Fast Growth and High Inequality: The Case of China and India

Second Prize – Postgraduate Category

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World output grew tremendously in the past two decades with per capita gross domestic product (GDP) in low- and middle-income countries expanding by 370% which was more than three times the percentage increase in high-income economies. The gap in per capita GDP has also narrowed. In 2011, per capita GDP in low- and middle-income countries were up at 10% of per capita income levels in rich countries from only 5% in 1991.

More impressive were countries that moved on the extra-fast lane. Twenty-eight developing economies[1] monitored by The World Bank recorded an impressive average annual GDP growth above 7% in the past 10 years, significantly higher than the 2.6% average global growth and the 1.6% expansion in high-income economies. Together, these 28 countries accounted for 12% of world output, with 8.5% contributed by China and 2.4% by India.

National income accounts data indicate that the growth in China and India has been largely investment-driven. In China, the contribution of gross capital formation (GCF) to GDP surged to 48.2% in 2010 from 36.1% two decades earlier, with foreign direct investments (FDI) expanding by 473% from 2000 to 2011. Meanwhile, GCF in India also strongly supported output growth, with its contribution to GDP rising from 24.2% in 2000 to 36.6% in 2011. Remarkably, FDI growth in India during the period stood at 798%, dwarfing the world's average growth of 23%.

Amidst rapid economic growth, are the poor (and the middle-class) in China and India significantly better-off? What are the repercussions if the poor (and the middle-class) are left out in the growth process?

In a nutshell, the negative elasticity of poverty to growth indicates that growth in China and India has contributed to lower poverty levels (Besley et al 2005; Ravallion and Chen 2007). In China,

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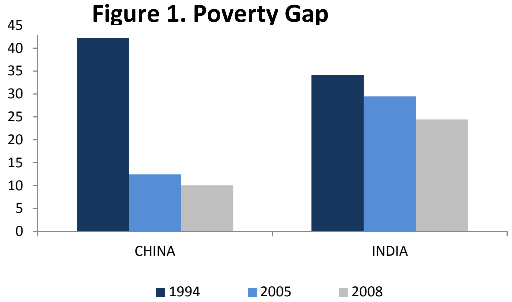
[1] Of which, eleven are in Africa (Angola, Chad, Equatorial Guinea, Ethiopia, Liberia, Maldives, Mozambique, Rwanda, Sierra Leone, Tanzania, and Uganda), ten are in Central Asia and Eastern Europe (Afghanistan, Armenia, Azerbaijan, Belarus, PR China, Kazakhstan, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan), four are in Southeast Asia (Cambodia, Lao PDR, Myanmar, and Vietnam), two are in South Asia (Bhutan and India), and one is in Latin America (Panama). *http://databank.worldbank.org/ddp/home.do.*

poverty headcount (based on poverty line of $2 a day, purchasing power parity-adjusted) has declined from 84.6% in 1990 to 29.8% in 2008; whilst in India, poverty incidence has been reduced to 68.7% in 2010 from 83.8% in 1988. Poverty gap, which measures how far along the poor are from the poverty line, indicates a similar trend in both countries (Figure 1).

Figure 1. Poverty Gap



Data source: World Bank Indicators. http://databank.worldbank.org/ddp/home.do.

However, rapid output expansion has also resulted in wider inequality which poses a threat to the sustainability of economic growth (Ostry et al 2011).

The Quantity vs. Quality Debate

Worsening inequality rekindled the debate whether governments should worry about the quality of growth. The debate is confounded by complicated trickle-down transmission mechanisms, and contentious methodological and measurement issues (for example, see Deaton & Kozel 2005, Hirsch 1980). It is therefore not surprising to find conflicting studies. For example, Norton (2002) showed that an increase in the income of the rich has a larger effect on poverty reduction than directly increasing the income of the poor, whilst Basu & Mallick (2007) argued that if growth is accompanied by capital-labour substitution, benefits from growth do not lead to poverty reduction. Meanwhile, Dollar and Kraay (2001) showed that growth-enhancing policies and pro-poor institutions and public expenditure on social services benefit the poor, albeit not proportionally more than the rest of the population.

Whilst economic growth expands opportunities for production, consumption and exchange, creates employment, encourages investment in technology and infrastructure, and increases the base for higher government revenue collection to support social sector spending, output growth[2] has a demand-pull and cost-push effect on prices, and can variably benefit workers and income

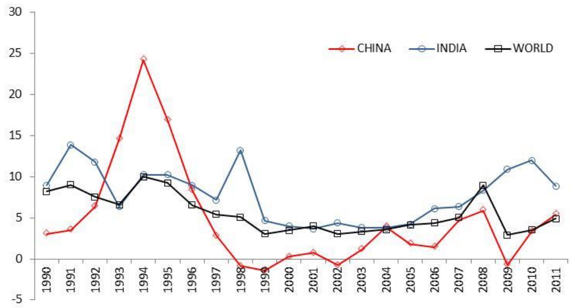
[2] Potential risks to the environment and "green growth" strategies are not discussed here due to space limitations. For a review, see Zhang (2012); Sengupta (2012); http://www.oecd-ilibrary.org/environment/oecd-green-growth-papers_22260935.

groups (i.e., can worsen inequality). We shall consider these two risks arising from economic growth in turn, focusing on China and India.

Is inflation welfare-reducing?

China has achieved relative success in controlling domestic inflation, and it is remote from the situation it was in during the early 1990s. India, on the other hand, is on its way to taming domestic inflation (Figure 2), following the Reserve Bank of India's policy stance to help curb food inflation (RBI 2013). Amidst rapid growth, does inflation pose serious welfare implications on the poor?

Figure 2. Annual Headline Inflation



Data source: World Bank Indicators. http://databank.worldbank.org/ddp/home.do

Cardosa (1992) argued that the welfare impact of inflation is felt through real wages, as nominal wages adjust more slowly than commodity prices. Inflation also threatens the savings of the middle class and can eventually contribute to higher inequality. Later studies, however, demonstrated that inflation is not uniformly detrimental to the poor.

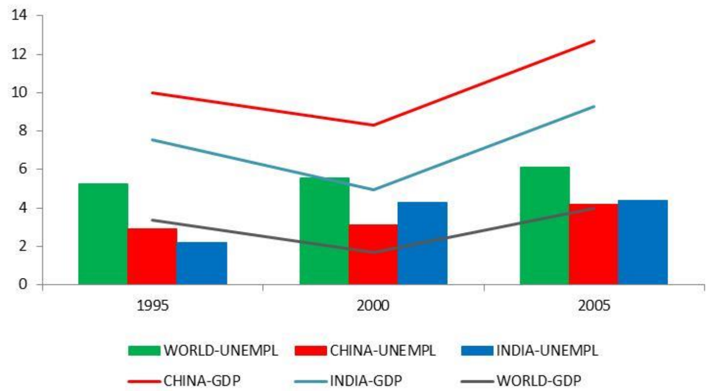
Walsh and Yu (2012) showed that food and non-food inflation have a different effect on the urban and rural poor. Non-food inflation worsens income inequality in both urban and rural areas. Meanwhile, food inflation is linked to lower inequality in China, as low-income food producers may benefit from higher food prices. In India, higher food inflation has had a positive effect on rural income inequality, but the effect is ambiguous for urban areas. Walsh and Yu (2012) added that the resulting lower income inequality in rural areas may have also been due to the opportunity of rural workers to move to the urban sector where higher productivity employment is available. However, labour mobility is futile if employment levels fail to keep pace with high output growth.

Job creation has been sluggish

Despite rapid economic growth, the unemployment rate in China rose to 4.2% in 2005 from 2.9% in 1995. Labour data in India revealed the same story: unemployment rate doubled to 4.4% in 2005 from a decade earlier (Figure 3). What went wrong?

In his review of employment trends in China, Siraj (2011) showed that the increase in unemployment has been due to the unwinding of accumulated labour supply prior to the country's global market integration. As the country's market openness paved the way for less secure employment, minimum wage enforcement, labour migration, and trimming down of the workforce within state enterprises, low-skilled urban workers found it difficult to seek gainful employment especially in the formal sector. Ghose (2008) estimated that whilst employment grew by 1% annually, unemployment rose by 2.7%, with urban unemployment growth significantly higher at 7.1%.

Figure 3. GDP Growth and Unemployment Rate



Data source: World Bank Indicators. http://databank.worldbank.org/ddp/home.do. GDP=annual GDP growth at constant local currency. UNEMPL= unemployment rate or share of the labour force without work but available for work.

Meanwhile, the unemployment in India can be explained by the manufacturing sector's inability to absorb excess labour from the agriculture sector. The country's service sector-led growth failed to generate sufficient jobs, and consequently forced excess labour in agriculture to either remain in agriculture or shift to the less productive informal sector (Siraj 2011). In addition to the labour-saving impact of technological innovation and economies of scale, Dasgupta and Singh (2005) cited that the information technology sector's specific demand for skilled and specialized workers constrained it from significantly contributing to job creation.

Have labour productivity and wages kept pace with output growth?

Labour productivity in China is rapidly catching up with the world average; and so does India but at a much slower pace (Figure 4). The incline in China's labour productivity has translated to higher wages (Figure 5), which in turn may ramp up domestic consumption. In 1990, personal consumption expenditure (PCE) contributed to 50.6% of GDP but has dropped to 33.5% by 2010.The declining contribution of PCE to GDP has been a concern among economists and policymakers, prompting the government to boost domestic consumption and to pursue measures to rebalance growth (Blanchard and Giavazzi 2006).

Meanwhile, wages in India appear to have stagnated despite the increase in labour productivity. This is not surprising given the sluggish employment growth in high growth sectors and the weak and erratic increase in agriculture productivity. With agriculture supporting over 50% of total workers, increasing labour productivity in agriculture and enhancing labour mobility will likely benefit the poor. Hull (2009) argued that productivity enhancing employment in the sector where the poor are is an effective pro-poor[3] strategy.

Figure 4. GDP Per Person Employed

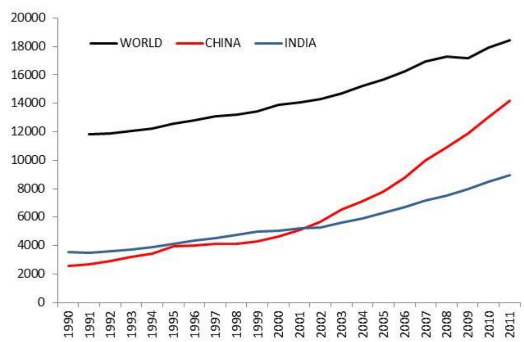
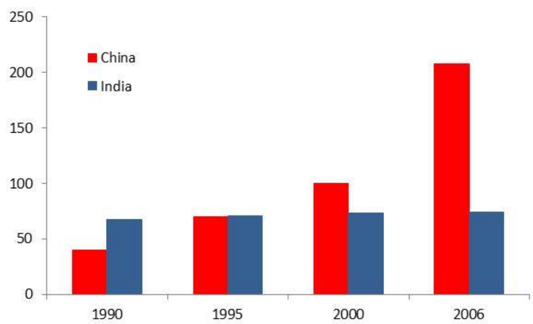


Figure 5. Average Monthly Wage (US$)



Data sources: World Bank Indicators. http://databank.worldbank.org/ddp/home.do; Oosterndorp (2013).

Avoiding the middle income trap

Addressing the mismatch between the quality of labour, and the skills and qualifications that employers require is important in avoiding the middle income trap or the country's inability to

[3] "Pro-poor growth" is defined in different ways: growth is said to be pro-poor if the growth rate in the income of the poor exceeds the average national income growth; or, if the absolute income gain of the poor is larger than the national average or relative to the rich; or, if the growth rate of the poor is greater than zero (Klassen 2005).

transition into high income status. Eichengreen et al (2013) argued that rapid improvement in education levels aid in productivity growth and in propelling the economy to being a high-income country.

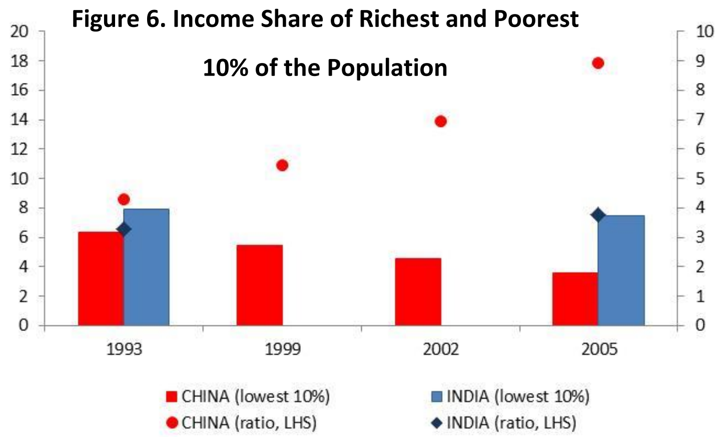
Using ADB (2011) data on pupil-teacher ratios are proxy for efforts to improve education, recent data in China show that the country is at par with Japan in terms of primary education, but lags slightly behind Japan in terms of secondary education. India, on the other hand, has about twice the pupil-teacher ratio in Japan. In terms of fiscal support, expenditures in education have remained in the neighbourhood of 3% of GDP in both China and India, while government health spending in China as a per cent of GDP has increased to 1.2% in 2010 from 0.7% in 2005. India, on the other hand, has kept government health spending unchanged at 0.7% of GDP.

Government support, through increased fiscal spending on human capital development (e.g. health, education, social services), will improve citizens' later-period access to high productivity employment opportunities, whilst precluding the onset of disincentive effects that may adversely affect future growth (McKay & Sumner 2008).

Income inequality has widened over time

Technological innovation and market integration have been found to have a larger positive impact on capital owners relative to labourers, whilst high-skilled workers and urban and coastal areas have also been favoured over low-skilled employees and rural and landlocked regions. The asymmetries on the impact of technology and global openness have been aggravated by inequalities in the citizens' access to opportunities for gainful employment and human capital improvements (ADB 2012), highlighting the need for government interventions to improve citizens' access to human capital development and to encourage the creation of sufficient and high-productivity jobs.

Inequality comes in two forms: income- or expenditure-based inequality (households' share of the total pie) and inequality of opportunities (households' ability to capture a share of the pie). The Gini coefficient for China significantly rose from 35.5 in 1993 to 42.5 in 2005, whilst India stood at 33.4 in 2005 from 30.8 in 1994. The ratio of the income share of the richest 10% and poorest 10% of the population provides stronger evidence of worsening income inequality, more so in China. In 2005, the poorest 10% in China controlled only 1.8% of total income, down from 3.2% in 1993. Meanwhile, the richest 10% in India owned 32% of income in 2005 up from 27.4% in 1993 (Figure 6).



Data source: World Bank Indicators. http://databank.worldbank.org/ddp/home.do

…but inequality of opportunities has improved

Brunori et al (2013) reiterated the seeming consensus that inequality arising from factors beyond an individual's control (such as gender, ethnicity, family characteristics, etc.) should be eliminated. Interventions that widen access to public services such as health, water, sanitation and education can facilitate skills development, labour productivity and subsequently reduce inequality of opportunities (ADB 2012).

Using access to basic services as proxy for (in)equality of opportunities indicate that achievements in education and health/sanitation appear to be on the right direction vis-à-vis the United Nations' Millennium Development Goals.[4] Enrolment rates in educational institutions revealed some gains on gender equality. In China, the enrolment of females has been at par with males at all education levels, whilst signs of bias for males in India remain, albeit less pronounced relative to past periods (Figures 7 and 8).

Meanwhile, the proportion of the population with access to potable water sources in China and India has increased over the past years, with over 97% of the population in urban areas having adequate access. Rural access, on the other hand, has inclined but remains low. Access to sanitation facilities remains a significant problem in both China and India. Over two-thirds of the population in India and one-third of the population in China have no access to adequate excreta disposal facilities (Figure 9). Barde et al (2011) showed that access to clean water and appropriate sanitation services contribute to economic growth through increased labour productivity: a one

[4] The eight Millennium Development Goals are universally agreed development targets by 2015, ranging from halving extreme poverty to stopping the spread of HIV/AIDS and providing universal access to primary education. *http://www.un.org/millenniumgoals/.*

standard deviation increase in access rates has been found to raise output growth by 1.2 percentage points.

Figure 7. Gross School Enrolment as a Proportion of the Population of Education Age

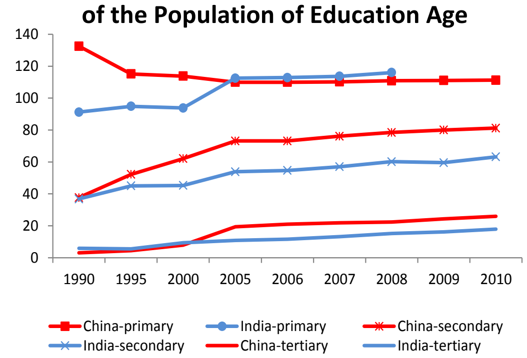
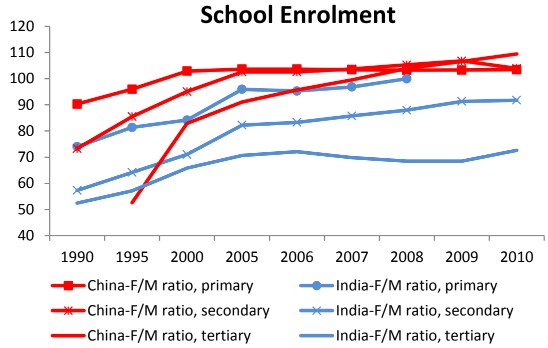


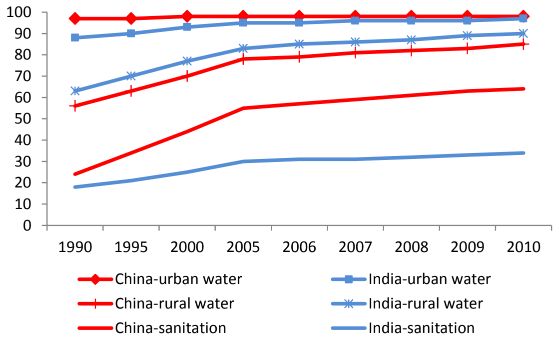
Figure 8. Ratio of Female to Male School Enrolment



Data source: World Bank Indicators. http://databank.worldbank.org/ddp/home.do. Gross enrolment as a percentage of the population of official education age can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

Figure 9. Access to Water and Sanitation Facilities

(% of population)



Data source: World Bank Indicators. http://databank.worldbank.org/ddp/home.do; water facilities refer to potable water sources within one kilometer of the dwelling (20 liters per person); sanitation facilities refers to excreta disposal facilities that prevent human, animal and insect contact to excreta.

Why should inequality cause concern?

Palma (2011) showed that income inequality is not a natural consequence of output growth, contrary to the Kuznet's curve. With a large group of the world's poor now residing in middle-income economies, understanding the benefits from economic growth that accrue to the poor and the non-poor is imperative (Sumner 2012). Avoiding the middle income trap entails ramping up the purchasing power of the middle class and inducing the production of innovative and high-quality goods. Birdsall (2010) argued that a middle-class led growth tends to be more sustainable, as it precludes the elite from engaging in corruption and rent-seeking activities, and makes conflict resolution easier.

High wealth and income inequality has been found to be detrimental to later-period economic growth and employment generation (for example, see Alesina and Rodrik 1994; Persson and Tabellini 1994). Inequality constrains the poor and middle-income households' access to capital for potentially profitable small enterprises (ADB 2012), limits investment in human capital by the poor, reduces the influence of low- and middle-income groups (Siebert 1998), and subsequently feeds into the inequality of opportunities (Son 2012). In addition, amidst risks of political instability and violence[5] (Ostry and Berg 2012), high inequality puts intense pressure on governments to pursue populist policies that have a short-term positive impact on low-income groups at the expense of long-run output growth (ADB 2012). Inequality has also been found to outweigh the impact of foreign investment, trade openness, exchange rate competitiveness and the strength of political institutions (Ostry et al 2011).

Reducing in-country inequality has three-fold benefits: lower poverty level, higher elasticity of poverty to output growth, and higher economic growth (Klassen 2005). For example, Ravallion and Chen (2007) estimated that the implied elasticity of poverty reduction to growth in China is over 3 for the headcount index and around 4 for the poverty gap. In addition, ADB (2012) estimates showed that achievements in reducing poverty are held back by inequality. If inequality had not increased in India, poverty incidence (based on national poverty line) would have gone down to 29.5% in 2008, instead of the actual 32.7%. In China, poverty would have declined to 4.9% instead of the actual 13.1%.

[5] There is countervailing evidence on the contribution of inequality to social unrest. Some countries with high inequality tend to have greater social instability (for example, measured in terms of the number of people killed during episodes of mass violence or the number of politically motivated assassinations), whilst others tend to experience less conflict given rich households' ability to control the poor. Shiller (2007) argued that inequality in itself may not be the cause of conflict, but the perceived fairness of the events that led to the existing distribution of income and wealth.

Conclusion

Rapid economic growth is not sufficient as a singular means to improve social welfare. Output growth does not automatically translate to income poverty reduction, and much less so in terms of non-income based development and vulnerability indicators (McKay and Sumner 2008). Vulnerability, or the probability that a household will slip into poverty, serves as a poverty trap: it discourages the poor from undertaking risky but more profitable activities. In a similar way, wealth and income inequality feed into poverty as it limits the ability of the poor to invest in human capital, or wealth- and income-enhancing activities.

Uneven growth across economic sectors can lead to heightened inequality. As governments recognize the risks of high in-country inequality, national governments, including China and India, have incorporated measures for inclusive, pro-poor growth in their policy agenda (ADB 2012). High inequality, if not adequately addressed, will hold back economic growth in later years, espouses vulnerability, and poses the risk of political instability that can hinder sustained growth.

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