# ncome Inequality in Asia





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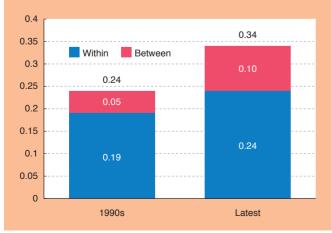
The increase in income inequality across the world is one of the most profound social, economic, and political challenges of our time. A survey conducted by the Pew Research Center (2014) found that more than 60% of worldwide respondents regard the gap between the rich and the poor as a major concern. The gap is at its highest level in decades for advanced economies, while the inequality trend has been rising in many developing countries. In Asia, despite recent economic growth, income distribution has been worsening as well. This article presents the profile of income inequality in Asia, discusses its drivers and consequences, and provides policy recommendations.

## **Profile of Income Inequality in Asia**

The *Chart* presents total inequality in Asia in the mid-1990s and most recently. This is measured by the Theil index. The larger the value of this index is, the worse the income distribution becomes. This total inequality consists of inequality within individual economies (the within component) and also of income gaps across countries (the between component). Clearly, inequality for the Asian region as a whole has grown significantly, rising almost 42% in less than two decades. More importantly, both the within- and betweencomponent have increased. The latter exactly doubled.

The *Chart* also indicates that inequalities within countries dominate the regional income distribution, accounting for more than 70% of the total. To explore this particular component, we use the popular inequality measure called the Gini coefficient. It ranges from 0 to 1, where 0 refers to the situation of perfect equality or all

# Income inequality within & between countries in Asia



Source: Compiled by the authors

individuals having the same income, while 1 represents the worst inequality or all income being held by a single person in the total population. The *Table* shows the Gini coefficient and its average annual growth rate in the 1990s and 2000s, calculated using both net income (income after taxes and transfers) and gross income

According to the Table, 18 of the 32 Asian economies now have a Gini coefficient of gross income equal to or greater than 40. Based on net income, only 10 economies have their Gini coefficients above 40, suggesting that taxes and transfers moderate the income gap. Although the Gini coefficients in developing Asia are on average lower than Sub-Saharan Africa, Latin America, and the Caribbean. the growth rate of inequality has surpassed these regions where the income gap has been declining. In terms of inequality trend, 16 of the 32 Asian economies exhibited an increase (worsening) in the Gini coefficient in the past two decades, covering around 80% of the region's population. In particular, China and India, with the largest populations in the world, have the highest Gini coefficients of around

It is useful to highlight the case of China which is now the secondlargest economy in the world and has been experiencing rapid rises in income inequality. Even in terms of net income, China's Gini coefficient increased from 39.37 in 1994 to 51.99 in 2008. These very high inequalities can undermine social stability. They also contribute to the slowdown of the Chinese economy and to the global imbalance. Despite recent declines in inequality in China, the issue of income distribution remains serious.

The situation in India is somehow similar to that in China. Starting in the 1980s average incomes in India grew faster than ever before, but most of the gains went to the super rich. According to the IMF ("Regional Economic Outlook: Asia and Pacific", IMF, April 2016), India's Gini coefficient rose from 45 in 1990 to 51 in 2013, mainly due to the rising gap between urban and rural areas as well as within urban areas.

### **Drivers of Income Inequality**

Many factors such as globalization, biased technological changes, financial development, and demographic changes, among others, have been identified as drivers of growing income inequality.

**Globalization:** Although globalization spurs economic growth, it can also affect income distribution in that trade increases differentials in returns to education and skills, globalization marginalizes certain groups of people or geographic regions, and liberalization is not complemented by development of adequate institutions and governance. For example, Guanghua Wan, Ming Lu and Zhao Chen in "Globalization and Regional Income Inequality: Empirical Evidence from within China", (Review of Income and Wealth, 53(1), March 2007) found that trade and FDI account for around 22% of regional inequality in China. In addition, when industrial countries shift parts of the production process to developing countries, increased employment and higher wages tend to benefit skilled workers vis-à-vis their unskilled counterparts.

Financial deepening: In most emerging market and developing countries (EMDCs), financial deepening, measured as the relative share of the banking and stock market sectors in the economy, has been associated with growing inequality, implying that financial sector deepening benefits mainly higherincome groups in these economies ("Causes and Consequences of Income Inequality: a Global Perspective" by Era Dabla-Norris, Kalpana Kochhar, Nujin Suphaphiphat, Frantisek Ricka, and Evridiki Tsounta, IMF Working Paper SDN/15/13, 2015). However, in Asia, particularly India, Malaysia, the Philippines, and Thailand, financial

deepening is found to play an important role in moderating income inequality because successful policies of financial inclusion have allowed financial services to reach the lower end of the income distribution with an increased geographical reach (Regional Economic Outlook Asia and Pacific: Building Asia's Strengths During

TABLE

# Gini coefficient & annual growth rate in the 1990s & 2000s

W 20003								
	Gini net					Gini market		
Country	Initial year	Final year	1990s	2000s	Annualized growth rate (%)	1990s	2000s	Annualized growth rate (%)
Central Asia								
Armenia	1994	2008	36.125	33.757	-0.468	34.967	34.840	-0.026
Azerbaijan	1994	2008	35.503	32.669	-0.570	42.183	31.786	-1.760
Georgia	1994	2008	37.312	41.173	0.739	34.466	45.952	2.380
Kazakhstan	1994	2008	32.803	31.009	-0.391	37.870	29.177	-1.640
Kyrgyzstan	1994	2008	47.848	35.685	-1.816	55.493	36.463	-2.450
Tajikistan	1994	2008	31.184	32.902	0.393	34.358	33.804	-0.115
Turkmenistan	1994	2005	34.172	39.286	1.360	35.763	42.792	1.787
Uzbekistan	1994	2005	34.603	34.232	-0.097	36.590	33.716	-0.714
East Asia								
China	1994	2008	39.370	51.990	2.290	38.873	49.684	1.986
Hong Kong	1994	2008	40.103	49.199	1.620	44.186	53.008	1.426
Taipei,China	1994	2008	28.361	31.461	0.781	30.793	32.059	0.294
Japan	1994	2008	27.263	30.220	0.775	36.087	45.090	1.782
South Korea	1994	2008	30.662	31.543	0.205	34.774	33.904	-0.179
Mongolia	1994	2008	33.870	33.097	-0.163	34.419	35.096	0.141
South Asia								
Bangladesh	1994	2008	37.055	42.949	1.136	39.298	45.740	1.171
Bhutan	2003	2008	51.882	38.617	-5.113	45.542	40.565	-2.186
India	1994	2008	48.926	49.371	0.065	45.199	50.000	0.759
Maldives	1998	2008	63.120	39.144	-3.799	61.438	40.696	-3.376
Nepal	1995	2008	39.362	37.709	-0.323	43.800	41.086	-0.477
Pakistan	1994	2008	32.587	32.422	-0.036	32.942	37.285	0.942
Sri Lanka	1994	2008	38.771	41.730	0.545	39.455	42.325	0.520
Southeast Asia								
Cambodia	1994	2008	37.827	39.351	0.288	43.108	39.176	-0.652
Indonesia	1994	2008	36.204	35.952	-0.050	37.538	42.158	0.879
Laos	1994	2008	33.080	39.063	1.292	34.321	38.965	0.966
Malaysia	1994	2008	42.819	41.637	-0.197	47.342	42.634	-0.710
Philippines	1994	2008	43.496	42.431	-0.175	46.832	45.268	-0.238
Singapore	1994	2008	35.576	39.969	0.882	39.590	46.763	1.294
Thailand	1994	2008	43.478	42.103	-0.226	46.190	42.493	-0.572
Vietnam	1994	2008	36.333	39.344	0.592	38.174	41.708	0.661
Pacific								
Fiji	1994	2008	38.319	33.116	-0.970	44.785	36.255	-1.361
Papua New Guinea	1995	2005	42.674	53.706	2.585	42.212	54.906	3.007
East Timor	2001	2007	40.639	31.844	-3.607	41.553	35.803	-2.306

Source: Compiled by the authors

Turbulent Times, IMF, 2016).

**Technological change:** Improvements in technology have dramatically augmented productivity. However, they have also affected income distribution by altering the rate of return on assets, favoring capital over labor as well as skilled labor over unskilled labor. On one hand, increased automation has eliminated the need for many manual or low-skilled jobs, leading to a fall in demand for unskilled labor. On the other hand, technological progress has driven up demand for skilled labor and increased the skill premium disproportionately ("Skill biased technological change and rising wage inequality: some problems and puzzles" by David Card and John E. DiNardo, Journal of Labor Economics, 20(4), 2002). Compared to other regions, skill premium has played a remarkably greater role in explaining income inequality in Asia. Its contribution is three times larger in Asia than elsewhere.

**Labor market imperfections:** Flexible labor markets promote economic dynamism through reallocation of resources from less productive to more productive firms. However, greater flexibility can increase risks disproportionately more for low-skilled workers. exacerbating income inequality. In South Korea and Japan, for instance, the duality between regular and nonregular employment has been the most important driver of wage inequality, with nonregular employment accounting for around one-third of the labor force in 2013. Moreover, in certain developing countries such as India, rigid hiring and firing laws and high employment protection have led to expansion of the informal sector and adoption of capitalintensive production methods which in turn fuel wage inequality.

Education: Education is often seen as the primary engine for upward mobility. However, unequal access to education has increased income inequalities in countries where the rich continue to get access to better and premium education while the poor drop out or fail. Moreover, it has also been found that children from lower socio-economic backgrounds are more likely to drop out if they live in places where the income gap is large. In quite a few emerging Asian countries like Bhutan, Cambodia, India, and Nepal, the percentage of people with less than four years of schooling is much higher for the poorest quintile than that for the richest quintile.

Fiscal policy: The progressiveness of taxation, usually measured by the top corporate tax rate or top personal tax rate, is associated with lower income inequality in Asia. However, in some Asian countries such as the Philippines, poor tax administration has significantly constrained government tax collections ("Philippines: Critical Development Constraints", Asian Development Bank, December 2007) which has in turn impacted on public spending and driven up inequality. Moreover, low and poorly targeted policies may have reduced the equalizing effects of expenditure policies. Indeed, due to the low coverage of spending policies and disproportionate allocation of the benefits toward the rich, education and social benefits are found to be associated with higher income inequality in Asia.

### **Economic Consequences of Income Inequality**

High and persistent income inequality can significantly impede growth, cause crises and weaken demand ("Inequality and Unsustainable Growth: Two Sides of the Same Coin?" by Jonathan David Ostry and Andrew Berg, IMF Staff Discussion Notes, No. 11/08, 2011). Specifically, a one percentage point increase in the income share of the top 20% is associated with a 0.08 percentage point decrease in GDP growth in the following five years. In contrast, the same percentage increase in the income share of the bottom 20% is related to a 0.38 percentage point growth. In addition, the length of growth spells is also found to be shorter in more unequal countries. Berg and Ostry found that a 10-percentile decrease in inequality increased the expected length of a growth spell by 50% ("Inequality and unsustainable growth: two sides of the same coin?", IMF Staff Discussion Note SDN/11/08).

Empirical evidence provided by Wan, Lu and Chen ("The Inequality-Growth Nexus in the Short and Long Runs: Empirical Evidence from China", Journal of Comparative Economics, 34(4), 2006) unequivocally point to the negative effects of inequality on growth in the short, medium, and long runs in China. These effects stem from the strong and negative influence of inequality on physical investment. The causal effects of a prolonged period of rising inequality on crises have been identified by a growing body of research (for example, "Inequality, Leverage, and Crises" by Michael Kumhof, Romain Ranciere and Pablo Winant, American Economic Review, Vol. 105, No.3, March 2015).

The negative relationship between inequality and growth may be attributed to two reasons. On one hand, a higher concentration of income reduces the chances for lower-income households to accumulate physical and human capital such as land, education, or good health, which will consequently lower the labor productivity and growth potential of the economy. In "Asia's income inequalities: recent trends" (Inequality in Asia and the Pacific: Trends, Drivers, and Policy Implications, ADB, 2014), Juzhong Zhuang, Ravi Kanbur and Dalisy Maligalig found that if inequality had been stable within Asian countries during the period from 1990 to 2010, the same levels of economic growth would have lifted about 240 million more Asians (6.5% of the population) out of poverty. On the other hand, an enlarged income gap undermines growth by dampening aggregate demand because the consumption propensity of the affluent is much lower than that of the poor. In addition, income inequality may generate unsustainable consumption outcomes for the poor. Relative income is seen to be an important determinant of sustainable consumption.

Quite a few Asian economies have joined the World Bank's group of middle-income countries. But there is no guarantee that buoyant economic growth in Asia will continue. The possibility that middle income countries could fall into the "middle-income trap" is real ("Asia 2050: Realizing the Asian Century", ADB, 2011). If that occurs, Asia's share of world GDP would be 32%, only a small increase from 27.4% in 2010. A middle-income trap could occur not only if a country fails to augment its productivity, but also if there is a worsening of income distribution which itself is considered to be related to economic structural changes. On one hand, worsening income inequality would cause social unrest and, as a result, become

a drag on economic growth. On the other hand, income inequality is related to the limits of "human development". An abundance of educated and healthy workers is key for the development of a high value-added and knowledge-based economy. However, an enlarged income gap will result in a large cohort of low-income households that are less likely to afford education and health care, and hence are less likely to engage in productivity-driven industries. Moreover, lowincome households tend to pay little attention to eco-friendliness and environmental protection, which would harm the sustainability of economic development ("Will income inequality cause a middleincome trap in Asia?" by Akio Egawa, Bruegel Working Paper, 2013/06).

# **Social & Political Consequences** of Income Inequality

Growing disparities can entail huge social costs by undermining individuals' education and occupational choices, damaging trust and eroding social cohesion, harming the quality of governance and increasing pressure for inefficient populist policies. This is because inequality is frequently associated with rent seeking which has a corrosive effect on morale, societal solidarity, and fairness.

Moreover, income distribution affects the political structure within a country. If high levels of inequality prevent lower income groups from influencing political decisions, it may result in loss of trust and generate political instability. In other cases, high levels of inequality could lead to poor public policy choices that may hurt growth in the long run. The lower-income voters may demand higher taxation and regulation which may negatively affect incentives for investment in the country. A political backlash due to high inequality could force governments to enact protectionist measures which in the shortterm could benefit the lower end of the income distribution but prove detrimental to efficiency and growth in the long run. Political influence from the elite may also adversely affect provision of public goods such as education, health care, and infrastructure.

Lack of trust in business groups and rising deprivation among lower-income groups could also result in a rise in crime and violence, thereby further affecting the investment climate and the political environment in a country. When people crowd at the top and bottom of the economic ladder, there may be a hollowing-out of the middle class, which is seen to be important in maintaining stability and economic growth. In general, the clustering of populations, often referred to as polarization, can have more damaging impacts than income inequality ("Income Polarization in China: Trends and Changes" by Chen Wang and Guanghua Wan, China Economic Review, 36(c), 2015).

Individuals at the lower level of incomes in unequal societies may try to compare and imitate the consumption patterns of the rich. This phenomenon of "conspicuous consumption" when the lower-income groups prioritize luxurious goods over necessities to signal higher status has been found to have large environmental costs. Further, inequality is also found to have a negative linkage with nutrition, with the proportion of obese people in the total population higher in more unequal countries ("Wider Income Gaps, Wider Waistbands? An Ecological Study of Obesity and Income Inequality", by K. E. Pickett, S. Kelly, E. Brunner, T. Lobstein and R. G. Wilkinson, Journal of Epidemiology & Community Health 59, 2005).

### **Confronting Income Inequality in Asia**

Income inequality is not only itself an important dimension of development, but also has important implications for governments' efforts to fight poverty, sustain growth, and maintain social cohesion. As the Nobel Laureate Joseph E. Stiglitz said. "The only true and sustainable prosperity is shared prosperity." This has not been the case in Asia. Hence, it is pertinent to adopt appropriate policy measures. Below, we discuss a few options that can contribute to inclusive and equal growth within an economy.

First, differences in educational attainments and human capital explain a large proportion of inequality in Asia. Efficient fiscal policies that ensure equal access to quality education, and improving human capital and skills for the poor can help moderate income inequality. Other measures include providing conditional cash transfers to poor families for health and education purposes, expanding social protection schemes and improving tax administration. Further, fiscal transfers from richer regions to poorer regions can lead to reductions in spatial gaps. This also includes developing transport and communication infrastructure in rural and inland areas to increase connectivity with the economic hubs.

Second, urbanization can shrink the urban-rural gap and in turn lead to declines in overall income inequality. Urbanization is regarded by classical developmental theories as a key step in reshaping emerging economies dichotomized by a subsistence rural sector and an industrializing urban sector. According to the famous inverted U-curve hypothesized by Kuznets, as more people move from the lower-income rural sector to the higher-income urban sector, the overall income inequality will first increase and then decrease. It is believed that quite a few Asian economies, like China, have already passed the turning point and, therefore, urbanization should help alleviate income inequality.

Finally, policy measures that create equality of opportunity, equal access to public goods and services, reduce corruption, and improve the quality of institutions and governance can reduce income inequalities within countries. JS

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