

Social Development Working Papers

AN EMERGING BUT VULNERABLE MIDDLE CLASS: A DESCRIPTION OF TRENDS IN ASIA AND THE PACIFIC

Orlando Zambrano Roman



**An emerging but vulnerable middle class:
a description of trends in Asia and the Pacific**

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Abstract

This paper examines the extent to which economic growth in Asia and the Pacific has translated in an increasing middle class. Using international poverty lines, the region's population is divided into four income groups to estimate those living in poverty according to middle-income country and high-income country standards. Estimates indicate that between 1999 and 2015, 1.2 billion people moved into the Asia-Pacific middle class, while the share tripled from 13 to 39 per cent of the total population. This expansion, however, did not translate in an income-secure middle class, as almost 1 billion people still live at risk of falling back into poverty. Examination at the country-level reveals that big disparities persist in the region.

Keywords: Middle class, poverty, vulnerability, Asia and the Pacific

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I. Introduction

Recent decades of development in Asia and the Pacific are often portrayed as a success story. Economic growth has generated new jobs, increased incomes, improved access to basic services and opportunities, and lead to advances in poverty reduction (United Nations ESCAP, 2018). Between 1999 and 2015, moderate poverty in the region, defined as living below \$3.20 per day, fell from 66 to 27 per cent, while Gross Domestic Product (GDP) per capita more than doubled. This surge in incomes among the poor translated in an increasing proportion of the population moving to higher incomes within their country's income distribution, thus forming an emerging middle class.

The middle class is often perceived as the engine of economic growth. Individuals in this stratum have consumption patterns above subsistence levels, allowing them to invest in productive activities and accumulate physical and human capital (Pezzini, 2012). Growing disposable incomes encourage higher spending on leisure, entertainment, and a range of basic services such as health and education, as well as consumer goods such as washing machines, phones, and computers (Kharas & Hamel, 2018). As this group expands, so does their weight and voice in matters of social protection and public provision of services, which can shape institutions and good governance (Birdsall, 2015; Desai & Kharas, 2017).

A strong and prosperous middle class is not only instrumental in assessing the economic health of a country, but also serves as a platform to estimate standards of living and the redistribution of economic growth. This paper uses international poverty lines and an absolute definition of the middle class to assess the size and growth of the Asia-Pacific middle class. The analysis sheds light on the extent to which economic growth has translated to higher standards of living between 1999 and 2015. It also explores how distributional changes have come alongside growing income inequalities in selected countries.

The paper is structured as follows: Section 2 provides an overview of the existing literature and defines the concept of vulnerability and middle class. Section 3 describes the data used and provides the framework to assess middle class changes over time. Section 4 discusses regional trends while focusing on the performance of the two most populous countries: China and India. Section 5 further explores the composition of the Asia-Pacific middle class by analyzing the most and least successful countries in terms of their income distribution. Section 6 presents some concluding remarks on the middle class expansion.

II. Poverty, vulnerability and the middle class

The concept of the middle class is often loaded with social, political, and historical implications. However, much of the recent academic and political discourse surrounds its income dimension. Individuals belonging to the middle class are expected to have a reasonable amount of disposable income to cover subsistence expenditures, buy consumer durables, invest in productive activities, and save for the future (Kharas & Hamel, 2018).

In the context of the 2030 Agenda for Sustainable Development, this notion carries great weight as the pledge of leaving no one behind is also a call to end extreme poverty, curb inequalities, and raise the wellbeing of all. Middle class expansion underlies the commitment to ‘reduce by half the proportion of men, women and children of all ages living in poverty in all its dimensions’ (Sustainable Development Goal (SDG) 1, Target 1.2), ‘empower and promote the social, economic, and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status’ (SDG 10, Target 10.2), and embodies other dimensions of sustainable development such as equal access to services and opportunities.

There is large amount of literature underscoring the relationship between middle class expansion, social gains, and economic growth. Dabla-Norris, et al. (2015) find that after controlling for several covariates, a percentage point increase in the income share of the middle class is associated with a 0.38 percentage point higher economic growth. Desai & Kharas (2017) find a negative and significant relationship between middle class expansion and extreme poverty¹, while Easterly (2001) and Loayza, Rigolini & Llorente (2012) underscore that countries with a high middle class share have greater physical and human capital, less political instability, and stronger institutions. Moreover, Ravallion (2001) and Fosu (2017) add to the debate by arguing that poverty reduction, thus an expanding middle class, is hampered by high inequality.

However, Pezzini (2012); Birdsall, Lustig & Meyer (2014) and Kochhar (2015) emphasize that for the middle class to be the driver of this virtuous cycle, it should have eliminated the risk of falling back into poverty². Individuals with incomes just above poverty would barely be able to acquire basic consumption goods or cope with idiosyncratic risks such as unemployment or illness. Further, their capacity to accumulate human capital would also be restricted, as insufficient incomes would not allow for investments in proper health care and quality education, or enable consumption smoothing through savings.

For the middle class to boost economic growth, drive investments, sustain consumption, and foster quality public services and social protection systems, it should meet reasonable standards of living sufficiently above poverty to enjoy economic security.

¹ The effect, however, diminishes once the size of the middle class approaches 30 per cent of the population (Desai & Kharas, 2017).

² In addition, the extent to which this group gets bigger and richer also play a role in forming expectations of further growth (Birdsall, 2015).

III. Data and methodology

Consistent with previous studies (Milanovic & Yitzhaki, 2002; Banerjee & Duflo, 2008; Birdsall 2010; Chun, 2010; Lopez-Calva & Ortiz-Juarez, 2011 and Kochhar, 2015) this paper adopts an absolute middle class approach to estimate the size and share of the Asia-Pacific middle class³. Two data sources are used to assess changes as well as provide inequality estimates between 1999 and 2015: population income distributions are obtained from World Bank's online poverty tool, PovcalNet, where poverty measures are drawn from households' income or consumption expenditure levels, and expressed in 2011 Purchasing Power Parity (PPP)⁴. Data is drawn from the World Inequality Database to estimate income changes across population percentiles in selected countries. Out of the 53 Member States of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) located in the region, data is available for 37 countries (Annex 1)⁵.

Following Ravallion (2010), the paper defines the Asia-Pacific middle class as those who are not poor by middle-income country standards, but still poor by high-income country standards. By using international poverty lines, the region's population is divided into four income groups to estimate those living in poverty at different income levels (Jolliffe & Prydz, 2016). Starting with the assumption that middle class begins where poverty ends, the lower bound to belong to the Asia-Pacific middle class is set at \$5.50 per person per day. This value corresponds to the poverty line of upper-middle income countries. As an upper bound, the poverty line of high-income countries of \$21.70 per person per day is used. Those beyond this threshold are not poor by any international standard, thus considered to belong to the 'global middle class'.

In this paper, the \$5.50 - \$21.70 bracket constitutes the Asia-Pacific middle class. The wide range, however, fails to capture those that could be trapped in vulnerable situations moving in and out of poverty at \$5.50 per day. On this basis, the paper uses \$10.00 per day to disaggregate the middle class. Based on evidence presented by Lopez-Calva & Ortiz-Juarez (2011), this threshold has gained acceptance among academics because households above this income level have a low probability of falling back into poverty⁶. Moreover, the poverty line of lower-middle income countries, defined as living below \$3.20 per day, is used to distinguish between the poor and those living just below \$5.50 per day with the potential to belong to the Asia-Pacific middle class.

³ The middle-class absolute approach, closely related to the notion of Purchasing Power Parity (PPP), allows a single metric depicting the same standards of living in Asia and the Pacific.

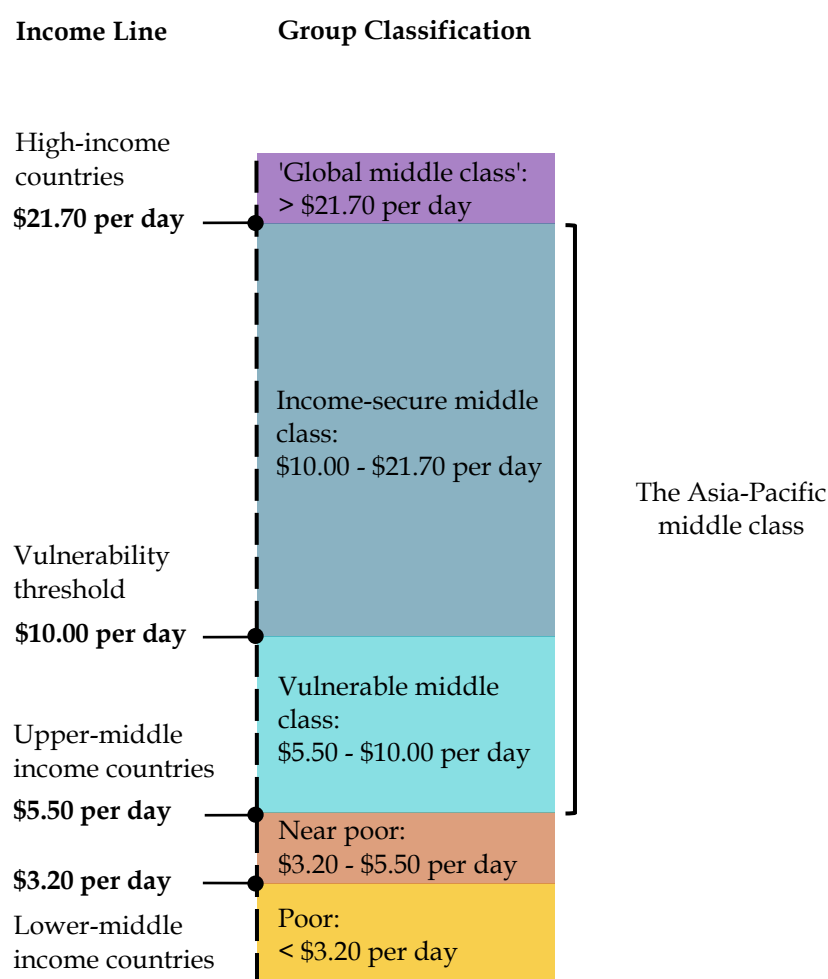
⁴ Purchasing Power Parity (PPP) are exchange rates adjusted for differences in the prices of goods and services across countries, which allows for regional aggregates, cross-country, and over time comparisons.

⁵ France, the Netherlands, the United Kingdom of Great Britain and Northern Island, and the United States of America are ESCAP member states but are located outside of Asia and the Pacific. Moreover, of the countries with available data, Australia, Japan, and the Republic of Korea are excluded from the analysis for being considered high-income countries with poverty lines > \$21.70 per day.

⁶ It is estimated households in Chile, Mexico, and Peru, have less than a 10 per cent probability of falling into poverty over time if their income is at least \$10.00 per day (2005 PPP) (Lopez-Calva & Ortiz-Juarez, 2011). See Birdsall, 2010; Kharas, 2010; Birdsall, Lustig & Meyer, 2014; Jolliffe, 2014; Kochhar, 2015 and Desai & Kharas, 2017.

Altogether, four income lines are used to divide the Asia-Pacific population into four groups: poor (< \$3.20 per day), near poor (\$3.20 - \$5.50 per day), middle class (\$5.50 - \$21.70 per day), and 'global middle class' (> \$21.70 per day). The middle class is further divided into the vulnerable cohort (\$5.50 - \$10.00 per day), and the income-secure cohort (\$10.00 - \$21.70 per day) (Figure 1).

Figure 1. Disaggregation of the Asia-Pacific middle class



Source: Author's elaboration based on PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank.

Note: See Jolliffe & Prydz, 2016 for poverty line estimations in lower-middle income, upper-middle income, and high-income countries.

IV. The growing middle class in China and India

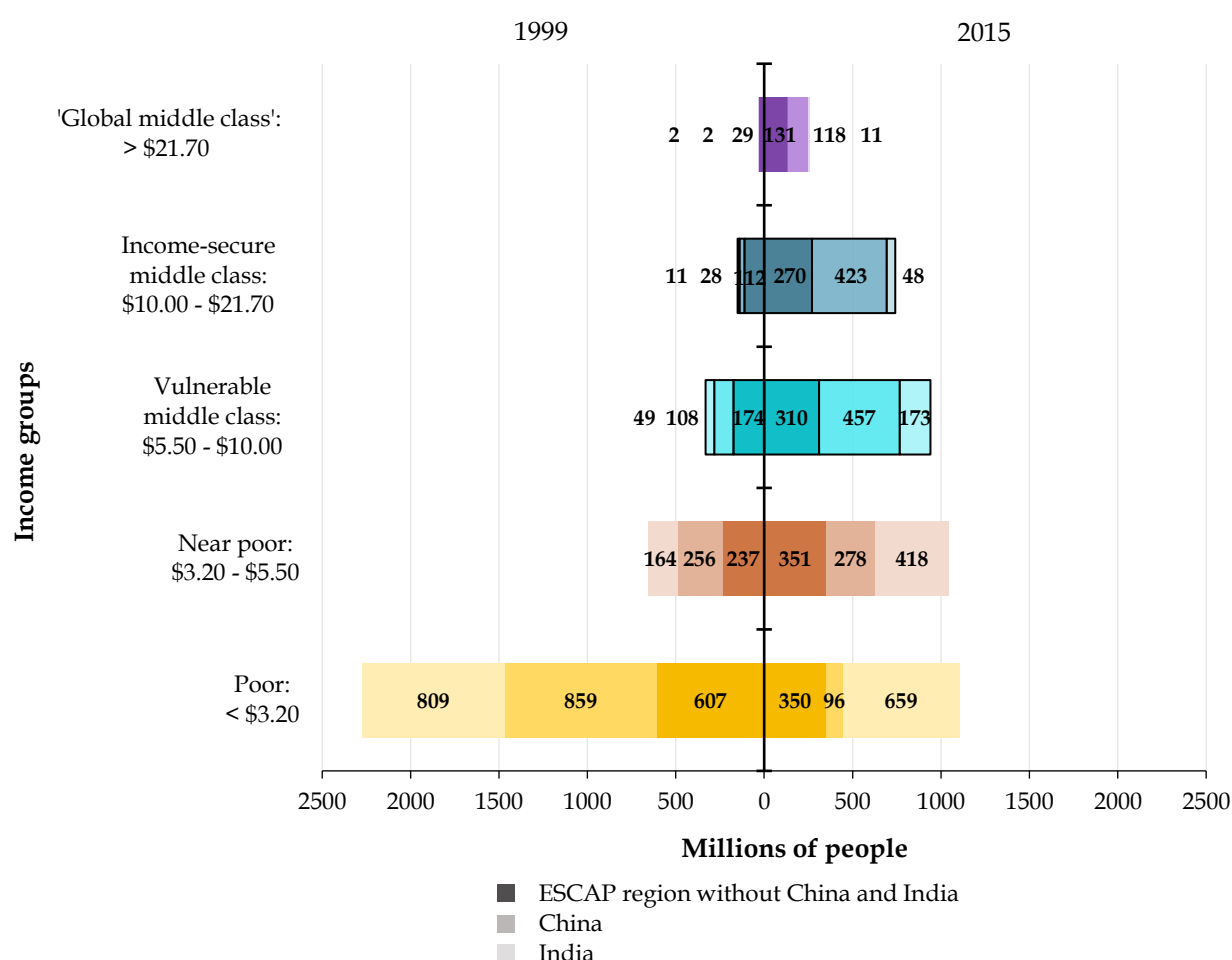
The Asia-Pacific middle class has seen a steep growth both in size and share of the total population. Almost 1.2 billion people moved to the middle class, which increased in absolute size from half a billion in 1999 to 1.7 billion in 2015, while the percentage share tripled from 13 to 39 per cent of the total population (Annex 2).

Authors such as Drysdale & Armstrong (2010) and Huang & Wang (2011) attribute this expansion to high economic growth in the region, which has allowed many to escape poverty and improve their standards of living. Large account surpluses, massive capital exports, and new initiatives and trade agreements promoting regional cooperation have enabled countries such as Azerbaijan, China, India, and Kazakhstan to attain average annual GDP growth rates around 8.5 per cent between 1999 and 2015. Other countries such as Indonesia, Malaysia, Philippines, the Russian Federation, and Turkey achieved average annual GDP growth rates around 5 per cent during the same period (World Bank, 2019).

Alongside economic growth, many countries have also led poverty reduction efforts by investing in human capital, thus creating conditions for many to take advantage of growth-related opportunities. Mongolia's universal cash transfer program, the Child Money Program (CMP), is thought to have reduced poverty by 12 per cent and the poverty gap by 21 per cent (Onishi & Chuluun, 2015; International Labour Organization, 2016). Thailand's expansion of health care through the Universal Coverage Scheme (UCS), decreased poverty by lowering out-of-pocket health expenditures and the incidence of catastrophic health spending (International Labour Organization, 2016; Tangcharoensathien et al., 2018). Further, United Nations ESCAP (2018) argues that if countries in the region were to further increase the amount of public expenditure in education, health care, and social protection to match global averages, 328 million people would be lifted out of moderate poverty and 52 million out of extreme poverty by 2030.

Analyzing middle class changes, estimates indicate that while in 1999, two thirds of Asia and the Pacific -2.2 billion people- were poor under \$3.20 per day, in 2015, the bulk -1.7 billion people-, are considered middle class (Figure 2). Yet, when disaggregating the Asia-Pacific middle class to consider the vulnerability threshold of \$10.00 per day, estimates show almost 1 billion live at risk of falling into poverty. These figures point to movements out of poverty to incomes levels just above poverty.

A closer look at trends reveals the Asia-Pacific middle class expansion was attributable to poverty reduction in the most populous countries: China and India. These best performers added 900 million people to the middle class between 1999 and 2015, comprising this figure 75 per cent of the total regional movement.

Figure 2. Size of the Asia-Pacific middle class, 1999-2015

Source: Author's elaboration based on PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank.

While in 1999, two thirds of the Chinese population -859 million- lived below \$3.20 per day, in 2015, two thirds of the population -880 million- belonged to the middle class. Out of this figure, 457 million people are considered vulnerable, whereas 423 million people are income-secure. By comparison, estimates in India suggest that while in 1999, 78 per cent of the population -809 million-, lived below \$3.20 per day, in 2015, half of the population -659 million- are still living in poverty. Only 220 million people are considered middle class, with 78 per cent of this figure -173 million- belonging to the vulnerable stratum. Most notably, only 48 million people are considered income-secure.

Differing middle class trends between China and India raise questions about the impact of growth and the nature of public expenditure in reducing poverty and raising standards of living. Although both countries attained high GDP growth rates between 1999 and 2015, China was able to sustainably reduce poverty and increase the size of its middle class. In India,

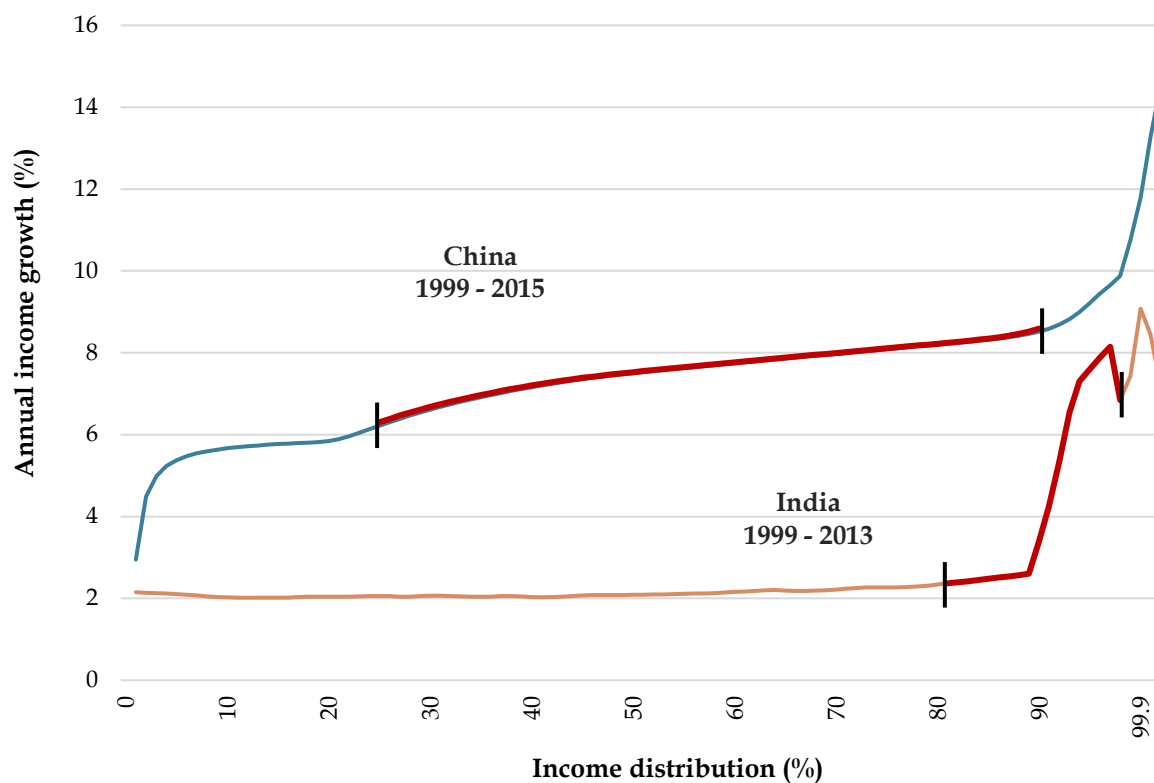
the spells of growth did not trickle down to those most in need. Figure 3 uses Growth Incidence Curves (GICs) to explore annualized income growth rates for all percentiles of the Chinese and Indian population between 1999 and latest year available.

The GIC of China underscores that the annualized GDP growth rate of 9 per cent, coupled with major reforms to create job opportunities and improved access to social protection, brought about income growth rates between 2.9 to 14.5 per cent for the whole population. After comparing over time distributional changes (Figure 2) with percentile income growth rates (Figure 3), the GIC suggests that most of those considered poor or near poor in 1999 were able to sustainably move into the Asia-Pacific middle class. The Chinese middle class, located between the 27 and the 91 percentile of the income distribution in 2015, had annualized income growth rates between 6.3 and 8.6 per cent as seen on the bold red part of the curve (Figure 3).

However, the GIC also underlines growing income inequalities. A closer look at the income growth rate of the bottom 10 per cent when compared to the top 0.1 per cent proves the standards of living of the poorest barely improved, while the gains of growth benefited those already rich. Xie & Zhou (2014); International Labour Organization (2017) and Jain-Chandra, et al. (2018) find that although most of the Chinese population saw income increases and gains in health and pension coverage through universal programs; rising incomes at the top hampered poverty reduction, increased regional disparities between urban and rural areas, and widened inequality in access to tertiary education and financial services. Further, Xie & Jin (2015) argue that inequality in China goes beyond the income sphere as a third of the country's wealth is owned by the top 1 per cent of households, in contrast to the bottom 25 per cent who owns 1 per cent.

The GIC of India is different. Although the country attained an average annual GDP growth rate of 7 per cent, low public expenditures on social protection and lack of job opportunities translated in stagnant incomes for most of the population. Figure 2 and Figure 3 show this mismatch. In India, middle class expansion was the result of movements of people living just below \$5.50 per day into the vulnerable middle class. Only a few were able to attain high enough annualized income growth and move into the income-secure group. Further, the Indian middle class is squeezed between the 82 and the 99 percentile of the income distribution, suggesting most of the population still lives under \$5.50 per day.

The GIC also highlights that the middle class is unlikely to expand as the gains of economic growth are highly concentrated at the top end of the income distribution. Chaudhuri & Kotwal (2016) and International Labour Organization (2018) note that economic growth in India was driven by the formal and skill intensive sector, which created few opportunities for the vast majority working in low-skilled and informal markets. This skilled-biased growth also translated in growing income inequality between the rich and the rest of the population. While the top 0.1 attained income growth rates of 9 per cent, those below the 90 percentile saw income increases of just 2.1 per cent. Credit Suisse (2018) argues income inequality came alongside high wealth inequality as India's top 1 per cent held over 50 per cent of the wealth in 2016.

Figure 3. Growth Incidence Curves (GICs), China and India, 1999-latest

Source: Author's elaboration based on World Inequality Database.

Note: Income refers to pre-tax national income. The variable is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labor and capital, before considering the operation of the tax/transfer system, but after considering the operation of pension system.

Note 2: Percentiles in red represent the annual growth rate of the cohort considered middle class at latest available year.

V. A closer look at the middle class: the vulnerable and income-secure stratum

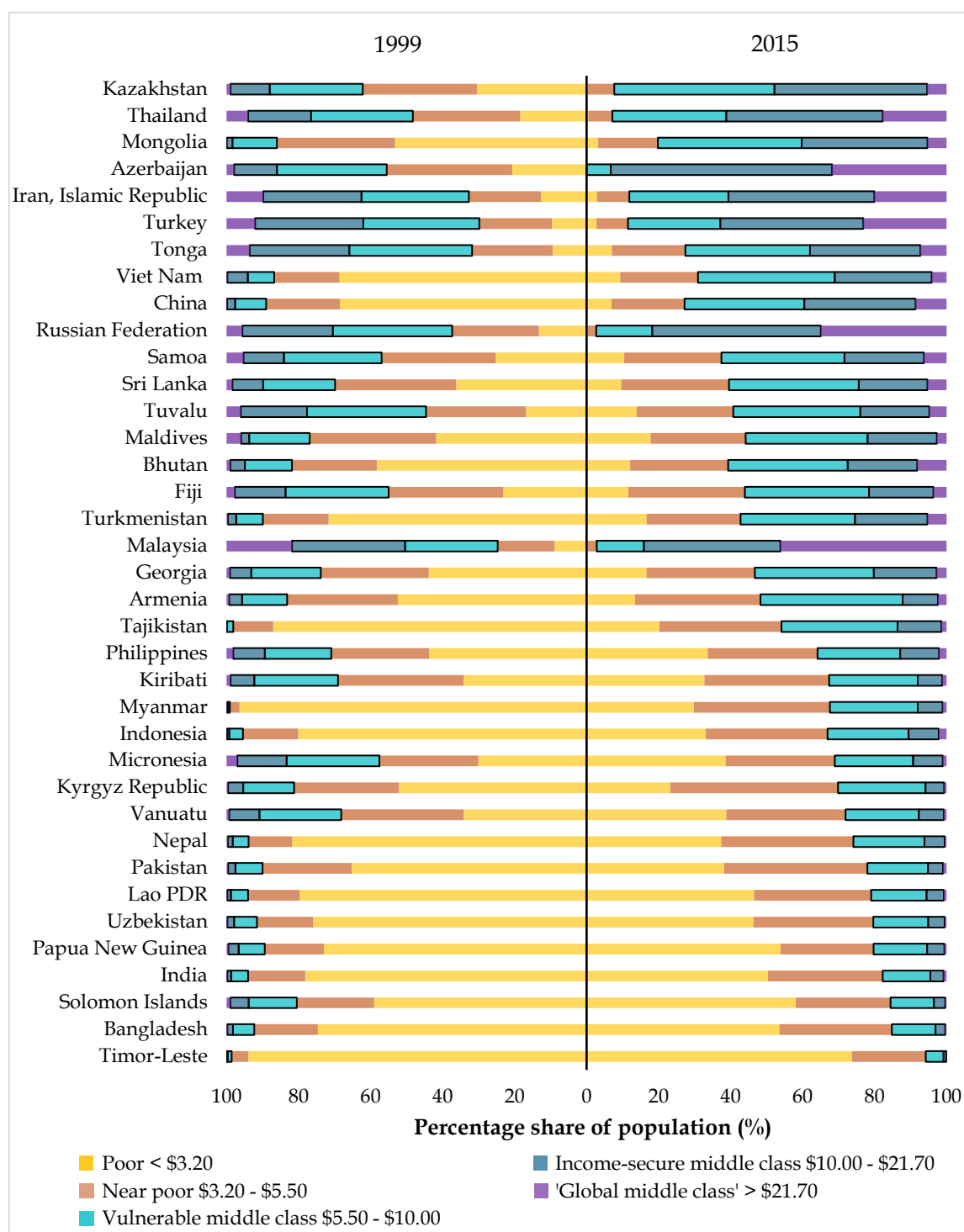
China and India were the drivers of middle class expansion in Asia and the Pacific due to their size. In both countries, economic growth also came alongside growing income inequality. However, other less populous countries also led major strides in poverty reduction by fostering inclusive growth and investing in human capital. This section explores the composition of the Asia-Pacific middle class in the rest of countries for which data was available.

Out of 37 countries considered, 34 saw the size of their middle class increase between 1999 and 2015 (Figure 4). Only Micronesia, Solomon Islands, and Vanuatu had a lower middle class share when compared to their 1999 value. Estimates also reveal that big disparities persist in the region.

Mongolia and Viet Nam stand out for their middle-class expansion. Poverty fell from 86 to 20 per cent in Mongolia while the middle class expanded from 14 to 75 per cent. In Viet Nam, poverty fell from 87 to 32 per cent while the middle class increased from 10 to 64 per cent. When disaggregating the middle class to consider the vulnerability threshold in both countries, however, estimates show the expansion was mainly due to movements out of poverty into the vulnerable middle class. This pattern is consistent throughout the Asia and the Pacific. Only in Azerbaijan, the Islamic Republic of Iran, Malaysia, the Russian Federation, Thailand and Turkey, did the income-secure middle class comprise a greater share of the middle class in 2015.

Some countries including Bangladesh, India, Lao People's Democratic Republic, Papua New Guinea, Solomon Islands, Timor-Leste, and Uzbekistan still face several challenges as most of the population lives under \$5.50 per day. Further, middle class shares are below 25 per cent of the population. These countries are the ones most in need for sustained economic growth and assistance in developing policies to boost their middle class.

Figure 4. Share of the Asia-Pacific middle class, 1999-2015



Source: Author's elaboration based on PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank.

VI. Concluding remarks

This paper examined the extent to which economic growth in Asia and the Pacific translated in an increasing middle class. After dividing the region's population into four income groups: poor (< \$3.20 per day), near poor (\$3.20 - \$5.50 per day), middle class (\$5.50 - \$21.70 per day), and 'global middle class' (> \$21.70 per day), estimates revealed 1.2 billion people had moved into the Asia-Pacific middle class, while the share tripled from 13 to 39 per cent of the total population.

Analysis at the country-level revealed that big disparities persist in the region. China, Mongolia and Viet Nam saw the greatest middle class expansion. On the contrary, Bangladesh, India, Lao People's Democratic Republic, Papua New Guinea, Solomon Islands, Timor-Leste, and Uzbekistan still face several challenges in boosting the size of their middle class. Results in China and India underscored that economic growth came alongside income inequality as the gains were concentrated among the top 0.1 per cent of the income distribution. Further, only in Azerbaijan, the Islamic Republic of Iran, Malaysia, the Russian Federation, Thailand, and Turkey did most individuals move into the income-secure part of the middle class.

Altogether, estimates suggest success against poverty in Asia and the Pacific resulted in growing vulnerabilities. Economic growth translated in almost 1 billion people living just above \$5.50 per day and at risk of falling back into poverty. In this manner, whether middle class expansion is a cause for optimism relies upon each country's ability to sustain economic growth while guaranteeing the gains are sufficiently shared. Political will, therefore, is paramount in creating the conditions for individuals to seize growth-related opportunities and guarantee those in vulnerable situations are able to move towards higher standards of living.

The paper sets the stage for further policy discussions on the drivers of the middle class expansion, as well as the barriers curbing its growth. As big disparities persist in the region, emphasis should be placed on the countries most in need for sustained economic growth and greater potential to unlock the middle class virtuous cycle. Only by removing persistent vulnerabilities can the middle class fulfil its role of driving investments, sustaining consumption, fostering quality public services and social protection systems, and boosting further economic growth.

References

- Banerjee, A. & Duflo, E. (2008). "What Is Middle Class about the Middle Classes around the World?" *Journal of Economic Perspectives*, 22 (2): 3-28.
- Birdsall, N. (2010). "The (indispensable) middle class in developing countries". *Equity and growth in a globalizing world*, 157.
- (2015). "Does the Rise of the Middle Class Lock in Good Government in the Developing World?". *The European Journal of Development Research*, 27(2), 217-229
- Birdsall, N., Lustig, N. & Meyer, C. (2014). "The Strugglers: The New Poor in Latin America?". *Center for Global Development*. Working Paper 337, Volume 60, Pages 132-146, ISSN 0305-750X.
- Chaudhuri A. R. & Kotwal, A. (2016). "Why is Poverty Declining so Slowly in India?". In: *Dev S., Babu P. (eds) Development in India*. India Studies in Business and Economics. Springer, New Delhi.
- Chun, N. (2010). "Middle Class Size in the Past, Present, and Future: A description of Trends in Asia". *Asian Development Bank (ADB) Economics Working Paper Series No. 217*.
- Credit Suisse (2018). "Global Wealth Report 2018". Credit Suisse Research Institute.
- Dabla-Norris, M. E., Kochhar, M. K., Suphaphiphat, M. N., Ricka, M. F. & Tsounta, E. (2015). "Causes and consequences of income inequality: A global perspective". International Monetary Fund. SDN/15/13.
- Desai, R. M. & Kharas, H. (2017). "Is a growing middle class good for the poor? Social policy in a time of globalization". *Global Economy and Development at Brookings*. Working paper 105.
- Drysdale, P. & Armstrong, S. P. (2010). "International and Regional Cooperation: Asia's Role and Responsibilities". *Asian Economic Policy Review*, Vol. 5, Issue 2, pp. 157-173.
- Easterly, W. (2001). "The middle class consensus and economic development". The World Bank.
- Fosu, A. K. (2017). "Growth, inequality, and poverty reduction in developing countries: recent global evidence". *Research in Economics*, 71(2), 306-336.
- Huang, Y. & Wang, B. (2011). "From the Asian Miracle to an Asian Century? Economic Transformation in the 2000s and Prospects for the 2010s". In *RBA Annual Conference Volume*. Reserve Bank of Australia.
- International Labour Organization (2016). "Mongolia: Child Money Programme". Social Protection Action: Building Social Protection Floors. International Labour Organization.
- (2016). "Thailand: Universal Health-care Coverage Scheme". Social Protection Action: Building Social Protection Floors. International Labour Organization.

- _____. (2017). *"World Social Protection Report 2017-19: Universal Social Protection to Achieve the Sustainable Development Goals"*. International Labour Organization.
- _____. (2018). *"Women and Men in the Informal Economy: A Statistical Picture (Third Edition)"*. International Labour Organization.
- Jain-Chandra, M. S., Khor, N., Mano, R., Schauer, J., Wingender, M. P. & Zhuang, J. (2018). *"Inequality in China—Trends, Drivers and Policy Remedies"*. International Monetary Fund.
- Jolliffe, D. (2014). *"A measured approach to ending poverty and boosting shared prosperity: concepts, data, and the twin goals"*. World Bank Publications.
- Jolliffe, D. & Prydz, E. B. (2016). *"Estimating international poverty lines from comparable national thresholds"*. The World Bank.
- Kharas, H. (2010). *"The Emerging Middle Class in Developing Countries"*. OECD Development Center.
- Kharas, H. & Hamel, K. (2018). *"A global tipping point: Half the world is now middle class or wealthier"*. Brookings Institution, Washington DC.
- _____. (November 2018). *"Who will drive consumer spending in the next decade?"*. OECD Development Matters. Retrieved from:
<https://oecd-development-matters.org/2018/11/07/who-will-drive-consumer-spending-in-the-next-decade/>
- Kochhar, R. (2015). *"A Global Middle Class Is More Promise than Reality: From 2001 to 2011, Nearly 700 Million Step Out of Poverty, but Most Only Barely"*. Pew Research Center/Global Attitudes and Trends.
- Loayza, N., Rigolini, J. & Llorente, G. (2012). *"Do middle classes bring institutional reforms?"*. The World Bank.
- Lopez-Calva, L. F. & Ortiz-Juarez, E. (2011). *"A vulnerability approach to the definition of the middle class"*. *The Journal of Economic Inequality*, 12(1), 23-47.
- Milanovic, B. & Yitzhaki, S. (2002). *"Decomposing world income distribution: Does the world have a middle class?"*. The World Bank.
- Onishi, J. & Chuluun, T. (2015). *"Review of Program Design and Beneficiary Profiles of Social Welfare Programs in Mongolia"*. *The World Bank and Ministry of Population Development and Social Protection of the Government of Mongolia*.
- Pezzini, M. (2012). *"An emerging middle class"*. *OECD Observer*, (288), 64.
- Ravallion, M. (2001). *"Growth, inequality and poverty: looking beyond averages"*. *World development*, 29(11), 1803-1815.
- _____. (2010). *"The developing world's bulging (but vulnerable) middle class"*. The World Bank.

- Tangcharoensathien, V., Witthayapipopsakul, W., Panichkriangkrai, W., Patcharanarumol, W., & Mills, A. (2018). "Health systems development in Thailand: A solid platform for successful implementation of universal health coverage". *The Lancet*, 391(10126), 1205-1223.
- United Nations, Economic and Social Commission for Asia and the Pacific (ESCAP) (2018). "Social Outlook for Asia and the Pacific: Poorly Protected". United Nations publication, Sales No. E.19.II.F.2
- (2018). "Inequality in Asia and the Pacific in the era of the 2030 Agenda for Sustainable Development". United Nations publication, Sales No. E.18.II.F.13
- Xie, Y. & Zhou, X. (2014). "Income inequality in today's China". *Proceedings of the National Academy of Sciences*, 111(19), 6928-6933.
- Xie, Y. & Jin, Y. (2015). "Household Wealth in China". *Chinese sociological review*, 47(3), 203-229.
- World Bank (2019). "GDP growth (annual %)". World Development Indicators. The World Bank Group. Retrieved from: <https://databank.worldbank.org/source/world-development-indicators>

Annex 1

Data availability for countries in Asia and the Pacific.

Sub region	Country
East and North-East Asia (ENEA)	China Mongolia
South-East Asia (SEA)	Indonesia Lao People's Democratic Republic Malaysia Myanmar Philippines Thailand Timor-Leste Viet Nam
South and South-West Asia (SSWA)	Bangladesh Bhutan India Iran, Islamic Republic Maldives Nepal Pakistan Sri Lanka Turkey
North and Central Asia (NCA)	Armenia Azerbaijan Georgia Kazakhstan Kyrgyz Republic Russian Federation Tajikistan Turkmenistan Uzbekistan
Pacific	Fiji Kiribati Micronesia Papua New Guinea Samoa Solomon Islands Tonga Tuvalu Vanuatu

Annex 2

Size and share of the Asia-Pacific middle class, 1999-2015.

Sub region	People living between \$5.50 - \$21.70 per day (millions)		Percentage share of population (%)		Absolute change in number of people	Percentage point change
	1999	2015	1999	2015	1999 - 2015	
East and North-East Asia (ENEA)	136.380	881.870	9.548	56.81	745.490	47.261
China	136.048	879.638	10.86	64.15	743.590	53.29
Mongolia	0.332	2.232	13.95	74.90	1.900	60.95
South-East Asia (SEA)	79.780	258.045	16.015	42.21	178.265	26.200
Indonesia	9.304	79.746	4.46	30.89	70.442	26.43
Lao PDR	0.302	1.341	5.76	20.14	1.040	14.38
Malaysia	12.941	15.652	57.11	50.95	2.711	-6.16
Myanmar	0.337	16.365	0.74	31.23	16.028	30.49
Philippines	20.764	34.310	27.20	33.73	13.546	6.53
Thailand	28.538	51.591	45.80	75.14	23.053	29.34
Timor-Leste	0.071	0.070	1.42	5.68	-0.001	4.26
Viet Nam	7.522	58.970	9.82	64.30	51.447	54.48
South and South-West Asia (SSWA)	165.249	409.874	11.249	21.94	244.625	10.692
Bangladesh	9.677	23.809	7.50	14.77	14.132	7.27
Bhutan	0.096	0.415	17.16	52.50	0.319	35.34
India	59.796	221.491	5.78	16.92	161.695	11.14
Iran, Islamic Republic	37.214	54.020	57.20	68.07	16.806	10.87
Maldives	0.053	0.223	19.05	54.38	0.170	35.34
Nepal	1.354	7.257	5.81	25.32	5.902	19.51
Pakistan	12.932	39.902	9.55	21.07	26.971	11.52
Sri Lanka	5.319	11.552	28.70	55.09	6.234	26.39
Turkey	38.807	51.204	62.30	65.42	12.398	3.12
North and Central Asia (NCA)	99.718	129.702	45.871	56.56	29.984	10.691
Armenia	0.496	1.439	16.04	49.29	0.944	33.25
Azerbaijan	3.384	6.580	42.40	68.19	3.197	25.79
Georgia	1.122	1.877	25.22	50.46	0.755	25.24
Kazakhstan	5.488	15.248	36.76	86.93	9.759	50.17
Kyrgyz Republic	0.886	1.755	18.30	29.45	0.870	11.15
Russian Federation	85.809	89.904	58.29	62.39	4.095	4.10
Tajikistan	0.112	3.795	1.83	44.39	3.684	42.56
Turkmenistan	0.436	2.894	9.75	51.95	2.458	42.20
Uzbekistan	1.986	6.210	8.17	19.84	4.224	11.67
Pacific	1.220	2.437	4.654	7.17	1.217	2.520
Fiji	0.346	0.466	42.69	52.36	0.120	9.67
Kiribati	0.024	0.035	29.83	31.47	0.011	1.64
Micronesia	0.043	0.030	39.48	30.04	-0.013	-9.44
Papua New Guinea	0.545	1.562	10.04	19.72	1.017	9.68
Samoa	0.065	0.107	38.33	56.28	0.042	17.95
Solomon Island	0.074	0.089	18.46	15.15	0.016	-3.31
Tonga	0.062	0.072	61.80	65.35	0.010	3.55
Tuvalu	0.005	0.005	51.52	54.46	0.000	2.94
Vanuatu	0.056	0.071	31.15	27.29	0.015	-3.86
Total	482.346	1681.928	13.25	39.16	1199.582	25.91

Source: Author's elaboration based on PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank.

About the Economic and Social Commission for Asia and the Pacific (ESCAP)

The Economic and Social Commission for Asia and the Pacific (ESCAP) serves as the United Nations' regional hub promoting cooperation among countries to achieve inclusive and sustainable development. The largest intergovernmental platform with 53 member States and 9 associate members, ESCAP has emerged as a strong regional think-tank offering countries sound analytical products that shed insight into the evolving economic, social and environmental dynamics of the region. The Commission's strategic focus is to deliver on the 2030 Agenda for Sustainable Development, which it does by reinforcing and deepening regional cooperation and integration to advance connectivity, financial cooperation and market integration. ESCAP's research and analysis coupled with its policy advisory services, capacity building and technical assistance to governments aim to support countries' sustainable and inclusive development ambitions.

Social Development Division

United Nations Economic and Social Commission for Asia and the Pacific

United Nations Building

Rajadamnern Nok Avenue

Bangkok 10200, Thailand

Email: escap-sdd@un.org

Website: www.unescap.org