III. Asia's Quest for Inclusive Growth

Income inequality has risen across the world over the last two decades. The academic literature attributes the rise mainly to three factors: globalization, skill-biased technological change, and the decreasing bargaining power of workers. The global financial crisis and recent social turmoil in different parts of the world have heightened global awareness, including in Asia, of the potential impact of rising inequality on economic and social stability and on the sustainability of growth (Berg and Ostry 2011 and Rajan 2010).

This chapter examines how pro-poor and inclusive Asia's recent growth has been compared with its own history and other emerging regions, and discusses some policies that are currently being considered to make growth more inclusive. The main findings are that poverty has fallen in the last two decades in Asia, but income inequality has increased and has dampened the impact of growth on poverty reduction. Relative to other regions, the recent period of growth in Asia has been both less inclusive and less pro-poor. There is scope for policy measures, including those related to spending on health and education, labor markets, financial inclusion, and governance, to broaden the benefits of growth.

A. How Does Asia Compare With Other Regions?

Over the last two decades, growth in most Asian economies has been robust and higher on average than in other emerging regions (Figure 3.1). In turn, this has translated into significant reductions in poverty; however, Asia still remains home to the largest number of the world's poor (Table 3.1).

Note: The main authors of this chapter are Ravi Balakrishnan, Chad Steinberg, and Murtaza Syed, and it is based on their forthcoming working paper. Jingfang Hao and Sanjeeda Munmun Haque provided research assistance.

Inequality has increased across the region, in sharp contrast to the previous three-decade record of equitable growth in Japan, the newly industrialized economies (NIEs), and the ASEAN.[8] While some decline in the impact of growth on poverty is to be expected as poverty rates fall, in Asia this decline has been exacerbated by the larger rise in inequality than in other emerging regions. Earlier work (IMF, 2006) attributes the rise in inequality to skill-biased technological change and the transition from agriculture to industry for lower-income Asian economies (consistent with the Kuznets hypothesis).[9] At the same time, even as the size and purchasing power of Asia's middle class have grown in the last two decades, their share of overall income has fallen while that of the richest quintile has increased. By contrast, in Latin America and the Middle East and North Africa, the share of the richest quintile has declined.

More recently, poverty has generally continued to fall in Asia, but the global crisis exacerbated the rise in inequality in several economies for which data are available (Figure 3.2). This trend has been particularly pronounced in China, Indonesia, and Malaysia, but has also been observed for some NIEs and Japan.

B. Poverty, Growth, and Inequality

Going beyond the stylized facts, regression analysis can be used to quantify how pro-poor and

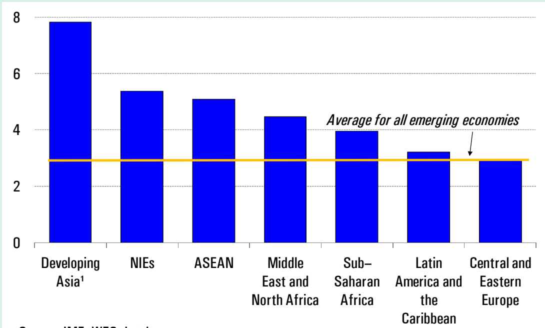
[8] This chapter follows the old *Regional Economic Outlook* classification and so "NIEs" include Hong Kong SAR, Korea, Singapore, and Taiwan Province of China, whereas "ASEAN" refers to Indonesia, Malaysia, the Philippines, Thailand, and Vietnam only. "South Asia" in this chapter also includes Bhutan and Nepal.

[9] Jaumotte, Lall, and Papageorgiou (2008) also argue that skill-biased technological progress is a key driver of rising inequality. In China, growing disparities between coastal and inland regions as well as between urban and rural areas are sometimes cited as explaining much of the rise in inequality.

Figure 3.1. Stylized Facts: Asia's Growth Experience over the Last Two Decades

Emerging Markets: Real GDP Growth

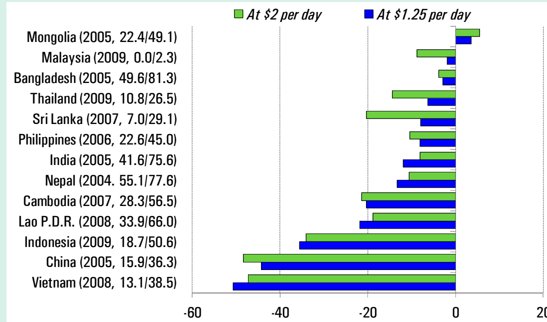
(Annual percent change, 1990–2010)



Source: IMF, WEO database.
[1] Developing Asia inlcludes Bangladesh, Cambodia, China, India, Lao P.D.R., Mongolia, Nepal, and Sri Lanka.

Selected Asia: Change in Poverty Headcount Ratio[1]

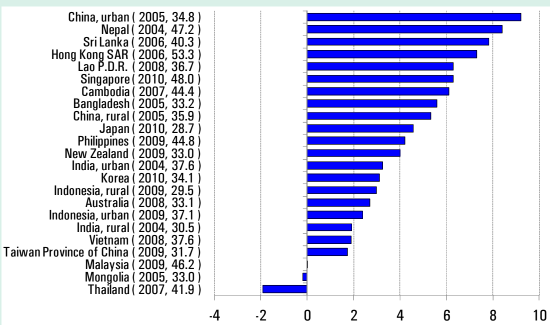
(In percentage points, since 1990)



Sources: World Bank, *World Development Indicators* database; and IMF staff calculations.
[1] At 2005 purchasing power parity prices. In parentheses, the latest available year and corresponding headcount ratios at $1.25 per day and $2 per day, respectively.

Selected Asia: Change in Gini Index[1]

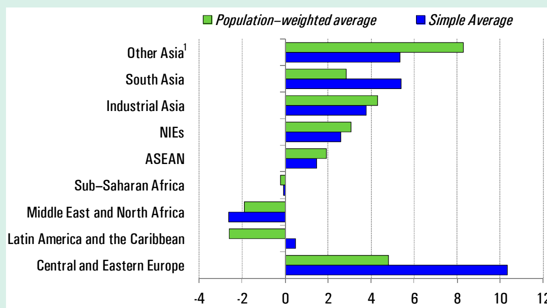
(In Gini points, since 1990)



Sources: CEIC Data Company Ltd.; World Bank, *PovcalNet* database; UNU–WIDER, *World Income Inequality* database; Milanovic (2010); country authorities; and IMF staff calculations.
[1] In parentheses, the latest available year and corresponding Gini coefficients.

Change in Gini Index

(In Gini points, since 1990)



Sources: CEIC Data Company Ltd.; World Bank, *PovcalNet* database; UNU–WIDER, *World Income Inequality* database; Milanovic (2010); country authorities; and IMF staff calculations.
[1] Other Asia here includes Cambodia, China, Lao P.D.R., and Mongolia.

Table 3.1. Number of People Living on Less than $1.25 per Day

(At 2005 purchasing power parity prices)

	Percent of population		Number (millions)	Percent of world total	Number (millions)	Percent of world total
	1990	2005	1990		2005	
Europe and Central Asia	2	4	9	< 1	17	1
Latin America and the Caribbean	11	8	50	3	45	3
Middle East and North Africa	4	4	10	1	11	1
Sub–Saharan Africa	58	51	297	16	388	28
Asia	53	27	1452	80	912	66
China	60	16	683	38	208	15
India	51	42	436	24	456	33
Rest of Asia	45	26	333	18	248	18
Total	42	25	1818		1374	

Source: World Bank, *PovcalNet* database.

inclusive growth has been in Asia relative to other emerging regions.[10]

How Pro-Poor and Inclusive Is Growth?

There are various ways to interpret what it means for growth to be inclusive and pro-poor. In this chapter, we follow the Ravallion and Chen (2003) approach and define growth as *pro-poor* simply if it reduces poverty. *Inclusive growth*, on the other hand, is defined as growth that is not associated with an increase in inequality, following Rauniyar and Kanbur (2010). In particular, we

[10] The main sources of data are the April 2011 version of the *PovcalNet* database and the *Penn World Tables*. To this, household survey data for the NIEs is added, resulting in an unbalanced panel between 1971 and 2010, with the sample skewed toward the latter part of the period.

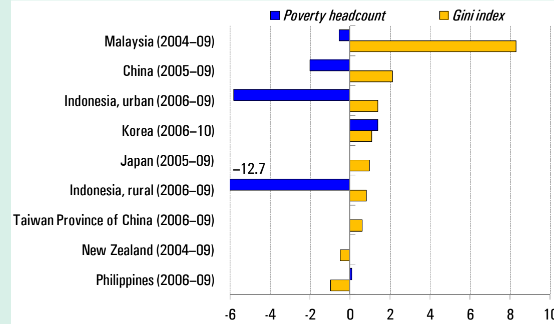
define growth as inclusive when it is not associated with a reduction in the share of the bottom quintile of the income distribution.

The regression analysis suggests that growth is in general pro-poor, with growth leading to significant declines in poverty across all economies and time periods. Specifically, a 1 percent increase in real per capita income leads to about a 2 percent decline in the poverty headcount. The relationship, however, varies across regions and economies. In particular, in East Asia and Latin America, income growth has a significantly lower impact on poverty than in the Middle East and North Africa, Eastern Europe and Central Asia, and sub-Saharan Africa, which make up our baseline economies (Figure 3.3). The impact is particularly weak in India and Indonesia.

However, a 1 percent increase in the Gini coefficient more or less directly offsets the beneficial impact on poverty reduction of the same increase in income. Moreover, inequality *interacts* with income, meaning that a higher level of inequality tends to reduce the impact of income growth on poverty reduction. An increase in the Gini coefficient of about 25 percent (the case of urban China from 1995–2005) reduces the impact of a 1 percent increase in income to about a 1½ percent decline in the poverty headcount from 2 percent in the base case. The implication of this result is that past rises in inequality in Asia are likely to reduce the future impact of income growth on poverty, even if the level of inequality remains constant.

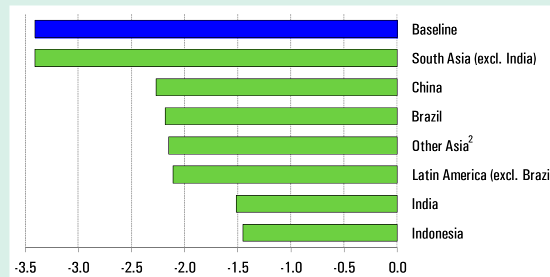
As a second step, we follow Dollar and Kraay (2002) and look at the relationship between a broader definition of "the poor"—the income of the bottom quintile of the income distribution—and per capita income. If the income of the poor tends to rise equiproportionately with average incomes—that is, income growth is not associated with a decrease in the income share of the bottom quintile—then growth would be considered *inclusive*. Given that much of the ongoing debate on inclusiveness has not just focused on the

Figure 3.2. Selected Asia: Change in Poverty and Inequality during the Global Crisis[1]
(In percentage points)



Sources: CEIC Data Company Ltd.; World Bank, *PovcalNet* database; UNU–WIDER, *World Income Inequality* database; country authorities; and IMF staff calculations.
[1] For China and the Philippines, based on World Bank estimates.

Figure 3.3. Income Elasticity of Poverty Reduction[1]
(Impact on poverty headcount of a 1–percent increase in per capita income; in percent)

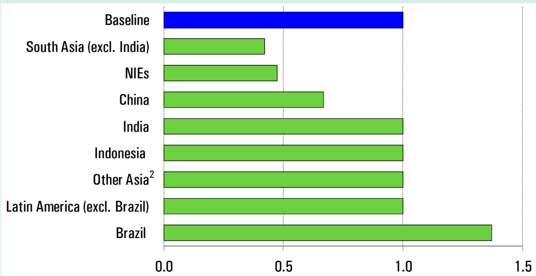


Sources: WorldBank, *PovcalNet* database; University of Pennsylvania, *Penn World Table*; and IMF staff calculations.
[1] The elasticity is set equal to that for baseline countries when the null hypothesis of a significant difference cannot be rejected.
[2] Other Asia here includes Cambodia, Malaysia, the Philippines, Thailand, and Vietnam.

poorest fifth of society being left behind, but the richest fifth doing particularly well, we also estimate a similar relationship for income in the top quintile.

We find that income of the bottom quintile rises significantly *less* than proportionately with average income and income of the top quintile rises significantly *more* than proportionately with average income. Moreover, these elasticities vary significantly across regions and economies. For the bottom quintile, the elasticity is significantly less than one for China, the NIEs, and South Asia (excluding India). For Brazil, the elasticity is significantly greater than one (Figure 3.4). Turning to the top quintile, the results are the mirror image of those for the bottom quintile. The elasticity is significantly greater than one for China, the NIEs, and South Asia (excluding India); and significantly less than one for Brazil. In sum, the results suggest that growth has generally not been inclusive in China, the NIEs, and South Asia (excluding India), whereas it has been inclusive in Brazil.[11]

Figure 3.4. Degree of Inclusiveness of Growth[1]
(Impact on income of the bottom quintile of a 1–percent increase in per capita income; in percent)



Sources: WorldBank, *PovcalNet* database; University of Pennsylvania, *Penn World Table*; and IMF staff calculations.
[1] The elasticity is set equal to one when the null hypothesis of a significant difference cannot be rejected.
[2] Other Asia here includes Cambodia, Malaysia, the Philippines, Thailand, and Vietnam.

How Important Is Growth for the Poor?

Using the regression estimates, Table 3.2 constructs measures of pro-poor and inclusive growth for Brazil, China, India, Indonesia, Mexico, and Russia over recent decades. Although the income elasticities of poverty and income of the bottom quintile vary significantly across economies, per capita income growth remains a key driver of income of the poorest fifth of society. Some of the more specific results include:

- Inequality has widened in China, in contrast to Brazil and Mexico. Yet China has still experienced the greater poverty reduction given its higher growth in average income.[12]
- The importance of average income growth is reinforced when looking at trends in Indonesia and Russia. For both economies in the 2000s relative to the 1990s, poverty reduction was much greater despite inequality worsening, as growth was much higher.
- A similar story emerges when looking at measures of inclusive growth. For example, while growth has been only half as inclusive in China compared with Brazil, the income of the poorest fifth of society has increased by relatively more in China as average income growth has been much stronger.

C. Policies

This section examines some policies that can reduce inequality and increase inclusiveness. The multiple factors behind rising inequality suggest that a set of mutually reinforcing policies will likely be needed, and that the necessary mix will vary from country to country.[13]

Fiscal Policy

The relatively low share of education and health spending in GDP across Asia points to an important potential role for fiscal policy in strengthening inclusiveness (Figure 3.5; OECD, 2011). *Conditional cash transfer programs* (CCT) are being increasingly used in low-income emerging economies. Brazil and Mexico have two of the largest schemes (in the former, "Bolsa Familia" covers about 25 percent of the population) with transfers contingent on requirements such as children's school attendance or vaccination records. Both are considered to have been successful, with the Mexican program being associated with a 10 percent reduction in poverty within two years of its introduction. In Asia, the Philippines introduced a CCT in 2008 ("the 4Ps") to help redirect resources toward socially desirable programs in a well targeted way. By 2012, it is budgeted to reach 60 percent of the poor.

[11] One important caveat is that Brazil entered the 1990s with a relatively higher level of inequality. A second caveat regarding India is that the last observation is for 2005, and thus the picture may have changed more recently.
[12] The contrast is even more striking in the 2000s, as the latest datapoint for China is 2005 relative to 2009 in Brazil and Indonesia.
[13] Balakrishnan, Steinberg, and Syed (forthcoming) model the determinants of inclusiveness more formally. The policies that follow are partly motivated by this work.

In Asian economies with higher per capita income and lower poverty, enhancing other safety nets could be a higher priority. In particular, few emerging Asian economies have *unemployment insurance schemes* and many have *low pension coverage rates*—less than 20 percent of the working age population is covered in most of emerging Asia compared with an average of 60 percent in OECD countries (OECD, 2009). Enhancing such safety nets, as well as increasing inclusiveness, would also reduce precautionary motives to save, thereby increasing consumption and facilitating global rebalancing.

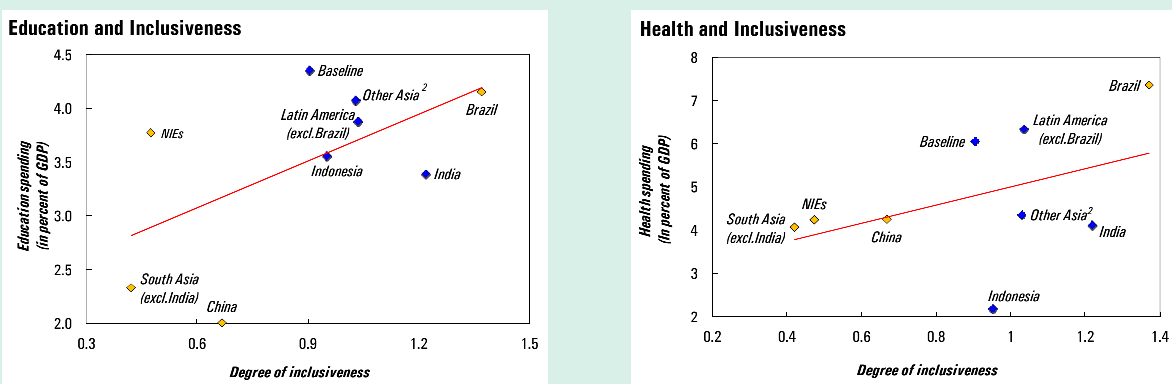
A key question about such policies is their fiscal cost. The Bolsa Familia program in Brazil costs only 0.4 percent of GDP and recent IMF work on China and Korea (Barnett and Brooks, 2010; and Feyzioglu, Skaarup, and Syed, 2008) argues that a minimum social safety net can be provided at low cost, with more comprehensive nets funded by broadening the tax base and increasing some taxes, along with reallocating existing spending. For many economies, introducing a general sales tax (or increasing the rate) and reducing poorly targeted fuel subsidies would be obvious candidates. Some policies may have no fiscal cost, such as unemployment insurance schemes with employee/employer contributions to individual accounts. Regarding education, in many cases, the challenge is to improve quality. Expanding pension provision could entail costs, but not necessarily if benefits are provided on a defined-contribution basis and contribution rates are increased.

Table 3.2. Pro-poor and Inclusive Growth Measures

	Elasticity of poverty with respect to income growth	Degree of inclusiveness	Income growth[1]	Change in Gini index[1]	Predicted change in poverty[1]	Predicted change in bottom fifth income[1]
	[1]	[2]	[3]	[4]	[5] = [1]*[3] + 2*[4]	[6] = [2]*[3]
China 1980s	–2.3	0.7	84	54	–81	56
China 1990s	–2.3	0.7	88	36	–127	59
China 2000s	–2.3	0.7	88	11	–176	58
Indonesia 1990s	–1.4	1.0	15	–5	–31	15
Indonesia 2000s	–1.4	1.0	90	23	–84	90
India 1990s	–1.5	1.0	10	–1	–17	10
India 2000s	–1.5	1.0	13	8	–4	13
Brazil 1980s	–2.2	1.4	24	5	–42	33
Brazil 1990s	–2.2	1.4	5	–3	–18	7
Brazil 2000s	–2.2	1.4	34	–9	–92	47
Mexico 1990s	–2.1	1.0	–17	–3	31	–17
Mexico 2000s	–2.1	1.0	41	–4	–94	41
Russia 1990s	–3.4	1.0	–47	–26	109	–47
Russia 2000s	–3.4	1.0	92	12	–289	92

Sources: WorldBank, *PovcalNet* database; University of Pennsylvania, *Penn World Table*; and IMF staff calculations.
[1] As proxied by 100 times the change in the logarithm over the corresponding period.

Figure 3.5. Fiscal Policy and Inclusiveness[1]

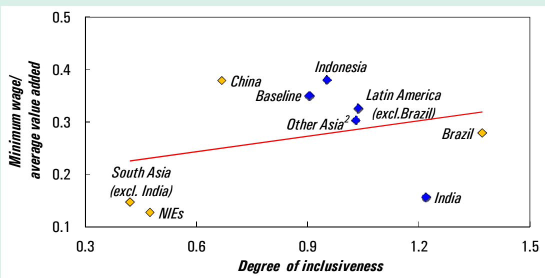


Sources: World Bank, *World Development Indicators* database; and IMF staff estimates.
[1] The yellow diamonds represent those economies whose inclusiveness coefficient has been estimated to be significantly different from one.
[2] Other Asia here includes Cambodia, Malaysia, the Philippines, Thailand, and Vietnam.

Labor Market Reform

Inclusiveness also seems to be positively associated with the degree of employment protection and minimum wage levels, with South Asia and the NIEs having particularly low minimum wages (Figure 3.6). This is consistent with recent academic work that links rising inequality in advanced economies to weakened bargaining power of workers (for example, Levy and Temin, 2007). A comprehensive discussion of the impact of labor market institutions (for example, collective bargaining structures and dual labor markets) on the inclusiveness of growth is beyond the scope of this chapter; however, minimum wages are being increasingly advocated in the region to support the income of low-earning workers.[14]

Figure 3.6. Labor Market Institutions and Inclusiveness[1]



Sources: Lopez de Silanes and others (2004); World Bank, *Doing Business* database; and IMF staff estimates.
[1] The yellow diamonds represent those countries whose inclusiveness coefficient has been estimated to be significantly different from one.
[2] Other Asia here includes Cambodia, Malaysia, the Philippines, Thailand, and Vietnam.

Minimum wages are one of the most well-studied policies. Yet both theory and empirical evidence are largely ambiguous on their disemployment effects (Boeri and Van Ours, 2008). It is usually a matter of fine-tuning: set the rate too low and it has no impact, set it too high and it will have significant disemployment effects. Moreover, minimum wages usually work better in combination with benefits conditional on employment as they reinforce each other. In particular, while the latter may be a good way of providing targeted assistance and work incentives, if labor has limited voice, employers could use such benefits to drive down wages, which a minimum wage can help avoid (Gregg, 2000).

Other Policies

While *financial development* generally increases incomes of the poorest households (Claessens and Perotti, 2005), unequal access to financial markets can reduce it by impeding investments in human and physical capital. These barriers are widespread in Asia, with nearly 60 percent of the population in East Asia and 80 percent in South Asia lacking access to the formal financial system, and there is evidence that they worsened during the global crisis (Financial Access, 2010). Reforms such as promoting rural finance, extending microcredit, and expanding credit information sharing should significantly expand credit availability. Already, there are some promising initiatives underway in Asia, such as the microfinance institution (MFI) card in the Philippines.

Institutional reforms can also play an important role. Work by the IMF suggests that high and rising corruption increases inequality and poverty, including by reducing the progressivity of the tax system, the level and effectiveness of social spending, and the formation of human capital (Gupta, Davoodi, and Alonso-Terme, 1998). Across Asia, notably in China and India, corruption has been identified by governments as a key challenge in recent years, with governance and institutional reforms high on the agenda.

[14] Hong Kong SAR introduced a minimum wage in May 2011, and Malaysia is considering one for 2012. Moreover, rates were increased in China, India, the Philippines, and Vietnam in 2011. China and Thailand are also looking at increasing existing minimum wages considerably in the near future.