

### World Inequality Lab - Issue Brief 2020-08 November 2020

# What's New about Income Inequality Data in Asia?

Li Yang

#### **Abstract**

In this issue brief, we present the evolution and decomposition of income inequality in Asia for the period 1993 to 2019, using the latest (preliminary) results from simplified Asia Distributional National Account (DINA)<sup>a</sup>. We find an important decrease in Asian inequality over the past three decades at the regional level; while within countries, we observe very different growth and inequality patterns. While inequality started to rise in India and China substantially in the early 1990s and 2000s, it was stabilized in China while it continued to rise in India. This suggests that development and higher growth rates do not necessarily mean more inequality in the distribution of growth. As a matter of fact, national economic policies matter.



<sup>&</sup>lt;sup>a</sup>For details about the methodology, see Mark Jenmana, Rowaida Moshrif, and Li Yang, 2020.

### WORLD INEQUALITY LAB

#### **DINA Asia Project**

From the global lens, the high growth rate sustained in Asia after the eighties allowed for a massive global reduction in the poverty rate. Global inequality also declined as a large share of Asian population - especially those in China - joined the ranks of the global middle class. However, the rise of within country inequality has become a major concern in the region as economies sustain high levels of economic inequality, the fruit of uneven but fast-growing development from decades before. Meanwhile, due to lack of consistent data, it is almost impossible to compare inequality evolution among countries and estimate inequality in the region systemically. DINA Asia Project aims at solving this obstacle by constructing harmonized DINA series based on national account, income survey, fiscal data. The work produced herein will include East Asia and the Pacific, Southeast Asia, South Asia, and Central Asia - excluding the Middle East and Russia. These 32 economies considered are home to 4.3 billion people, accounting for around 55% of the world population<sup>1</sup>. Therefore, understanding how economic growth and resources are distributed in Asia is a monumentally important task in order to examine global inequality dynamics.

In this issue brief, we present the evolution and decomposition of income inequality in Asia for the period 1993 to 2019, using the latest (preliminary) results from simplified Asia Distributional National Account (DINA).

### **Overall Inequality in Asia**

Inequality trends in Asia for the period of 1993 to 2019 feature a great convergence. The inequality in Asia was steep in the beginning of the 1990s, for example, the top 10% share in Asia in 1993 was comparable to the levels in Africa and the Middle East at that time. In the following three decades however the income gap be-

tween rich and poor has gradually converged

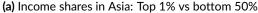
Figure 1 presents the evolution of income shares in Asia for the top 1% vs. the bottom 50% as well as the top 10% vs. the middle 40% from 1993 to 2019 in 2019 PPP euros. The top 1% income share floated around 19% between 1993 and 2005, then it gradually decreased to 17% in 2019. At the same time the share of total national income of the bottom 50% stagnated around 12% during the entire period. When we look at the top 10% and the middle 40%, the results are equally staggering: the gap between top 10% and middle 40% has continuously narrowed. By 2019 the top 10% income share in Asia decreased to 49% of Asia's total national income, while the middle 40% grew to 40%.

Meanwhile, the rise of within country inequality is another important feature in Asia during the same period. This was especially true, when we saw that inequality has been rising significantly since 1990 in China and India, whose population accounts for more than 3 quarters of the total population of Asia. In both countries, inequality increased substantially after the economic liberalization of the 1980s. In China, the top 1% captured 8% of national income in 1990 and rose to 14% in 2019, while in India the corresponding figures are 11% in 1990 and 21% in 2019 India and China followed similar inequality pathways between 1990 and 2000s, and diverged afterwards, with China able to stabilize its inequality levels and India unable to do so. It is worth stressing that communist countries like China and Vietnam display lower inequality levels than non-communist countries like India and Thailand, yet, they still display much higher levels of inequality as compared to Western Europe, the least unequal region worldwide. China and Vietnam also appear to be more unequal than post-communist Eastern Europe, but somewhat less unequal than post-communist Russia (especially at the very top). We should stress however that the lack of transparency on income and wealth tax data in China and Vietnam makes it very difficult to properly monitor the levels and trends of inequality in these countries

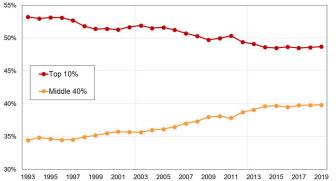
<sup>&</sup>lt;sup>1</sup>Including Afghanistan; Kazakhstan; Kyrgyzstan; Mongolia; Tajikistan; Turkmenistan; Uzbekistan; China; Hong Kong; Japan; Korea; North Korea; Taiwan; Macao; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka; Brunei Darussalam; Cambodia; Indonesia; Lao PDR; Malaysia; Myanmar; Philippines; Singapore; Thailand; Timor-Leste; Viet Nam; Papua New Guinea.

### WORLD INEQUALITY LAB

Figure 1. Income shares in Asia



(b) Income shares in Asia: Top 10% vs bottom 40%



Source: Distribution of national income among adults. Equal-split-adults series, in 2019 PPP Euro.

The contrasting decrease of inequality trend in Asia as a region despite rising within-country inequality suggests a great economic convergence among Asian economies, such as China, India, Indonesia and Vietnam. The following section will further explain how the economic growth of Asian emerging economies, especially China, contributes to the reduction of regional inequality in Asia.

### Inequality decomposition by economies in Asia

One interesting question is how is the adult population<sup>2</sup> of these Asian economies distributed at the two tails of the Asian income distribution? And how has this distribution changed given the strong economic development over the past decades in Asia?

To address these questions, figure 2a depicts how the composition of the Asian-wide bottom 50% income group has transformed over time. It is clearly visible that the Indian population makes up for the biggest group in this bottom tail. Their share had risen over time from about 33% in the early 1990s to about 46% in 2019. Given the Indian population account for less than 30% of the Asian adult population (see figure 3), it

Figure 2b shows the top tail (top 1%) of the Asian income distribution. Japan has clearly lost its dominant position: its share dropped by almost two third from 67% in 1993 to 25% in 2019. Nonetheless its share among the richest is still more than 6 times higher than its population share in Asia. Who is filling this gap? Similar to previous observations for the bottom tail, it is China that shows again the strongest evolution. Its share in Asia's top 1% income group was merely 3% in 1993, in 2019 this figure has increased more than 12 times to 37%. China now forms the biggest group in the top 1% of Asia. India's progress in this context is also impressive, its population share in Asia's top 1% increased more than 7 times from 2% in 1993 to 15% in 2019. A slightly more modest yet positive development is also visible for Indonesia: its share in Asia's top 1% increases from 2% to 4% during the same period.

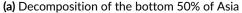
To sum up, the two tails of the income distribution

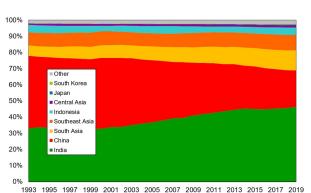
is thus overrepresented in this bottom tail. Similarly, the share of the adult population in the bottom 50% in other South Asian economies (i.e. Nepal, Pakistan, Sri Lanka, Bangladesh, Bhutan, and the Maldives) increased from 6% to 12%. These developments stand in sharp contrast to the roughly equally populated China: Its share in this bottom tail has decrease remarkably from 45% to 23% over the same time horizon, and is thus now lower than its share in the Asian population, i.e. 38%.

 $<sup>^2</sup>$ In this article, our observation unit is adult. Thus all the population refers to the adult population.

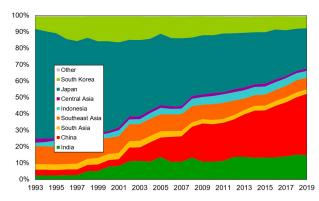
### WORLD INEQUALITY

Figure 2. Distribution of nationl income in Asia: Top 1% and bottom 50%





(b) Decomposition of the top 1% of Asia



Source: Distribution of national income among adults. Equal-split-adults series.

Figure 3. Adult Population by Country or Region, 1993-2019

Country/Region	1993		2019	
	Total	Percentage of region	Total	Percentage of region
China	765,778,594	42%	1,100,668,032	38%
Japan	94,280,714	5%	103,158,048	4%
South Korea	29,463,521	2%	45,358,317	2%
South Asia (excl. India)	128,257,000	7%	252,496,201	9%
India	487,098,368	27%	872,403,072	30%
Southeast Asia (incl. Indonesia)	146,668,875	8%	254,976,422	9%
Indonesia	103,838,552	6%	175,546,336	6%
Central Asia	27,254,759	2%	43,503,803	2%
Other	23,987,390	1%	42,314,292	1%
Total	1,806,627,772	100%	2,890,424,523	100%

in Asia have seen a remarkable shift in their compositions overtime. Overall, in the top 1%, high-income economies lost their position to the emerging economies, especially to China and India. Meanwhile in the bottom 50%, the population share of India as well as other South Asian economies have been expanding and contrasting to the sharp decline of the Chinese population share in this group.

Currently we are in the progress of constructing full DINA series for Hong Kong, Indonesia, Japan, South Korea, Taiwan, which we believe will bring more exciting findings about Asia's income inequality in the future.

country by country using new data and new methods.

#### **Future Steps**

Despite the important findings presented above; we have to stress that our current simplified Asia DINA series is still very fragile. Asia DINA Project is a longer ongoing process, we are gradually updating the series

## WORLD INEQUALITY

#### About the author

Li Yang is the Asia coordinator at the World Inequality Lab (li.yang@psemail.eu). The author gratefully acknowledges funding from the European Research Council (MSCA Grant 799444 and ERC Grant 856455) from the French National Research Agency (EUR Grant ANR-17-EURE-0001), as well as from the United Nations Development Program (Project 00093806).

#### The World Inequality Lab

The World Inequality Lab aims to promote research on global inequality dynamics. Its core mission is to maintain and expand the World Inequality Database. It also produces inequality reports and working papers addressing substantive and methodological issues. The Lab regroups about twenty research fellows, research assistants and project officers based at the Paris School of Economics. It is supervised by an executive committee composed of 5 co-directors. The World Inequality Lab works in close coordination with the large international network (over one hundred researchers covering nearly seventy countries) contributing to the database.

World Inequality Lab 48 bd Jourdan 75014 Paris

Contact: press@wid.world.

Website: https://wid.world.