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Analyst Contacts

Anushka Shah +65.6398.3710
VP-Senior Analyst
anushka.shah@moodys.com

Marcus Yiu +65.6398.8334
Associate Analyst
marcus.yiu@moodys.com

Gene Fang +65.6398.8311
Associate Managing Director
gene.fang@moodys.com

Marie Diron +44.20.7772.1968
MD-Sovereign/Sub Sovereign
marie.diron@moodys.com

Alastair Wilson +44.20.7772.1372
MD-Global Sovereign Risk
alastair.wilson@moodys.com

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Sovereigns – Asia Pacific

Pandemic shock will spur income inequality, with credit risks for fiscally weak sovereigns

The impact of the coronavirus pandemic will exacerbate income inequality across Asia Pacific (APAC). Governments with constrained fiscal capacity have limited scope to address the resulting social and political strains, which could amplify credit risks.

Coronavirus will exacerbate income inequality, mitigated by fiscal measures Growth in APAC has outpaced other regions globally for decades, but this has not been accompanied by equity gains. Nearly half of rated APAC sovereigns logged a rise in the Gini coefficient since 2000, indicating growing inequality. The largest increases were in the three most populous economies — China (A1 stable), India (Baa3 negative) and Indonesia (Baa2 stable). The pandemic will make inequality starker, with governments increasingly resorting to fiscal policy to limit widening income gaps and protect human capital.[1]

Spending, particularly on social protection, will attenuate income disparity Expenditure measures can support vulnerable groups, but nearly all APAC emerging markets have weaknesses in their social protection systems: social spending is lowest in India, the Philippines (Baa2 stable) and Indonesia, although efforts to strengthen redistribution systems are in train. Strong delivery mechanisms and financial inclusion have enabled Malaysia (A3 stable) and Thailand (Baa1 stable) to swiftly deploy transfers during the pandemic, but other factors hinder inequality reduction. Frontier markets except for Vietnam (Ba3 negative), Maldives (B3 negative) and Mongolia (B3 negative) have weak redistribution systems.

Tax policies determine social protection spending capacity Progressive personal income taxes can effectively address income inequality, but only when tax leakage or evasion is minimal. For APAC, the role of taxation in reducing inequality has been limited, except in some advanced economies, since most governments have a low share of personal taxes and they are not aligned with taxpayers' capability to pay. In most APAC emerging markets, low tax revenue or other weaknesses in tax structures exacerbate inequality.

Sovereigns that struggle to address inequality face greater social, political risk Governments with weak social protection systems and low fiscal capacity to raise spending will face particular challenges in tackling income inequality. India, Indonesia and, to some extent, Malaysia and the Philippines stand out in this regard. Frontier markets, particularly Papua New Guinea (PNG, B2 stable) and Sri Lanka (Caa1 stable) face similar pressures. Conversely, China, Hong Kong (Aa3 stable) and Singapore (Aaa stable) report high inequality, but fiscal space provides leeway in quelling immediate pressures. Generally speaking, public discontent with progress in addressing social issues could erode government legitimacy, with negative implications for credit quality.

Coronavirus will exacerbate income inequality, mitigated by fiscal measures

Over the past few decades, APAC has recorded economic growth rates that have outpaced other regions globally, accompanied by rapid progress in poverty reduction. However, strengthening growth has been counterbalanced by an increase in income inequality.

While technological change has raised productivity, it has favored capital-intensive businesses over labor-intensive ones, and skilled labor over unskilled labor, often confined to the informal sector. These trends have been amplified by globalization.

Disposable or after-tax income inequality as measured by the Gini coefficient is much higher in Sub-Saharan Africa and Latin America, but the overall pace of decrease in APAC has been negligible since the early 2000s, coinciding with more pronounced falls in other regions. Of the 25 rated APAC sovereigns, 12, accounting for nearly 90% of their combined population, experienced an increase in the Gini coefficient since the early 2000s.

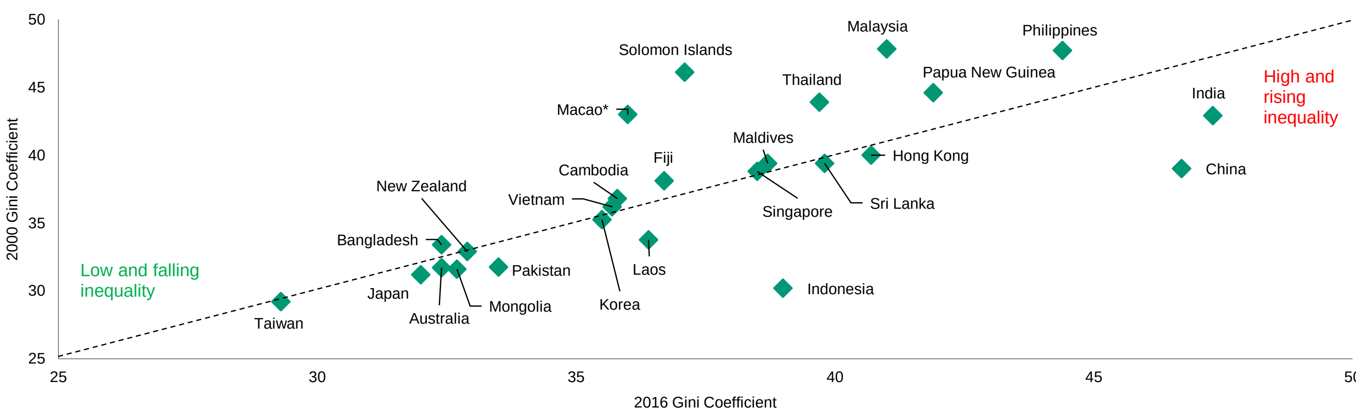
Some of the largest gains were recorded in the three most populous countries — India, Indonesia and China (see Exhibit 1). China and India also report some of the highest Gini ratios globally currently (see Exhibit 2). As a result, the population-weighted Gini logged a significant rise between 2000 and 2016, the latest year for which data is available for most economies. Some advanced economies, such as Japan (A1 stable), Australia (Aaa stable) and Korea (Aa2 stable) recorded increases, although these were smaller and from lower starting points. Gini ratios in Hong Kong and Singapore are also relatively high, but have not materially changed.

Inequalities in wealth are even more stark, and have particularly increased among emerging market economies. For instance, the share of wealth held by the richest 1% of the population in China crossed 30% in 2019, from about 20% in 2000, and for India, rose to over 40% in 2019 from under 20% in the early 2000s. The wealth Gini coefficient, which measures disparities in wealth (including accumulated savings and assets) is 70.2% in China and 83.2% in India.[2]

The coronavirus outbreak will make these inequality gaps starker. Typically, job losses and income shocks disproportionately hurt vulnerable and lower-income groups. According to an International Monetary Fund (IMF) study, the Gini coefficient on disposable income increases by close to 1.5 percentage point on average five years after a pandemic hits. Past pandemics have also resulted in a rise in social unrest, driven by inequality and lower growth.[3]

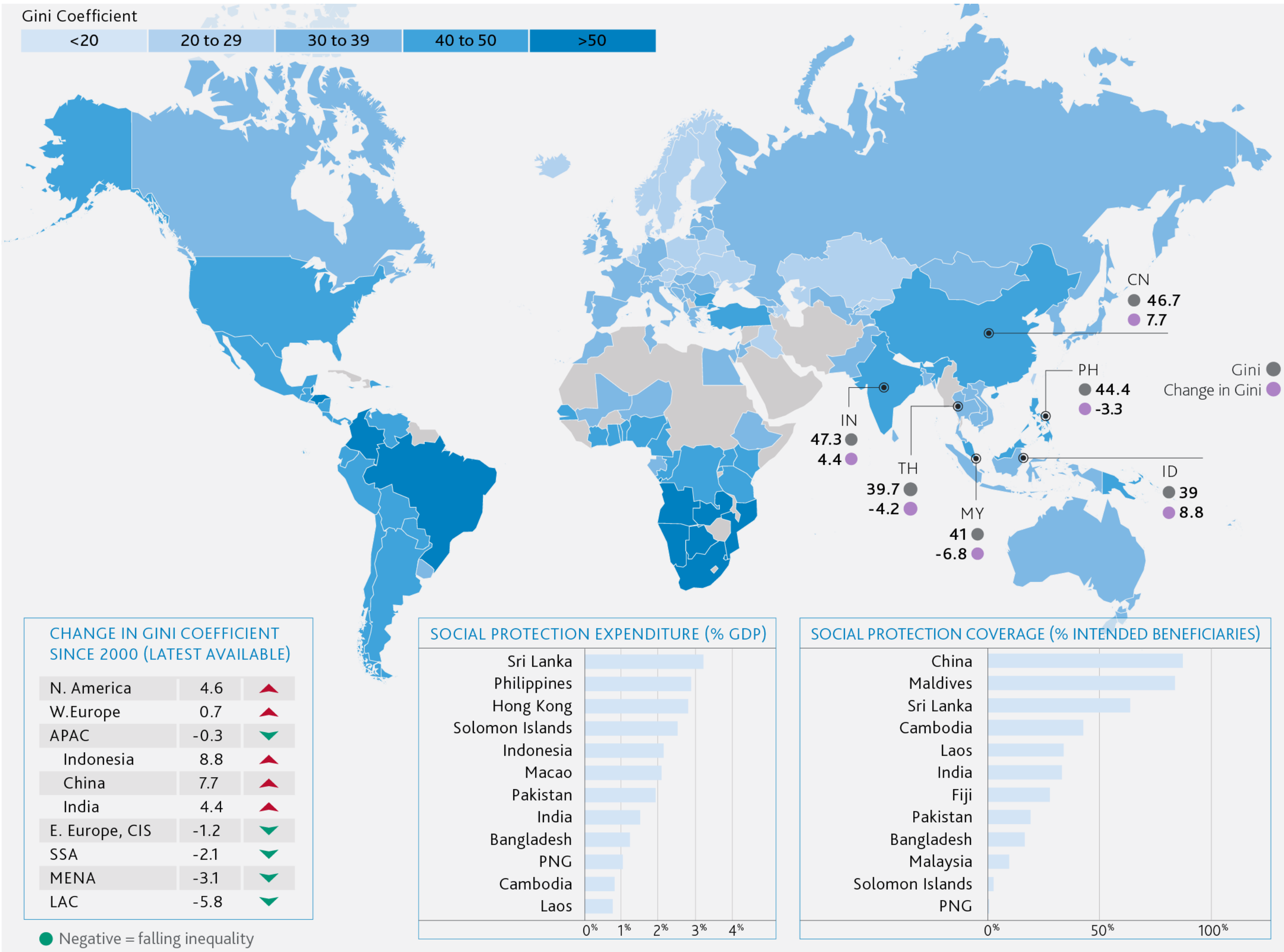
Post-pandemic, less-skilled workers or those with basic education are more likely to face unemployment and for longer than those with advanced education. Informal sector workers have been faced with a double-whammy of significant job losses and inadequate coverage under social protection systems.

Exhibit 1
Income inequality has increased in APAC's most populous sovereigns, among others
(Post-tax Gini coefficient)



*Data for Macao compared Gini coefficient from 1998/99 and 2017/18.
Sources: World Bank, The Standardized World Income Inequality Database, United Nations World Income Inequality database and Moody's Investors Service

Exhibit 2
China and India report among the highest Gini ratios globally



For Gini coefficient; higher value = greater inequality. Social protection data are for those economies that are below the median for rated APAC sovereigns. CN: China, ID: Indonesia, IN: India, MY: Malaysia, PH: Philippines, TH: Thailand. All data are latest available.
Sources: World Bank, The Standardized World Income Inequality Database, United Nations World Income Inequality database and Moody's Investors Service

The International Labor Organization (ILO) estimates that the coronavirus shock resulted in an almost 60% income drop in April 2020 alone for 1.6 billion informal economy workers, comprising half of the global workforce.[4]

Governments are keen to tackle income inequality given its social and political repercussions. While not a rating driver in itself, persistent income inequality is linked with weak institutional frameworks and effectiveness, and lower and less stable economic growth, which breeds social and political strains.[5] Inequality is an aspect of labor and income risk, and falls under the "social" category in our assessment of environmental, social and governance considerations.[6]

Fiscal policy can address inequality

Amid these challenges, sovereigns are using fiscal policy to mitigate income inequality, and provide support to vulnerable groups.

Large emerging markets in the region – India, Indonesia, Malaysia and the Philippines – have all announced cash transfers, and some have broadened coverage of existing social assistance schemes to low-income households. Advanced economies such as Korea, Japan and Australia have taken similar steps, including providing wage support.

The pandemic reinforces the role of fiscal policy in facilitating reductions in inequality that has already been established in advanced economies. Gini coefficients before taxes and transfers (market income inequality) and post taxes and transfers (disposable income inequality) indicate that fiscal tools decrease disparity in OECD economies excluding APAC by as much as one-third.

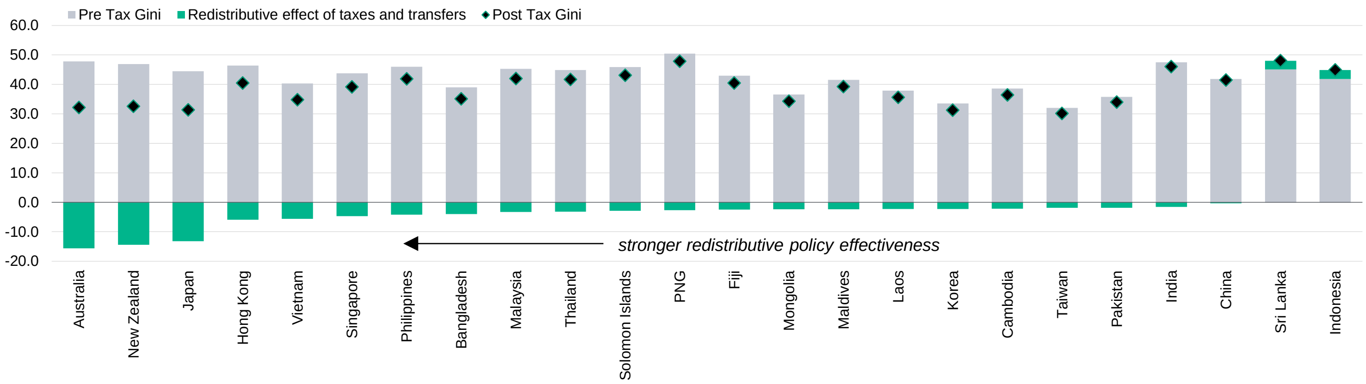
By contrast, an analysis of Gini coefficients pre and post taxes and transfers in APAC suggests that the difference between market and disposable Gini coefficients is 8%-10% on average, and only offsets up to 15% of inequality for sovereigns with the most effective redistribution systems, much less than in the OECD (see Exhibit 3).

The difference between pre- and post-tax Gini coefficients in APAC is pronounced generally for higher-income economies which also have strong social redistribution systems (Australia, Japan, Korea). Even some economies with weaker revenue collections (Vietnam, Bangladesh [Ba3 stable]) have relatively low disposable income Gini coefficients, partly because of strong or strengthening social distribution systems. Conversely, some economies with relatively robust or strengthening social protection systems, such as China and Malaysia, record high income inequality and fiscal policy has been a blunt tool to reduce these gaps.

These results indicate that for most APAC economies, particularly large emerging markets, the root causes of inequality are manifold and extend beyond the current state of their redistribution systems and tax policies. However, a combination of progressive tax policy with minimal leakage and an effective transfer system contributes to low or falling inequality.

Exhibit 3

Higher-income economies display stronger redistribution policy effectiveness
(Pre-tax, post-tax average Gini coefficients since 2000)



Data for Macao is from national sources and represents difference between Gini coefficients pre- and post-transfers of government welfare benefits and subsidies.
Sources: Documentation and Information Centre of the Statistics and Census Service (Macao), The Standardized World Income Inequality Database (SWIID) and Moody's Investors Service

Spending, particularly on social protection, will attenuate income disparity

Expenditure measures – which include transfers, provision of specific public services (usually education and health), and social insurance – are established fiscal levers to reduce income inequality, and can efficiently protect targeted vulnerable groups.

As countries recover from the coronavirus pandemic, social protection systems in particular have the power to mitigate the near-term economic impact, while preventing long-lasting effects on labor.

This is evident in most governments' policy responses. World Bank data[7] suggest that for a sample of 119 countries globally, spending as of mid-September 2020 on coronavirus-related social protection measures, including social insurance, cash transfers, social assistance measures and labor market related assistance, is close to $800 billion, of which more than 40% was deployed in the APAC region.

Some countries, with higher social protection spending, have been able to mobilize resources and distribute them efficiently by scaling up their existing frameworks. China, Thailand and Malaysia fall into this category, although various features of their systems have hindered them from reducing income inequality more generally. Others with narrower systems and lower coverage have announced plans but implementation has been difficult.[8]

For the region, we find strong correlations that suggest that for those economies with strong or growing social protection systems inequality is either low or falling.

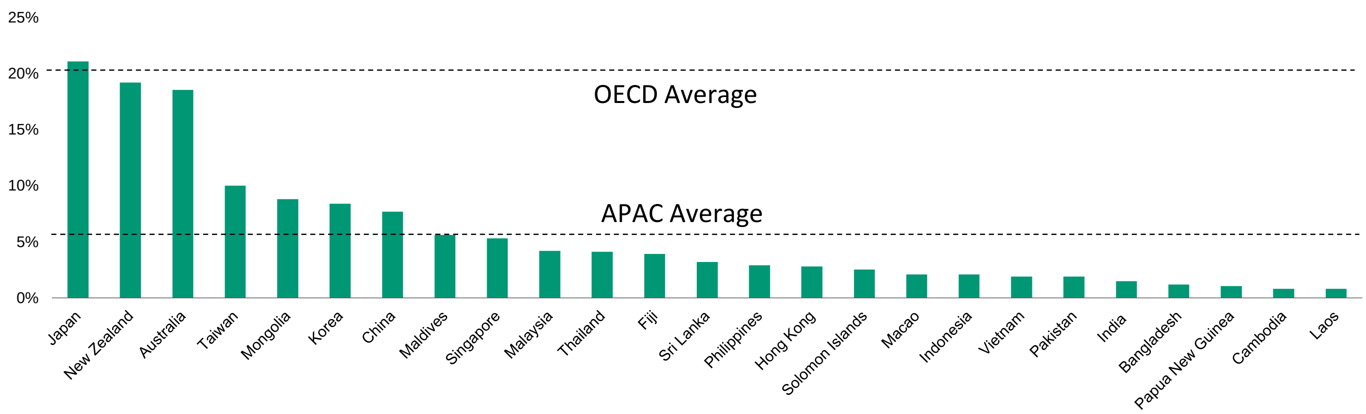
Weaknesses in social protection systems are exacerbating income inequality for emerging markets in the region

Overall social protection coverage – which generally includes social insurance, transfers and labor market programs – is low in APAC and typically excludes the informal sector, which comprises a large part of many economies.

Across rated APAC sovereigns, average social protection expenditure was over 5% of GDP in 2015-16, the latest year for which data is available, but a majority of governments spent below the regional average, and far below the OECD average (see Exhibit 4).

Moreover, expenditure increased by less than one percentage point since 2012, and social protection covered just under 60% of intended beneficiaries on average, for the set of economies included in the Asian Development Bank (ADB, Aaa stable) Social Protection Indicator database.[9] There is also a very wide range of coverage, from PNG at just 0.3% of the targeted population, to the Philippines at 118%, implying that beneficiaries obtain coverage from various schemes.

Exhibit 4
Most APAC governments spend less on social protection than the OECD average
(Social protection expenditure, % of GDP, 2015-16)



Sources: Asian Development Bank, National Statistics Bureau (Taiwan), OECD, World Bank and Moody's Investors Service

Characteristics among APAC **emerging markets** reinforce the overarching correlation between income inequality and social protection systems (see Exhibits 5 and 6):

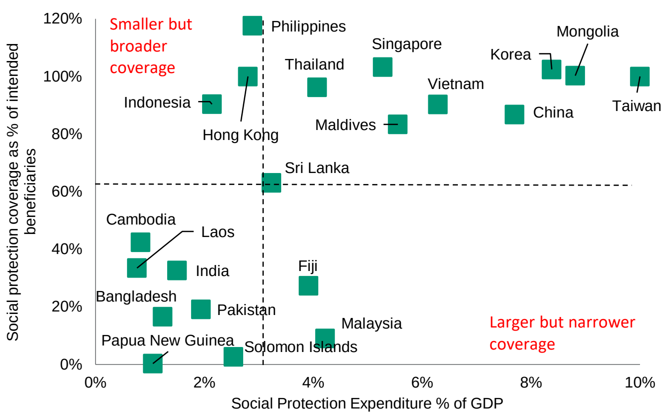
» **Indonesia** and **India** have high benefit incidence, when considering the proportion of benefits provided to the overall population going to the poorest one-fifth. However, social protection expenditure, both as a share of GDP and of GDP per capita, is low, which limits scope for reducing income inequality. Similarly, the **Philippines** reports strong coverage and benefit incidence, but low spending as a share of GDP. Each of these governments is bolstering redistributive systems, but measures are relatively recent and have not translated into shifts in Gini ratios. For instance, India's National Rural Employment Guarantee Scheme, more targeted public distribution system, health services, and substantial digitalization efforts have improved benefit incidence and reduced leakage. However, other structural issues persist. And some schemes target the rural poor, at the expense of the urban and informal sectors, where income disparities are particularly prominent.

» Although **Malaysia** and **Thailand** each spend nearly double on social protection compared with Indonesia, they report relatively high inequality, because benefit incidence is low. According to the World Bank's Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE) database, benefit incidence is less than 12% in Malaysia and just over 8% in Thailand.

» **China** has high inequality despite strong social protection coverage and spending. This is a result of various legacy issues, in particular the *hukou* or household registration system, which constrained rural-urban migration and restricted the benefits provided to rural Chinese. Despite strides made over recent years, public spending on health and education is low, and coverage of the rural sector and new urban migrants is limited. Inequality is primarily driven by differences in educational attainment and the effects that a structural shift to manufacturing activity have had on a less-skilled working class. Moreover, only a small percentage of high-income earners pay tax, and regressive rules around social security contributions persist.[10]

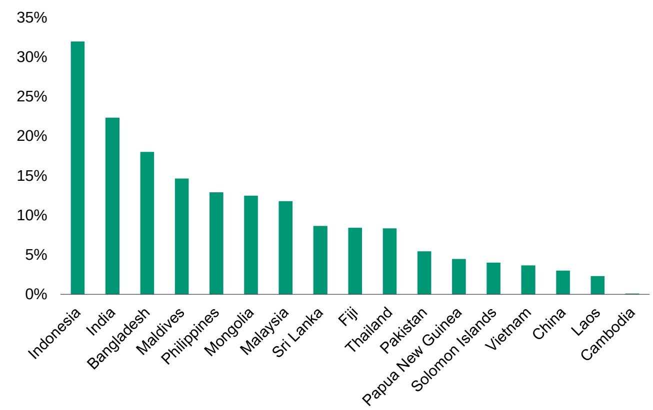
There have been long-standing reform efforts by governments in the region, particularly emerging markets, to strengthen social protection systems. China, Indonesia, Pakistan (B3 stable) and the Philippines are increasing welfare assistance under conditional cash transfer programs. Indonesia and Thailand have also established universal health insurance (as has the Maldives), and the Philippines and Vietnam are steadily expanding health insurance coverage. Notably, in the Philippines, revenue collections from sin taxes on tobacco, and alcoholic and sugary beverages help to finance the universal healthcare program, representing a double-barreled fiscal approach to enhancing social protection.

Exhibit 5
Most frontier economies have small social protection spending and narrow coverage
(%)



Dotted lines indicate the median for each indicator.
Data for Australia, Japan and New Zealand are not included in the chart given their much higher social protection expenditure compared with other APAC sovereigns.
Sources: Asian Development Bank and Moody's Investors Service

Exhibit 6
Poorest segment of population in many frontier economies may not have access to adequate social benefits
(Benefit incidence of poorest quintile)



Benefit incidence measures the percentage of benefits going to the poorest income quintile relative to the total benefits going to the population.
Sources: World Bank and Moody's Investors Service

For **high-income economies**, Gini ratios are low, and social protection expenditure is typically greater than in emerging markets. However, spending on social protection is below the OECD average of over 20% of GDP for Australia, Korea and New Zealand (Aaa stable), corresponding to these sovereigns' strong regional – but moderate global – positioning in income inequality rankings. Exceptions are Singapore and Hong Kong, which have relatively high Gini ratios. Apart from structural factors, spending on social protection in Singapore is well below the OECD average at less than 6% of GDP, and the country has a flat and low tax structure. At under 3.0% of GDP, spending on social protection in Hong Kong is even smaller than in Singapore, with lower tax rates.

Most **frontier economies** are at the other end of the spectrum, with low spending and coverage on social protection, as well as high income inequality. Exceptions include Maldives, Mongolia and Vietnam, where strong coverage or spending has contributed to low or falling Gini coefficients.

Delivery mechanisms increase immediacy of fiscal response, particularly in a crisis

Strong implementation infrastructure, including universal national identity systems, broad mobile phone coverage, and high banking penetration, can complement a well-constructed social protection system and increase benefit incidence over time, facilitating a reduction in income disparity.

The role played by these factors has been emphasized by the coronavirus pandemic, with countries with well-established digital payment ecosystems and high financial inclusion among recipients being able to rapidly scale their social protection assistance.

» In **India**, over 300 million account holders of the Jan Dhan Yojana financial inclusion program were able to receive account-based cash transfers as an immediate response to the coronavirus pandemic. India has made major strides in increasing network readiness through Jan Dhan Yojana, Aadhar (the unique identification system) and mobile phone access.[11]

» **Thailand** used the PromptPay system to deliver digital cash transfers.

» **Malaysia**, with its universal national identity system, wide mobile phone coverage and high financial inclusion, had a strong delivery mechanism already in place, and was able to distribute large-scale cash transfers with a 99% implementation rate.

By contrast, in economies with low financial inclusion and development of the digital payments ecosystem, authorities have provided cash directly to beneficiaries or through cash points.

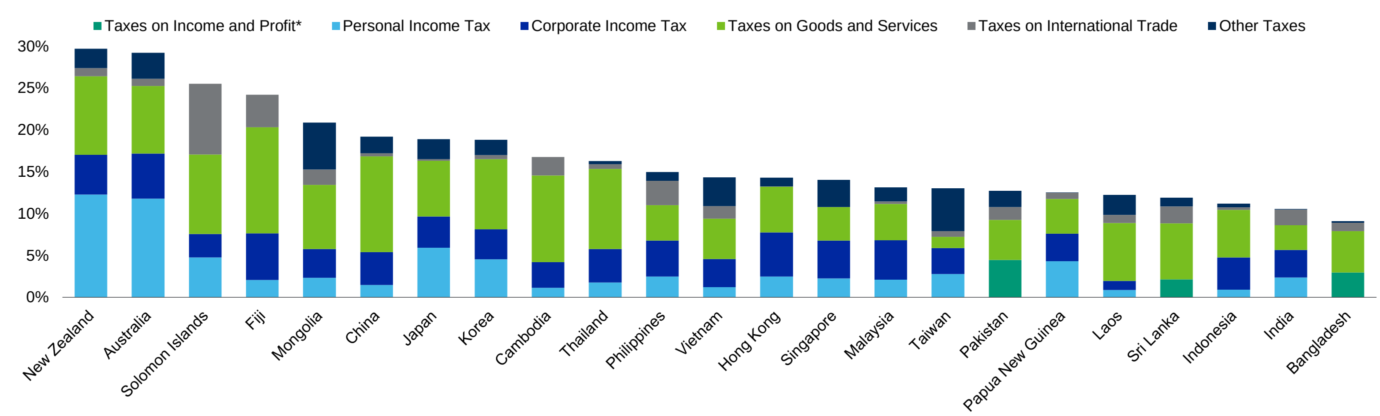
Tax policies determine social protection spending capacity

Tax policies in themselves are less effective in addressing income inequality than social protection measures. However, strong tax collections and progressive structures support the raising of financing that can provide equality-promoting public services.

The experience of OECD economies suggests that expenditure policies, particularly transfers, reduce income dispersion more than taxes. On average, according to the OECD, in the late 2000s, three-quarters of the reduction in inequality as measured by the difference between disposable and market Gini coefficients in OECD economies came from transfers, and the rest from taxes.

The overall redistributive impact of taxes depends on the amount collected, the composition and the progressivity of each tax.[12] Progressive personal income taxes have the most impact on reducing income inequality, but only when tax leakage or evasion is limited. By contrast, consumption taxes, which are generally regressive, increase inequality, even with provisions for zero or low tax rates on essential consumption.

Exhibit 7
Less-progressive indirect taxes dominate collections in APAC
(Tax revenue, % of GDP, 2018)



*Taxes on income and profit are used for economies which do not distinguish between personal income tax and corporate taxes.
Sources: United Nations University (UNU-WIDER) and Moody's Investors Service

For APAC, the role of taxation as a tool in reducing inequality has been particularly limited, and there is no strong evidence that tax structures by themselves have contributed to lower inequality.

Lower tax income blunts the use of revenue-side fiscal policies. On average, the tax ratio in emerging and frontier market economies in the region is 15%-16% of GDP, smaller than the mean of 17%-18% for advanced economies, and the OECD average of over 34%.

Indirect tax collections, including value-added tax (VAT) and excise taxes, dominate total collections, accounting for 9%-10% of GDP on average (see Exhibit 7). Direct taxes comprise about 40% of total collections on average, with the exception of some advanced economies, such as Australia, New Zealand, Japan and Korea. In these economies, corporate tax – which is less effective in driving reductions in the Gini ratio – plays a prominent role in driving tax revenue.

For many economies in the region, including Indonesia and PNG, direct tax collections have fallen as a percentage of GDP over the past decade. This reduces the overall progressivity of the system and can exacerbate inequality.

Personal income tax revenue collections are low across APAC, a result of a combination of either low per-capita income, lower tax rates or higher exemption thresholds. Since 2006, the top personal income tax rate has remained more or less unchanged on average across the region, even while per-capita income has increased, and is lower than in most advanced economies. Moreover, a large informal sector and high rates of tax evasion in many APAC economies undermine the use of a progressive personal income tax as a tool to reduce income inequality.[13] Sovereigns with high personal income tax revenue to GDP include Australia and New Zealand; collections in Japan and Korea are in line with the OECD average, although the rate structure is less progressive.

Corporate income taxes, while positively correlated with reductions in income inequality in the rest of the world, have the opposite effect in Asia, according to the ADB. The incidence of corporate taxes often falls on wages and wage-earners, rather than those with capital income, which dampens the redistributive impact. Moreover, a high number of corporate tax incentives and concessions in Asia, designed to encourage investment and particularly prevalent for free trade zones, reduces the effective tax rate and deters from inequality reductions.

Social security contributions directly reduce income inequality, but comprise a small portion of revenue for almost all APAC economies, with the exception of Japan (36.8% of total revenue in 2018), Korea (19.8% in 2018) and China (18.4% in 2017). In Indonesia, the government is undertaking reforms to increase social security contributions, including through a new compulsory pension insurance scheme and greater coverage of existing schemes.

Other consumption-based taxes, such as VAT and goods and services tax, also tend to be regressive. Finally, **real estate** and **wealth taxes** can reduce inequality, but do not contribute significantly to revenue collections in the region.

Sovereigns that struggle to address inequality face greater social, political risk

Following the coronavirus outbreak, sovereigns with weak social protection systems and low fiscal capacity will face particular challenges in tackling income inequality.

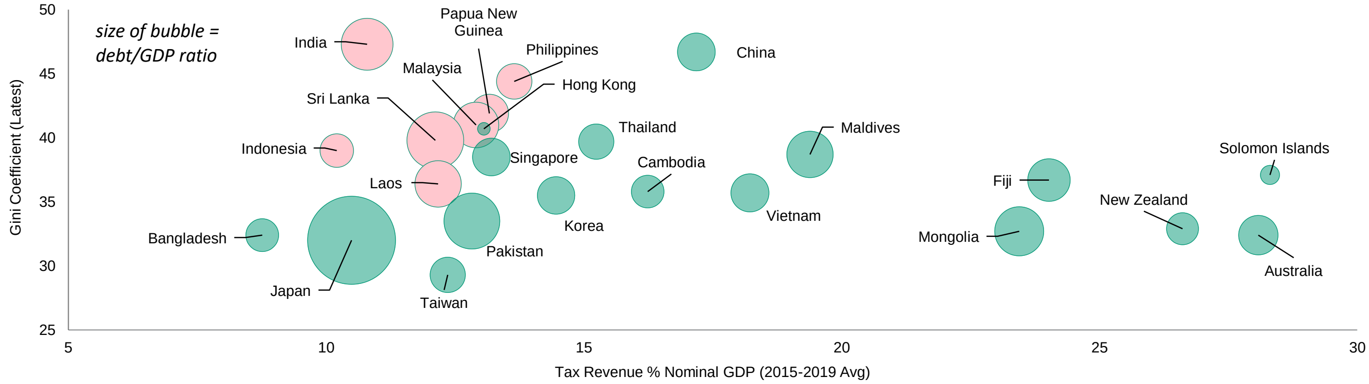
Persistent inequality and public discontent with progress in addressing social issues could erode governments' legitimacy, with negative implications for credit quality. These issues would tend to be less pronounced for sovereigns with more effective administrative capacity.

In general, governments' promotion of equitable income distribution is at least partly driven by a desire for social cohesion and to reduce political conflict. Effective policymaking entails political support, while inequality breeds divisiveness and political polarization, often derailing structural reforms. There are also strong, established correlations between inequality and corruption.

Among sovereigns with income inequality above the regional median, **India** and **Indonesia** stand out for their limited capacity to address these pressures. **Malaysia** and the **Philippines** have little fiscal space to ramp up spending without offsetting tax measures, and high Gini ratios. Frontier markets, particularly **PNG**, **Sri Lanka** and **Laos,** face similar pressures (see Exhibit 8 and Appendix).

Exhibit 8

Fiscal capacity is limited in some economies with high income inequality
(Gini coefficient, % of GDP)



Economies shaded red are faced with higher income inequalities and lower revenue capacities to bolster social protection. Size of bubble reflects size of general government debt as a percentage of GDP in 2019.
Sources: National authorities, Asian Development Bank, International Labor Statistics, OECD, World Bank and Moody's Investors Service

Measures underway suggest that governments have identified these issues and are focusing on strengthening distribution systems. Moreover, some of these governments' recent responses to the coronavirus outbreak indicate that they have been able to rapidly leverage their existing frameworks to carry out redistributive measures to targeted beneficiaries.

However, social protection for each of these economies exhibits certain weaknesses that have exacerbated income disparities. Revenue is low, which constrains the ability of these governments to shore up financing for spending on social transfers. If growth remains below pre-pandemic rates, these governments may be presented with tough choices between addressing inequality before it has persistent and wide-ranging effects – particularly, but not limited to, social and political strains – and implementing fiscal consolidation.

Those economies with stronger fiscal buffers – characterized by higher tax collections and modest debt burdens – may have more space to step up spending on social protection measures or even use cash handouts as a bridge to prevent emerging income inequality from climbing, and are as such as less susceptible to such pressures.

Sovereigns including **China**, **Singapore** and **Hong Kong** face high inequality, but are better positioned to address related challenges, given their combination of fiscal resources and effective policies.

History suggests that various episodes of political conflict across Asia have their roots in income imbalances, which have typically converged with class and religion-based divides. Class-based politics in Thailand, racial tensions in Malaysia in the 1960s, and religious politics in Indonesia have been exacerbated by or originated from income disparities. Today, wealth and income inequality remains significant across much of the region. In a post-pandemic environment, more glaring disparities in all these respects, and dissatisfaction with corruption at higher levels, can particularly breed social tensions.

For most APAC economies, policies seeking to narrow inequality feature prominently in political campaigns, and are an important aspect of longer-term economic plans and a factor driving electoral outcomes, particularly where social or income mobility is an issue, such as in India, the Philippines and Malaysia.

Appendix

Exhibit 9

Key indicators for assessing fiscal capacity to address income inequality (Gini Coefficient, %,)

Economies	Gini coefficient	Gini coefficient Change since 2000	Social Protection Expenditure % of GDP	Social Protection Coverage % of Population	Tax Revenue % Nominal GDP (2015-2019 Avg)	Gen. Gov. (Gross) Debt % Nominal GDP (2019)
India	47.3	4.4	1.5	22.0	10.8	72.2
China	46.7	7.7	7.7	70.7	17.2	38.6
Philippines	44.4	-3.3	2.9	36.7	13.6	34.1
Papua New Guinea	41.9	-2.7	1.1	9.6	13.2	39.8
Malaysia	41.0	-6.8	4.2	27.3	12.9	55.9
Hong Kong	40.7	0.7	2.8	100.0	13.1	4.6
Sri Lanka	39.8	0.4	3.2	36.4	12.1	86.8
Thailand	39.7	-4.2	4.1	68.0	15.2	33.7
Indonesia	39.0	8.8	2.1	27.8	10.2	30.6
Maldives	38.7	-0.7	5.6	27.6	19.4	57.9
Singapore	38.5	-0.3	5.3	100.0	13.2	38.3
Solomon Islands	37.1	-9.0	2.5	1.6	28.3	10.2
Fiji	36.7	-1.4	3.9	58.9	24.0	48.8
Laos	36.4	2.7	0.8	12.1	12.2	58.0
Macao	36.0	-9.0	2.1	-	28.7	0.0
Cambodia	35.8	-1.0	0.8	6.2	16.2	29.0
Vietnam	35.7	-0.5	6.3	38.8	18.2	39.2
Korea	35.5	0.2	8.4	77.3	14.5	38.0
Pakistan	33.5	1.8	1.9	8.0	12.8	83.7
New Zealand	32.9	0.0	19.2	100.0	26.6	27.8
Mongolia	32.7	1.1	8.8	100.0	23.4	64.7
Australia	32.4	0.7	18.5	100.0	28.1	42.0
Bangladesh	32.4	-1.0	1.2	28.4	8.8	29.3
Japan	32.0	0.8	21.1	98.0	10.5	206.2
Taiwan	29.3	0.1	10.0	100.0	12.4	33.8
Median	**36.7**	**-**	**3.9**	**37.8**	**13.6**	**38.6**

Green (red) shading denotes values above (below) median.

Sources: National authorities, Asian Development Bank, International Labor Statistics, OECD, World Bank, SWIID, and Moody's Investors Service

A note on data sources

Income inequality refers to measures of how income is distributed across members of a population. There are several ways of measuring income inequality, including looking at the percentage of income that the top 1% or 20% of the population receives, or the ratio between the top and bottom one-fifth.

In this report, we focus on measures of income inequality based on the Gini index, a score that captures how much a given income distribution differs from a perfectly equal distribution and is reported in a range from zero (complete equality) to 100 (complete inequality), i.e., the higher the score, the greater the inequality. We use Gini index data because of the wide availability across economies and time.

For data on Gini coefficients pre and post taxes and transfers, we rely on the Standardized World Income Inequality Database (SWIID) database, since it provides comprehensive and updated information for our set of economies.

To gauge broader income inequality, we have predominantly used the Gini coefficient from the World Development Indicators (WDI). Where unavailable, we have used the disposable Gini coefficient from the SWIID database.

On average, we find that the disposable income Gini from the SWIID database is 3.6 points lower on average than the WDI Gini coefficient for our data set of APAC sovereigns. However, in some instances, there is a wide divergence between the SWIID and WDI indicators. Here, we have used a third source of information where available – either the United Nations University World Institute for Development Economics Research (UN WIDER) database, or national official sources – and then settled on either the WDI or SWIID indicator, whichever is more closely aligned.

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Contributors

Author

Anushka Shah

Contributor

Marcus Yiu

Research Writer

Natasha Brereton-Fukui

Endnotes

1 People's skills, knowledge and experience, which allows them to create economic value.

2 See Global Wealth Databook 2019

3 See, for example, IMF's Regional Economic Outlook, October 2020 and How Pandemics Leave the Poor Even Farther Behind, May 2020

4 See ILO: As job losses escalate, nearly half of global workforce at risk of losing livelihoods, April 2020

5 See our previous report, Sovereigns – Global: Income inequality associated with some credit drivers, but not a differentiating rating factor, June 2019

6 See Request for Comment: General Principles for Assessing Environmental, Social and Governance Risks - Proposed Methodology Update, September 2020

7 See Social Protection and Jobs Responses to COVID-19 : A Real-Time Review of Country Measures, Open Knowledge Repository, World Bank Group

8 See From Containment to Recovery, World Bank East Asia and Pacific Economic Update, October 2020

9 See The Social Protection Indicator for Asia: Assessing Progress, ADB, July 2019

10 See Inequality in China, Bruegel, September 2018, and Inequality in China - Trends, Drivers, and Policy Remedies, IMF, June 2018

11 See Is India Ready to JAM?, Brookings Institution, August 2018

12 Progressivity refers to the extent to which taxes are tailored to capacity to pay.

13 A recent exception is the Philippines, which as part of its 'TRAIN' tax reform package improved personal income tax progressivity by lowering tax rates for all income groups and increased rates on the very rich

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