

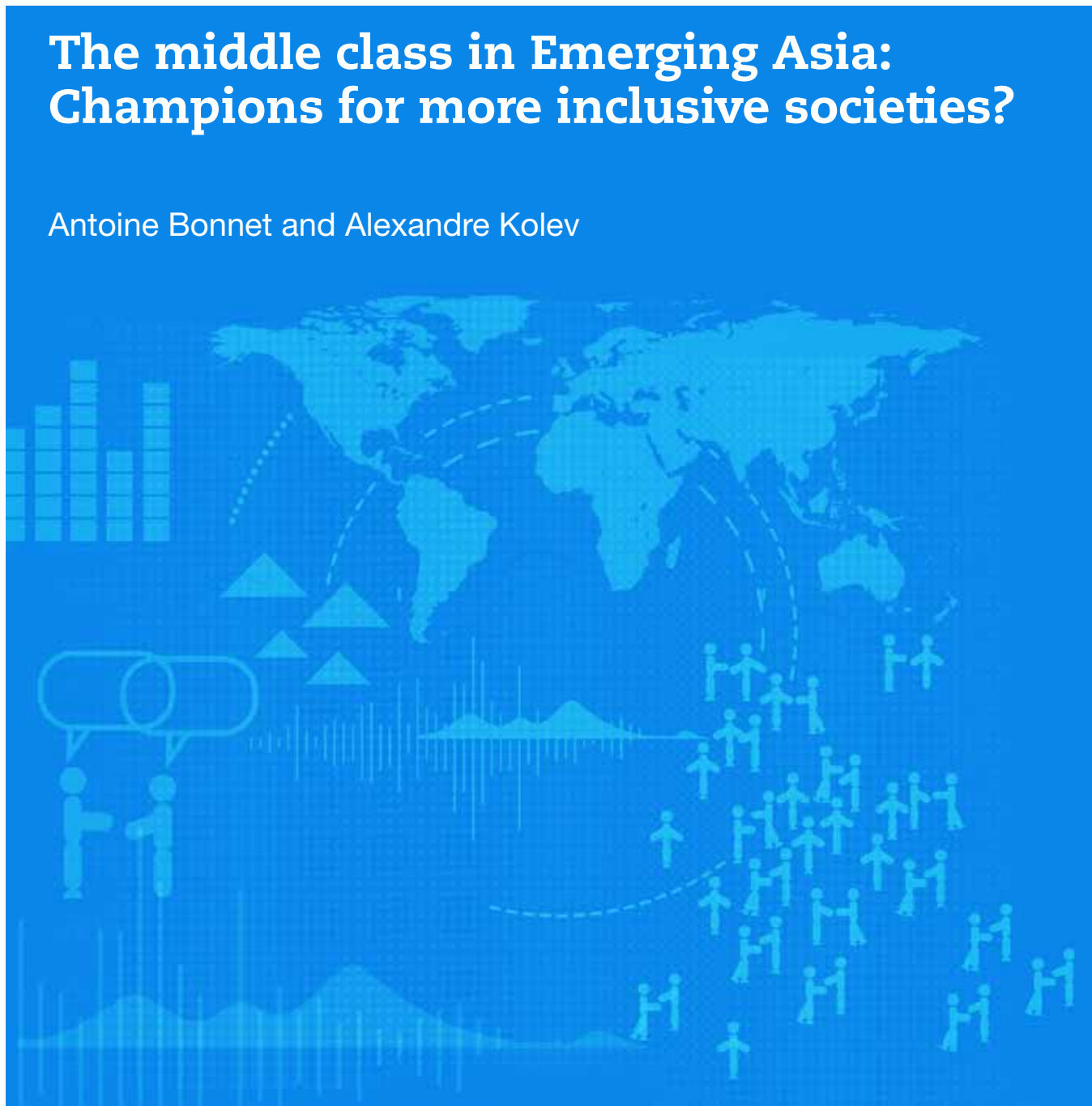
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The middle class in Emerging Asia: Champions for more inclusive societies?

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Abstract

As Asian societies continue to undergo rapid economic transformation, income distribution and social stratification are set to change radically. A primary characteristic of this evolution is the emergence of wealthier Asian middle-income classes. While middle-income classes are a heterogeneous group, they often come with new policy expectations, and the extent to which they will call for policy changes that are beneficial to more fragile segments of society remains unclear. This paper investigates the characteristics of different income classes in Asia in order to explore the extent to which the emergence of wealthier Asian middle-income classes could become a driver for more inclusive societies. From this perspective, we assess whether middle-income classes share common characteristics with the poor and the near-poor in six Asian countries, i.e. Cambodia, China, Indonesia, Thailand, Pakistan and Viet Nam. The paper finds that, in some aspects, middle-income classes share a number of similar characteristics with lower income classes. We discuss how this resemblance could result in support for policies that could benefit larger segments of society. We also underline the necessity to better integrate the needs of the poor and the near-poor in policy discussions, especially in areas where the interests of lower and upper income classes do not necessarily converge.

JEL classification: D63, N35, O15

Keywords: Asia, Income distribution, Inequalities, Social Classes

Résumé

La rapide transformation des économies émergentes d'Asie a radicalement modifié leur distribution du revenu et leur structure sociale. Cette évolution est notamment caractérisée par l'augmentation du revenu des classes moyennes. Quoique ces classes moyennes sont fortement hétérogènes, il est généralement admis que leur émergence s'accompagne de nouvelles préférences et demandes sur le plan des politiques publiques, et l'alignement de ses préférences avec celles de segments plus fragiles de la société reste à établir. Cet article évalue la mesure dans laquelle les classes moyennes sont différentes des populations pauvres et quasi-pauvres, et, sur cette base, si elles peuvent apparaître comme des moteurs de croissance inclusive, dans six pays asiatiques émergents : le Cambodge, la Chine, l'Indonésie, la Thaïlande, le Pakistan et le Viet Nam. L'article met en évidence une série de similarités entre leur classes moyennes respectives et des groupes au revenu moindre. Nous observons comment ces similarités peuvent soutenir des politiques bénéficiant à de larges pans de la société. Nous soulignons également la nécessité d'intégrer d'avantage les besoins spécifiques des foyers pauvres et quasi-pauvres dans l'établissement de politiques publiques, en particulier dans des domaines où leurs intérêts divergent de ceux des classes moyennes et supérieures.

Classification JEL : D63, N35, O15

Mots clés : Asie, Classes sociales, Distribution du revenu, Inégalités

Foreword

The recent, unprecedented growth of Emerging Asian economies has resulted in a radical change in their income distribution and social stratification, characterised in particular by the rise of a wealthier middle-income class.

While global evidence shows that a strong middle class is also one of the main determinant factors for governance structures and policies beneficial to development at the national level, this paper aims at better understanding Asian middle-income classes. It looks how they compare with other segments of society, how close they are to the needs and aspirations of more vulnerable groups, and therefore explores the extent to which they could become a driver for more inclusive societies. It also underlines the importance of better integrating the needs of the poor and the near-poor in policy discussions, especially in areas where the interests of lower and upper classes do not necessarily coincide.

Focusing on six Asian countries – Cambodia, China, Indonesia, Pakistan, Thailand and Viet Nam – the paper looks at whether middle-income classes share common characteristics and challenges with the poor and the near-poor and highlights potential discrepancies that policy makers should be aware of. It thereby aims at supporting an integrated approach in favour of inclusive growth.

This paper was produced with the financial support of the European Commission and as part of the OECD Development Centre's work on social cohesion within the Policy Dialogue on Transforming Asian Economies – a programme engaging policy makers and experts from Asia and Europe in a conversation on their common ambition to shift away from low-cost production models towards innovative ones that value environmental and social sustainability. This paper should enrich the evidence-based discussion on the evolution of Emerging Asian economies and societies.

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1 Introduction

As Asian societies continue to undergo rapid economic transformation, income distributions and social stratification are set to change radically. A primary characteristic of this evolution is the emergence of a wealthier Asian middle-income class. Traditionally, one of the clearest differences between developed and developing economies is that in the former most individuals are considered to belong to the middle-income class (Kapsos and Bourmpoula, 2013^[1]). In recent years, this view has been challenged as middle-class income has stagnated in OECD member states, while their Asian counterparts have rapidly improved their standard of living.

The middle-income class often plays a particular role in economic development. In particular, middle classes are key to the sustainability of long-term growth as they tend to support investment in human capital, infrastructure services, the development of social protection systems and the provision of reliable and fair public services (OECD, 2019^[2]). A stronger middle class is also found to improve overall governance, as it pushes for higher democratic participation and control of corruption (Loayza, Rigolini and Llorente, 2012^[3]). Moreover, as people residing at the centre of the income distribution, the middle class is likely to promote a healthy balance between public spending and taxation. Good policies are not constructed in a vacuum; they depend on the support of public opinion and such support is likely to be stronger among large middle classes. In turn, policies enhancing social cohesion might reinforce the middle-income class, thereby creating a virtuous circle.

What remains unclear, however, is the extent to which the middle-income class is likely to support policies that correspond to the interests of more fragile segments of society. Better understanding Asian middle classes, how they compare with other segments of society, how their needs and aspirations align with those of more vulnerable groups is therefore particularly important.

This paper investigates the characteristics of different income classes in Asia and explores the extent to which the emergence of wealthier Asian middle-income classes could become a driver for more inclusive societies. To this end, the paper assesses whether middle-income classes share common characteristics and challenges with the poor and the near-poor. In doing so, it seeks to understand whether the emergence of Asian middle-income classes may result in a disconnect with poorer segments of society, or whether common features and policy concerns may increase the likelihood of demands for policy changes that could benefit broader segments of society. The analysis is undertaken for six Asian low- and middle-income economies: Cambodia, China, Indonesia, Pakistan, Thailand and Viet Nam.

2 Defining the middle class

The concept of middle class covers a wide variety of definitions. In cross-country studies, the definition of the middle class resorts to two possible approaches: First, an “absolute level” approach defining upper and lower bounds, typically in purchasing power parity, across all countries. For example, Banerjee and Duflo (2008^[4]) define the middle class as people living with USD 4 to 6 (1993 PPP)/day. One of such “absolute level” type of class definitions is the “global middle class”, a concept used by Milanovic (2016^[5]), Kharas (2010^[6]; 2017^[7]) or by the Pew Research Center (Kochhar, 2015^[8]). In this case the size of the middle class, that is the share of a country’s population that belongs to it, varies across time and countries, and its size tends to increase in GDP per capita (Kharas, 2010^[6]; Kharas, 2017^[7]).

Another strand of the literature uses a “relative level” approach defining lower and upper bounds relative to countries’ income distribution. Instead of measuring a global middle class, this approach defines the middle class through country-specific thresholds.

For example, Easterly (2001^[9]) defines as middle-class individuals with income between the 20th-80th percentile of a given country’s income distribution, in which case the size of the middle class is fixed as the share of total population. One can also define thresholds as multiples of the median income, for example 75% to 200% of the median, as defined by the OECD (2019^[2]). In this case, the size of the middle class changes across countries and time and can be interpreted as a measure of inequality: countries with more individuals earning between 75% and 200% of the median income would be seen as more equal. As such, this measure does not need to be positively correlated with GDP per capita – as GDP per capita does not have a monotonic relationship with the level of inequalities.

This paper follows the latter “relative” approach used by the OECD (2019^[2]), focusing on the range between 75 and 200% of a country’s median income,¹ as we aim at discussing social cohesion, which is influenced by the national income distribution. To highlight this methodological choice, the paper refers hereinafter to this group as middle-income group.

Also, this latter definition allows for direct comparison with OECD’s *Squeezed middle class* report (2019^[2]), allowing to assess the extent to which OECD guidelines on supporting the stability and growth of the middle class can be implemented in the target countries. The paper defines three other income groups as follows. The “poor” are defined as individuals living on less than half the median income, consistent with the concept of relative poverty (Balestra et al., 2018^[10]). The “near-poor” are individuals between the 50% and 75% of median income. The “affluent” are individuals with income above 200% of the median. The analysis, which covers each country’s general population, is conducted by attributing individuals to a given class depending on their household’s income per capita. For consistency, any labour market statistic also follows this methodology, i.e. each working age individual or worker is classified depending on his/her household income per capita. Exact income concepts used in the paper are described in the *Data sources* section (Section 3).

To summarise, our aim is to measure middle-income class in a fashion that is relevant to discuss the relationship of said group with their poorer co-nationals. Therefore, the relative measure of a middle class

¹ In the case of Cambodia, as many survey respondents report zero incomes, the analysis relies on reported consumption as a proxy.

following the (OECD, 2019^[2]) definition of individuals living with 75-200% of the median income is particularly suitable here. Compared to a definition using absolute thresholds such as USD 10-100 per capita, this relative definition can lead to different conclusions in terms of the changes in the middle class size across time. While the size of a middle-class defined in “absolute level” terms typically increases with GDP per capita, the size of a middle-class defined with such as “relative” approach does not necessarily exhibit a monotonic relationship with a country’s income level.

3 Data sources

The main data sources used for the analysis are available household surveys as described in Table 1. They represent the only source of information combining measures of income as well as extensive individual and household characteristics. For the sake of transparency, it is worth mentioning that such surveys tend to imperfectly observe both the lowest and the highest incomes. The lowest incomes tend to be missed because such surveys choose households based on place of residence, in a random manner, therefore typically missing the homeless, prisoners and other marginalised groups (Milanovic, 2016^[5]). At the other end of the income distribution, observing people with high income is difficult, and it is subject to both traditional “sampling” issues, as well as “non-sampling” issues. By sampling issues, one generally thinks of the difficulty of observing very rare individuals, and very rich individuals, which are very rare by the very nature of income distributions. Additionally, there are problems not arising from sampling itself, but rather because high-income earners might be unwilling to participate in household surveys or aim at dissimulating some sources of income and might therefore underreport or refuse to take the survey entirely – see Stiglitz, Fitoussi and Durand (2018^[11]) for a detailed description of the issue. This led to underestimate inequality by about 10% in the United States for example, and in Brazil there is evidence that the underestimation of top incomes has tended to increase in recent years (Alvaredo et al., 2018^[12]). This poses only a limited problem for this paper, as the primary focus is on the middle of the income distribution.²

As much as possible, we rely on gross income as our welfare metric, as it is the most widely available measure across the surveys used here. Annex A explains in more detail the differences between income concepts. The analysis encompasses any element that can be considered an element of (gross) income, including in-kind payments and transfers when available in a given survey. This measure is different from disposable income, used in (OECD, 2019^[2]), as it does not subtract taxes, in particular personal income tax. Yet, personal income taxation is typically low in a developing context: according to IMF research (Abdel-Kader and Mooij, 2020^[13]) personal income tax represents on average 3% of GDP in low- and middle-income countries, much lower than in advanced economies (10%). The latest estimates are 1.15% for Cambodia (2017), 1.44% for China (2017), 0.92% for Indonesia (2017), 4.08% for Pakistan (2013) and 1.78% for Thailand.³ Therefore, the difference between gross and disposable income is likely to be small in this case.⁴

² While administrative records provide a more comprehensive coverage of the entire income distribution (Atkinson, Piketty and Saez, 2011^[33]), their availability is limited in the case of developing economies (Milanovic, 2016^[5]) and they do not include a rich set of variables on living conditions as household surveys do. Household surveys are thus considered preferable given the objectives of the present study.

³ Source: IMF World Revenue Longitudinal Dataset. No estimate is available for Viet Nam.

⁴ Another conceptual difference with (OECD, 2019^[2]) is the adjustment for household size: while (OECD, 2019^[2]) adjusts for household size assuming economies of scale, we follow the standard in the development economics literature.

Table 1. Data sources and welfare metrics

Country	Year	Country's income status (at time of survey*)	Survey name	Number of observations**	Welfare metric used
China	2013	Upper middle income	Chinese Household Income Project (CHIP)	57 821	Disposable income per capita
Cambodia	2014	Low income	Cambodia Socio-Economic Survey (CSES)	53 968	Consumption per capita
Indonesia	2015	Lower middle income	Indonesian Family Life Survey (IFLS) ⁵	58 561	Gross income per capita
Pakistan	2019	Lower middle income	Pakistan Social And Living Standards Measurement (PSLM/HIES)	159 949	Gross income per capita
Thailand	2017	Upper middle income	Thailand Household Socio-economic Survey (SES)	120 434	Gross income per capita
Viet Nam	2016	Lower middle income	Vietnam Household Living Standards Survey (VHLSS)	35 771	Gross income per capita

Notes:* Source: World Bank. **Observations at the individual level. Are only included individuals for which the household welfare metric (household income/consumption) is available.

Besides primarily household surveys, the analysis also relies on other sources of data that provide additional information that is useful for the analysis. It combines this survey-based information with data from OECD's Inter-Country Input-Output tables to obtain a measure of trade exposure by social class, which can be interpreted as the average exported share of total output by sector, weighted by the number of workers by sector in each social class. It also uses data from Dingel and Neiman (2020^[14]) to obtain a measure of the average potential ability to telework by social class, based on distribution of types of occupations by social class. While the cross-sectional data are directly computed based on microdata, time-series in average incomes and inequalities come from the World Income Database as well as World Bank's PovCal.

⁵ The survey omits certain territories, in particular some Eastern Islands, therefore being representative of 84% of Indonesia's population.

4 Asian income dynamics in the global context

The magnitude and significance of the changes in Asia's income distributions is best highlighted when considered in the broader context of the world income distribution, which features the income distribution of all individuals across the world irrespectively of the country where they live. From this perspective, the so-called “elephant curve” (named after the peculiar shape of the global income distribution incidence curve) has attracted a lot of attention in recent years. This curve, initially introduced by Lakner and Milanovic (2015^[15]), has been recently updated in the *World Inequality Report* (Alvaredo et al., 2018^[12]), and further broken down by shorter time periods by Milanovic (2021^[16]). The “elephant curve” is an estimate based on incidence curves, a graph showing the percentage increase of each segment (percentile) of world distribution between the two periods.

The rise of (median) incomes in Emerging Asia

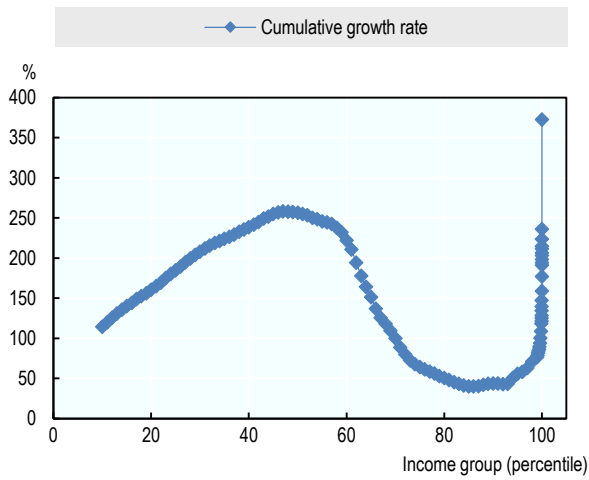
There were two main “winners” in the income race over the last four decades: the lower and middle parts of the income distribution (between the 10th and the 70th percentile) as well as those at the top (95th percentile and beyond). Income for the segment between the 70th and the 95th percentile stagnated (Figure 1, Panel A).

The group experiencing fast income growth is located between the 10th and 60th percentile. This segment is largely composed of households in Emerging Asia, as shown in Panel B. Conversely, the stagnating segments between the 70th and 95th percentile mainly contain the lower middle-income groups of advanced economies (Figure 1, Panel B).

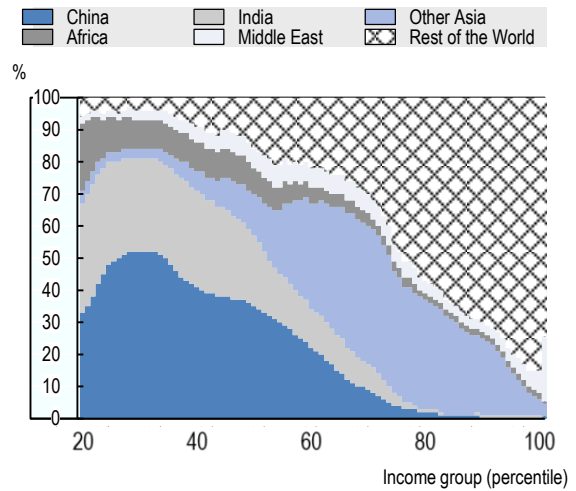
The extraordinary economic growth of Asian economies boosted individual incomes, including for the centre of the distribution, as median incomes have been multiplied by about 3.5 in China and in Viet Nam. This clearly contrasts with OECD countries, where median incomes increased by a mere 25% over the same period.

Figure 1. The “elephant curve” winners are mostly in Asia

Panel A. Total income growth by income percentile, 1980-2016

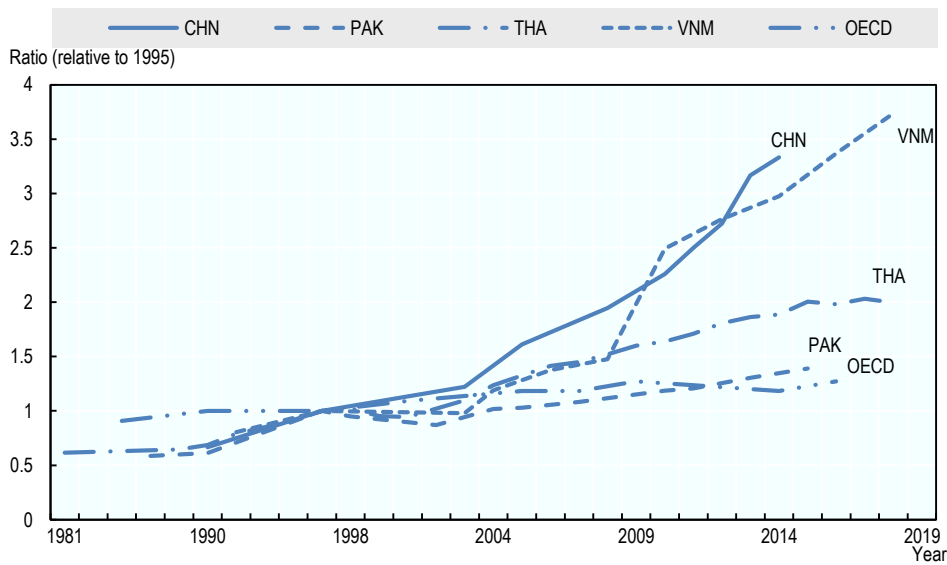


Panel B. Geographic breakdown of income groups, 1990



Source: Adapted from Alvaredo et al. (2018_[12]).

Figure 2. Emerging Asia's median incomes increased sharply



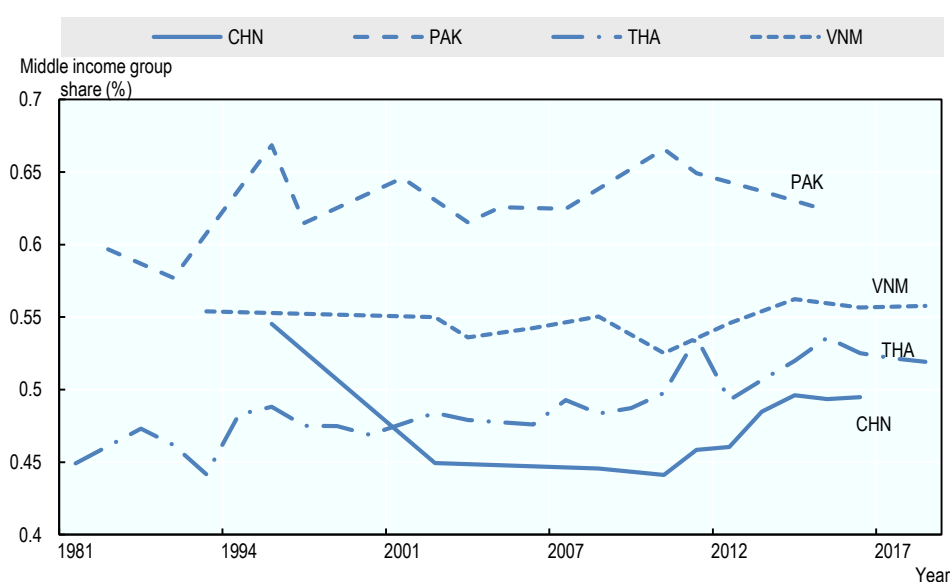
Source: Author's calculations based on POVCAL. Indonesia and Cambodia are not shown for lack of (comparable) time-series.

The changing size of Asian middle-income groups

While Asian median incomes increased sharply in the past decades, the size of most Asian middle-income groups tended to decline or stagnate in recent years as within-country income inequality surged. Figure 3 represents the evolution of the size of middle-income groups in China, Pakistan, Thailand, and Viet Nam.⁶

With the exception of Thailand, which experienced a sustained increase in the size of its middle-income group, all three countries experienced an overall stagnation or decline in the size of the middle group in the late 2010s compared to the mid-1990s. Viet Nam's and Pakistan's middle-income group experienced a slight decrease in size, while in China its size fell sharply until approximately the first half of the 2010s then increased again. As mentioned before, this pattern can be, and indeed is, different from what is observed on the basis of the definition of a "global middle-class" (individuals living on USD 10-100 per capita, PPP), the share of which has increased steadily across Emerging Asia across the last decades (Kharas, 2010^[6]).

Figure 3. Middle-income groups have tended to stagnate or shrink in size



Source: Author's calculations based on POVCAL. Indonesia and Cambodia are not shown for lack of (comparable) time-series.

The dynamics of income inequality

The decline or at least stagnation in the relative size of the Asian middle-income groups mirrors the increase in income inequality observed in most Asian economies. Figure 4 depicts the levels of inequality,

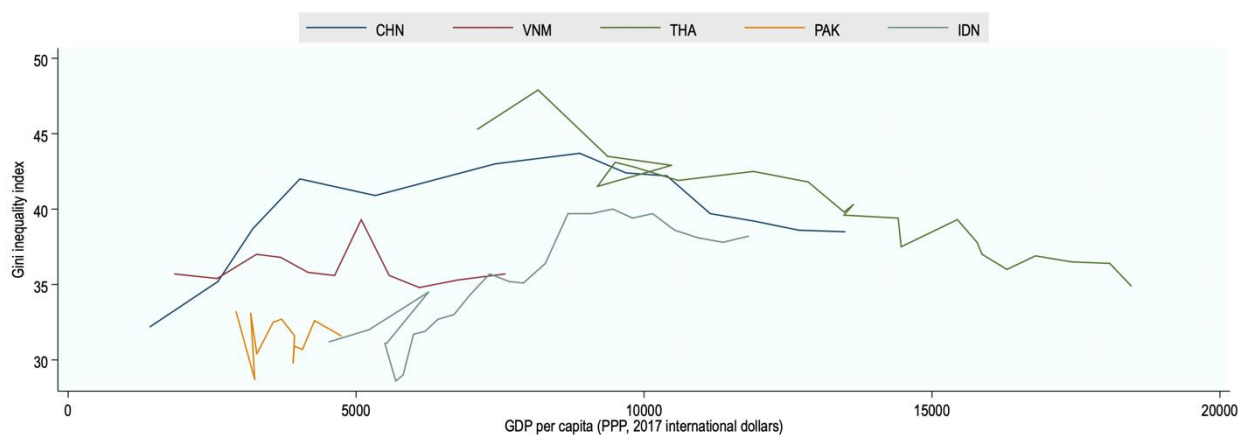
⁶ Out of the six countries covered in the study, POVCAL provides comparable time series for four of them. Note that in order to obtain long-time series, the analysis relies here on World Bank's POVCAL consumption distributions, as a proxy for income distributions. As consumption is more equally distributed than income, the share of individuals belonging to the middle-income group is slightly larger than in the subsequent analysis. Yet the relative position of each country in the mid-2010s remains similar. In the case of Indonesia, POVCAL provides estimates based on a survey with a larger geographic coverage than the one used in the rest of this analysis. Those estimates are thus not incorporated here in order to ensure comparability across data sources.

as measured by the Gini coefficient, against each country's GDP per capita (PPP), as they evolved through time.

A pattern appears, though: when plotted against GDP, inequalities seem to follow an inverted U-shaped relationship, as all economies have generally experienced increasing income inequalities up to USD 10 000 GDP per capita (2017, PPP), after which countries seem to exhibit a decline. This pattern is reminiscent of the one highlighted by Kuznets (1955^[17]), which posits that, as they develop, countries first experience an increase followed by a decrease in inequalities after a certain threshold level of GDP per capita. The concept has been described as “the main tool used by inequality economists when thinking about the relationship between development or growth and inequality over the past half century” (Milanovic, 2016^[5]). More recently, Milanovic (2016^[5]) has suggested a generalisation of the Kuznets' curve through the concept of *Kuznets' waves*, which are characterised by cyclical decreases and increases in inequalities.

Emerging Asian economies might be following a pattern similar to the early trajectory of advanced economies, with an increase in inequalities at early stages of development, which is finally reversed, even though many countries of the region still seem to be on the ascending part of the inequality/development relationship – as suggested by Figure 4. So, is there an Asian Kuznets' curve? As discussed by Ravallion and Chen (2021^[18]), while it has been clearly established that China has indeed seen an increase followed by a decrease in inequalities along its development process, the underlying mechanisms are different from the historical trajectories of developed economies and do not allow to predict the future trajectory of the country or the ones of other emerging Asian economies.

Figure 4. An Asian Kuznets' curve?



Source: Gini coefficients and GDP per capita (PPP, 2017) obtained from the World Bank.

Besides the consequences of rising income inequality on the size of the middle-income group, the overall increase in inequalities in the last decades had a detrimental effect on poverty reduction. Had inequalities been stable between 1990 and 2010, 240 million more Asians would have been lifted out of extreme poverty (Zhuang, Kanbur and Rhee, 2014^[19]).

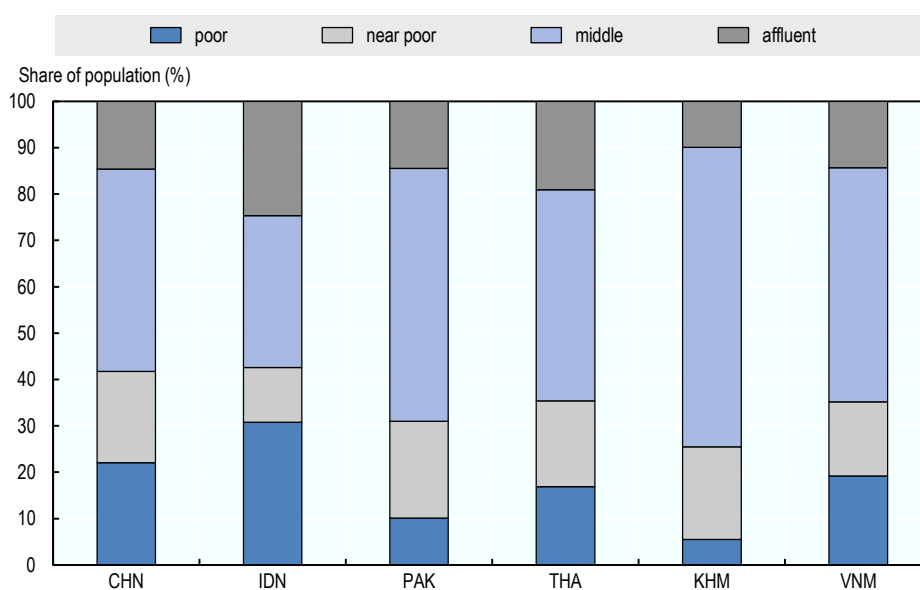
Rising income inequality in Asia has several root causes. One important driver of inequality in Asia is the globalisation process, which has spurred economic growth but has left behind many people. Evidence suggests that trade and foreign direct investment may have produced 22% of regional inequality in China (Wan, Lu and Chen, 2007^[20]). Domestic policies have also played a critical role in the rise of inequality: the (IMF, 2016^[21]) estimates that certain policies, in particular social and education spending, are associated

with an increase in inequalities in Asia, unlike what is usually observed in most OECD countries. This may be due to low levels of social protection, health and education spending observed in Asia on average. Asia is the second lowest spender on these programmes, after sub-Saharan Africa. The fact that social and education spending is both low and, when spent, seems to widen disparities indicates a pro-rich bias in the allocation of these scarce resources. In contrast, financial deepening seems to be negatively associated with inequality in Asia, unlike what is observed in other countries, as some financial policies have allowed to foster economic inclusion of lower-income households (Huang, Morgan and Yoshino, 2019^[22]).

5 The income and size of different income groups in Emerging Asia

What follows is a discussion about the size and the income of different income groups in Emerging Asia. Figure 5 shows the share of the population in different social classes in the set of six countries. Cambodia is an outlier here – exhibiting the largest middle-income group and the smallest affluent and poor categories. This might be driven by the fact that in the case of Cambodia the analysis needs to rely on consumption rather than income – an intrinsically more equal welfare metric. In mid-/late 2010s, middle-income groups (individuals with incomes between 75% and 200% of the median income) ranged from 32% in Indonesia to 65% in Cambodia; the poor (individuals with incomes below 50% of the median income) represented from 5% of the population in Cambodia to 31% in Indonesia; the near-poor from 21% in Pakistan to 20% in Cambodia and the affluent from 25% in Indonesia to 10% in Cambodia.

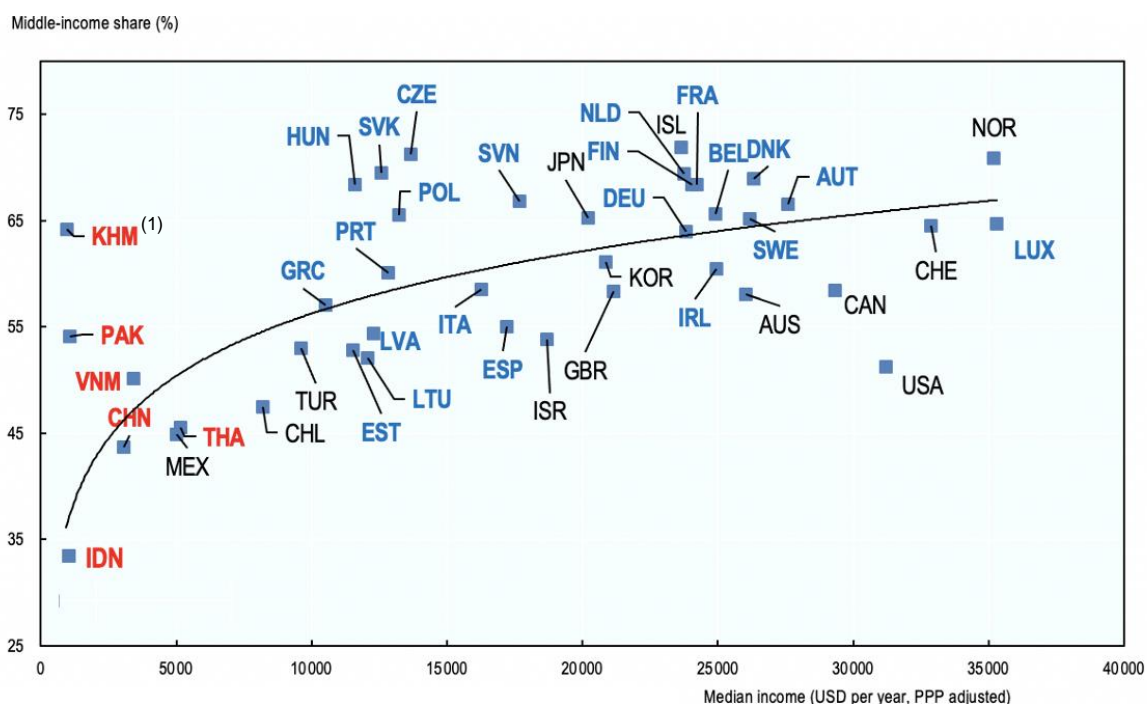
Figure 5. Share of total population by income groups, 2013-2017



Note: Authors' calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

Unsurprisingly, across the six countries, median incomes are lower than in most OECD countries (Figure 6). The share of the population belonging to the middle-income group is also generally smaller than in OECD countries, in particular when compared to EU27 countries (Figure 6).

Figure 6. Middle-income groups remain smaller in Emerging Asia compared to OECD countries, 2009-2018



Note: The estimates for OECD countries are based on disposable income, adjusted for household-size. The estimates for Pakistan, Thailand and Viet Nam are based on gross income per capita. (1) The estimate for Cambodia is based on consumption per capita – as consumption tends to be more equally distributed than income, therefore not fully comparable to other countries.

Colour coding: selected Emerging Asian countries in red, selected EU member countries in blue, non-EU OECD countries in black.

Results are given for the following years: Australia (2014), Cambodia (2014), Chile (2015), Germany (2015), Hungary (2015), Israel (2016), Indonesia (2014), Iceland (2010), Italy (2014), Japan (2009), Korea (2012), Mexico (2012), Pakistan (2018), Poland (2016), Slovenia (2012), Thailand (2017), Turkey (2014), United States (2016), South Africa (2012), Viet Nam (2016) and 2013 for all other countries.

Source: Author's calculations based on national household surveys and (OECD, 2019^[2]).

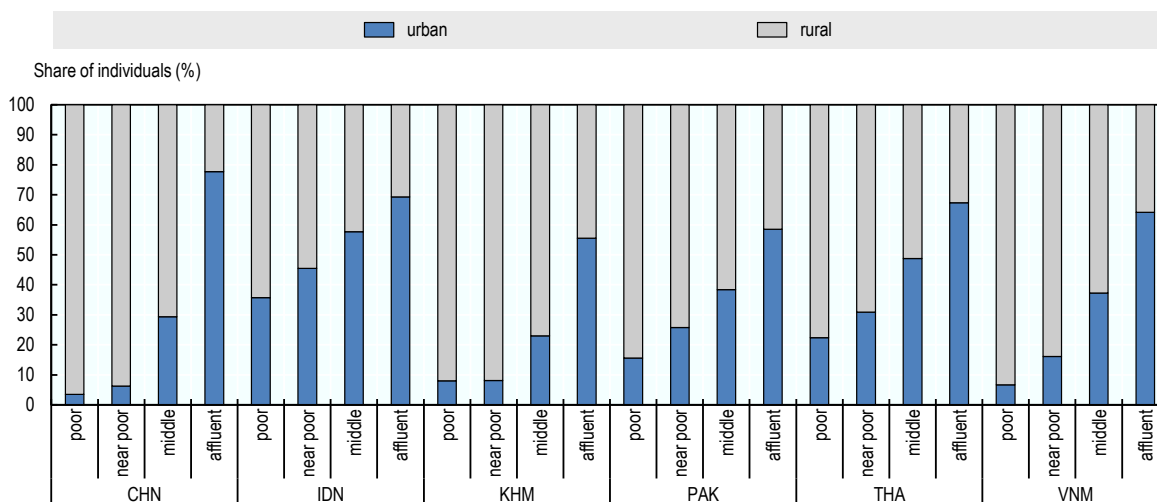
6 Characteristics of different income groups in Emerging Asia

The previous section has shown that the middle-income groups in Asia vary in size from one country to another, yet they constitute an important share of the population in the region. At the same time, taken altogether, the poor and the near-poor remain a large group in Asia. In this section, we look at the characteristics of these different income groups to assess the proximity or distance between these groups along different metrics.

Geography

Geography, in particular the rural-urban divide, is a crucial determinant of social stratification. In all six countries, the poor and near-poor overwhelmingly live in rural areas while the affluent disproportionately live in urban areas.⁷ Middle-income individuals seem to be more evenly distributed across rural and urban areas, with a slightly higher proportion living in rural areas except in Indonesia.

Figure 7. Urbanisation is strongly associated with income status, 2013-2018



Note: For Cambodia, social class categorisation is based on consumption instead of income and is therefore not fully comparable to the other countries covered.

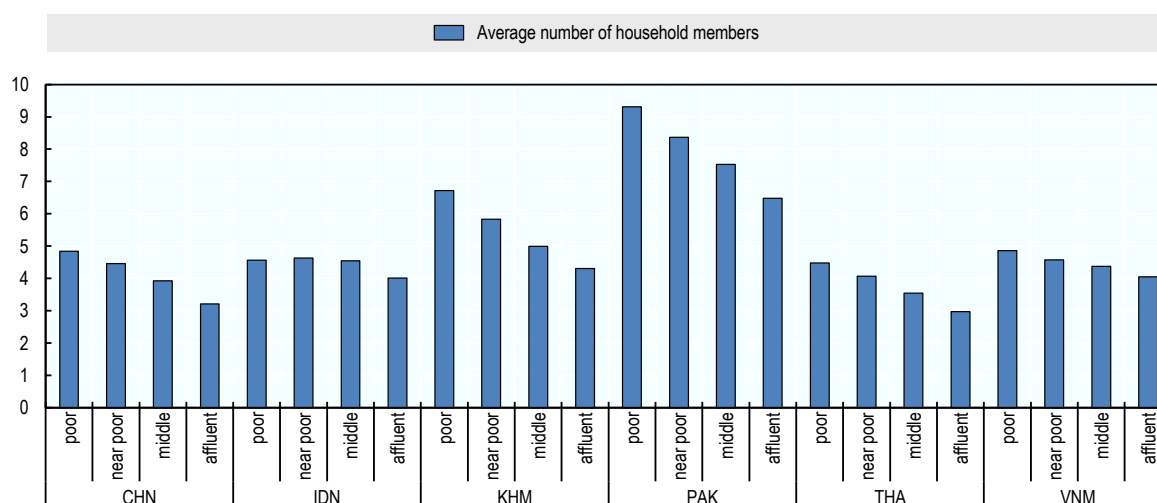
Source: Author's calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam. Urban and rural status is determined according to national definitions.

⁷ Rural/urban status follows national definitions.

Demographics

Household size, as one might expect, decreases with average household income, with a sharp decrease observed in Cambodia and Pakistan and a slight one in Indonesia, for example. This trend largely reflects an uneven distribution of children across income groups, while the share of elderly people living in the household seems to be rather stable along the income distribution.

Figure 8. Household size across income groups, 2013-2018

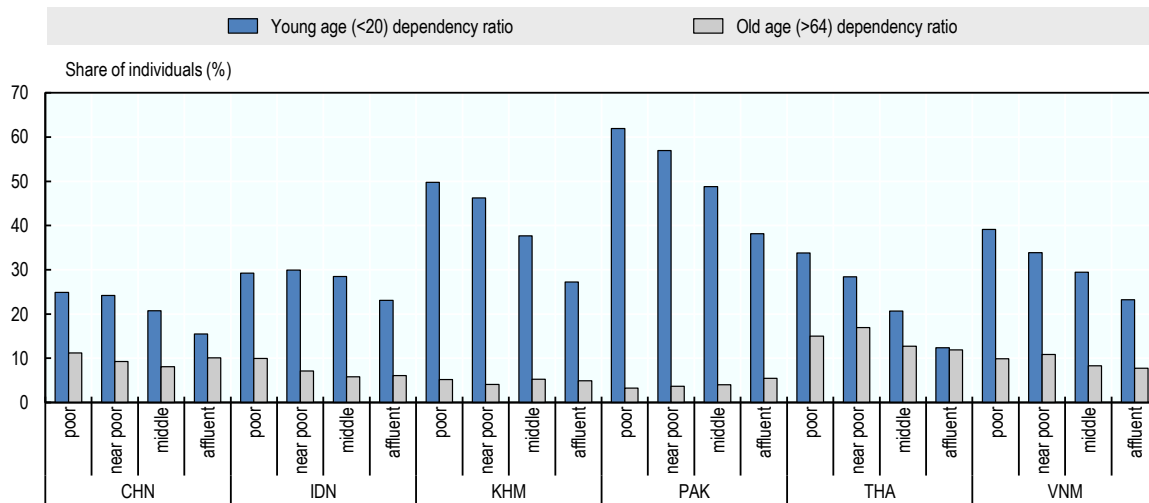


Source: Author's calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

The dependency ratio can be calculated using the OECD definition of dependents as those aged between 0-19 (young age dependents) and 65+ (old age dependents). Young-age dependency declines steadily with a country's level of development following the World Bank income nomenclature, as lower middle-income countries (Cambodia, Pakistan, Viet Nam) exhibit higher levels of dependency than upper middle-income ones (China, Indonesia, Thailand). Within country, more affluent groups typically exhibit lower young-age dependency ratios, except for Indonesia.

In contrast, old-age dependency is rather similar across income groups within countries, possibly reflecting the fact that in Asian countries elderly people tend to live with their younger family members, regardless of income status. In the sample of upper middle-income countries (China, Indonesia, Thailand), the old-age dependency ratios are higher than in the lower middle-income ones (Cambodia, Pakistan, Viet Nam), probably reflecting a different ageing pattern.

Figure 9. Dependency ratios across social classes, 2013-2018



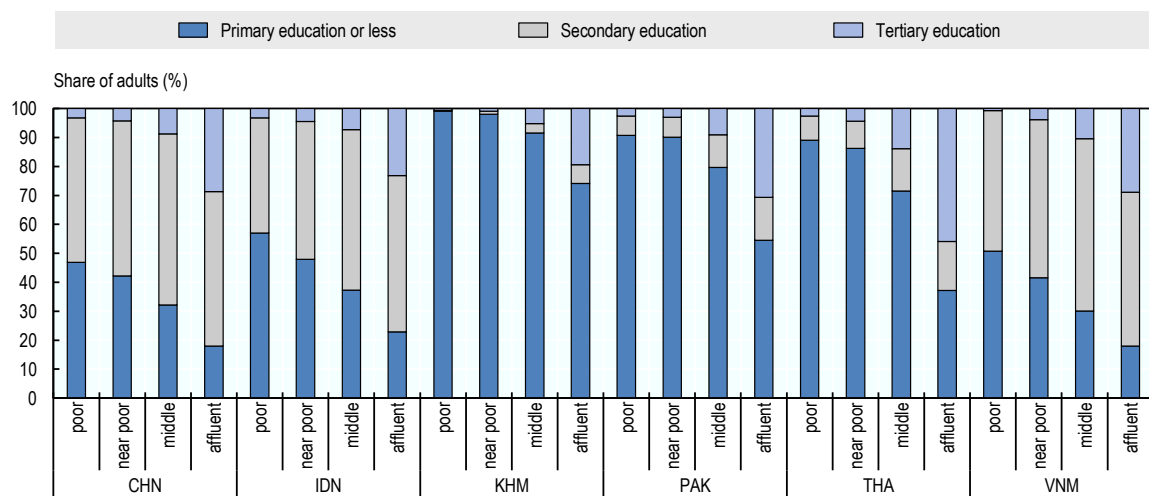
Note: Class categorisation is based on per capita household income. The young/old age dependency ratio is computed as the average share of household members by social classes (weighted by household size).

Source: Author’s calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country’s territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

Education

The level of education is another important feature that differentiates income groups in Asia. In all six countries, tertiary education is heavily concentrated in the high-income group, while the share of those with at-most primary education is systematically high among the poor. What is worth noting, moreover, is that the distribution of educational attainment among the middle-income group is much closer to that of the near-poor and poor than to the affluent.

Figure 10. Education level among adults across income groups, 2013-2018



Source: Authors’ calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country’s territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

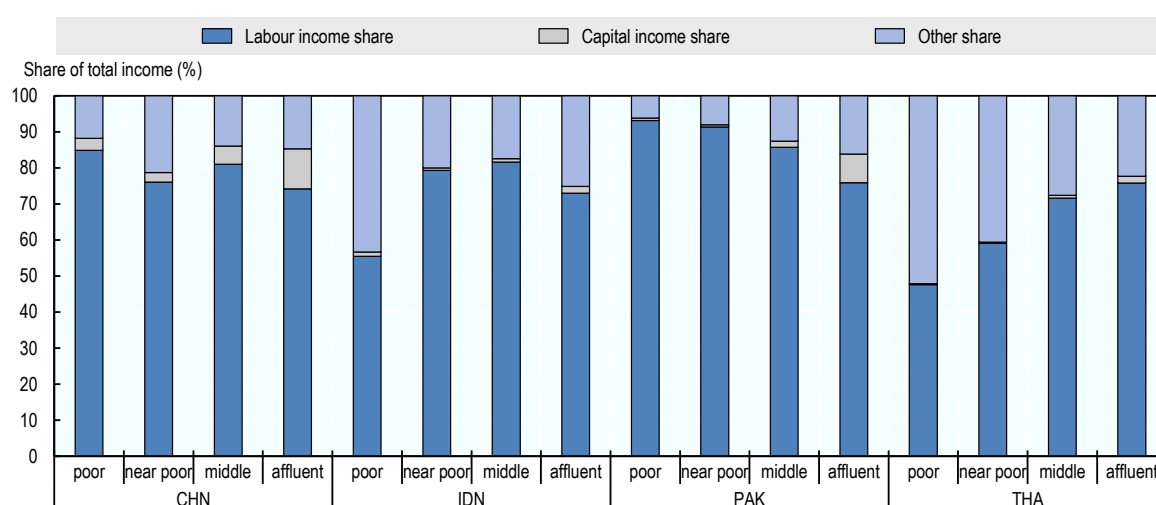
Sources of income

Sources of income vary by income groups and countries. Figure 11 presents the share of the two sources of “market” income (labour and capital income), on one side, and “other share”, which encompass private transfers (e.g. remittances) and government transfers, on the other. Where possible, the share of government transfers is presented in Figure 12. As a share of total income, labour income is relatively stable within a given country from one social class to another. Thailand represents an exception, as the share of labour income increases steadily with income levels; this is partly explained by the larger share of government transfers for low-income groups in the country. Also, in the Thai survey (SES 2017), some in-kind incomes cannot be disaggregated between market income and private transfers and are therefore classified as “other”, which may bias downwards the labour share of low-income workers, in particular in agriculture.

Across all countries, the capital share is concentrated among the affluent – even though it represents a small share of income even for this group. One should emphasise however that households at the very top of the income distribution typically concentrate a large share of capital income but, as previously discussed, are generally not covered by household surveys. Thus, the share estimated for the affluent group is likely to be underestimated.

For consistency with other metrics, the capital and labour share are computed as the share for each individual averaged across all individuals. It is conceptually different from the labour and capital share in national accounts, which is the contribution of labour and capital across the entire economy – not the average of individual shares.

Figure 11. Sources of income, as a share of total income, across income groups, 2013-2018



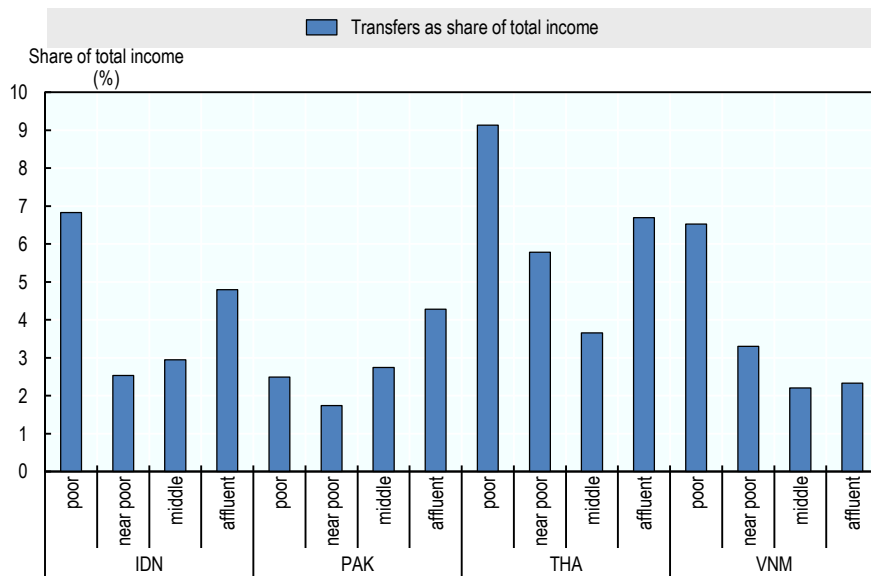
Note: In the case of Thailand some in-kind income cannot be disaggregated between market income and private transfers. This is likely to bias downwards the labour share of low-income households, as e.g. in agriculture.

Source: Authors' calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), HIES (2018) for Pakistan, SES (2017) for Thailand.

Government transfers exhibit heterogeneous patterns as well (see Figure 12). They are clearly redistributive in Viet Nam as they constitute 6.5% of poor households' incomes, compared to only about 2% of households with affluent and middle incomes. While the analysis focuses here on monetary transfers, other studies have also highlighted the pro-poor dimension of basic services provision in

Viet Nam (World Bank, 2017^[23]). Indonesia and Pakistan are instead characterised by a U-shaped pattern, without a clear redistributive effect. In Indonesia, transfers appear as overall progressive as they are highest among the poor (7%), consistently with findings from the World Bank/CEQ Institute findings (Jellema, Wai-Poi and Afkar, 2017^[24]) based on older data (SUSENAS 2012). Yet, these transfers provide little support to households close to poverty thresholds. In Pakistan, transfers might even be described as regressive, as it is highest towards the affluent class (4%). Regarding China, while data do not allow for comprehensive government transfers measurement, previous research has concluded that such transfers are progressive and reduce inequalities within regions, as well as between regions (Lustig and Wang, 2020^[25]).

Figure 12. Government transfers as share of total income across different income groups, 2013-2018

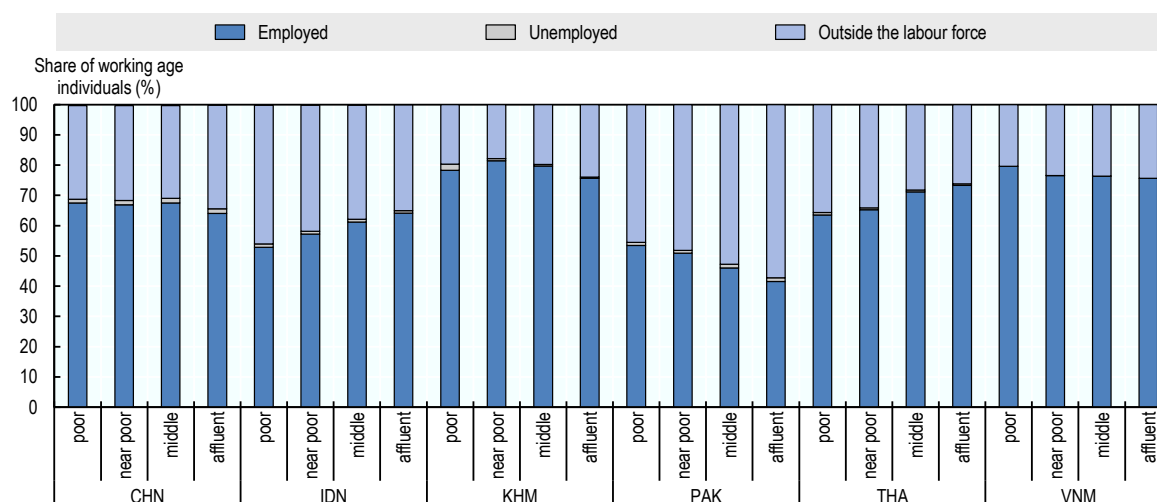


Source: Author’s calculations based on household surveys: IFLS (2014) for Indonesia (survey excluding some of the country’s territories, namely eastern islands), HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

Employment

Looking at the labour market status of people belonging to different income groups does not show any significant disparities in societies. The employment rate, that is the share of working-age population individuals engaged in employment, is rather uniform across countries and classes, and so are the share of people who are unemployed and out of the labour force (Figure 13).

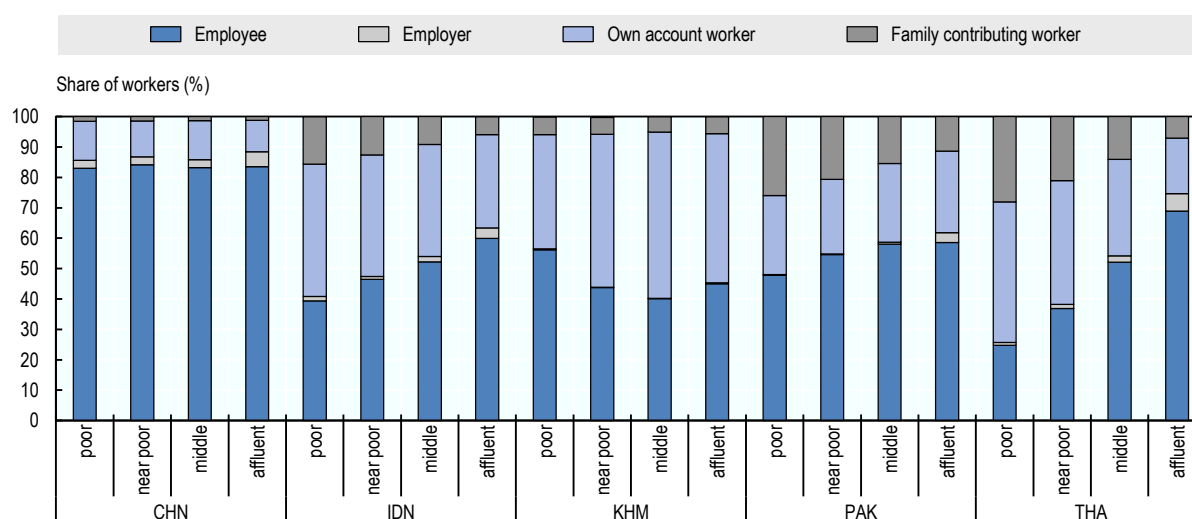
Figure 13. Labour market status across income groups, 2013-2018



Source: Author's calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

In contrast, the status in employment seems to vary significantly across income groups in some countries. As shown in Figure 14, higher income groups are generally characterised by a lower share of own-account workers and family contributing workers, and a higher share of employees. The main exceptions are China, where employees constitutes the majority of employment across all classes, and at the other end of the spectrum Cambodia, where own-account status is prevalent across all classes.

Figure 14. Status in employment by income groups, 2013-2018



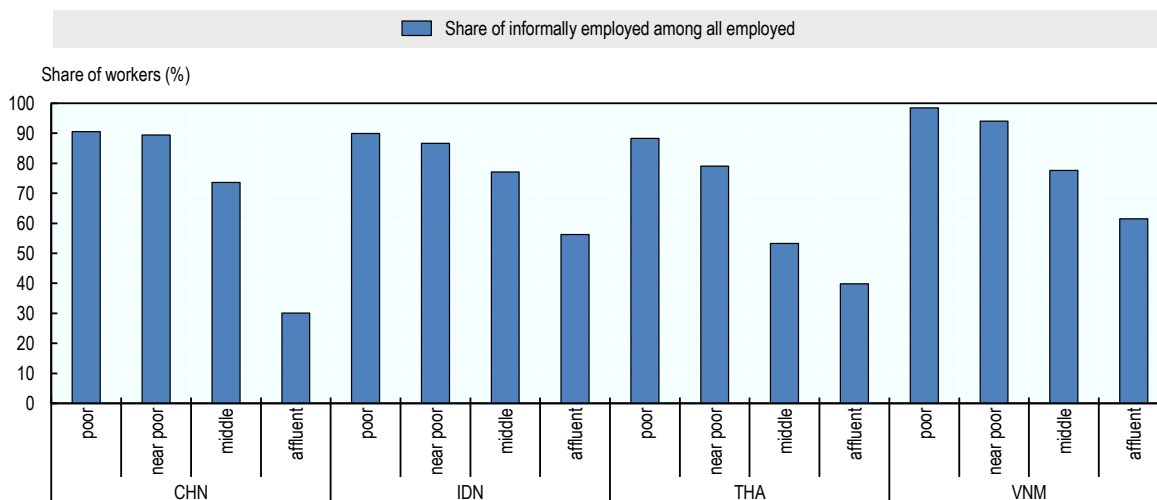
Source: Author's calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand.

What seems to additionally distinguish income groups is the quality of employment, especially the incidence of informal employment.⁸ Informality is one of the long-term structural challenges faced by many Asian economies. In Southern Asia, 88% of employment is informal; in East and South-Eastern Asia (excluding China), it is nearly 77%. Informality patterns and underlying causes are diverse and vary from country to country. Consequently, there is a strong heterogeneity across informal workers and their households in terms of employment, earnings, prospects, and risks.

Informality also has many adverse consequences for economies, such as productivity loss, inequality, or lack of social cohesion. At the individual and household levels, informality has a differentiated effect on workers, but also their dependent family members, including children and elderly. Some of the most adverse effects are manifested by the lack of social protection, related income poverty and income insecurity. This poses specific challenges to Emerging countries' middle-income groups, as they typically do not qualify for means-tested non-contributory income support because of their relatively higher income, and because they tend also to be excluded from contributory schemes given their informal work status.

As shown in Figure 15, informal employment status is a key determinant of lower income groups, although informality cuts across all groups in society.⁹ The poor and the near-poor are overwhelmingly engaged in informal employment, at rates around 90% and above. A large proportion of middle-income workers are also in informal employment, from 58% in Thailand to 78% in Viet Nam. In contrast, workers belonging to the affluent class are significantly more formalised; yet the share in informal employment remains important, especially in Viet Nam and Indonesia.

Figure 15. Informal employment, as a share of total employment, by income groups, 2013-2018



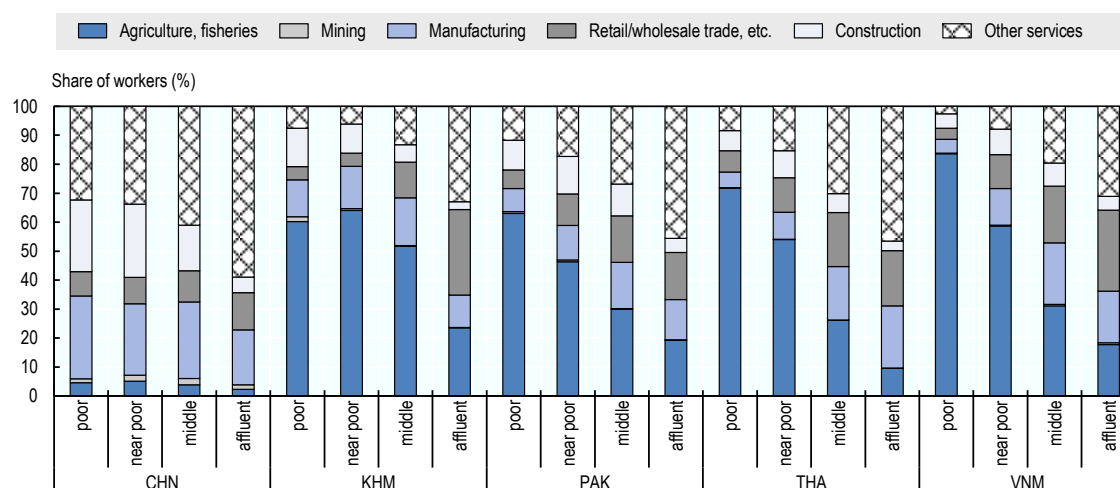
Note: Author's calculations based on household surveys: CHIP (2013) for China, IFLS (2014) for Indonesia (survey excluding some of the country's territories, namely eastern islands), SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

⁸ Throughout this study, informal employment is defined following ILO guidelines. Are namely considered informal employees those whose "employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits" (OECD/ILO, 2019^[32]), as well as own-account workers and employers whose economic activity is not formally registered.

⁹ Social classes are defined based on per capita household incomes, and not on individual (for example labour) ones.

The sector of employment is also a key parameter that characterises different income groups in the six Asian countries. The distribution of employment by sector shows first of all that in all countries, with the exception of China,¹⁰ low-income groups tend to be heavily concentrated in agricultural activities. What is also clear from Figure 16 is that the relative share of retail and other services increases among middle-income and affluent groups. From this perspective, middle classes appear to be more similar to affluent households than to poor and near-poor households. Finally, within each income groups, there are also large sectoral disparities, highlighting a high level of heterogeneity along the sectors of employment.

Figure 16. Sectoral distribution of employment by social class, 2013-2018



Source: Author's calculations based on household surveys: CHIP (2013) for China, CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

Trade exposure

Looking at trade exposure across different social classes is equally important in Asia. On the one hand, global trade integration and global value chains development have played a key role in Asia's emergence (WTO, 2020^[26]). As such, Asian middle-income groups and poor households are considered among the winners of the globalisation process (Milanovic, 2016^[5]). On the other hand, trade integration comes with a number of challenges. One concern is that trade openness in Asia is associated with greater income inequalities in Asia, as discussed by the IMF (2016^[21]) or more recently by Huang, Morgan and Yoshino (2019^[22]), as the value-added created through trade is typically captured by a handful of companies (UNCTAD, 2019^[27]). Another and more recent concern is the level of risks associated with a high degree of trade dependence, as shown by the COVID-19 crisis (Espitia et al., 2021^[28]).

For a subset of three countries with sufficiently detailed employment data, Cambodia, Thailand and Viet Nam, we compute a measure of (direct) trade exposure through individual employment, corresponding to the average share of output exported in industries in which members of a given social class work. We base the trade exposure of each industry/country on data from OECD's Inter-Country Input-Output¹¹ tables, computed simply as exports/output. Trade exposure of a given class is then measured by the

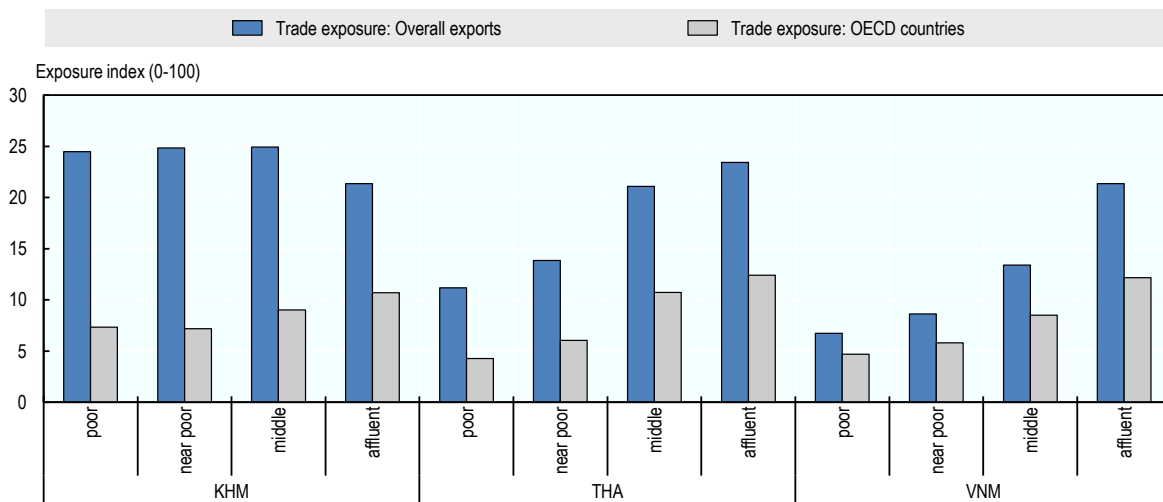
¹⁰ The agricultural employment share in China is, in CHIP, inconsistent with and lower than estimates from the National Bureau of Statistics, as reported by Erten and Leight (2021^[31]) and should therefore be taken with caution.

¹¹ As not all country-years were available by the drafting of this paper, 2015 is used as a reference year.

average trade exposure of specific industries, weighted by the share of individuals having their primary job in each industry.

In the subset of three countries for which data are available, employment “exposed” to trade corresponds to a non-negligible share of total employment (Figure 17). There are also important variations across countries and social class. In Viet Nam and Thailand, trade exposure tends to be systematically higher among wealthier social classes, while in Cambodia, there is not much difference. In Viet Nam and Thailand, this pattern is explained by the high share of higher-income workers in manufacturing, namely textile in Viet Nam and electronic devices in Thailand, highly exporting sectors in these countries. In Cambodia, while manufacturing, in particular textile, is also export oriented and employs high-income workers, the presence of a largely export-focused mining and quarrying sector employing low-income workers produces a more even distribution of trade exposure across social classes. By computing the index by export destinations, we see that across all three countries, higher-income classes are more involved in sectors exporting towards high-income countries.

Figure 17. Trade exposure of different income groups, 2013-2018



Source: Author’s calculations based on OECD’s ICIO (year 2015) and household surveys: CSES (2014) for Cambodia, SES (2017) for Thailand, VHLSS (2016) for Viet Nam.

Teleworking ability

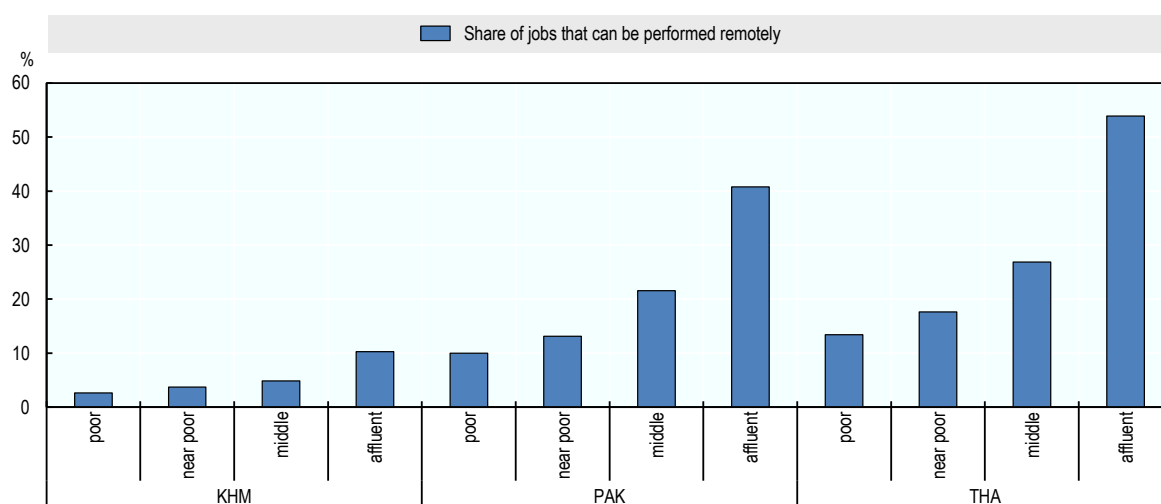
Finally, we also explore a measure of the ability to telework, which has been promoted in many countries in the context of the COVID-19 crisis. Using the methodology developed by Dingel and Neiman (2020_[14]), we provide estimates of the share of (primary) jobs that can be performed from home based on a subset of countries with surveys containing the necessary information.

At its core, the methodology relies on descriptions of US occupations from the Occupational Information Network (O*NET), where US workers answer questions with respect to their professional activities. Based on those answers, Dingel and Neiman (2020_[14]) classify occupations by “telework ability”. For example, an occupation defined as needing to be performed outside is deemed impossible to exercise from home, etc. As the methodology relies on the possibility to telework in a given occupation in the United States, it represents an overestimation of the teleworking potential for the same occupation in emerging countries, as among others the IT infrastructure is less developed. Yet, the measure gives a sense of the relative

capacity to telework and, in the context of the COVID-19 crisis, of the capacity to protect oneself from infection.

The data show that the teleworking potential increases steadily in income within a country. Among the poor, the possibility to telework is estimated to cover only around 3% of workers in Cambodia, 10% in Pakistan, and 14% in Thailand. The possibility to telework increases significantly among the affluent, reaching 10% of workers in Cambodia, 41% in Pakistan, and 50% in Thailand. As regards middle-income workers, their estimated capability to telework is closer to the rate of poorer segments than to the one of affluent workers. Again, one must stress that this measure of teleworking ability is likely to be biased upwards. As such, these results show that even in principle, given the nature of their occupations, only a very small share of middle-income, near-poor and poor workers would be able to telework. In practice, the possibility of teleworking is even lower, given additional constraints, such as the lack of the appropriate IT infrastructure, among others.

Figure 18. Remote work potential across workers in different income groups, 2013-2018

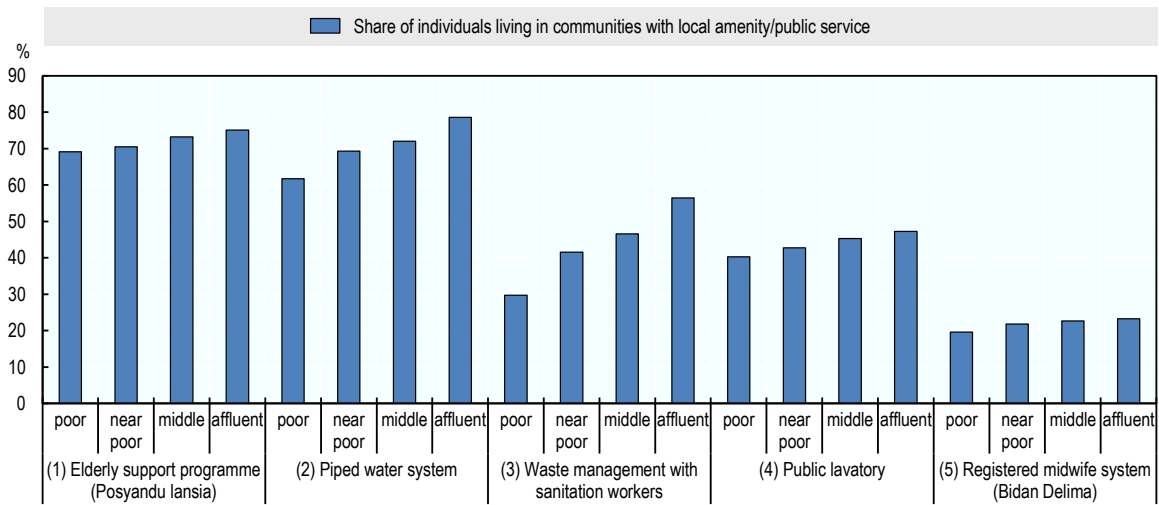


Source: Author's calculations based on Dingel and Neiman (2020^[14]) and household surveys: CSES (2014) for Cambodia, HIES (2018) for Pakistan, SES (2017) for Thailand.

Local public infrastructure and public services

For Indonesia, this analysis also explores local public infrastructure and public services. It focuses on the local provision of five types of amenities: (1) an elderly support programme (Posyandu Lansia) offering local health services and physical exercise; (2) the availability of local piped water systems; (3) the presence of local waste management systems with specialised workers; (4) the availability of local public lavatories; (5) and a system of midwives accreditation (Bidan Delima) aimed at educating and incentivising private midwives to meet and maintain high standards of care. The analysis has some limitations related to the structure of the Indonesian survey (IFLS 5), a panel survey which only provides community-level information for individuals still living in the municipality where they were registered at the time of the initial survey (1993/1994). That is, one only observes the local amenity provision for individuals who did not change municipality (or returned) since 1993/1994.

Figure 19. Presence of local public services and public infrastructure, by income groups in Indonesia, 2014



Source: Author's calculations based on IFLS (2014).

The provision of all categories of public amenities increases by income: higher-income classes tend to live in communities with a higher supply of quality public infrastructure or services. Some key infrastructures are much scarcer in the communities where *poor* households live, such as piped water and proper waste management systems. These results are consistent and complement previous analysis from the World Bank (2019^[29]) showing that in Indonesia local public goods and services provision tends to be regressive, being more prevalent where a larger share of higher-income households lives.

7 Conclusions

As Asian societies continue to undergo rapid economic transformation, income distribution and social stratification are set to change radically. A primary characteristic of this evolution is the emergence of a wealthier middle-income group. While the middle-income group is far from homogeneous, it often comes with new policy expectations. The extent to which middle-income earners will call for policy changes that are beneficial to more fragile segments of society remains unclear, however.

By investigating the characteristics of different income groups in six Asian countries – China, Cambodia, Indonesia, Pakistan, Thailand and Viet Nam – this paper contributes to a better understanding of the extent to which the emergence of wealthier Asian middle-income classes could become a driver for more inclusive societies.

The results show, first of all, that a large share of the population in the six Asian countries belongs to the middle-income group, followed by the poor and the near-poor. The share of the middle-income group in these Asian countries is still smaller than in OECD countries, in particular when compared to EU27 countries.

Second, in some metrics, such as the number of children, the level of education and the incidence of informal employment, middle-income classes in all six countries studied are considerably closer to poor and near-poor households than to affluent ones. As such, they remain largely different from the economic reality of middle classes in advanced economies. One can assume that this resemblance between middle- and low-income groups could result in support from the former for a range of policies that could benefit larger segments of society. More specifically, policy areas where there seem to be a convergence of interests and which are likely to receive the support from both the middle and the bottom of the income distribution include investments in primary and secondary education, universal child benefit, and the extension of social protection to informal economy workers.

Third, in other areas, middle-income groups appear more different from the poor and the near-poor. In particular, a lower involvement in agriculture, a higher level of urbanisation, a greater exposure to trade, and a larger ability to telework are key factors that distinguish the affluent and the middle-income groups from the poor and the near-poor. From this perspective, the paper draws attention to the fact that a number of pro-poor policies, such as investments in rural infrastructure and agriculture and support to small-scale farmers and local food systems may not necessarily resonate with people in middle-income groups and affluent households. Also, the negative impact of lockdown measures taken as a response to the COVID-19 crisis was felt disproportionately by the more fragile segments of society with limited teleworking possibilities.

All in all, the results underscore the necessity to better integrate the needs of the poor and the near-poor in policy discussions, especially in areas where such needs do not necessarily overlap with those of the more affluent social groups.

References

- Abdel-Kader, K. and R. Mooij (2020), “Tax Policy and Inclusive Growth”, [13]
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3772475 (accessed on
 6 September 2021).
- Alvaredo, F. et al. (2018), “World Inequality Report 2018”, *PSE-Ecole d'économie de Paris*
 (Postprint), <https://ideas.repec.org/p/hal/pseptp/halshs-01885458.html> (accessed on
 28 July 2021). [12]
- Atkinson, A., T. Piketty and E. Saez (2011), “Top Incomes in the Long Run of History”, *Journal*
of Economic Literature, Vol. 49/1, pp. 3-71, <http://dx.doi.org/10.1257/jel.49.1.3>. [33]
- Balestra, C. et al. (2018), “Inequalities in emerging economies: Informing the policy dialogue
 on inclusive growth”, *OECD Statistics Working Papers*, No. 2018/13, OECD Publishing,
 Paris, <https://dx.doi.org/10.1787/6c0db7fb-en>. [10]
- Banerjee, A. and E. Duflo (2008), “What is Middle Class about the Middle Classes around the
 World?”, *Journal of Economic Perspectives*, Vol. 22/2, pp. 3-28,
<http://dx.doi.org/10.1257/jep.22.2.3>. [4]
- Dingel, J. and B. Neiman (2020), *How Many Jobs Can be Done at Home?*, National Bureau of
 Economic Research, Cambridge, MA, <http://dx.doi.org/10.3386/w26948>. [14]
- Easterly, W. (2001), “The Effect of International Monetary Fund and World Bank Programs on
 Poverty”, <http://dx.doi.org/10.1596/1813-9450-2517>. [9]
- Erten, B. and J. Leight (2021), “Exporting Out of Agriculture: The Impact of WTO Accession on
 Structural Transformation in China”, *The Review of Economics and Statistics*, Vol. 103/2,
 pp. 364-380, http://dx.doi.org/10.1162/rest_a_00852. [31]
- Espitia, A. et al. (2021), “Pandemic Trade Covid-19, Remote Work and Global Value Chains”, [28]
<http://www.worldbank.org/prwp>. (accessed on 27 July 2021).
- Förster, M. and M. D’Ercole (2012), “The OECD Approach to Measuring Income Distribution
 and Poverty”, in *Counting the Poor*, Oxford University Press,
<http://dx.doi.org/10.1093/acprof:oso/9780199860586.003.0002>. [30]
- Huang, B., P. Morgan and N. Yoshino (2019), *Demystifying Rising Inequality in Asia*, Asian
 Development Bank Institute, <https://www.think-asia.org/handle/11540/9615> (accessed on
 28 July 2021). [22]

- IMF (2016), *Regional Economic Outlook, April 2016, Asia and Pacific*, International Monetary Fund, <http://dx.doi.org/10.5089/9781498350921.086>. [21]
- Jellema, J., M. Wai-Poi and R. Afkar (2017), "The Distributional Impact of Fiscal Policy in Indonesia", <http://www.commitmentoequity.org>. (accessed on 30 September 2021). [24]
- Kapsos, S. and E. Bourmpoula (2013), "Employment and economic class in the developing world", *ILO Research Papers*. [1]
- Kharas, H. (2017), *The unprecedented expansion of the global middle class: An update*, Brookings Institution, <https://www.brookings.edu/research/the-unprecedented-expansion-of-the-global-middle-class-2/> (accessed on 5 July 2021). [7]
- Kharas, H. (2010), "The emerging middle class in developing countries", *OECD Development Centre Working Papers*. [6]
- Kochhar, R. (2015), *Despite Poverty's Plunge, Middle-Class Status Remains Out of Reach for Many* | Pew Research Center, <https://www.pewresearch.org/global/2015/07/08/despite-povertys-plunge-middle-class-status-remains-out-of-reach-for-many/> (accessed on 27 July 2021). [8]
- Kuznets, S. (1955), "Introduction", *Review of Income and Wealth*, Vol. 5/1, pp. vii-viii, <http://dx.doi.org/10.1111/j.1475-4991.1955.tb01074.x>. [17]
- Lakner, C. and B. Milanovic (2015), "Global Income Distribution: From the Fall of the Berlin Wall to the Great Recession", *The World Bank Economic Review*, Vol. 30/2, pp. 203-232, <http://dx.doi.org/10.1093/wber/lhv039>. [15]
- Loayza, N., J. Rigolini and G. Llorente (2012), "Do Middle Classes Bring Institutional Reforms?", <http://dx.doi.org/10.1596/1813-9450-6015>. [3]
- Lustig, N. and Y. Wang (2020), "The Impact of Taxes and Transfers on Income Inequality, Poverty and the Urban-Rural and Regional Income Gaps in China", <http://www.ceqinstitute.org> (accessed on 30 September 2021). [25]
- Milanovic, B. (2021), "After the Financial Crisis: The Evolution of the Global Income Distribution Between 2008 and 2013", *Review of Income and Wealth*, <http://dx.doi.org/10.1111/roiw.12516>. [16]
- Milanovic, B. (2016), *Global Inequality*, Harvard University Press, <http://dx.doi.org/10.4159/9780674969797>. [5]
- OECD (2019), *Under Pressure: The Squeezed Middle Class*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/689afed1-en>. [2]
- OECD/ILO (2019), *Tackling Vulnerability in the Informal Economy*, Development Centre Studies, OECD Publishing, Paris, <https://dx.doi.org/10.1787/939b7bcd-en>. [32]
- Ravallion, M. and S. Chen (2021), "Is that Really a Kuznets Curve? Turning Points for Income Inequality in China", <http://dx.doi.org/10.3386/W29199>. [18]
- Stiglitz, J., J. Fitoussi and M. Durand (eds.) (2018), *For Good Measure: Advancing Research on Well-being Metrics Beyond GDP*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264307278-en>. [11]

- UNCTAD (2019), *Trade and Development Report 2019: Financing a Global Green New Deal*, United Nations, New York, <https://dx.doi.org/10.18356/ebbf587-en>. [27]
- Wan, G., M. Lu and Z. Chen (2007), "Globalization and Regional Income Inequality: Empirical Evidence from Within China", *Review of Income and Wealth*, Vol. 53/1, pp. 35-59, <http://dx.doi.org/10.1111/j.1475-4991.2007.00217.x>. [20]
- World Bank (2019), *Aspiring Indonesia—Expanding the Middle Class*, World Bank, Washington, DC, <http://dx.doi.org/10.1596/33237>. [29]
- World Bank (2017), *Vietnam Systematic Country Diagnostic 2016 - Priorities for inclusive and sustainable growth sustaining success*. [23]
- WTO (2020), *World Trade Report 2020: Government Policies to Promote Innovation in the Digital Age*, World Trade Organization, Geneva/OECD Publishing, Paris, <https://dx.doi.org/10.30875/60123dd4-en>. [26]
- Zhuang, J., R. Kanbur and C. Rhee (2014), "Rising Inequality in Asia and Policy Implications", *SSRN Electronic Journal*, <http://dx.doi.org/10.2139/ssrn.2399298>. [19]

Annex A. Welfare metrics: Income and consumption

The analysis is, for most countries, based on a social classification based on income, consistently with the (OECD, 2019^[2]) definition. Yet, in the case of Cambodia (CSES, 2014), income is only available for waged employees. Thus, the analysis relies on consumption to construct the social class thresholds.

In the case of China, the analysis relies on disposable income i.e. income after tax and transfer income.

Gross income, defined as the sum of market income and transfers (public or private) before tax (see Figure A.1), is used for all other countries. Additional details on the welfare metrics are presented in Figure A.1.

Figure A.1. Elements of welfare metrics

Gross wages and salaries from dependent employment +
Self-employment income
+
Capital and property income
=
1. Factor income
+
Occupational and private pensions
=
2. Market income
+
Social security cash benefits (universal, income-related, contributory)
+
Private transfers
+
Other cash income
=
3. Gross income
-
Income tax (and employee social security contributions) =
4. Cash disposable income

Source: Förster and d'Ercole (2012^[30]).

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