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Policy Research Working Paper 11301

Striving for Economic Security

Emerging Middle Class in the East Asia and Pacific Region

Kwabena Krah
Veronica Sonia Montalva Talledo
Sailesh Tiwari

WORLD BANK GROUP
Poverty and Equity Global Department
February 2026

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Abstract

The East Asia and Pacific region has made remarkable progress on poverty reduction, transforming the economic lives of hundreds of millions of people. With growth prospects dimmer in a world that is increasingly polarized, the question of what it will take to convert the success in poverty reduction into a similar success in growing and nurturing the emergent middle class has become critical for the region. Providing an updated definition of middle class that is grounded in the concept of economic security, this paper presents new evidence on the size, evolution, and characteristics of the region's middle class. The results show that around a third of the region's population belongs to the middle class, and more than half still live in relative poverty and vulnerability. From a global perspective, the region stands out for the fastest rate of expansion of the middle class, but China accounts for a large share of this progress. Excluding China, middle-class growth in the rest of the region has stalled in recent years. A larger share of the region's poor today live in urban areas than a decade earlier (47 percent versus 34 percent), suggesting marked progress on rural convergence. Still, urban areas continue to provide better prospects for upward mobility into the middle class (44 percent) than rural areas (22 percent). Jobs have been pivotal in driving middle-class growth in the region and future mobility prospects will continue to depend on countries being able to generate more and better-quality jobs. Improving quality of services and closing the remaining gaps across economic classes will be crucial for building human capital and ensuring upward mobility for all. This will also necessitate and reinforce the emerging middle class's commitment to the social contract, including greater tax contributions.

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Produced by the Research Support Team

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Kwabena Krah[*]
Veronica Sonia Montalva Talledo
Sailesh Tiwari

Authorized for distribution by Benu Bidani, Practice Manager, Poverty and Equity Global Department, World Bank Group

Keywords: Economic mobility; middle class; jobs

[*] Several helpful comments and suggestions received from Aaditya Mattoo, Ambar Narayan, Benu Bidani, Lidia Ceriani, Luis-Felipe Lopez Calva, Matthew Wai-Poi, Omar Arias, Rinku Murgai, and Sergio Daniel Olivieri are gratefully acknowledged. All remaining errors and omissions are our own.
This paper reflects the views of the authors and does not reflect the official views of the World Bank, its Executive Directors, or the countries they represent.

1 Introduction

Developing East Asia (EAP hereon) has made remarkable progress on poverty reduction.[1] Fueled by rapid economic growth sustained over several decades, the region has lifted hundreds of millions out of poverty. In 1990, over half of the world's 1.9 billion extreme poor – approximately 987.1 million people – lived in EAP, representing about 61.3 percent of the regional population. By 2018, this number had fallen dramatically to 30 million people, representing just 1.5 percent of the region's population. China led the poverty decline in the region, and globally. Over the past 40 years, China alone lifted 800 million people out of extreme poverty, accounting for about three-quarters of global poverty reduction since 1980 (World Bank and Development Research Center of the State Council, 2022). Besides China, Viet Nam, Indonesia, Thailand, and Malaysia also made impressive strides in poverty reduction. The region's notable decline in poverty was mainly attributed to robust economic growth, fueled by the region's success in capitalizing on the export of labor-intensive manufacturing goods in a globalizing world, while generally upholding a sound macroeconomic environment.

A key question that the region faces now relates to the durability of this progress. How sustainable is the progress on poverty reduction? Are those who successfully exited poverty in the last few decades likely to continue enjoying similar growth in living standards and join the ranks of EAP's emerging middle class? Or do they face a risk of sliding back? These questions are relevant in the present juncture for at least four reasons. First, while the region is still growing healthily, especially considering setbacks related to the pandemic, its growth performance is less impressive compared to its own past. Apart from Indonesia, GDP growth is yet to recover to pre-pandemic levels in most countries in the region while rising geopolitical tensions and the attendant rise in protectionism cast a long shadow on future growth prospects (World Bank, 2024). Second, inequality remains high. The Gini index of most major EAP economies, except the Lao PDR, has been lower in recent years than it was in the early 2010s. However, inequality in the more populous countries such as China and Indonesia is still higher than in the 1990s. Moreover, average inequality in the EAP region is higher than in other developing regions such as South Asia, Europe and Central Asia, and the Middle East and North Africa and also higher than average inequality in high-income countries.

Third, the EAP region is aging rapidly, and this presents challenges to both economic growth and social welfare systems. The proportion of the EAP population aged 65 and older was approximately 11 percent in 2020 and is projected to almost triple by 2060.[2] This rapid population aging could significantly impact economic growth through the decline in the share of the working-age population while at the same time straining fiscal balances, including rising pension costs and health care spending (World Bank, 2023). Fourth, the region is highly vulnerable to climate change. EAP is second only to South Asia on the share of its population exposed to climate related hazards (68 percent) (World Bank, 2024b). For instance, Indonesia experienced more than 300 natural disasters between 1990-2021, including 200 flooding events affecting more than 11 million people (World Bank 2023b). Pacific Island countries, such as Kiribati and Tuvalu, face existential threats from rising sea levels, with large portions of their populations already being displaced by climate-induced disasters. The frequent occurrence of floods, droughts, and storms in the EAP region is likely to hinder economic growth and exacerbate inequalities by disproportionately affecting the more vulnerable populations.

[1] The EAP region comprises Fiji, Cambodia, China, Kiribati, Indonesia, the Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Philippines, Samoa, Thailand, Timor-Leste, Tonga, Vanuatu, and Viet Nam.
[2] According to the latest projections in the International Database of the U.S. Census Bureau.

Against this backdrop, this paper provides an updated picture on the size, composition and profile of the middle-class population across countries in the EAP region. It uses a definition of the middle-class that is rooted in the idea of economic security and operationalized by identifying households that are vulnerable to the risk of falling into poverty. An upper threshold is also derived to distinguish the economically secure middle class from the richer, more affluent group at the top of the income distribution. A similar approach was used in a flagship report for the region which discussed upward economic mobility and the challenges to inclusive growth in the region (World Bank, 2018). This paper provides an updated definition of middle class for the region by using more recent household survey data of a much larger sample of EAP countries to provide an overview of how the region fared in fostering economic mobility and increasing economic security during the most recent decade that includes the COVID-19 pandemic.

To assess the distribution of economic security in a way that is both regionally appropriate and analytically robust, we adopt a vulnerability-based approach, grounded in poverty thresholds that reflect the region's level of development and aspirations. The data underpinning the main analysis come from nationally representative household surveys from twenty EAP countries. The methodology follows the approach proposed in Chaudhuri (2003) to estimate the likelihood of falling into poverty using consumption variation across households within a single cross-section. This is combined with López-Calva and Ortiz-Juárez's (2014) approach to derive the income or consumption levels associated with a low probability of falling below a given poverty line. The region is highly heterogeneous in terms of where countries are in their levels of development. Most of the region's population lives in upper-middle-income countries (UMICs), but most countries in the region are classified as lower-middle-income countries (LMICs). In order to provide contextually relevant standards for countries at different stages of development, we rely on the LMIC and UMIC poverty lines introduced by the World Bank in 2018 (World Bank 2018b).

The motivation for studying the middle class is two-fold. First, the size of the middle class and its evolution over time is in and of itself an important metric of sustainable improvements in the living standards of the population. Second, this group is arguably catalytic to economic development through various channels. The middle class is often also the consuming class and as such a large and growing middle class can enlarge domestic markets and stimulate demand, which has been argued to be crucial for fostering greater industrialization (Murphy, Shleifer and Vishny, 1989) as well as promoting innovation (Matsuyama, 2002; Foellmi and Zweimueller, 2006). Moreover, economic security associated with being in the middle class can lead to greater investments in physical and human capital (Banerjee and Duflo, 2008; Banerjee and Newman, 1993) which can help make growth more inclusive in the long run.

Furthermore, a strong and economically secure middle class can also drive better governance and progressive and inclusive social policies. Those in the middle class often demand greater government accountability, improving institutions and service delivery for all. Birdsall (2010) argues they are less vulnerable to patronage than lower-income groups reliant on welfare and less prone to rent-seeking than elites. Evidence supports this: Loyaza, Rigoloni, and Loorente (2012) link middle-class status to better policies, greater democratic participation, and lower corruption. Emerging research also suggests their support for climate action.[3] For many countries aiming for high-income status over the next decade or so, a large, vibrant and economically secure middle class will thus be both a measure of success and to some extent also the driver.

[3] Shao, Tian and Fan (2018) for example, show that the Chinese middle-income class has the highest willingness to pay for environmental protection. This is consistent with evidence in Sun, Yuan and Yao (2016) in which willingness to pay for environmental protection increases with income but diminishes for households at the top of the income distribution who presumably self-protect themselves through, for example, the purchase of air filters and purifiers in the case of air pollution.

The paper reports three main stylized findings on the size and evolution of the middle class in the region. *First*, a little over a third of the population belongs to the middle class or upper income groups (36.2 percent) while another third has living standards below the UMIC poverty line of $8.30 a day (31.2 percent). Some 32.7 percent of the region's population lives in vulnerability; a position above the poverty line but with significant precarity. *Second*, while from a global perspective the region stands out for its rapid expansion of the middle class, much of this success is driven by China and Viet Nam. In fact, the growth of the middle class has stalled in recent years in the region excluding China. *Third*, a larger share of the region's poor today live in urban areas than before (47 percent versus 34 percent), suggesting marked progress on rural convergence. Still, urban areas continue to provide better prospects for upward mobility into the middle class (44 percent) than rural areas (22 percent).

The paper also leverages regionally comparable harmonized datasets to construct a basic profile of the region's population in the different economic classes to identify current and future drivers of economic mobility. Findings reveal that education is a key driver of economic mobility, with those with higher levels of education, especially beyond college, enjoying significantly better odds of joining the middle class. Stable, well-paying jobs are crucial pathways out of poverty and into economic security and results confirm that salaried jobs are closely tied to middle class status. The region's poor continue to be employed in agriculture while those in the middle class are more likely to be in more productive forms of employment. While the region has largely universalized access to many basic services, marked gaps exist in access to clean water and adequate sanitation across the region's economic classes, with deprivation rates 10-12 times higher for the poorest in comparison to those in the middle class. More work is required at the country level and across a broader set of domains, but the paper also confirms that the middle class is opting out of public education in several countries in the region. This indicates an urgent need for countries to make faster improvements in the quality of the public services provided to citizens, to, among others, keep the emerging middle class committed to the social contract that calls for greater tax contributions from them.

The rest of the paper is organized as follows. Section 2 introduces our conceptual framework and explains the rationale behind our approach to defining the four income classes, highlighting similarities and differences with existing methodologies in the literature. Section 3 discusses our main findings on the size, composition and evolution of these income classes in the EAP region as a whole as well as across countries in the region. Section 4 presents a profile of the middle class focusing on education, labor force participation and access to some basic services.. Finally, Section 5 concludes.

2 Vulnerability and Economic Security

Conceptual Framework

There is a large literature defining and measuring the "middle class" in a variety of ways. Traditionally, the middle class has been studied by sociologists who have tended to advocate for behavioral definitions based on characteristics such as education, occupation, assets ownership, or self-perception (e.g. Adelman and Morris, 1967; Amoranto, Chun, and Deolalikar, 2010). The foundation of these modern sociological approaches can be traced back to the work of Marx and Weber. While these early conceptualizations of the middle class did acknowledge the importance of economic potential of households and individuals, they were largely subsumed into observable markers such as education and occupation (Ferreira et al., 2013).

Part of the challenge these early studies faced was the relative scarcity of household income or consumption data, especially in developing countries. With increasing availability of microdata and the technology for analyzing this type of data, studies started incorporating income or consumption in the definition of the middle class. Some studies follow a multidimensional approach using income in conjunction with other discrete dimensions to define the middle class (e.g., Boniolo and Estevez, 2015; Li and Yi, 2009; Teruel et al., 2018).

Economists, on the other hand, have commonly favored definitions based solely on income or consumption. Both relative and absolute definitions have been used. For instance, a relative definition of the middle class forwarded by Easterly (2001) defined the middle class simply as those in the three middle quintiles within each country. Birdsall, Graham, and Pettinato (2000) and Atkinson and Brandolini (2013) similarly defined the middle class as those with incomes between 75 percent and 125 percent of the median income in each country. A key feature of these relative definitions of the middle class is that the standard of well-being of the middle class varies depending on the level of development of the country. However, as Birdsall (2010) points out, a shortcoming of this approach is that this is more akin to thinking about the "middle stratum" within each society rather than the "middle class" that is rooted in anything absolute.

Several studies have taken an absolute approach where thresholds have been typically chosen using global benchmarks. For example, Milanovic and Yitzhaki (2002) defined the middle class as the set of people living between the mean incomes of Brazil and Italy. Ravallion (2010) similarly defined the middle class as those who would not be considered poor by standards of developing countries but would still be poor by standards of developed countries using the US poverty line as the upper bound. Banerjee and Duflo (2008) observed that the absolute thresholds for defining the middle class, derived from the relative criteria proposed by Birdsall, Graham, and Pettinato (2000), varied significantly across countries. In lower-income countries, the middle class would include individuals with daily expenditures roughly between $2 and $4 (2005 PPP), whereas in wealthier countries, it would include those spending approximately between $6 and $10 (2005 PPP). To assess the sensitivity of their findings, Banerjee and Duflo (2008) analyzed results for both expenditure ranges—$2–$4 and $6–$10. In a related approach, the Asian Development Bank's Key Indicators for Asia and the Pacific 2010 classified those living on $2 to $4 (2005 PPP) a day as lower-middle class, $4 to $10 (2005 PPP) a day as middle-middle class, and $10 to $20 (2005 PPP) a day as upper-middle class. While these absolute approaches facilitate comparison across countries using common benchmarks, a shortcoming they often must contend with relates to the seeming arbitrariness of the value of these lines.

An alternative approach that uses the concept of "vulnerability to poverty" to empirically derive the value of these lines addresses the shortcomings of the other approaches and has seen growing use in recent years. Proposed originally by Lopez-Calva and Ortiz-Juarez (2014), this approach is motivated by the argument in Sen (1983) that the definition of poverty ought to be "*absolute in the realm of capabilities but relative in the realm of functionings*" to achieve these capabilities. In other words, to be free of poverty should mean – in any society – absolute *capability* of having adequate nourishment or being able to secure meaningful participation in a minimum set of activities. However, the monetary and non-monetary wherewithal – or *functionings* – required to attain such capabilities can differ across societies (Ferreira et al., 2013). The same idea is extended to the definition of the middle class where the absolute capability is the requisite economic security to be at a sufficiently low risk of falling into poverty.

Previous work for the region followed this "vulnerability to poverty" approach using panel data from Indonesia (2008-10), the Philippines (2006-09), and Viet Nam (2010-12) (World Bank, 2018). The

comparable income associated with a low (10 percent) probability of falling into poverty estimated in the three countries came close to the World Bank upper-middle-income poverty line of US$ 5.50 (2011 PPP). This line was used to separate those considered "vulnerable" from those considered "economically secure". World Bank (2018) also introduced the "global middle class" group which was defined as those above the US$15 (2011 PPP) threshold, based on the US poverty line and following various international studies (Pritchett, 2003, 2006).[4]

In its original formulation, implementing this approach requires panel data. However, given the relative paucity of nationally representative panel data in most developing country contexts, other implementation approaches that can accommodate cross-sectional data have also been introduced. Several studies have relied on repeated cross-sections to construct pseudo-panels aimed at estimating inter-temporal variation in consumption (Dang and Lanjouw, 2023; Fernandez, Olivieri, and Sanchez, 2023). Other studies have relied on only one round of cross-section data following the Chaudhuri (2003) method that approximates households' intertemporal variability in welfare using cross-sectional variability across households.

In this paper, we adopt the Chaudhuri (2003) approach which allows us to undertake a comprehensive regional approach by incorporating twenty EAP countries in the estimation of thresholds. While the synthetic panel approaches can provide additional insights, they come with their own cost and limitations. Most importantly for our purposes, the data requirements of those approaches would mean excluding from the analysis many countries in the region. Pseudo-panel approaches require two comparable surveys in a relatively short interval as one key assumption that underpins the method is the stability of the reference population in the period under study. In contrast, the Chaudhuri approach can be implemented with just one survey (see Appendix A for a detailed description of this approach). Around half of our sample of EAP countries only have one survey available in the period considered. Taking the Chaudhuri approach thus allows us to include these countries in the analysis. For the few countries with available recent panel data (China and Viet Nam), we conduct a robustness exercise to compare the results from our approach to those from applying the Lopez-Calva and Ortiz-Juarez (2014) approach exploiting the panel nature of the data. The results are remarkably close to our cross-sectional estimates.[5]

Regional Context and Data

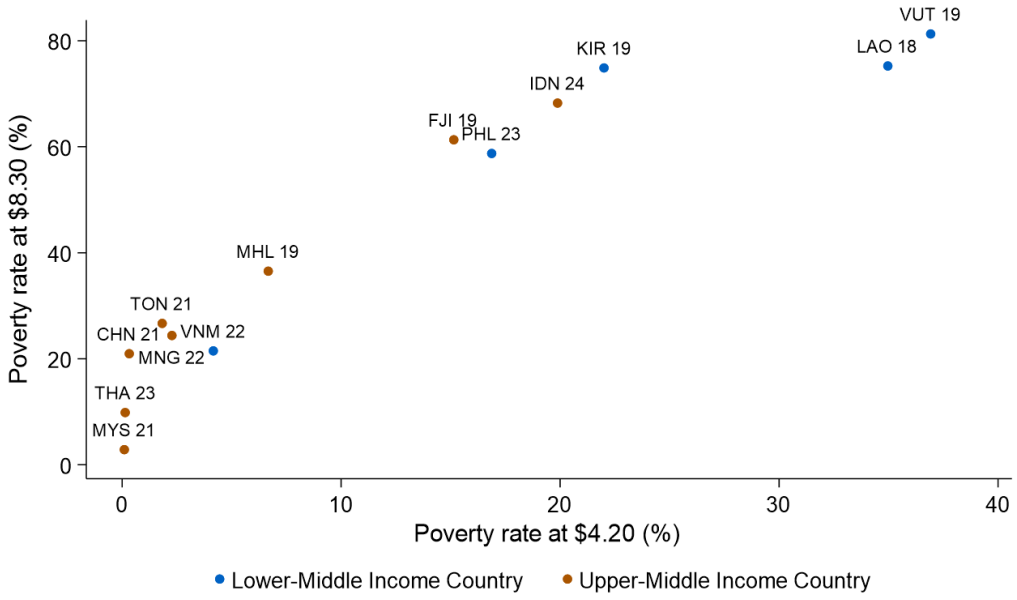
As part of its effort to facilitate cross-country comparisons of progress in poverty reduction, the World Bank introduced the lower-middle-income (LMIC) and upper-middle-income (UMIC) poverty lines to provide more contextually relevant thresholds for countries at different stages of development. A comprehensive assessment of poverty in EAP requires taking both into consideration to fully capture the diversity of poverty experiences across the region (Figure 1). The figure shows three broad groups. First, in several UMICs—including China, Viet Nam, Mongolia, and Thailand—poverty at the LMIC line is already very low, yet between 10 and 25 percent of the population remains below the UMIC line, pointing to persistent vulnerabilities even in more advanced economies. Second, in countries such as Indonesia, the Philippines, Fiji, and Kiribati, poverty remains significant at both thresholds, with around 15–20 percent of the population below $4.20 per day and more than half below $8.30. Finally, in the Lao PDR and Vanuatu, poverty is high at the LMIC line and even more pronounced at the UMIC line, where more than 70 percent

[4] This methodology has been widely used in analysis of economic mobility by the World Bank. See for example, World Bank (2016) for Nepal; World Bank (2019) for Indonesia; Tiwari et al (2018) for the South Caucasus; World Bank (2018c) uses the methodology to characterize the middle class in Viet Nam.

[5] In China, the differences in the derived lines using panel data are less than 15 percent of the value of our lines estimated using cross-section data, and in Viet Nam those differences are less than 20 percent.

of the population remains below the threshold. Timor-Leste, Solomon Islands and the Federate States of Micronesia lack recent data, but data from early 2010s reveal that these countries also have quite high poverty rates. Note that these poverty estimates are based on official welfare aggregates rather than harmonized definitions, and differences exist across countries—notably, Malaysia and the Philippines use income per capita as the welfare aggregate, while all others use consumption per capita.

Figure 1. EAP Poverty Rates at LMIC and UMIC Thresholds

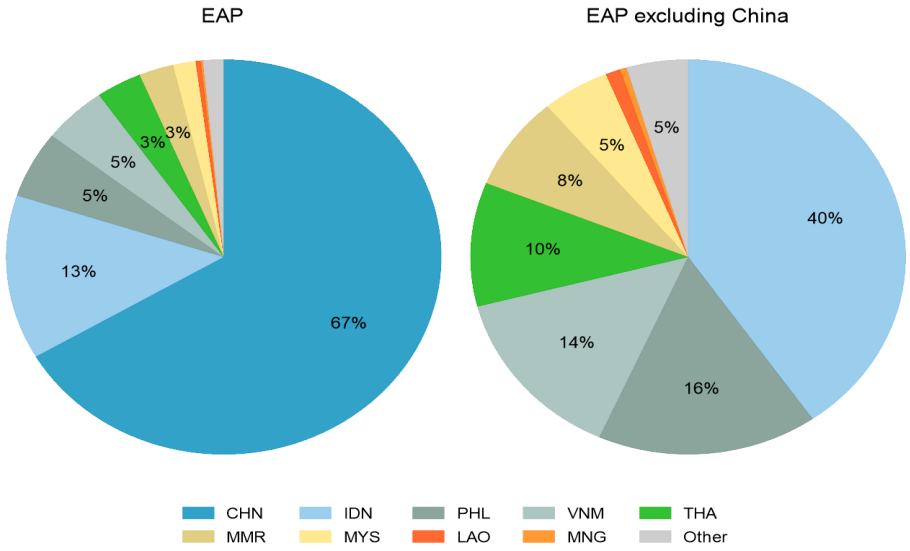


Source: GDP per capita data is from World Development Indicators (WDI). Poverty rates are from authors' calculations using the EAPPOV database, a harmonized database that uses microdata from official household surveys except for China. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas 4separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook) (World Bank, 2025).
Note: CHN = China, IDN = Indonesia, LAO = the Lao PDR, MMR = Myanmar, MNG = Mongolia, PHL = Philippines, THA = Thailand, MYS=Malaysia, VNM = Viet Nam, FJI = Fiji, VUT = Vanuatu, KIR = Kiribati, MHL = Marshall Islands. See Appendix Table B1 for a list of all country acronyms. * Malaysia and the Philippines are the only countries in the EAP region for which income – as opposed to consumption – is used in the official measurement of poverty.

While the UMIC poverty line is particularly relevant—given that, as of 2024, 85 percent of the region's population lived in an upper-middle-income country (56 percent if China is excluded)—the LMIC line remains important for understanding the broader regional context. Most EAP countries are still classified as LMICs, and if recently graduated Indonesia— which routinely prefers to benchmark its progress against the LMIC line than the UMIC line — were also treated as such, then 84 percent of the region's population outside China would be living in a lower-middle-income country. This underscores the need to consider both thresholds when analyzing economic security in the region.

The countries in the region also vary considerably in terms of their population size. Figure 2 shows the population distributions of all EAP countries, both including China and excluding it. China constitutes more than two-thirds of the regional population and as such the regional distribution of population with China included is heavily skewed. Excluding China makes the distribution less concentrated, though Indonesia alone still represents about 40 percent (Figure 2).

Figure 2: Developing EAP population by country, 2024
(Percentage of total regional population)



Source: Authors' calculations using data from World Development Indicators (WDI).
Note: See Appendix Table B1 for a list of all country acronyms.

We use nationally representative household microdata surveys from twenty EAP countries. We use official household surveys for all countries but China for which the World Bank does not have access to the official household survey. For China, we then use a combination of official grouped consumption data from the National Bureau of Statistics of China (NBS) and the nationally representative China Family Panel Survey (CFPS) conducted by Peking University (for methodological details, see Montalva and Tiwari (forthcoming)). We focus on two periods: (i) around the mid-2010s and (ii) the late-2010s to early 2020s. Just half of the countries in our sample have surveys available in both periods. This includes only one Pacific Island country (Fiji). The other half, which includes the rest of the Pacific Island countries and Timor-Leste, only has one survey available (see Table 1). While all surveys are included in the estimation of the thresholds, only countries with surveys available for the second period are considered for most of the descriptive analysis. Countries that do not meet this requirement represent less than 0.1 percent of the regional population. The analysis completely excludes two countries: Cambodia, due to the unavailability of poverty rates based on international poverty lines, and Papua New Guinea, owing to the absence of relatively recent microdata. Together, those two countries account for 1.3 percent of the regional population.

Table 1: Sample of surveys to estimate thresholds

Eleven countries with two surveys in period considered			**Nine countries with one survey in period considered**		
Country	Around mid 2010's	Late 2010's / early 2020's	Country	Around mid 2010's	Late 2010's / early 2020's
China (CHN)	2014	2018	Vanuatu (VUT)	.	2019
Indonesia (IDN)	2015	2023	Kiribati (KIR)	.	2019
Lao PDR (LAO)	2012	2018	Marshall Islands (MHL)	.	2019

Fiji (FJI)	2013	2019	Micronesia (FSM)	2013	
Myanmar (MMR)	2015	2017	Nauru (NRU)	2012	.
Mongolia (MNG)	2016	2022	Solomon Islands (SLB)	2012	.
Philippines (PHL)	2015	2023	Timor-Leste (TLS)	2014	.
Thailand (THA)	2015	2023	Tuvalu (TUV)	2010	.
Malaysia (MYS)	2015	2021	Samoa (WSM)	2013	
Viet Nam (VNM)	2016	2022			
Tonga (TON)	2015	2021			

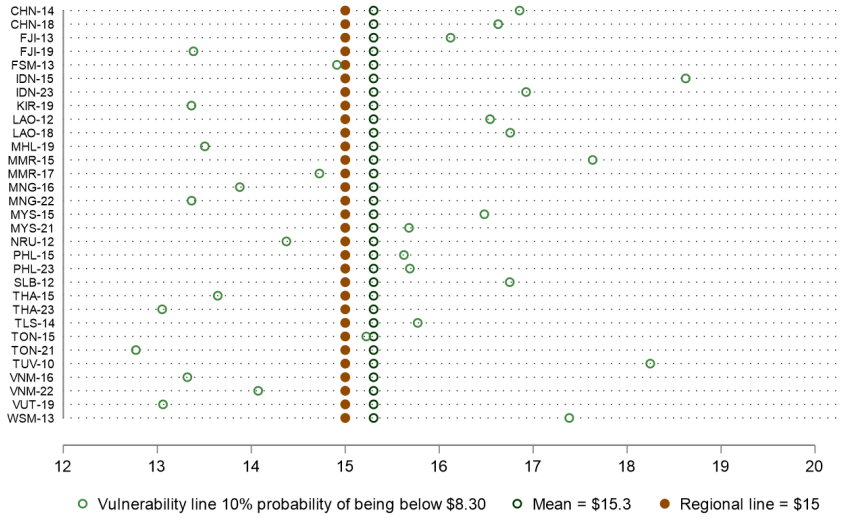
Note: See Appendix C for brief descriptions of each country's microdata.

Estimated Thresholds

The analysis draws on nationally representative household surveys from twenty (20) countries in the region to define the middle class using the "vulnerability to poverty" methodology. The first step is to identify the poor. In our approach, this group is divided into two categories. Individuals living below the lower-middle-income (LMIC) poverty line of $4.20 per day (2021 PPP) are classified as "LMIC poor," a benchmark that remains critical in lower-income EAP countries where large shares of the population continue to face basic deprivation. There are also many countries in the EAP where poverty at the LMIC line has already declined to very low levels. For these countries, the upper-middle-income (UMIC) poverty line of $8.30 per day (2021 PPP) provides a more appropriate benchmark. We therefore define the "UMIC poor" as individuals living between $4.20 and $8.30 per day (2021 PPP). These are people who would not be poor by the LMIC standard but would be considered poor by the UMIC standard.

Then following Chaudhuri (2003) and building on the approach of López-Calva and Ortiz-Juárez (2014), we estimate the vulnerability threshold associated with a 10 percent probability of falling into poverty at the UMIC line of $8.30 per day (see Appendix A for methodological details). Figure 3 shows that the estimated thresholds range from $12.8 to $18.6 per day (2021 PPP) across surveys, with notable cross-country variation. Higher thresholds generally reflect the need for greater income to achieve security, which may arise from higher income volatility or less developed social protection systems. Still, caution is warranted: in interpreting these model thresholds. While generally relatively robust to alternative specifications, threshold estimates can be sensitive to model fit. In this analysis, we prioritize broader country coverage which necessitates relying on a parsimonious set of common variables across countries; richer, country-specific models could yield more precise thresholds tailored to local contexts. The median threshold is $15.20 per day (2021 PPP), rounded to $15, which serves as our regional benchmark. Individuals living below this benchmark are considered "vulnerable," while those above it are classified as "middle class."

Figure 3. Vulnerability Threshold: Income Levels Corresponding to a 10 Percent Risk of Falling Below the $8.30 Poverty Line



Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook) and the nationally representative China Family Panel Survey (CFPS) conducted by Peking University (for methodological details, see Montalva and Tiwari (forthcoming)). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: See Appendix Table B1 for a list of all country acronyms.

To complete the classification, we set an upper bound for the middle class with the aim of excluding the upper tail of the distribution. We set this upper-income threshold at $56 per day, which is twice the Prosperity Gap (PG) threshold of $28 per day (see Foster et al., 2025; Kraay et al., 2023). There is some arbitrariness to the choice of this upper threshold but the consequences for the size and evolution of the middle class are immaterial. The prosperity gap threshold of $28 per day reflects the income of a typical person in countries transitioning to high-income status. However, in the contexts such as China and Malaysia—both of which are close to this transition—the threshold would be too low to meaningfully delineate the middle class, as it is designed to capture the typical person rather than the upper tail. Doubling the PG line allows us to better exclude the upper tail while maintaining the focus on the middle of the distribution.

Taken together, our framework defines five distinct income classes, defined in 2021 PPP terms. The *LMIC poor*, comprising individuals living on less than $4.20 per day; the *UMIC poor*, those living between $4.20 and $8.30 per day; the *vulnerable*, with incomes from $8.30 to $15.00 per day; the *middle class*, between $15.00 and $56.00 per day; and the *upper-income class*, made up of individuals with incomes above $56.00 per day. This classification provides a nuanced lens for understanding economic security in a highly diverse region.

3 Description of Income Classes for EAP

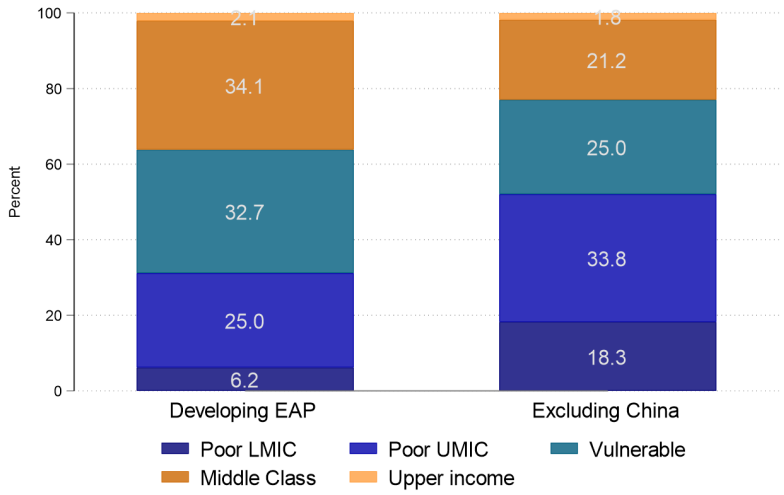
Size of the Income Classes

We start first by reporting on the size of the population in each of the economic classes based on data for 2021. A little over a third of the population belongs to the middle class or upper income (36.2 percent) while another third has living standards below the UMIC poverty line (31.2 percent). We note that 32.7 percent

of the region's population is vulnerable; above the poverty line, but still in a relatively precarious economic position (Figure 4). This implies that roughly 760 million people in the EAP region are in the middle class or upper-income group, around 70 million more than the population of the entire region excluding China.

China accounts for a large share of the region's overall prosperity. Excluding China, the share of the population belonging to the middle class or upper-income groups is close to a fourth (22.8 percent) while the share of the poor is more than half (52.1 percent). This not only reflects China's relative population size but also its influence on overall income distribution within the region. This will be a recurrent theme in the interpretation of results throughout the paper. While the regional narrative will be constructed using the picture that includes China, results excluding China will be presented and discussed to highlight similarities and differences across other countries in the region whenever appropriate.

Figure 4. Size of income classes in EAP in 2021
(Percentage of total population)

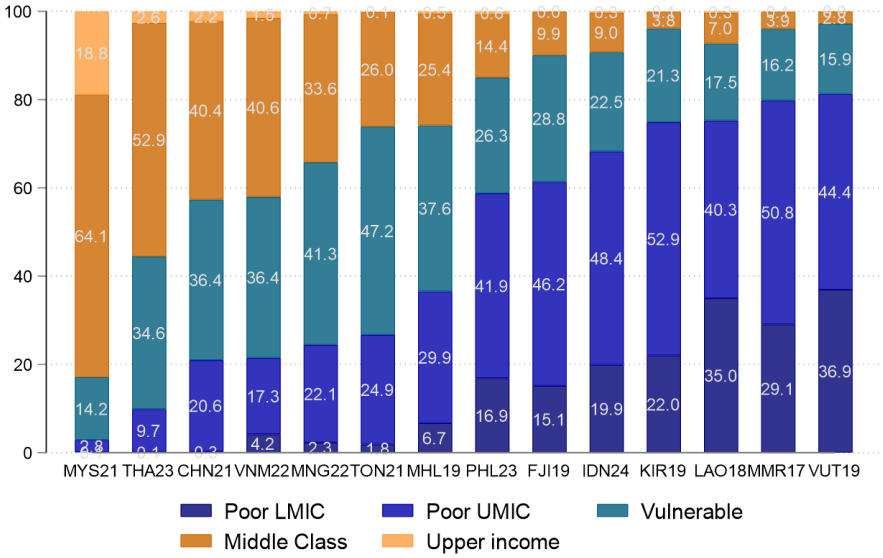


Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: Regional estimates use interpolations and extrapolations to fill the information for countries without information in 2021.

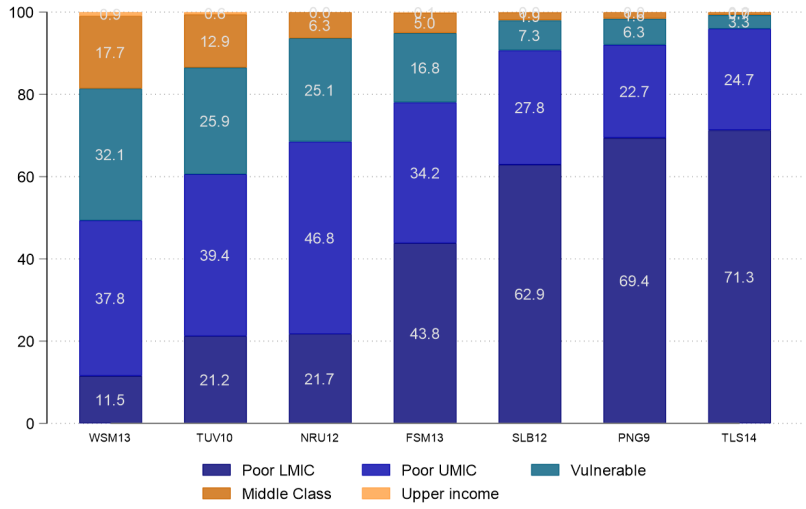
Figure 5 shows the wide variation in the economic class distribution among the twenty countries in our sample. Malaysia, Thailand, Viet Nam, and China, in that order, top the list of countries in terms of the highest share of their populations classified in the middle or upper-income classes. For instance, in Malaysia, 64 percent of the population is classified as middle class and 19 percent as upper income. Similarly, 53 percent of Thailand's population is classified as middle class and 2.6 percent in upper income. In contrast, the Lao PDR has only a little over 7 percent of its population in the middle or upper-income groups. The size of middle class is also quite small in most of the island-economies which are at a distinctly different stage of development. For example, apart from the Marshall Islands and Samoa, where around 26 percent and 19 percent of the population respectively are either in the middle class or upper-income groups, all other island-economies (e.g., Fiji, Kiribati, Vanuatu, Micronesia, Solomon Islands) and Timor-Leste have considerably lower shares of their population in these groups.

Figure 5: Population distribution by economic class in EAP, latest available year
(Percentage of total population)

Panel A. With surveys in 2017 or later



Panel B. With latest survey before 2017

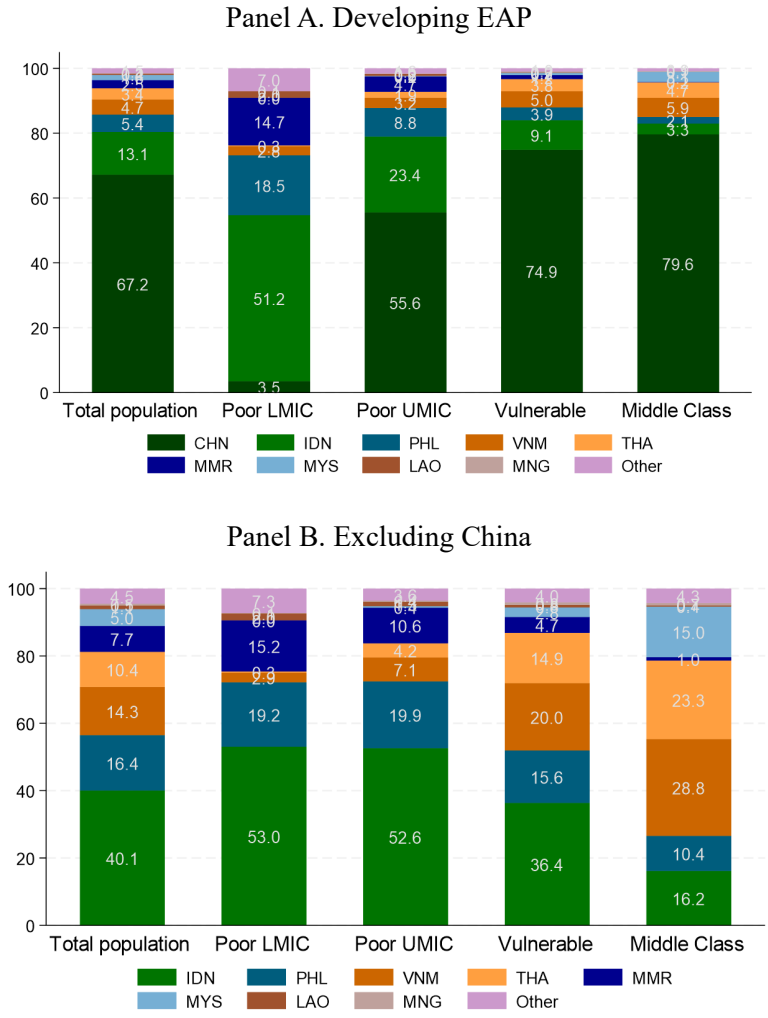


Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: See Appendix Table B1 for a list of all country acronyms.

The heterogeneity across countries on the size of the various economic classes is largely a reflection of the variation in stages of development and population sizes across countries. China makes up 67 percent of the region's total population. As expected, people from China are well represented across all income groups,

except for the LMIC poor, where they comprise only 6 percent. Indonesia, the second most populous country which accounts for 13 percent of the region's population, has significant shares of the region's LMIC poor (51 percent) and UMIC poor (24 percent) Excluding China, every other poor person in the region is Indonesian and one in five is Filipino (Figure 6, Panel B). Excluding China, Indonesia also accounts for the largest share of the region's middle class (33 percent), followed by Viet Nam (16 percent), Thailand (14 percent) and the Philippines (14 percent).

Figure 6: Population distribution by income class in EAP, 2021
(Percentage of total population)



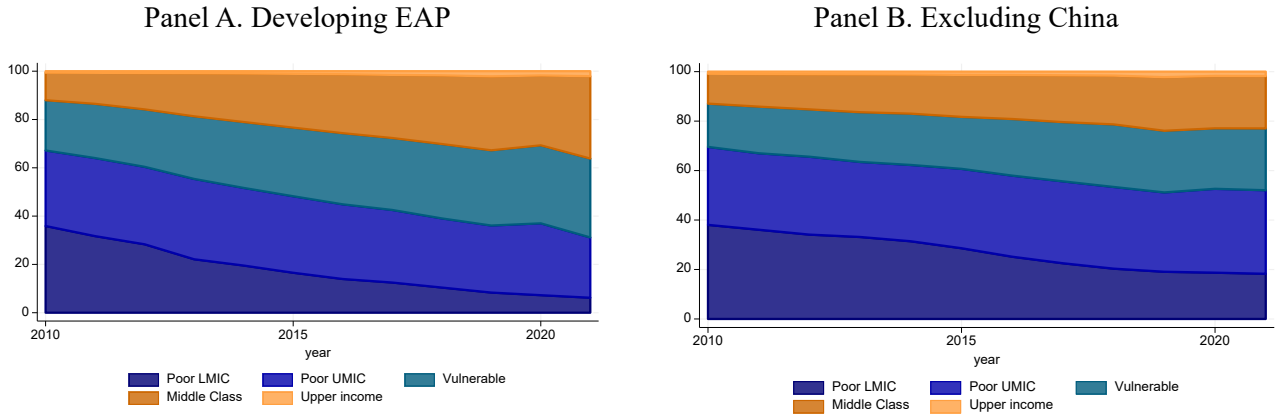
Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: See Appendix Table B1 for a list of all country acronyms.

Evolution of the Income Classes

Over the decade of the 2010s, poverty at the $8.30 per day (2021) line went from around two-thirds of the population in 2010 to less than a third in 2021 (Figure 7, Panel A). Progress was slower excluding China

(Figure 7, Panel B). The regional poverty rate at the $8.30 line was 52 percent in 2021, or 17 percentage points higher compared to the scenario in which China is included. The expansion of the middle class was also remarkable, with the proportional share for the group increasing three-fold over the period, from 11 percent of the population to 34 percent. The share of the vulnerable also increased by around 11 percentage points. The increase in the rates of poverty (especially at the UMIC line) and vulnerability and the corresponding shrinkage in the size of the middle class in 2020 is likely due to the impact of COVID-19 pandemic on economic growth in the region. In addition, the fact that the setback looks less pronounced in the picture of the region without China suggests that the impact may have been larger in China.

Figure 7: Population distribution by income class in developing East Asia and Pacific, 2010–2021
(Percentage of total population)



Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: Regional estimates use interpolations and extrapolations to fill the information for countries and years without information.

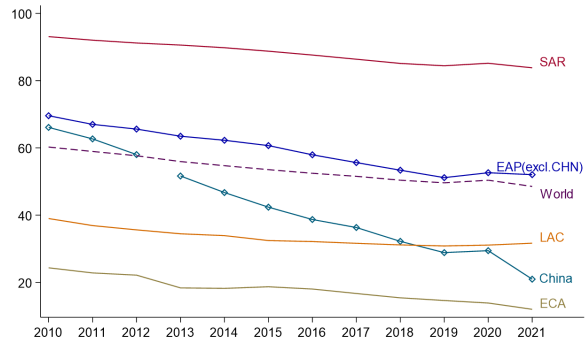
Taking a global perspective, we turn next to benchmarking the progress made by EAP with other regions of the world. China showed the fastest decline in the share of population living below $8.30 a day and the fastest increase in the share of the top two income classes among all countries in the EAP region and compared to any region of the world (Figure 8). The progress of the rest of the region, though slower than that of China, was also remarkable. The proportion of the population in poverty at the $8.30 line decreased by 18 percentage points between 2010 and 2021, a higher absolute decline than witnessed in Europe and Central Asia (ECA) (12 pp), Latin America and the Caribbean (LAC) (7 pp), and South Asia (SAR) (9 pp) during the same period. The share of the population belonging to the middle class and upper-income group increased by 10 percentage points, a pace of growth higher than in LAC and SAR but about half of the absolute growth recorded in ECA (20 pp).[6]

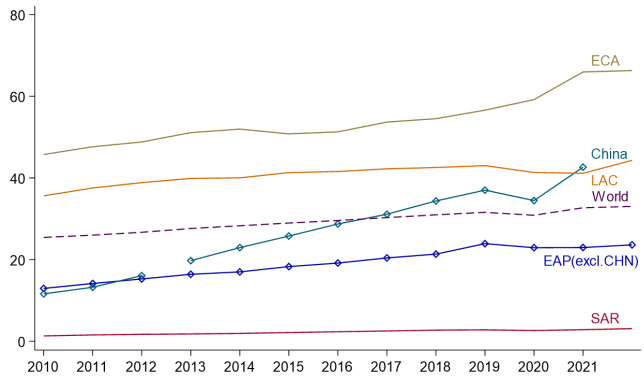
Figure 8: Poor at $8.30 and top two income groups by region, 2010-2021
(Percentage of total population)

Panel A. Poor at $8.30

Panel B. Middle class (between $15 and $56) and Upper-income group (above $56)

[6] Progress in Sub-Saharan Africa has been slower than in South Asia, while the Middle East and North Africa has seen setbacks.



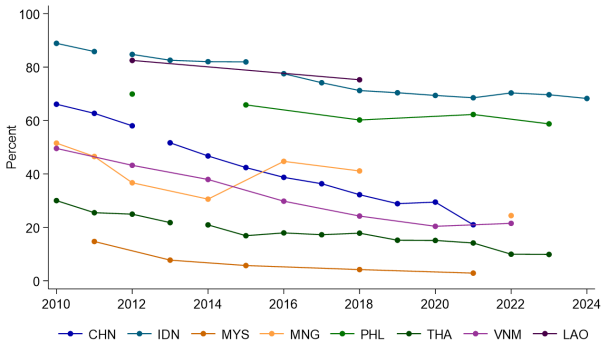


Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For the East Asia and Pacific region, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: Regional groupings follow World Bank classifications: EAP = East Asia & Pacific; ECA = Europe & Central Asia; LAC = Latin America and the Caribbean; SAR = South Asia. CHN refers to China. Regional are constructed using interpolations and extrapolations to address missing country-year data.

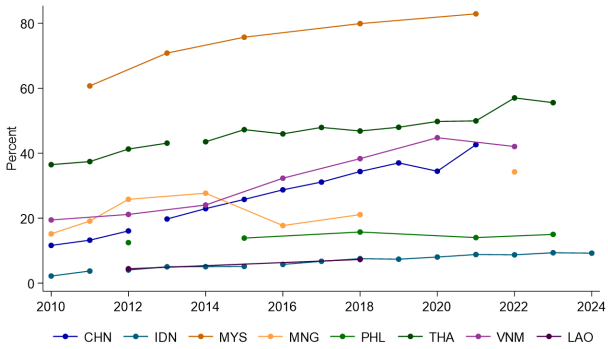
There is significant variation across countries in the region on the pace of poverty reduction and middle-class growth. Focusing just on the growth of the middle class, China saw the largest proportional growth with the share of the middle class growing almost four-fold from 11 percent of the population in 2010 to 40 percent in 2021 (Figure 9). Viet Nam and Mongolia have kept pace with China, more than doubling the share of the middle class. Middle class growth in Malaysia, Indonesia, Philippines and the Lao PDR in contrast has somewhat stalled over the last decade. Thailand lies somewhere in between, with the size of the middle class increasing from 34 percent to 47 percent during this period. Both cyclical and structural drivers seem to be at play. Sharp breaks in the middle-class growth trajectories in China, Viet Nam and Mongolia coincide with episodes of sharp growth deceleration or even contraction of economic activity. In contrast, the relative flat-lining of middle-class growth in Indonesia, Philippines, Malaysia and the Lao PDR suggests the possibility of structural headwinds such as slowing productivity growth. Lingering effects of the COVID-19 pandemic and uneven recovery also likely play a role.

Figure 9: Poor at $8.30 and top two income groups by country in EAP region, 2010-2024
(Percentage of total population)

Panel A. Poor at $8.30



Panel B. Middle class (between $15 and $56) and Upper-income group (above $56)



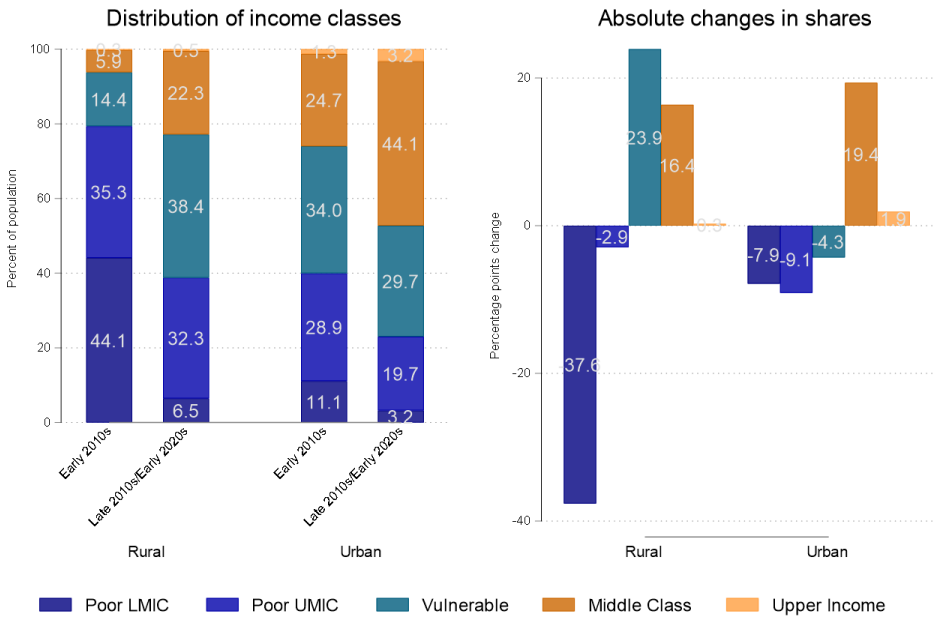
Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform

Methodology Handbook). For the East Asia and Pacific region, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: See Appendix Table B1 for a list of all region and country acronyms. Regional estimates use interpolations and extrapolations to fill the information for countries and years without information.

Examining the evolution in the distribution of economic classes separately across urban and rural areas, we see that rural areas experienced greater absolute poverty reduction, but urban areas remained significantly more prosperous. The analysis uses data from seven EAP countries with surveys in the early 2010s and early 2020s, representing 96 percent of the region's population in 2021.[7] As shown in Figure 10, poverty at the LMIC line declined by 38 percentage points in rural areas and by 8 percentage points in urban areas. Targeted poverty reduction efforts in rural areas, especially in China and other countries, were likely a key factor in these outcomes (World Bank, 2022b). In the Lao PDR, for instance, better access to markets has transformed rice-based subsistence farming dependent rural areas into commercial, market-oriented systems, contributing to significant improvements in rural living standards (World Bank, 2019b). Despite these gains, most of those who exited poverty in rural areas are now in the vulnerable group, which grew in rural areas by 24 percentage points. While the absolute increase in the size of the middle class was similar in rural (16 pp) and urban (19 pp) areas, the increase was larger in rural areas in proportional terms. Despite this catch-up, urban areas still have a higher share of the population in the middle class (44 percent) than rural areas (22 percent).

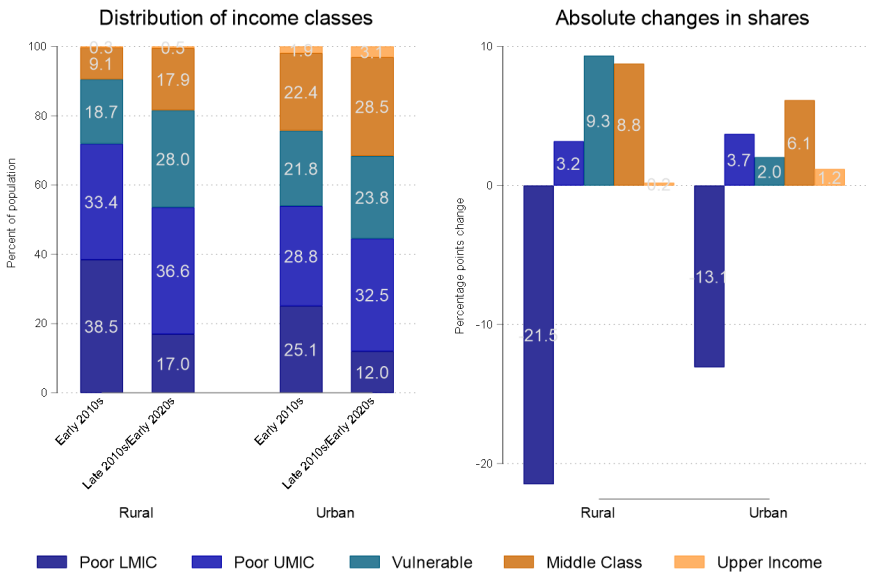
Figure 10: Distribution of income classes within rural and urban areas, in early 2010s and early 2020s

Panel A. Selected EAP countries



Panel B. Excluding China

[7] It is important to keep in mind that countries differ in urban population shares. Thus, in regional analyses by urban and rural areas, country representation varies by both population size and urban share.



Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.

Note: Selected countries include China, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam. The "early 2010s" correspond to 2012 for all countries, except Malaysia, for which 2011 is used. The "early 2020s" correspond to 2023 for the Philippines, Indonesia, and Thailand; 2022 for Viet Nam; 2021 for China and Malaysia; and 2018 for Lao PDR, as data for the early 2020s are not available for that country.

Are these observed patterns driven by differential economic growth and expansion of economic opportunities in urban and rural areas? Or does the changing size and composition of the underlying population also play a role? We conduct a decomposition exercise to parse out the relative contributions of these effects. The exercise allows us to distinguish between changes within urban and rural areas from changes that are associated with urban-rural population shifts. Consistent with results in Figure 10, the decomposition shows that changes within rural areas played a larger role in moving people out of poverty and placing them in the vulnerable group, while growth within urban areas contributed more to the expansion of the middle class. Population shifts from rural to urban areas had a modest impact on the overall changes (Table 2). There is some cross-country variation. Rural areas drove poverty reduction in all countries considered – except Malaysia, where the poor represent only a minimal share – with particularly strong contributions in China, the Lao PDR, Thailand, and Viet Nam (see Appendix Table B2). By contrast, rural and urban areas played a more balanced role in Indonesia, Malaysia, and the Philippines. The expansion of the middle class was generally balanced, though urban areas contributed more in China and Indonesia.

Table 2. Decomposition of changes in shares of income classes between early 2010s and early 2020s

	Within rural	Within urban	Population shifts	Total change in share of income class between early 2010s and early 2020s (p.p.)
EAP selected countries				
Poor LMIC	-17.0	-4.3	-1.8	-23.0
	74%	19%	8%	100%

Poor UMIC	-1.3	-5.0	-0.9	-7.2
	18%	69%	13%	100%
Vulnerable	10.8	-2.4	0.5	8.9
	121%	-26%	6%	100%
Middle Class	7.4	10.6	2.0	20.0
	37%	53%	10%	100%
Excluding China				
Poor LMIC	-10.8	-6.5	-0.7	-18.0
	60%	36%	4%	100%
Poor UMIC	1.6	1.8	-0.3	3.1
	52%	59%	-11%	100%
Vulnerable	4.7	1.0	0.0	5.7
	83%	18%	-1%	100%
Middle Class	4.4	3.0	0.9	8.4
	53%	36%	11%	100%

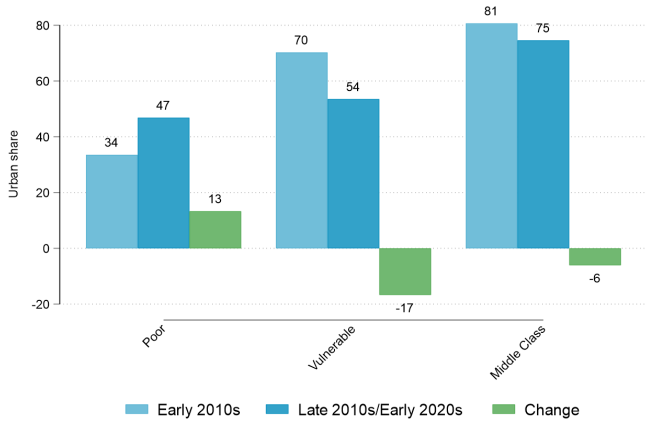
Source: Authors' calculations.
Note: Selected countries include China, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam. The "early 2010s" correspond to 2012 for all countries, except Malaysia, for which 2011 is used. The "early 2020s" correspond to 2023 for the Philippines, Indonesia, and Thailand; 2022 Viet Nam; 2021 for China and Malaysia; and 2018 for the Lao PDR, as data for the early 2020s are not available for that country. The "within urban" component is defined as the change between early 2010s and early 2020s in the share of the respective income class among the urban population, multiplied by the average share of the urban population in the national population in the two periods. The "within rural" component is defined analogously to the "within urban" component. The "Population shifts" is the sum of two components: (i) the change in the share of the urban population in the national population, multiplied by the average share of the respective income class among the urban population in the two periods, and (ii) analogous component analogous for rural areas.

Did these shifts really lower the concentration of the poor in rural areas and the rich in urban ones? Urban shares of the region's poor and the middle class provide some suggestive evidence. In the early 2010s, 34 percent of the region's poor lived in urban areas. A decade later, this increased to 47 percent. Similarly, urban areas accounted for 81 percent of the middle class in the early 2010s but a lower 75 percent a decade later. The rising urban share among the poor and the declining urban share among the middle class suggests that rural areas became relatively more prosperous over this period (Figure 11). This regional pattern was true for most countries in the region (Appendix Figure B1).[8]

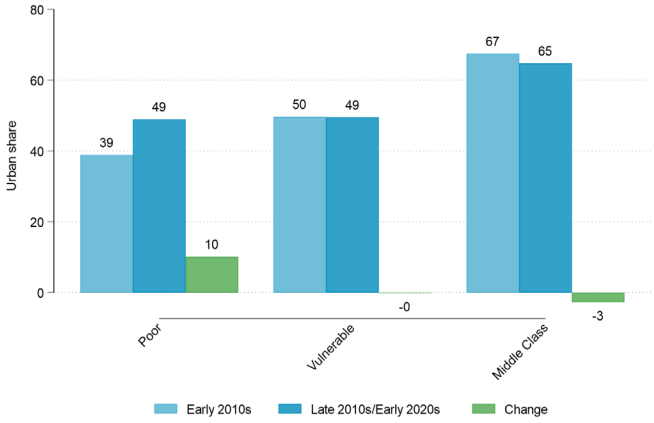
Figure 11: Urban share of the population within income classes, early 2010s and early 2020s

Panel A. Selected EAP countries

[8] Exceptions include Malaysia and Thailand, which see a decrease in the urban share among the poor—though both start with a very low share of poor—and the Philippines, which records an increase in the urban share of the middle class, but with only a small overall change in that group (less than 3 percentage points).



Panel B. Excluding China



Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For other EAP countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: Selected countries include China, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam. The "early 2010s" correspond to 2012 for all countries, except Malaysia, for which 2011 is used. The "early 2020s" correspond to 2023 for the Philippines, Indonesia, and Thailand; 2022 for Viet Nam; 2021 for China and Malaysia; and 2018 for the Lao PDR, as data for the early 2020s are not available for that country.

The more even distribution of prosperity between urban and rural areas is likely a result of significant poverty reduction and increased economic opportunities in rural areas, rather than compositional changes of the population. While migration from rural to urban areas may partly explain this, it is unlikely to be the main driver. Migrants are generally a heterogeneous group, who are typically not the poorest segments of the population; instead, some originate from relatively worse-off households but with enough resources to afford migration expenses, while others come from better-educated and more connected rural households (e.g., Lagakos et al., 2023; Selod and Shilpi, 2021; Tacoli, 2008). Furthermore, the decreasing share of the middle class in urban areas strongly suggests growing economic opportunities in rural areas. This shift requires a larger relative increase in the middle class in rural areas compared to urban areas – a trend unlikely to result from migration, as urban middle-class households rarely relocate to rural regions. Another potential compositional factor is the administrative reclassification of rural areas as these regions are

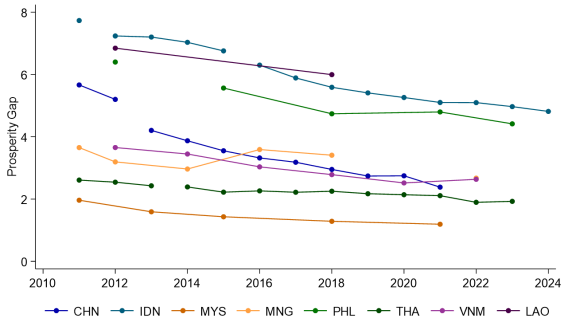
absorbed into expanding cities. However, this process tends to underestimate the progress achieved in rural regions since such reclassified areas are often among the most prosperous rural areas.

One limitation of assessing progress in welfare through changes in income group shares is that it overlooks variations within those groups. The Prosperity Gap, the new World Bank indicator for shared prosperity, addresses this limitation by capturing welfare progress for all individuals, giving greater weight to those with lower welfare levels (Foster et al., 2025; Kraay et al., 2023). It is defined as the average factor by which individual income or consumption must be multiplied to elevate everyone in a society to a prosperity standard of $28 per day (2021 PPP). While the choice of threshold affects the indicator's absolute values, it does not impact comparisons over time or across groups. We use the Prosperity Gap indicator to provide a complementary picture on the region's progress on shared prosperity. Exploiting its decomposability property, we also show that growth has continued to drive welfare convergence in the region.

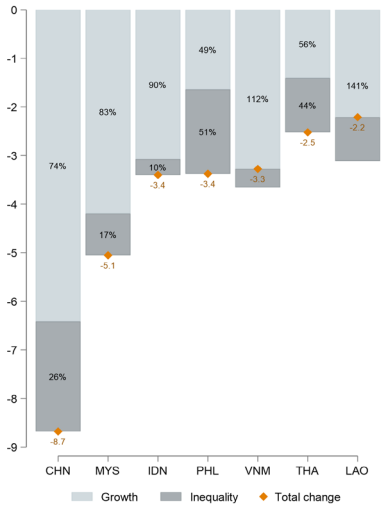
The Prosperity Gap has declined in almost all large economies in the region, but at varying pace. China's Prosperity Gap was 5.6 in 2010, indicating that average consumption needed to be multiplied by 5.6 to meet the $28 per day standard. By 2021, the gap had more than halved to 2.7, demonstrating significant closing of the Prosperity Gap (Figure 12, panel A). Among countries where middle class growth has been sluggish in recent years, Indonesia and Philippines saw sharper declines in the Prosperity Gap than Malaysia and Thailand. Part of the reason could be that Malaysia and Thailand already start with relatively low gaps too.

Figure 12: Prosperity Gap (PG) and bottom two income groups by country in EAP region, 2011–24

Panel A. Prosperity Gap



Panel B. Annual growth rate of PG: Contributions of average consumption and inequality growth rates



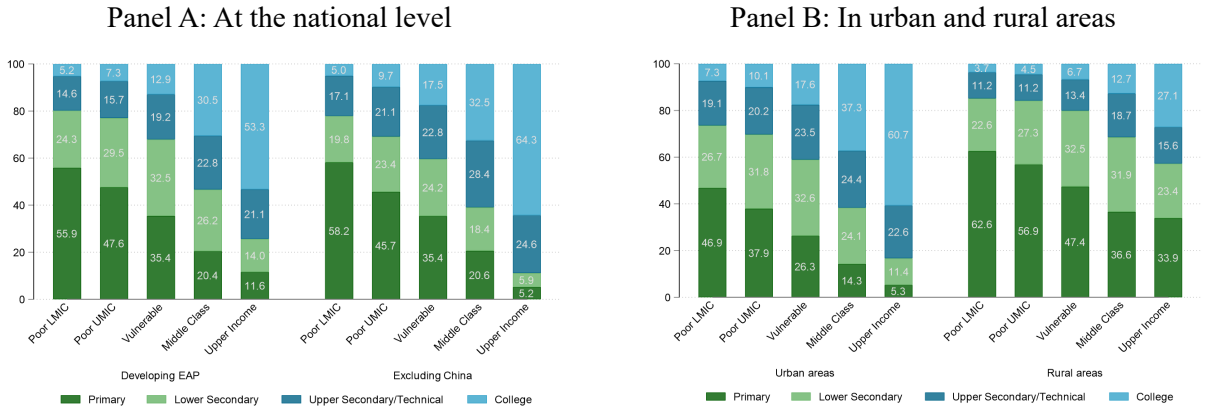
Source: Authors' calculations. Numbers for China are based on the synthetic distribution datasets derived from grouped (ventile) data from the National Bureau of Statistics of China for urban and rural areas separately (for methodological details, see Poverty and Inequality Platform Methodology Handbook). For the East Asia and Pacific region, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: The annual growth rate of the Prosperity Gap is calculated between the "early 2010s" and the "late 2020". The "early 2010s" correspond to 2012 for all countries, except Malaysia, for which 2011 is used. The "early 2020s" correspond to 2024 for Indonesia; 2023 for the Philippines and Thailand; 2022 for Viet Nam; 2021 for China and Malaysia; and 2018 for the Lao PDR. See Appendix Table B1 for a list of all country acronyms.

Furthermore, the Prosperity Gap also allows us to decompose overall progress in closing the Prosperity Gap into average overall improvements (growth) and improvements at the bottom parts of the distribution (reduction in inequality). Figure 12 (Panel B) presents the annual growth rate of the Prosperity Gap for each country, breaking down the contributions of changes in average welfare and changes in inequality. For all countries except the Philippines, growth in average welfare has been the main driver of reductions in the Prosperity Gap, while reductions in inequality have generally played a more modest role. In the Philippines, inequality reduction has contributed more to lowering the Prosperity Gap than growth. In the Lao PDR and Viet Nam, inequality trends have even hindered progress.

4 Characteristics of the Middle Class

In this section, we explore some characteristics of the middle class in the EAP region. Data coverage varies across countries, and generally, we use the most recent available household survey. We start first by looking at education, an important determinant of economic mobility. Fewer than a third of those who are in the poor and vulnerable groups have upper secondary education or more. In contrast, almost half of the secure-middle group and around two-thirds of the upper-income group have upper secondary level education or more (Figure 13, Panel A). The distinction is even sharper for college education; the college share jumps from 5.2 percent among the LMIC poor to 53.3 percent for the upper-income group. Interestingly, results show that many have climbed the economic ladder also with relatively low levels of education. Almost a fifth of those in the middle group and around 12 percent of the upper-income group have primary education or less. This suggests that while education is an important ticket to upward mobility, it is not the only one as many have made it even without it. This is especially the case in rural areas, where around 42.4 percent of those in the secure-middle group and 27.9 percent of those in the upper-income group have primary education or less (Figure 13, Panel B). This suggests that other drivers such as entrepreneurial abilities, risk tolerance, and land/intergenerational endowments that may not always be correlated with formal education could also be driving mobility. The picture is broadly similar if China is excluded from the analysis.

Figure 13. Educational attainment in developing EAP, late 2010s-early 2020s
(Population 25-64 years old in each education level, as share of population by economic class)



Source: Authors' calculations. Data for China is from the nationally representative China Family Panel Survey (CFPS). For all other countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.

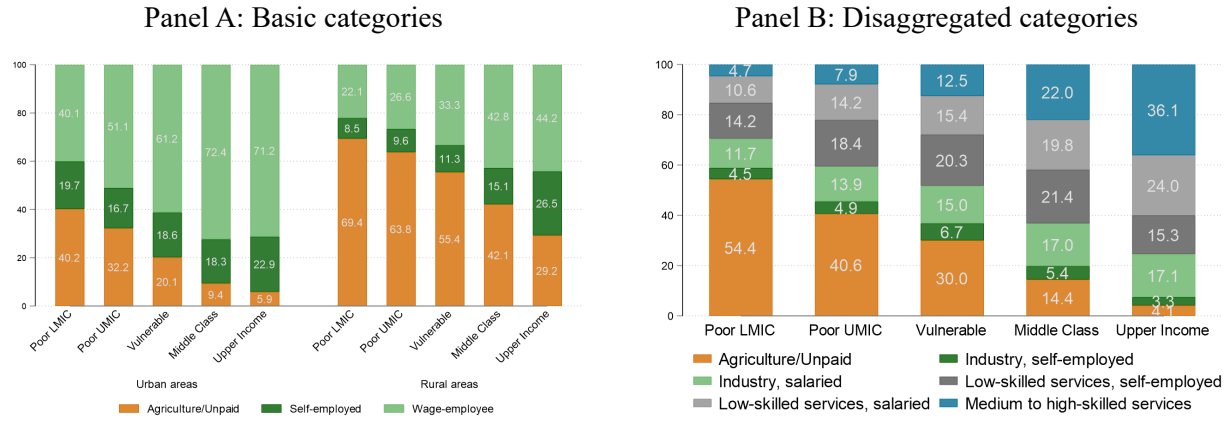
Note: The sample includes all 14 countries with a household survey from 2017 or later. For each country, we use the latest available survey, except for China (2018 survey) and Indonesia (2023 survey).

Having a stable, well-paying job is one of the most effective ways to escape poverty and achieve economic security, making it essential to examine how different types of jobs are distributed across income groups. Jobs that fetch wages and salaries are typically strong predictors of middle class and the results from the EAP region bear that out. Wage-employees constitute less than half the share of the poor in urban areas, but account for much larger shares among the middle (72 percent) and the upper-income class (71 percent). While wage jobs tend to be more concentrated in urban areas, the disparity across income classes is also evident in rural areas. A little over a fifth of the LMIC poor population is wage-employed in rural areas, which is much lower in comparison for the middle (43 percent) and upper-income classes (44 percent) (Figure 14, Panel A). Results are similar if China is excluded from the sample.

When considering employment by sector, the most striking disparities across economic classes appear in agriculture and medium- to high-skilled services. Poor and vulnerable workers are disproportionately employed in agriculture, a sector characterized by low productivity. Nearly half of the LMIC poor and around 30 percent of the vulnerable work in agriculture, compared to just 14 percent of the middle class and 4 percent of the upper-income group (Figure 14, Panel B). Conversely, employment in medium- to high-skilled services is far less common among the lower-income groups. Only around 5 percent of the LMIC poor and 8 percent of the UMIC poor class are employed in these sectors, compared to 22 percent of the middle class and 36.1 percent of the upper-income group. Most non-farm self-employment in the EAP is in low-skilled services. The fact that roughly a fifth of the region's middle class works in low-skilled services suggests that such jobs could support upward mobility. Yet, about 14 percent of the LMIC poor work in the same activities, suggesting the pathway is far from reliable.

Figure 14. Type of job, late 2010s-early 2020s

(Population 25-64 years old in each type of job, as share of population by economic class)



Source: Authors' calculations. Data for China is from the nationally representative China Family Panel Survey (CFPS). For all other countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: The sample includes 13 countries with a household survey from 2017 or later. Kiribati is excluded due to lack of comparable employment information. For each country, we use the latest available survey, except for China (2018 survey), Indonesia (2023 survey), and Viet Nam (2018 survey). Panel B excludes China from the analytical sample due to lack of comparable information.

Boosting productivity within sectors and shifting workers from low- to high-productivity jobs are key to economic security. While gains in agriculture and low-skilled services can help, their impact may be modest. Evidence from Indonesia shows that manufacturing, wage employment, and formal sector jobs have been the main drivers of middle-class job growth (World Bank, 2019). The study highlights that, in the short to medium term, manufacturing remains a crucial source of quality jobs for a workforce predominantly possessing low to mid-level skills. The prospects of higher-value services remain limited in the medium term, as they primarily employ an educated workforce. However, long-term productivity growth depends on investing in human capital and equipping workers with relevant skills (World Bank, 2019). Moreover, while manufacturing has historically fueled growth, the service sector now leads in productivity gains and will play an even larger role as rising incomes drive demand for services (World Bank, 2023). This shift, accelerated by digital technologies (World Bank, 2023; 2024), will further increase demand for skilled labor. Without urgent action, lower-income groups risk being left behind. Strengthening workforce skills is essential for inclusive and sustainable growth.

While providing high wages is undeniably an important aspect of a good job, other factors also play a crucial role in job quality and overall quality of life. Beyond income, key considerations include job stability, security, satisfaction, benefits, and opportunities for human capital accumulation. Recognizing this, there is a growing emphasis on using multidimensional measures of job quality (e.g. Bocquier, Nordman and Vescovo, 2010; Brummund, Mann and Rodríguez-Castelán, 2018; Hovhannisyan et al., 2022; Leschke and Watt, 2014; Sehnbruch et al., 2020). Low-quality jobs are not only characterized by low wages but also by a lack of these essential dimensions. Informal workers, in particular, often lack access to social protections such as pensions and health care, further exacerbating the precariousness of their living standards. For instance, in Thailand, only 15 percent of informal sector workers made voluntary contributions to the Social Security Fund in 2018 (Sharpe et al., 2021). In China, a two-tiered social insurance system creates stark disparities, with the benefits provided under the employee system (targeted at formal workers) significantly exceeding those available under the resident system (designed for other types of workers) (Lugo et al., 2024). These gaps highlight the broader need to consider job quality beyond wages and address structural inequalities in social protection systems.

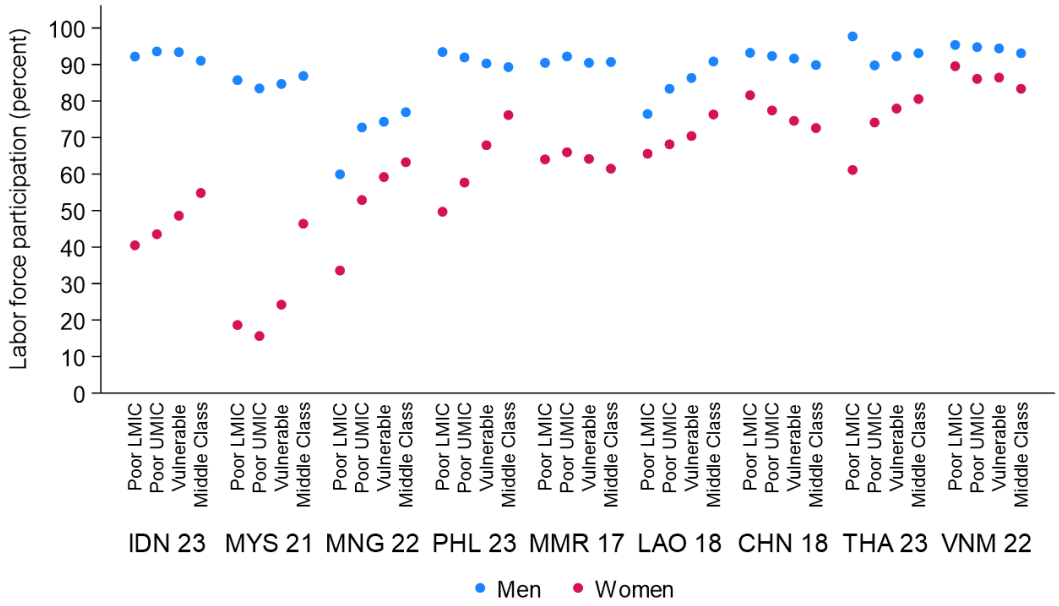
Middle class and female labor force participation

The EAP region is aging rapidly and one way of countering the impact of aging on growth will be to increase women's participation in the labor market. Understanding how female labor force participation varies across economic classes within countries and using that to infer how this dynamic may evolve as countries themselves prosper over time will be critical to devising policies to support greater female participation in the labor market. Women's participation in the economy varies significantly among the larger economies of our sample, ranging from 48 percent in Malaysia to 85 percent in Viet Nam (Appendix Figure B2).[9] Women in higher economic classes participate more in the labor market than those in lower income classes, particularly in countries where overall participation rates are relatively low. Indonesia, Malaysia, Mongolia, and the Philippines, the four economies with relatively lower female labor force participation, demonstrate a strong positive correlation between female labor force participation and economic class progression. In contrast, the gradient is more gradual for the Lao PDR and Thailand, non-existent for Myanmar and quite distinctly negative in China and Viet Nam (Figure 15).

[9] The smaller island countries in our sample tend to have low female labor force participation, ranging from 31 to 55 percent (see Appendix Figure B2).

Figure 15. Male and female labor force participation, by economic class

(Population 25-64 years old in the labor force in late 2010s/early 2020s, as share of population)



Source: Authors' calculations. Data for China is from the nationally representative China Family Panel Survey (CFPS). For all other countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.

To gain more insights into what drives women's participation in the paid economy, we estimate country-specific models to analyze how women's and households' characteristics are associated with their participation in the labor market. Following Klasen et al. (2021), we focus on prime age married or cohabitating women and the covariates capture two sets of supply-side factors: women's own characteristics, including their education level and age; and family circumstances, including household expenditure, education of the household head, presence of a man with salaried employment (to capture income security), and number of children in the household (regression results are in Appendix Table B3).

The analysis reveals two opposing drivers of women's labor force participation. On one hand, we find that highly educated women tend to participate to a larger extent in the labor market, suggesting that women in higher economic classes will have higher participation rates. On the other hand, the household's economic circumstances – as captured by the education level of the household head and the presence of a man with salaried employment – tend to negatively correlate with female labor force participation, suggesting that some women leave the labor force when it becomes affordable. In some cases, this negative correlation is also reflected when household expenditure is used as the measure of economic circumstances. Which effect prevails depends on the country-specific circumstances. For instance, the second effect seems to dominate in China and Viet Nam, relatively richer countries that also have relatively high female labor force participation.

These findings also suggest that economic growth or raising women's education alone are unlikely to boost women's participation in the labor market much. First, as found in many other settings, our regressions show that the presence of young children in the household lowers women's labor force participation unambiguously. Policies that further alleviate women's care responsibilities, including expanding access

and affordability of childcare, are thus essential. Second, similarly to Klasen et al. (2021), we find that the extent to which the characteristics of women and their families influence female labor force participation varies considerably across countries and that there is a significant portion of the female labor market participation that is left unexplained in all countries. These factors capture country-specific characteristics such as social and institutional norms, implying that these norms are likely to play an important role in shaping women's labor force participation.[10] There is scope for influencing these norms as the views supporting gender equality are still relatively low in the region (Appendix Figure B3).[11] Legal changes and communication campaigns targeted at influencing gender norms can be key in this regard (see e.g. Belghith, Lavin and Frohman, 2021).

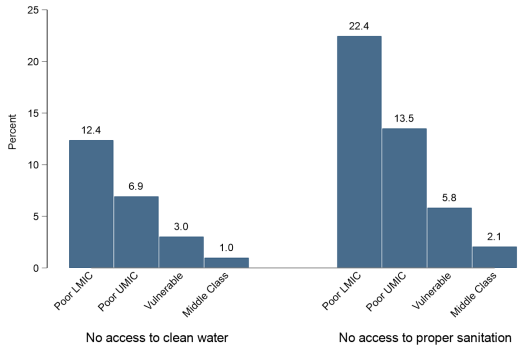
Expanding female labor force participation is both more imperative and more challenging given the rapid population aging in the region. According to the latest projections by the U.S. Census Bureau, the proportion of the EAP population aged 65 and older was approximately 11 percent in 2020 and is projected to almost triple by 2060. Given that women are not only more likely to be the caregivers of their children but also of the sick and the elderly, this dramatic demographic shift is likely to make it even more difficult for women to participate in the paid economy unless policies are put in place to improve the institutional infrastructure and accessibility of long-term care. At the same time, expanding female labor force participation will become even more critical to help counteract the shrinking labor force implied by the rapid population aging.

Access and use of public services

Though the region has largely universalized access to many basic services, inequalities across economic classes persist on several important fronts. Specifically, we look at access to clean water and proper sanitation defined respectively by having access to piped water, a protected well, or water sold by a vendor and having access to a flush toilet or an improved pit latrine. We have information on these variables for twelve countries in the region. Over 90 percent of the population in these countries have access to clean water, while over 85 percent have access to proper sanitation. However, deprivation among the poor and the vulnerable groups is significantly higher than that for the middle class and the upper-income groups. While less than 1 percent of those in the upper-income group lack access to clean water or access to proper sanitation, almost 12 and 23 percent of the poor face these deprivations, respectively (Figure 16).

Figure 16. Population with no access to basic services, late 2010s-early 2020s
(Percentage of total population)

[10] Moreover, for several countries like Indonesia, Malaysia, the Philippines and China, we find a J-shaped relationship between a women's educational attainment and her likelihood of participating in the paid economy. It is likely that the J-shape reflects, at least partly, social and religious norms that prevent women from taking jobs at intermediate skill levels (Boserup, 1970; Goldin, 1995).
[11] Appendix Figure B3 shows that the population in EAP countries have generally less supportive views regarding gender equality relative to high-income countries and most Latin American countries.

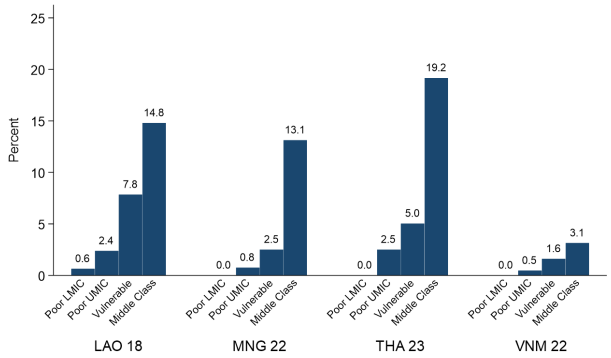


Source: Authors' calculations. Data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: Access to clean water means piped water, a protected well, or sold by a vendor. Access to proper sanitation means a flush toilet or an improved pit latrine. The sample includes 13 countries with a household survey from 2017 or later. China is excluded due to lack of comparable information. For each country, we use the latest available survey, except for Indonesia (2023 survey).

One key channel through which the middle class can influence policies and outcomes that affect all segments of the population is through their utilization of publicly provided services such as education and health. The middle class are often more quality-conscious (compared to poorer segments) and as such their use of these services is likely to bolster demand and voice to hold the state accountable for the quality of services. Conversely, if the quality of the publicly provided services is poor, the middle class can choose the path of exit, opting out of public services in favor of privately provided options. If this happens, public services are likely to remain the preserve of the poorest and often the most voiceless segments of the population in every country, leading to further deterioration in quality. Our data allows us to look at the extent to which families choose between public and private option in the domain of education in the Lao PDR, Mongolia, Thailand and Viet Nam. We are particularly interested in how private school use varies as households move up the economic ladder.

We find that while there is generally a positive gradient between income class and the use of the private option, the overall degree to which there is opting out of public education varies across the four countries. In Viet Nam, most kids go to public schools and while the rate of opting out is higher for the higher economic classes, it peaks at a relatively modest 3.1 percent for the middle class. In contrast, the gradient is much more pronounced in the Lao PDR, Mongolia and Thailand where between 13-20 percent of the middle class appear to opt out of public education (Figure 17). Previous evidence shows that higher economic classes are even more likely to opt out of public health services (World Bank, 2018). If the quality of the services provided is low and that is what leads those of the more affluent segments to opt for privately provided substitutes, then this weakens the role governments can play in equalizing opportunities. First, there is the risk that quality erodes further as the more vocal and quality conscious users of services exit the market. Second, this can also lead to further weaking of the social contract such that the lower utilization of public services by the richest segments renders them less inclined to pay into the public system in the form of taxes, which can perversely hamper efforts to improve quality.

Figure 17. Households with all children in private school, late 2010s/early 2020s
(Share of household with kids in school where all kids go to private school)



Source: Authors' calculations. using data from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: See Appendix Table B1 for a list of all country acronyms.

5 Conclusion

The EAP region is at a crossroads. Growth has been slower than in the past. The extent to which the export-led development model has driven unparalleled success in lifting hundreds of millions out of poverty can also be relied on to support the expansion of the middle class is under question. At the same time, newer challenges loom. People in the region are highly vulnerable to climate change. The population is rapidly aging and the region is also on the leading edge of adoption of technologies such automation and AI. What will it take for the region to continue making progress on expanding the size of its middle class and how does the emergence of the middle class interact with some of the existing and new challenges?

This paper provides an updated picture on the size, composition and profile of the middle-class population across countries in the EAP region. It uses a definition of middle class that is rooted in the idea of economic security and operationalized by identifying households that are vulnerable to the risk of falling into poverty. The paper reports three stylized findings on the size and evolution of the middle class in the region. *First*, a little over a third of the population belongs to the middle class or upper income groups (36.2 percent) while another third has living standards below the UMIC poverty line of $8.30 a day (31.2 percent). Of the region's population, 32.7 percent lives in vulnerability, a position above the poverty line but with significant precarity. *Second*, while from a global perspective the region stands out for its rapid expansion of the middle class, much of this success is driven by China and Viet Nam. In fact, the growth of the middle class has stalled in recent years in the region excluding China. *Third*, a larger share of the region's poor today lives in urban areas than before (47 percent versus 34 percent), suggesting marked progress on rural convergence. Still, urban areas continue to provide better prospects for upward mobility into the middle class (44 percent) than rural areas (22 percent).

The paper also leverages regionally comparable harmonized datasets to construct a basic profile of the region's population in the different economic classes to identify current and future drivers of economic mobility. The findings reveal that education is a key driver of economic mobility, with those with higher levels of education, especially beyond college, enjoying significantly better odds of joining the middle class. Stable, well-paying jobs are crucial pathways out of poverty and into economic security, and the results confirm that salaried jobs are closely tied to middle class status. The region's poor continue to be employed in agriculture while the middle class is more likely to be in more productive forms of employment. While the region has largely universalized access to many basic services, marked gaps exist

in access to clean water and adequate sanitation across the region's economic classes, with deprivation rates 10-12 times higher for the poorest in comparison to those in the middle class. More work is required at the country level and across a broader set of domains, but the paper also confirms that the middle class is opting out of public education in several countries in the region, which could further erode quality. Bridging these gaps will be important to ensure equitable access to upward mobility for the future generation. It will also necessitate and reinforce the emerging middle class's commitment to the social contract, including greater tax contributions.

Finally, for a region that is rapidly aging, unlocking the barriers to increase participation of women in the labor market will also be important for future mobility. Analysis in the paper shows that higher education levels and greater affluence do not necessarily translate into greater labor force participation among women, with social and institutional barriers remaining important determinants. Future research will need to diagnose these barriers and identify concrete and practical solutions to counteract the possible slowdown in economic mobility as the population ages and the labor force shrinks.

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Appendix

Appendix A: Methodology

A method to identify the middle class based on vulnerability to poverty was proposed by López-Calva and Ortiz-Juárez (2014). Using two rounds of panel data from three Latin American countries, they employed a regression-based approach to estimate the income level associated with a low probability of falling into poverty over time. This approach was later applied in the *Riding the Wave* report, which analyzed panel data from three East Asia and Pacific (EAP) countries (World Bank, 2018). Given the limited availability of nationally representative panel data, other studies have adopted pseudo-panel techniques that approximate intertemporal variation using repeated cross-sections (e.g., Dang and Lanjouw, 2023).[12]

Our approach relies on a single round of cross-sectional data, following Chaudhuri (2003). Several recent World Bank studies (2019, 2023c, 2023d, 2024c) have also applied this method. This method approximates households' intertemporal welfare variability using cross-sectional variation across households. While it rests on certain assumptions, it avoids those required to construct synthetic panels. Its lower data requirements also make it applicable in a wider range of cases, which is particularly important in the EAP region where several countries have had one survey in recent years.

We estimate vulnerability lines separately for each of the 20 EAP countries. To do so, we apply Chaudhuri's (2003) method to calculate each household's probability of falling into poverty. In line with numerous studies using the vulnerability-to-poverty approach, we adopt a 10 percent probability threshold to identify households at risk of becoming poor. We then determine the corresponding monetary value in the per capita consumption expenditure distribution at this threshold. Following López-Calva and Ortiz-Juárez (2014), we map the probability threshold to a monetary value in the consumption distribution function. Specifically, we use the mean expected per capita consumption expenditure of households whose probability of falling into poverty lies within one percentage point of the threshold.

We specifically follow the steps below:

First, we estimate the regression specification:

$$lnY_h = \alpha + \boldsymbol{X}_h\beta + \varepsilon_h \qquad (1)$$

where Y_h is the per capita consumption expenditure / income of household h, $\boldsymbol{X}_h$ is a vector of household and household head's characteristics. We choose the best available model to explain per capita household consumption expenditure / income in each survey, which means we include all available covariates in each survey among the following: Location (urban/rural, province/region dummies); Household size; Overcrowding; Dwelling condition: roof, floor, toilet; Assets: owns house, cell phone, fridge, computer, car; Household head's age; Household head's sex; Household head's marital status; Household head's education; Household head's employment status; Household head's wage salaried / self-employed; Household head's employed in agriculture. β is a vector of coefficients to be estimated; and ε_h is the error

[12] Fernandez, Olivieri and Sanchez (2023) also construct synthetic panels for measuring the middle class in the Latin American and the Caribbean region, implementing a machine-learning based method to avoid the strong assumptions on distribution of the error term. Their vulnerability threshold is not defined in terms of a low probability of becoming poor but as the median per capita household income over households who were estimated to be not poor in the initial year and were poor in the final year.

term (with mean zero) which captures idiosyncratic factors that affect household's per capita consumption expenditures. Within this framework, the variance of the disturbance term ε_h (cross-section variability) is interpreted as the inter-temporal variability of consumption expenditure / income. Therefore, it is important to allow this variance to depend on household characteristics. Thus,

$$\sigma^2_{\varepsilon,h} = \boldsymbol{X}_h\theta \qquad (2)$$

Using a three-step Feasible Generalized Least Squares (FGLS) approach, unbiased estimates for θ and β were obtained. First, using Ordinary Least Squares (OLS), equation (1) was estimated. We then used the residual from equation (1) to estimate:

$$\hat{\varepsilon}^2_{OLS,h} = \boldsymbol{X}_h\theta + \tau_h \qquad (3)$$

The predictions from equation (3) were used to rescale equation (3) to:

$$\frac{\hat{\varepsilon}^2_{OLS,h}}{\boldsymbol{X}_h\hat{\theta}_{OLS}} = \left(\frac{\boldsymbol{X}_h}{\boldsymbol{X}_h\hat{\theta}_{OLS}}\right)\theta + \frac{\tau_h}{\boldsymbol{X}_h\hat{\theta}_{OLS}} \qquad (4)$$

The transformed equation (4) was estimated following an OLS procedure to obtain asymptotically efficient GLS estimator, $\hat{\theta}_{FGLS}$, thus $\hat{\sigma}^2_{\varepsilon_h} = \sqrt{\boldsymbol{X}_h\hat{\theta}_{FGLS}}$, is a consistent estimator of $\sigma^2_{\varepsilon_h}$, the variance of the idiosyncratic component of consumption expenditure. We used the standard deviation (i.e., $\hat{\sigma}_{\varepsilon_h} = \sqrt{\boldsymbol{X}_h\hat{\theta}_{FGLS}}$ to rescale equation (1) to account for the inefficiency of OLS as follows:

$$\frac{\ln Y_h}{\hat{\sigma}_{\varepsilon_h}} = \frac{\boldsymbol{X}_h}{\hat{\sigma}_{\varepsilon_h}}\beta + \frac{\varepsilon_h}{\hat{\sigma}_{\varepsilon_h}} \qquad (5)$$

The OLS estimate of equation (5) (i.e., $\hat{\beta}_{FGLS}$), is consistent and asymptotically efficient estimate of β. Using $\hat{\beta}_{FGLS}$ and $\hat{\theta}_{FGLS}$ we directly estimated the log expenditure and variance of log expenditure for each household as:

$$\hat{E}[\ln Y_h|\boldsymbol{X}_h] = X_h\hat{\beta} \qquad (6)$$

and

$$\hat{V}[\ln Y_h|\boldsymbol{X}_h] = \hat{\sigma}^2_{\varepsilon_h} = \boldsymbol{X}_h\hat{\theta} \qquad (7)$$

With the assumption of Y_h (i.e., consumption expenditure) being log-normally distributed, we were able to calculate vulnerability as follows:

$$v_h = \widehat{Pr}(ln\,Y_h < ln\,z\,|\boldsymbol{X}_h) = \Phi\left(\frac{ln\,z - \boldsymbol{X}_h\hat{\beta}}{\sqrt{\boldsymbol{X}_h\hat{\theta}}}\right) \qquad (8)$$

where $\Phi(.)$ is a cumulative density of the standard-normal and z = poverty line

The **vulnerability line** is then derived as the mean of $\hat{Y}_h$ of non-poor households with a 10% probability of being poor within 1 point of the probability threshold set. Thus,
$Y_{\mathrm{h}} > PL$ and $\widehat{Pr}(Y_{\mathrm{h}} < PL)$ =10%, where PL is the poverty line.

Appendix B: Additional Tables and Figures

Appendix Table B1: List of Abbreviations

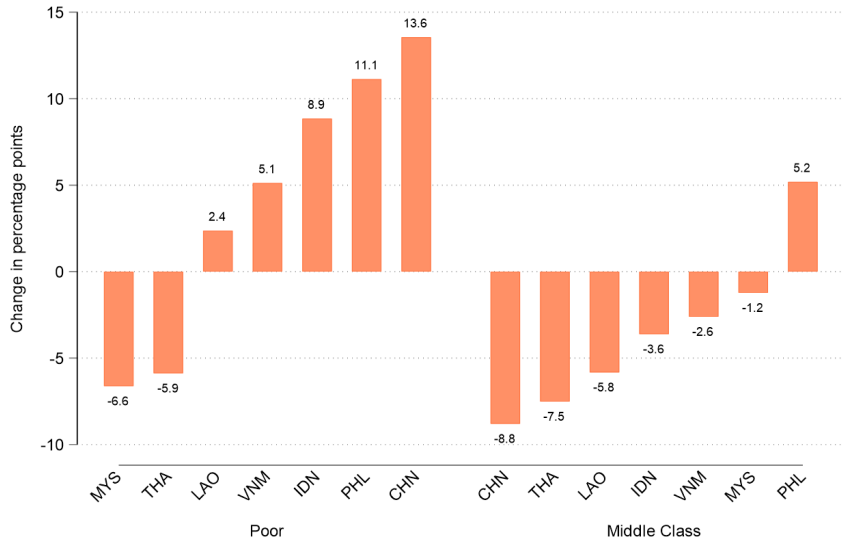
General abbreviations			
ADB	Asian Development Bank	GDP	Gross Domestic Product
PPP	Purchasing Power Parity	WDI	World Development Indicators
Regions, World Bank Classification and Country Groups			
EAP	East Asia and Pacific	MENA	Middle East and North Africa
ECA	Eastern Europe and Central Asia	HIC	High Income Countries
LAC	Latin America and the Caribbean	UMIC	Upper-middle-income countries
SAR	South Asia Region	LMIC	Lower-middle-income countries
SSA	Sub-Saharan Africa		
Country Abbreviations			
CHN	China	PHL	Philippines
FJI	Fiji	THA	Thailand
IDN	Indonesia	TON	Tonga
LAO	Lao People's Democratic Republic	KIR	Kiribati
MYS	Malaysia	MHL	Marshall Islands
MNG	Mongolia	NRU	Nauru
MMR	Myanmar	SLB	Solomon Islands
TUV	Tuvalu	WSM	Samoa
VUT	Vanuatu	TLS	Timor-Leste
VNM	Viet Nam		

Appendix Table B2: Decomposition of changes in shares of poor and middle class between early 2010s and early 2020s, by country

Country	Income class	Within rural	Within urban	Population shifts	Total change in share of income class between early 2010s and early 2020s (p.p.)
China	Poor	-22.2	-11.4	-3.4	-37.1
		60%	31%	9%	100%
	Middle Class	8.7	13.9	2.5	25.0
		35%	55%	10%	100%
Indonesia	Poor	-7.4	-6.7	-1.0	-15.1
		49%	45%	7%	100%
	Middle Class	1.6	3.0	0.5	5.1
		31%	59%	10%	100%
Lao PDR	Poor	-4.2	-2.0	-1.1	-7.2
		58%	27%	15%	100%
	Middle Class	1.2	1.1	0.4	2.7
		44%	42%	14%	100%
Malaysia	Poor	-5.3	-6.2	-0.7	-12.1
		44%	51%	6%	100%
	Middle Class	6.3	5.0	0.8	12.1
		52%	42%	6%	100%
Philippines	Poor	-5.6	-3.9	-2.4	-11.9
		47%	33%	20%	100%
	Middle Class	1.2	0.6	1.1	3.0
		42%	20%	38%	100%
Thailand	Poor	-11.3	-4.2	0.4	-15.1
		75%	28%	-3%	100%
	Middle Class	8.3	6.7	-0.7	14.3
		58%	47%	-5%	100%
Viet Nam	Poor	-16.0	-3.3	-2.4	-21.7
		74%	15%	11%	100%
	Middle Class	11.3	6.0	2.7	20.0
		56%	30%	13%	100%

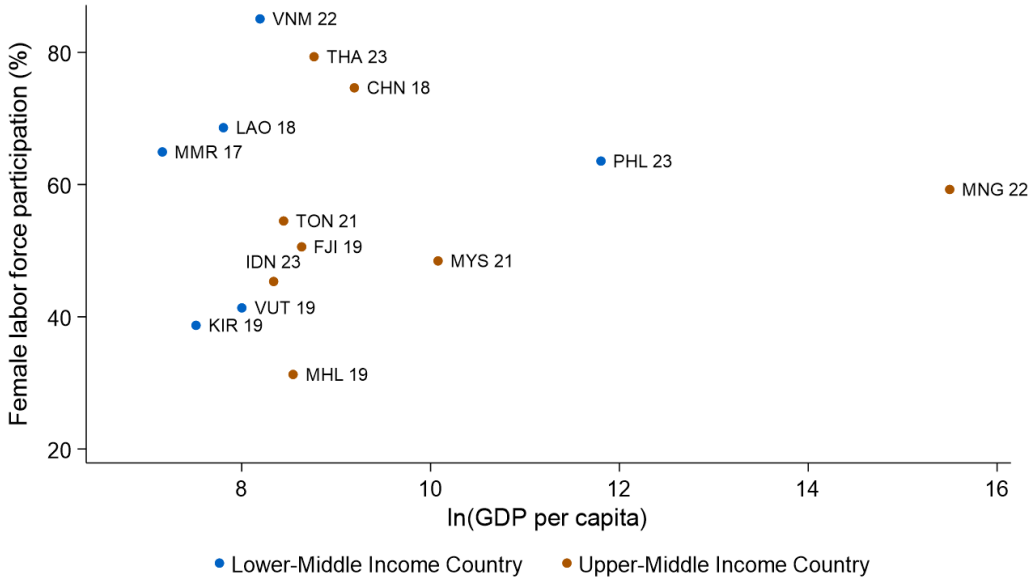
Source: Authors' calculations.
Note: Selected countries include China, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam. The "early 2010s" correspond to 2012 for all countries, except Malaysia and Thailand, for which 2011 is used. The "early 2020s" correspond to 2023 for the Philippines, Indonesia, and Thailand; 2022 Viet Nam; 2021 for China and Malaysia; and 2018 for the Lao PDR, as data for the early 2020s are not available for that country.

Appendix Figure B1: Change in Urban Share within the Poor and Middle Class, by Country (Early 2010s–Early 2020s)



Source: Authors' calculations.
Note: Selected countries include China, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam. The "early 2010s" correspond to 2012 for all countries, except Malaysia and Thailand, for which 2011 is used. The "early 2020s" correspond to 2023 for the Philippines, Indonesia, and Thailand; 2022 Viet Nam; 2021 for China and Malaysia; and 2018 for the Lao PDR, as data for the early 2020s are not available for that country.

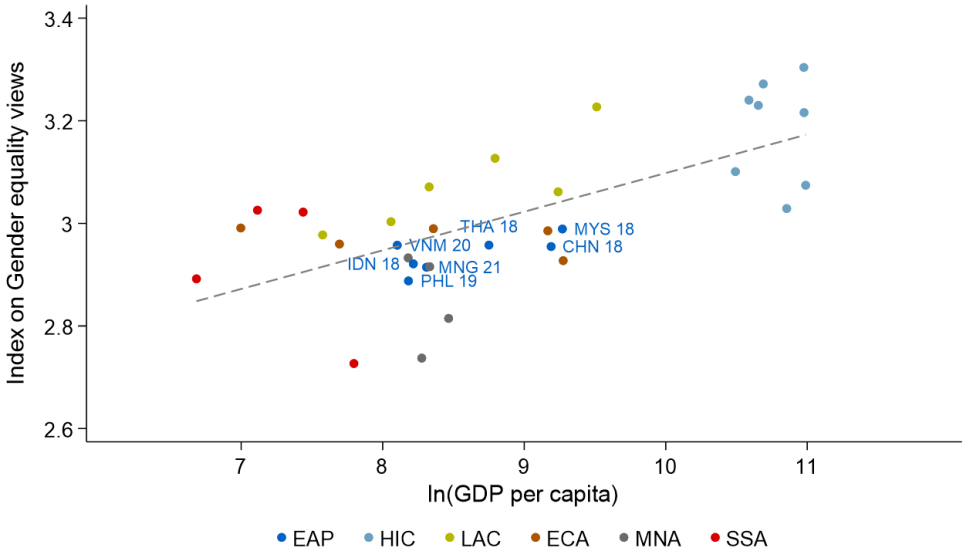
Appendix Figure B2. Female labor force participation and GDP per capita in EAP countries



Source: GDP per capita data is from World Development Indicators (WDI). Female labor force participation rates are based on the population aged 25-64, using data from the nationally representative China Family Panel Survey (CFPS) for China; and from the EAPPOV database, a harmonized database using microdata from official household surveys, for all other countries.

Appendix Figure B3. Gender equality views

(Average score on questions regarding support of gender equality)



Source: GDP per capita data is from World Development Indicators (WDI). The index on gender equality views is based on authors' calculations using seventh round of World Values Survey database (www.worldvaluessurvey.org) (Haerpfer et al., 2022).

Note: EAP = East Asia and Pacific; HIC = High-income countries; LAC = Latin America and the Caribbean; ECA = Eastern Europe and Central Asia; MNA = Middle East and North Africa; SAR = South Asia; SSA = Sub-Saharan Africa.

Appendix Table B3. Determinants of female labor market participation by country

	MYS 21	IDN 23	PHL 23	MNG 22	MMR 17	LAO 18	CHN 18	THA 23	VNM 18
Reside in urban area	-0.44	-1.15***	-0.64	9.84***	-11.08***	-2.42	-8.86***	-1.56**	-6.60***
	(0.49)	(0.34)	(0.53)	(1.13)	(1.48)	(1.49)	(1.34)	(0.74)	(1.17)
Age	3.59***	2.96***	4.78***	7.99***	4.14***	4.73***	5.61***	4.05***	3.15***
	(0.19)	(0.14)	(0.18)	(0.54)	(0.51)	(0.53)	(0.57)	(0.31)	(0.39)
Age squared	-0.05***	-0.03***	-0.06***	-0.10***	-0.06***	-0.06***	-0.07***	-0.05***	-0.04***
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)
Completed lower secondary	-2.29***	-0.96**	-1.53***	2.43	-2.73	8.51***	-2.97*	-1.17	0.22
	(0.86)	(0.47)	(0.59)	(1.99)	(2.04)	(2.14)	(1.66)	(1.19)	(1.15)
Completed upper secondary / technical	3.40***	0.19	3.69***	3.80**	-1.48	15.16***	-5.64**	1.83	1.73
	(0.72)	(0.48)	(1.31)	(1.86)	(2.69)	(3.22)	(2.58)	(1.16)	(1.56)
College	33.17***	22.91***	8.15***	11.57***	18.23***	24.16***	13.94***	7.23***	6.85***
	(0.96)	(0.67)	(0.70)	(2.14)	(2.45)	(2.88)	(3.78)	(1.49)	(1.88)
# children 0-2 years old in HH	-1.85***	-7.47***	-6.84***	-14.89***	-12.20***	-5.49***	-14.80***	-15.02***	-3.95***
	(0.55)	(0.41)	(0.49)	(1.21)	(1.42)	(1.28)	(1.59)	(1.21)	(0.93)
# children 3-5 years old in HH	0.35	-2.14***	-1.09**	-1.32	-2.89**	-1.57	-3.97***	-4.45***	-1.63*
	(0.45)	(0.38)	(0.44)	(1.14)	(1.25)	(1.05)	(1.31)	(0.97)	(0.90)
# children 6-14 years old in HH	3.19***	-0.09	1.61***	-0.54	-0.55	0.44	0.35	-1.49***	-0.57
	(0.24)	(0.23)	(0.23)	(0.67)	(0.66)	(0.53)	(0.78)	(0.57)	(0.58)
HH head: Completed lower secondary	0.23	-0.97**	-2.96***	-3.45**	-1.63	-3.72*	4.08**	-0.92	0.10
	(0.91)	(0.48)	(0.57)	(1.56)	(2.02)	(1.95)	(1.69)	(1.16)	(1.05)
HH head: Completed upper secondary / technical	-1.15	-1.24***	-7.20***	-0.69	4.82***	1.47	1.77	-4.59***	-1.98
	(0.75)	(0.45)	(1.30)	(1.61)	(1.69)	(3.02)	(2.09)	(1.11)	(1.42)
HH head: College	-12.85***	-0.54	-8.14***	-2.30	-5.65*	-1.68	1.19	-10.51***	-0.78
	(0.90)	(0.69)	(0.70)	(2.02)	(3.01)	(3.41)	(3.30)	(1.68)	(2.03)
HH with male wage employee	-3.89***	-4.52***	-10.44***	-19.90***	-7.67***	-4.93***	4.06***	-5.42***	-2.64**
	(0.51)	(0.34)	(0.43)	(1.14)	(1.25)	(1.81)	(1.28)	(0.74)	(1.08)
ln(HH expenditure)	21.09***	4.04***	15.88***	11.71***	-2.83**	-0.31	-3.82***	4.13***	-2.72***
	(0.46)	(0.33)	(0.44)	(1.43)	(1.42)	(1.16)	(1.05)	(0.97)	(0.95)
Constant	-93.82***	-35.16***	-52.03***	-102.00***	8.57	-10.12	-48.70***	-4.46	30.42***
	(4.44)	(3.19)	(4.20)	(12.54)	(10.95)	(11.43)	(14.46)	(7.62)	(9.25)
Mean of dependent variable	43.17	41.50	59.47	70.31	61.41	77.23	63.11	79.63	89.82
R2	0.228	0.068	0.096	0.203	0.081	0.115	0.088	0.111	0.148
Number of observations	61,493	260,392	108,953	11,448	10,465	6,937	11,415	26,669	7,822
	MYS 21	IDN 23	PHL 23	MNG 22	MMR 17	LAO 18	CHN 18	THA 23	VNM 18
Reside in urban area	-0.44	-1.15***	-0.64	9.84***	-11.08***	-2.42	-8.86***	-1.56**	-6.60***
	(0.49)	(0.34)	(0.53)	(1.13)	(1.48)	(1.49)	(1.34)	(0.74)	(1.17)
Age	3.59***	2.96***	4.78***	7.99***	4.14***	4.73***	5.61***	4.05***	3.15***

Source: Data for China is from the nationally representative China Family Panel Survey (CFPS). For all other countries, data is from the EAPPOV database, a harmonized database using microdata from official household surveys.
Note: ***, **, * denotes $p < 0.01$, $p < 0.05$, $p < 0.1$ respectively.

Appendix C: Summary of Data Used for the Analysis

Official Household Surveys and China Family Panel Studies (CFPS)

Data for all countries except China come from the EAPPOV database, which is a harmonized collection of socio-economic statistics derived from official household surveys. These nationally representative surveys are designed to capture comprehensive information on household well-being, including demographics, livelihoods, consumption expenditures, income, access to services, and exposure to shocks. A summary of the surveys used for each EAP country is provided in Appendix Table C1.

Survey data for China comes from the China Family Panel Studies (CFPS). The CFPS is a biennial longitudinal survey of Chinese communities, families, and individuals administered by Peking University, funded by the Chinese government. The survey is nearly nationally representative of China, excluding Hong Kong SAR, China; Macao SAR, China; Taiwan, China; and remote minority regions such as Xinjiang, Tibet, Inner Mongolia, Ningxia autonomous regions, and Qinghai and Hainan provinces (Xie & Lu 2015).

Appendix Table C1: Summary of harmonized microdata (HH) surveys

Country	Survey	Survey years
China	China Family Panel Studies (CFPS)	2014, 2018
Fiji	Household Income & Expenditure Survey (HIES)	2002, 2008, 2013, 2019
Malaysia	Household Income Survey (HIS)	2004, 2007, 2009, 2012, 2014, 2016, 2019, 2022
Indonesia	National Socio-Economic Survey (SUSENAS)	2000, 2001, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024
Philippines	Family Income and Expenditure Survey (FIES)	2000, 2003, 2006, 2009, 2012, 2015, 2018, 2021, 2023
Lao PDR	Laos Expenditure and Consumption Survey (LECS)	2002, 2007, 2012, 2018
Thailand	Socio-Economics Survey (SES)	2000, 2002, 2004, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023
Viet Nam	Viet Nam Household Living Standards Survey (VHLSS)	2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022
Mongolia	Household Socio-Economic Survey (HSES)	2010, 2011, 2012, 2014, 2016, 2018, 2022
Myanmar	Myanmar Poverty and Living Conditions Survey (MPLCS)	2015, 2017

Micronesia	Household Income and Expenditure Survey (HIES)	2005, 2013
Kiribati	Household Income and Expenditure Survey (HIES)	2006, 2019
Marshall Islands	Household Income and Expenditure Survey (HIES)	2019
Nauru	Household Income and Expenditure Survey (HIES)	2012
Solomon Islands	Household Income and Expenditure Survey (HIES)	2005, 2012
Vanuatu	National Sustainable Development Plan Survey (NSDP)	2019
Vanuatu	Household Income and Expenditure Survey (HIES)	2010
Samoa	Household Income and Expenditure Survey (HIES)	2002, 2008, 2013
Timor-Leste	Timor-Leste Living Standards Survey (TLSS)	2001
Timor-Leste	Timor-Leste Survey of Living Standards Survey (TLSLS)	2007, 2014
Tonga	Household Income and Expenditure Survey (HIES)	2000, 2009, 2015, 2021

Grouped data for China

The World Bank receives grouped expenditure data from the NBS which contains the mean per capita consumption by ventile nationwide and in urban and rural areas separately. The World Bank estimates of China's poverty rates at its three global poverty lines is based on this data. To do this, the World Bank uses the NBS grouped data together with information about mean per capita consumption to construct a full distribution by fitting a Lorenz curve. More information is available online through the Poverty and Inequality Platform (https://pip.worldbank.org/home). Estimates using the CFPS do not necessarily line up with the NBS based estimates. For instance, the share of the Chinese population below the typical upper-middle income poverty line calculated using the CFPS is higher than that from the NBS ventile information. Zhang et al. (2014) show that several early household surveys, including the CFPS, produced higher poverty numbers compared to official estimates. This may be due to differences in questionnaires, sampling and other methodological considerations. For consistency, calibrated lines were used to make sure that the shares in each economic class that we report line up in both datasets (for more details on the methodology see Montalva and Tiwari (forthcoming)).

The household survey that provides the information for the Chinese grouped data suffered a comparability break in 2013, associated with a change of the sampling frame and the inclusion of home ownership imputation in the consumption aggregate. The change in the sampling frame involved using actual residence instead of hukou to determine location and this may have a bearing on the interpretation of trends in urban and rural areas.