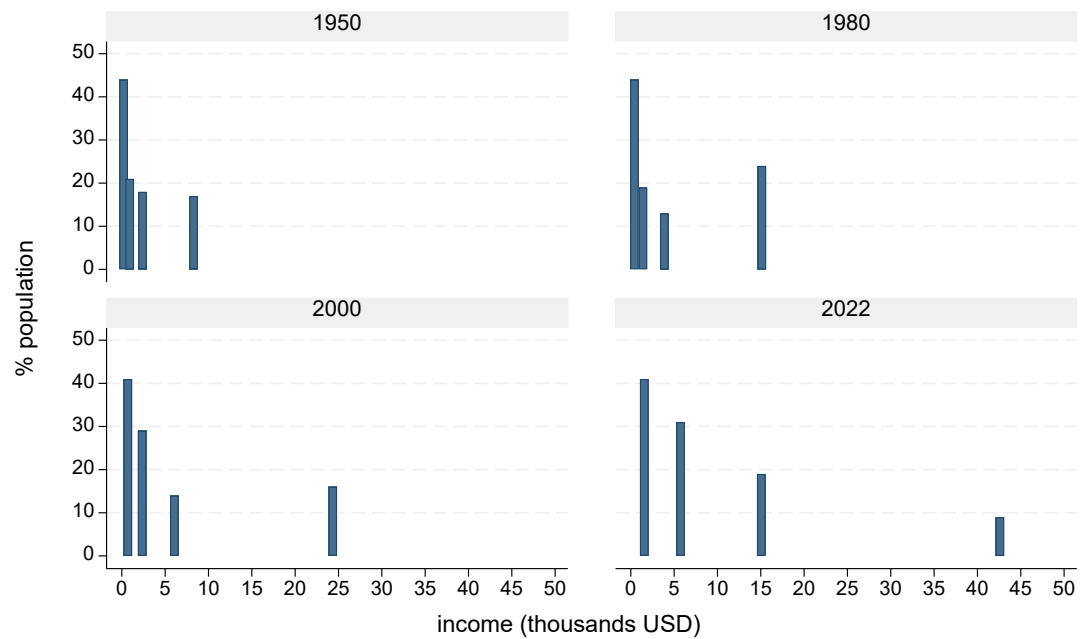
Note: Esteban, Gradín & Ray’s (2007) polarization index ($\alpha = 1.3$). Between = polarization in the smoothed distribution (i.e., no inequality within countries). Overall = polarization between classes minus ‘within-class identification’ (information loss after aggregation using the Gini index; $\beta = 1$).

Figure A5. Simplified distribution: global income classes

a. Absolute approach



b. Relative approach



c. Optimal approach

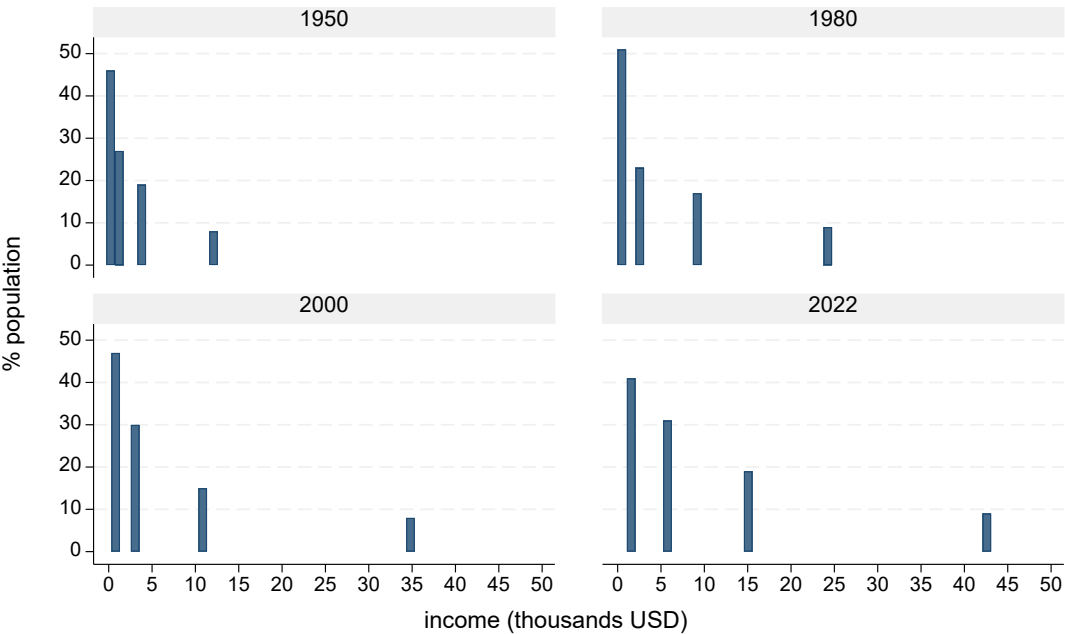
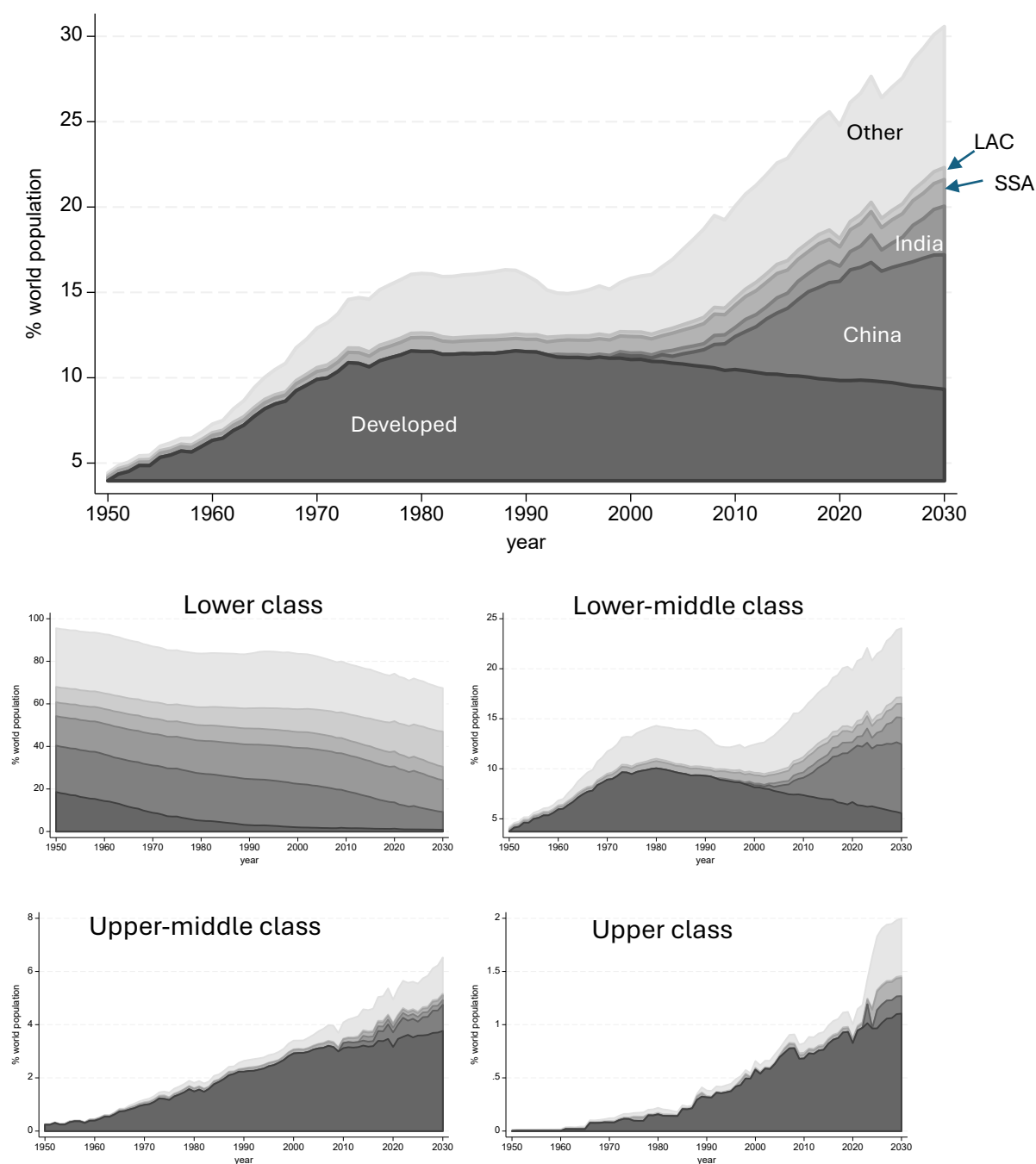


Figure A6. Changing composition in the Western European global middle class by area (absolute approach)



Note: Global income classes are defined using the 2022 WE boundaries (anchored in constant international dollars). 2023-2030 is a projection. The middle class (total) comprises the lower- and upper-middle classes. Developed countries: Sixteen Western European countries, the US, Canada, New Zealand, Australia, and Japan. LAC = Latin America and the Caribbean; SSA = Sub-Saharan Africa.

Table A1. Boundaries by global income class

	Upper bound by income class					
	Lower	% median	Lower-middle	% median	Upper-middle	% median
<i>Absolute</i>	USD		USD		USD	
1950	3,325	479	9,362	1,348	24,092	3,469
1980	3,325	305	9,362	859	24,092	2,210
1990	3,325	255	9,362	719	24,092	1,850
2000	3,325	183	9,362	515	24,092	1,325
2010	3,325	111	9,362	312	24,092	803
2020	3,325	84	9,362	235	24,092	606
2022	3,325	77	9,362	215	24,092	555
2030	3,325	65	9,362	184	24,092	472
<i>Relative</i>						
1950	532	77	1,497	215	3,852	555
1980	834	77	2,350	215	6,047	555
1990	997	77	2,806	215	7,221	555
2000	1,391	77	3,918	215	10,082	555
2010	2,296	77	6,464	215	16,635	555
2020	3,045	77	8,574	215	22,064	555
2022	3,325	77	9,362	215	24,092	555
2030	3,904	77	10,991	215	28,285	555
<i>Optimal</i>						
1950	591	85	2,254	325	6,415	924
1980	1,173	108	5,400	495	14,807	1,358
1990	1,324	102	5,466	420	17,066	1,311
2000	1,669	92	5,736	316	19,418	1,068
2010	2,428	81	7,156	239	20,354	679
2020	3,064	77	8,613	216	22,419	563
2022	3,325	77	9,362	215	24,092	555
2030	3,778	74	10,566	207	26,343	517

Note: Optimal boundaries that produce four income classes are computed globally for selected years, including a projection for 2030. They refer to net income, measured in constant (2022) international dollars.

Table A2. Population shares (%) by global income class

	Lower	Lower- middle	Upper- middle	Upper	Total Middle class
<i>Absolute</i>					
1950	81.2	14.4	3.9	0.4	18.3
1980	68.2	15.5	13.2	3.1	28.7
1990	69.3	14.3	12.0	4.3	26.3
2000	66.9	16.7	11.0	5.4	27.7
2010	53.0	26.2	14.3	6.5	40.5
2020	44.4	30.1	17.8	7.8	47.9
2022	41.8	30.4	19.0	8.9	49.4
2030	37.0	30.5	21.4	11.1	51.9
<i>Relative</i>					
1950	43.7	22.2	17.9	16.1	40.1
1980	44.2	19.3	13.2	23.3	32.5
1990	42.1	24.4	13.5	19.9	37.9
2000	41.6	28.9	13.8	15.7	42.7
2010	41.9	29.4	17.4	11.4	46.8
2020	41.9	30.5	18.7	8.9	49.2
2022	41.8	30.4	19.0	8.9	49.4
2030	42.0	29.7	19.8	8.5	49.5
<i>Optimal</i>					
1950	46.5	27.2	17.9	8.3	45.1
1980	51.2	23.8	16.3	8.6	40.1
1990	50.2	26.4	15.3	8.1	41.7
2000	47.4	29.8	15.1	7.7	44.9
2010	43.4	30.2	17.7	8.6	47.9
2020	42.0	30.3	18.9	8.8	49.2
2022	41.8	30.4	19.0	8.9	49.4
2030	41.0	29.7	19.6	9.7	49.3

Note: All baseline-year (2022) estimates are based on optimal boundaries. For other years, boundaries are either optimal (relative) or anchored to the baseline year, either in dollars (absolute) or as a percentage of the median (semi-relative). Estimates for 2030 are projections assuming constant within-country relative distributions.

Table A3. Income shares (%) by global income class

	Lower	Lower- middle	Upper- middle	Upper	Total Middle Class
<i>Absolute</i>					
1950	30.3	36.9	25.6	7.2	62.5
1980	12.8	20.1	42.3	24.8	62.4
1990	14.0	16.5	36.2	33.3	52.7
2000	14.7	15.9	29.6	39.8	45.5
2010	10.8	20.5	30.2	38.5	50.7
2020	8.1	20.4	31.7	39.7	52.1
2022	7.1	19.2	31.5	42.2	50.7
2030	5.7	17.2	31.5	45.6	48.7
<i>Relative</i>					
1950	4.2	9.6	21.0	65.2	30.6
1980	4.0	5.9	11.3	78.7	17.2
1990	4.3	8.1	12.3	75.4	20.4
2000	5.1	11.9	14.9	68.0	26.8
2010	6.5	16.2	25.2	52.1	41.4
2020	7.2	19.1	30.8	42.9	49.9
2022	7.1	19.2	31.5	42.2	50.7
2030	7.5	19.5	33.8	39.1	53.3
<i>Optimal</i>					
1950	4.9	15.7	32.3	47.1	48.0
1980	5.5	13.7	33.6	47.2	47.3
1990	6.1	14.1	31.4	48.4	45.5
2000	6.7	15.9	29.1	48.3	45.0
2010	7.0	18.0	29.9	45.1	47.9
2020	7.2	19.1	31.3	42.4	50.4
2022	7.1	19.2	31.5	42.2	50.7
2030	7.1	18.9	31.8	42.2	50.7

Note: All baseline-year (2022) estimates are based on optimal boundaries. For other years, boundaries are either optimal (relative) or anchored to the baseline year, either in dollars (absolute) or as a percentage of the median (semi-relative). Estimates for 2030 are projections assuming constant within-country relative distributions.

Table A4. Income means (USD) by global income class.

	Lower	Lower-middle	Upper-middle	Upper	Total Middle class
<i>Absolute</i>					
1950	790	5,436	13,798	34,528	7,232
1980	862	5,955	14,649	37,012	9,959
1990	1,016	5,761	15,109	38,389	10,025
2000	1,257	5,457	15,353	41,743	9,390
2010	1,463	5,598	15,092	42,235	8,953
2020	1,538	5,723	15,010	42,866	9,176
2022	1,553	5,772	15,109	43,389	9,364
2030	1,590	5,790	15,101	44,078	9,636
<i>Relative</i>					
1950	202	918	2,478	8,580	1,616
1980	412	1,414	3,930	15,474	2,437
1990	509	1,659	4,554	18,972	2,691
2000	700	2,357	6,190	24,798	3,594
2010	1,115	3,945	10,373	32,776	6,335
2020	1,441	5,289	13,837	40,344	8,546
2022	1,553	5,772	15,109	43,389	9,364
2030	1,830	6,776	17,580	49,685	11,100
<i>Optimal</i>					
1950	224	1,220	3,823	11,999	2,254
1980	491	2,639	9,426	25,035	5,400
1990	611	2,681	10,261	29,936	5,467
2000	801	3,052	11,042	35,836	5,736
2010	1,160	4,254	12,098	37,304	7,153
2020	1,447	5,306	13,933	40,732	8,617
2022	1,553	5,772	15,109	43,389	9,364
2030	1,780	6,538	16,650	46,899	10,566

Note: All baseline-year (2022) estimates are based on optimal boundaries. For other years, boundaries are either optimal (relative) or anchored to the baseline year, either in dollars (absolute) or as a percentage of the median (semi-relative). Estimates for 2030 are projections assuming constant within-country relative distributions. Estimates are based on net income, measured in constant (2022) international dollars.

Table A5. Within-class inequality (Gini) (optimal boundaries)

	Lower	Lower- middle	Upper- middle	Upper	Within classes (weighted average)	Between classes	Total	Between classes/total (%)
1950	41.3	21.6	16.9	26.3	30.3	64.9	68.8	94.3
1980	31.3	25.5	16.3	23.0	26.8	66.3	69.9	94.8
1990	31.3	23.5	18.3	23.5	26.6	66.7	70.3	94.9
2000	31.0	19.8	20.1	25.7	25.6	65.3	69.0	94.6
2010	32.1	17.6	17.2	25.9	24.6	59.7	63.6	93.9
2020	33.7	16.8	15.7	25.6	24.4	57.1	61.0	93.6
2022	33.8	16.9	15.5	25.2	24.4	56.9	60.8	93.6
2030	34.0	16.7	15.1	25.1	24.3	56.0	59.9	93.5

Note: All estimates are based on optimal boundaries. Estimates for 2030 are projections assuming constant within-country relative distributions. The Gini index is defined as a value between 0 and 100.

Table A6. Composition of global income classes (%) by area (absolute approach)

Year	Area	Global class				Middle Class (total)	World
		Lower	Lower-middle	Upper-middle	Upper		
1950	Developed countries	11.2	66.0	89.4	86.5	71.0	22.5
	China	26.9	0.0	0.0	0.0	0.0	21.8
	India	16.9	1.0	0.0	0.0	0.8	13.9
	Latin America and the Caribbean	7.1	5.1	4.4	2.5	5.0	6.7
	Sub-Saharan Africa	8.4	2.6	2.5	7.6	2.6	7.4
	Other	29.5	25.3	3.8	3.4	20.7	27.7
	All areas	100	100	100	100	100	100
1980	Developed countries	0.8	29.6	69.2	82.3	47.8	16.8
	China	32.5	0.0	0.0	0.0	0.0	22.2
	India	22.1	2.0	0.0	0.0	1.1	15.4
	Latin America and the Caribbean	7.0	16.1	5.1	4.9	11.1	8.1
	Sub-Saharan Africa	11.0	6.0	1.6	2.1	4.0	8.7
	Other	26.6	46.2	24.1	10.6	36.1	28.8
	All areas	100	100	100	100	100	100
1990	Developed countries	0.5	18.7	68.0	84.5	41.2	14.9
	China	30.9	1.5	0.0	0.0	0.8	21.7
	India	22.7	3.4	0.0	0.0	1.8	16.2
	Latin America and the Caribbean	7.5	16.6	4.7	3.6	11.1	8.3
	Sub-Saharan Africa	12.5	5.8	1.7	1.6	3.9	9.7
	Other	25.9	54.1	25.6	10.3	41.1	29.2
	All areas	100	100	100	100	100	100
2000	Developed countries	0.4	10.1	63.2	86.0	31.2	13.6
	China	27.2	13.6	1.9	0.0	8.9	20.6
	India	23.5	7.2	1.6	0.0	4.9	17.1
	Latin America and the Caribbean	7.1	16.1	7.2	3.4	12.5	8.4
	Sub-Saharan Africa	14.7	5.2	2.0	1.0	3.9	11.0
	Other	27.0	47.9	24.1	9.7	38.4	29.2
	All areas	100	100	100	100	100	100
2010	Developed countries	0.5	5.3	43.1	76.2	18.7	12.8
	China	17.9	30.2	12.1	3.0	23.8	19.3
	India	27.4	10.1	3.7	0.0	7.9	17.7
	Latin America and the Caribbean	7.1	12.5	7.6	3.7	10.8	8.4
	Sub-Saharan Africa	20.0	6.3	2.4	1.2	4.9	12.7
	Other	27.1	35.6	31.1	15.9	34.0	29.2
	All areas	100	100	100	100	100	100

2020	Developed countries	0.6	3.7	30.9	66.4	13.8	12.0
	China	9.8	27.2	27.6	9.3	27.3	18.2
	India	26.5	17.2	4.0	2.3	12.3	17.8
	Latin America and the Caribbean	8.5	10.9	5.3	2.7	8.8	8.2
	Sub-Saharan Africa	27.5	6.6	2.3	1.0	5.0	14.7
	Other	27.1	34.4	29.9	18.3	32.7	29.1
	All areas	100	100	100	100	100	100
2022	Developed countries	0.3	3.1	26.4	65.6	12.0	11.9
	China	8.5	25.3	30.1	10.1	27.2	17.9
	India	25.5	19.3	5.6	2.0	14.1	17.8
	Latin America and the Caribbean	8.1	11.3	5.9	2.8	9.2	8.2
	Sub-Saharan Africa	30.1	6.8	2.4	0.9	5.1	15.2
	Other	27.5	34.2	29.6	18.6	32.4	29.1
	All areas	100	100	100	100	100	100
2030	Developed countries	0.2	2.6	20.4	54.6	10.0	11.3
	China	6.6	19.4	29.9	14.8	23.7	16.4
	India	21.6	22.8	11.6	3.2	18.2	17.8
	Latin America and the Caribbean	7.9	11.1	6.0	3.9	9.0	8.0
	Sub-Saharan Africa	37.2	9.0	2.9	1.0	6.5	17.2
	Other	26.4	35.1	29.2	22.5	32.7	29.2
	All areas	100	100	100	100	100	100

Note: Income classes are defined using 2022 optimal boundaries anchored in international constant dollars. The middle class (total) comprises the lower- and upper-middle classes—percentage of the population in each global class residing in each area (columns sum to 100).

Table A7. Composition of areas (%) by global income class (absolute approach)

Year	Area	Global class				Middle class (total)	World
		Lower	Lower-middle	Upper-middle	Upper		
1950	Developed countries	40.5	42.2	15.6	1.7	57.8	100
	China	100.0	0.0	0.0	0.0	0.0	100
	India	99.0	1.0	0.0	0.0	1.0	100
	Latin America and the Caribbean	86.2	11.1	2.6	0.2	13.6	100
	Sub-Saharan Africa	93.1	5.1	1.4	0.5	6.5	100
	Other	86.3	13.1	0.5	0.1	13.7	100
	All areas	81.2	14.4	3.9	0.4	18.3	100
1980	Developed countries	3.3	27.2	54.4	15.0	81.6	100
	China	100	0.0	0.0	0.0	0.0	100
	India	98.0	2.0	0.0	0.0	2.0	100
	Latin America and the Caribbean	58.8	30.9	8.4	1.9	39.3	100
	Sub-Saharan Africa	86.2	10.7	2.4	0.7	13.1	100
	Other	62.9	24.9	11.1	1.1	36.0	100
	All areas	68.2	15.5	13.2	3.1	28.7	100
1990	Developed countries	2.4	18.0	54.9	24.7	72.9	100
	China	99.0	1.0	0.0	0.0	1.0	100
	India	97.0	3.0	0.0	0.0	3.0	100
	Latin America and the Caribbean	62.7	28.6	6.8	1.9	35.4	100
	Sub-Saharan Africa	88.7	8.5	2.1	0.7	10.5	100
	Other	61.5	26.5	10.5	1.5	37.0	100
	All areas	69.3	14.3	12.0	4.3	26.3	100
2000	Developed countries	2.1	12.4	51.1	34.4	63.5	100
	China	88.0	11.0	1.0	0.0	12.0	100
	India	92.0	7.0	1.0	0.0	8.0	100
	Latin America and the Caribbean	56.6	31.8	9.4	2.2	41.2	100
	Sub-Saharan Africa	89.6	7.9	2.0	0.5	9.9	100
	Other	61.8	27.3	9.1	1.8	36.4	100
	All areas	66.9	16.7	11.0	5.4	27.7	100
2010	Developed countries	2.0	10.8	48.3	38.8	59.1	100
	China	49.0	41.0	9.0	1.0	50.0	100
	India	82.0	15.0	3.0	0.0	18.0	100
	Latin America and the Caribbean	45.1	39.1	12.9	2.9	52.0	100
	Sub-Saharan Africa	83.8	12.9	2.7	0.6	15.6	100
	Other	49.2	32.0	15.3	3.6	47.3	100
	All areas	53.0	26.2	14.3	6.5	40.5	100

2020	Developed countries	2.0	9.2	45.7	43.0	54.9	100
	China	24.0	45.0	27.0	4.0	72.0	100
	India	66.0	29.0	4.0	1.0	33.0	100
	Latin America and the Caribbean	45.9	40.1	11.5	2.6	51.6	100
	Sub-Saharan Africa	83.1	13.6	2.8	0.5	16.4	100
	Other	41.3	35.5	18.3	4.9	53.8	100
	All areas	44.4	30.1	17.8	7.8	47.8	100
2022	Developed countries	1.0	7.8	42.2	48.9	50.0	100
	China	20.0	43.0	32.0	5.0	75.0	100
	India	60.0	33.0	6.0	1.0	39.0	100
	Latin America and the Caribbean	41.3	42.0	13.7	3.0	55.6	100
	Sub-Saharan Africa	82.8	13.6	3.0	0.5	16.7	100
	Other	39.4	35.7	19.3	5.7	54.9	100
	All areas	41.8	30.4	19.0	8.9	49.3	100
2030	Developed countries	0.8	7.0	38.7	53.5	45.7	100
	China	15.0	36.0	39.0	10.0	75.0	100
	India	45.0	39.0	14.0	2.0	53.0	100
	Latin America and the Caribbean	36.2	42.3	16.1	5.4	58.3	100
	Sub-Saharan Africa	79.9	15.9	3.6	0.6	19.4	100
	Other	33.5	36.6	21.4	8.5	58.0	100
	All areas	37.0	30.5	21.4	11.1	51.9	100

Note: Income classes are defined using 2022 optimal boundaries in constant international dollars. The middle class (total) comprises the lower- and upper-middle classes. Percentage of the population in each area belonging to each class (rows sum to 100).

Source: Own construction using the WIID (see data section).

Table A8. Composition of global income classes (%) by area (absolute approach, Western European middle class)

Year	Area	Global class				Middle class (total)	World
		Lower	Lower-middle	Upper-middle	Upper		
1950	Developed	19.4	89.4	89.9	0.0	89.5	22.5
	China	22.8	0.0	0.0	0.0	0.0	21.8
	India	14.5	0.0	0.0	0.0	0.0	13.9
	LAC	6.8	4.2	3.5	0.3	4.1	6.7
	SSA	7.6	2.8	3.2	63.1	2.8	7.4
	Rest	28.9	3.6	3.5	36.7	3.6	27.7
	World	100	100	100	100	100	100
1980	Developed	6.1	70.3	82.1	72.1	71.6	16.8
	China	26.5	0.0	0.0	0.0	0.0	22.2
	India	18.4	0.0	0.0	0.0	0.0	15.4
	LAC	8.7	5.1	5.5	1.7	5.1	8.1
	SSA	10.1	1.6	1.5	4.9	1.6	8.7
	Rest	30.2	23.0	10.8	21.4	21.7	28.8
	World	100	100	100	100	100	100
1990	Developed	3.6	69.5	84.6	83.3	72.0	14.9
	China	25.9	0.0	0.0	0.0	0.0	21.7
	India	19.4	0.0	0.0	0.0	0.0	16.2
	LAC	9.0	4.7	3.8	0.3	4.5	8.3
	SSA	11.3	1.7	1.1	3.3	1.6	9.7
	Rest	30.7	24.1	10.6	13.1	21.9	29.2
	World	100	100	100	100	100	100
2000	Developed	2.4	65.6	85.9	87.5	69.9	13.6
	China	24.5	1.7	0.0	0.0	1.3	20.6
	India	20.3	1.4	0.0	0.0	1.1	17.1
	LAC	8.9	6.8	3.8	1.6	6.1	8.4
	SSA	12.8	2.0	0.7	1.3	1.7	11.0
	Rest	31.2	22.6	9.6	9.6	19.8	29.2
	World	100	100	100	100	100	100
2010	Developed	2.1	46.1	76.4	82.7	52.3	12.8
	China	22.0	10.9	4.7	0.0	9.6	19.3
	India	21.7	3.3	0.0	0.0	2.6	17.7
	LAC	8.9	7.3	3.4	4.1	6.5	8.4
	SSA	15.5	2.4	0.6	2.4	2.0	12.7
	Rest	29.9	30.0	14.9	10.8	26.9	29.2
	World	100	100	100	100	100	100
2020	Developed	1.8	33.7	64.0	82.4	39.7	12.0
	China	16.6	26.6	11.0	0.0	23.5	18.2
	India	22.8	3.6	3.6	0.0	3.6	17.8
	LAC	9.5	5.0	2.6	3.2	4.5	8.2
	SSA	19.1	2.2	0.9	1.3	1.9	14.7
	Rest	30.1	29.0	17.9	13.1	26.8	29.1
	World	100	100	100	100	100	100

2022	Developed	1.4	30.0	62.8	81.9	37.0	11.9
	China	15.6	28.0	12.6	0.0	24.8	17.9
	India	22.9	5.1	3.1	0.0	4.7	17.8
	LAC	9.4	5.7	2.3	3.3	5.0	8.2
	SSA	20.3	2.2	0.9	1.2	2.0	15.2
	Rest	30.3	28.9	18.2	13.6	26.7	29.1
	World	100	100	100	100	100	100
2030	Developed	1.3	23.1	57.7	55.2	30.5	11.3
	China	12.4	28.7	15.1	8.2	25.8	16.4
	India	22.2	11.1	2.7	0.0	9.3	17.8
	LAC	9.3	5.7	2.7	8.6	5.1	8.0
	SSA	24.5	2.7	0.9	0.8	2.3	17.2
	Rest	30.3	28.7	20.9	27.1	27.0	29.2
	World	100	100	100	100	100	100

Note: Income classes are defined using 2022 Western European boundaries anchored in international constant dollars. The middle class (total) comprises the lower- and upper-middle classes—percentage of the population in each global class residing in each area (columns sum to 100).

Table A9. Composition of areas (%) by global income class (absolute approach, Western European middle class)

Year	Area	Global class				Total
		Lower	Lower-middle	Upper-middle		
1950	Developed	82.4	16.6	1.1	0.0	100
	China	100.0	0.0	0.0	0.0	100
	India	100.0	0.0	0.0	0.0	100
	LAC	97.3	2.6	0.1	0.0	100
	SSA	98.2	1.6	0.1	0.1	100
	Rest	99.4	0.5	0.0	0.0	100
	World	95.6	4.2	0.3	0.0	100
1980	Developed	30.5	59.8	8.8	0.9	100
	China	100.0	0.0	0.0	0.0	100
	India	100.0	0.0	0.0	0.0	100
	LAC	89.8	9.0	1.2	0.0	100
	SSA	96.9	2.7	0.3	0.1	100
	Rest	87.7	11.4	0.7	0.2	100
	World	83.7	14.3	1.8	0.2	100
1990	Developed	20.4	62.5	15.0	2.1	100
	China	100.0	0.0	0.0	0.0	100
	India	100.0	0.0	0.0	0.0	100
	LAC	91.2	7.5	1.2	0.0	100
	SSA	97.2	2.4	0.3	0.1	100
	Rest	87.9	11.0	1.0	0.2	100
	World	83.6	13.4	2.6	0.4	100
2000	Developed	14.5	59.8	21.4	4.2	100
	China	99.0	1.0	0.0	0.0	100
	India	99.0	1.0	0.0	0.0	100
	LAC	88.3	10.0	1.5	0.1	100
	SSA	97.5	2.2	0.2	0.1	100
	Rest	89.0	9.6	1.1	0.2	100
	World	83.5	12.4	3.4	0.7	100
2010	Developed	12.7	57.6	24.4	5.3	100
	China	90.0	9.0	1.0	0.0	100
	India	97.0	3.0	0.0	0.0	100
	LAC	84.1	13.9	1.6	0.4	100
	SSA	96.6	3.0	0.2	0.2	100
	Rest	81.2	16.4	2.1	0.3	100
	World	79.1	16.0	4.1	0.8	100
2020	Developed	11.3	55.5	26.3	6.9	100
	China	68.0	29.0	3.0	0.0	100
	India	95.0	4.0	1.0	0.0	100
	LAC	85.9	12.2	1.6	0.4	100
	SSA	96.6	3.0	0.3	0.1	100
	Rest	76.8	19.7	3.0	0.5	100
	World	74.2	19.8	4.9	1.0	100
2022	Developed	8.6	53.3	29.9	8.2	100

	China	63.0	33.0	4.0	0.0	100
	India	93.0	6.0	1.0	0.0	100
	LAC	83.3	14.6	1.6	0.5	100
	SSA	96.5	3.1	0.3	0.1	100
	Rest	75.0	20.9	3.5	0.6	100
	World	72.1	21.0	5.6	1.2	100
2030	Developed	7.8	49.2	33.3	9.8	100
	China	51.0	42.0	6.0	1.0	100
	India	84.0	15.0	1.0	0.0	100
	LAC	78.4	17.2	2.2	2.1	100
	SSA	95.8	3.7	0.4	0.1	100
	Rest	69.9	23.6	4.7	1.9	100
	World	67.4	24.1	6.5	2.0	100

Note: Income classes are defined using 2022 Western European boundaries in constant international dollars. The middle class (total) comprises the lower- and upper-middle classes. Percentage of the population in each area belonging to each class (rows sum to 100).

Source: Own construction using the WIID (see data section).