

WORKING PAPER

FGI-2012-2

Economic Growth Patterns and Strategies in China and India: Past and Future

Louis Kuijs

September 2012

Fung Global Institute

Cyberport 1, Level 12

100 Cyberport Road

Hong Kong

Tel: (852) 2300 2728

Fax: (852) 2300 2729

www.fungglobalinstitute.org

The Fung Global Institute Working Paper Series presents the findings of original and professional research-in-progress on questions and topics that are relevant to the Institute's research themes. Written by FGI researchers and, sometimes, researchers from other institutions, the papers aim to get the findings out for critical review and feedback. The views expressed in the papers are those of the authors and do not necessarily reflect those of the Institute, its Board of Directors and/or its Academic Board. They carry the names of the authors and should be cited accordingly.

ABSTRACT

This paper, written as part of the Fung Global Institute's research project on the Evolving Growth Models in China and India, is a first step in exploring part of the project's research scope. It tentatively characterises the existing economic growth patterns and problems in China and India; summarises how governments want to adjust their growth strategies; introduces some key features of the policymaking process and some of the institutional and political economy problems; and sketches some tentative economic scenarios. China's investment and industry-heavy growth has allowed for steady growth but has also led to imbalances. India's growth has trended up, but governance issues are constraining further progress. Meanwhile, expectations and demand have run ahead of supply in recent years, leading to macroeconomic tension. Both countries want to adjust their growth patterns, as reflected in their 12th five-year plans (5YPs). China wants to re-balance growth towards consumption and services. It also wants to upgrade its industrial structure. This calls for an extensive set of reforms. India wants to speed up economic growth and development, which calls for better governance. In both countries, the key obstacles to achieving these objectives are of an institutional and political economy nature. Looking ahead, China is likely to meet its growth targets, but it is not clear how rapidly China will re-balance its pattern of growth. In India, the key question is whether the obstacles to raising potential growth can be overcome. In our default scenario India would grow by a solid 7.6 per cent per year in the 12th 5YP period, compared to a target of 9 per cent. More progress requires higher total factor productivity (TFP) growth and thus more progress on governance.

KEY WORDS

China, India, growth pattern, policy process

A Fellow at the Fung Global Institute, Louis Kuijs is based in Hong Kong as Chief China Economist for the Royal Bank of Scotland. Kuijs has 18 years of experience in macroeconomic analysis and policy work across different regions. He previously served as a Project Director at the Institute, where he coordinated its research into the evolving growth models of China and India, and was the Chief Asia Economist for the financial firm MF Global. Prior to that, he was a senior economist at the World Bank in Beijing, coordinating the Bank's macroeconomic analysis and policy dialogue. The main author of the World Bank's China Quarterly Update, he also did research into savings and investment, re-balancing and on long-term growth prospects. He led the Bank's medium-term review of China's 11th five-year plan. Louis was with the International Monetary Fund in Washington DC from 1997 to 2004, working on both emerging markets and high-income countries.

The author thanks, without implications, Andrew Sheng, Geng Xiao, Bin Ma, Jeffrey Tong and Michelle Liang for stimulating discussions, comments and other help. He can be reached at Louis.Kuijs@rbs.com.

1 Introduction

China and India are leading the shift in the centre of economic gravity towards Asia, and the economic prospects of economies throughout the world have become increasingly dependent on sustained demand in the two Asian giants. Continued success cannot be taken for granted, though. We know from history that growth trajectories are not sustained on autopilot.

Indeed, both countries are aiming at adjusting their growth and development strategies to deal with problems that have emerged and major challenges ahead. Their 12th five-year plans (5YPs) reflect their visions and objectives. However, adjusting growth and development strategies is complex and difficult from both economic and political economy perspectives. Thus, there is a lot of uncertainty about the direction of policy and about whether and how China and India will adjust their pattern of growth.

This paper, written as part of the Fung Global Institute's research project on the Evolving Growth Models in China and India, is a first step towards exploring the issues involved. It tentatively characterises the existing economic growth patterns and problems; summarises how governments want to adjust their growth strategies; introduces some key features of the policymaking process and some of the institutional and political economy problems; and sketches some tentative economic scenarios.

In Section 2 we tentatively characterise the existing economic growth pattern in both countries. Policy-wise, opening up and gradual market-oriented reform in China were combined with a strong role of the government in channelling resources to industry and investment. Indeed, growth has been particularly industry- and investment-oriented. This has served China well in important regards, allowing for sustained high growth without major macro stress. However, it has also led to important imbalances.

India has since the mid-1980s also embarked on market-oriented reform. India's policies have typically not explicitly targeted at industrialisation and investment as much as in China and India's growth pattern has been less industry- and export-oriented. India's potential GDP growth rose over time because of higher investment and total factor productivity (TFP) growth. However, expectations and demand ran ahead of the supply side in recent years, leading to macroeconomic tension. Moreover, fiscal pressures have re-emerged. Meanwhile, in both countries, making growth more inclusive is a major challenge.

Section 3 discusses how both governments want to adjust their growth strategy to sustain growth and development and meet domestic and global challenges. The 12th 5YPs reflect those aims.

China wants to transform the pattern of growth towards consumption and services in order to reduce the imbalances. A second major objective is industrial upgrading and moving up the value chain. This calls for reforms to channel new resources to new sectors and support more full migration to the cities.

India's highest profile objective is to raise economic growth. Other key goals are: faster overall development and urbanisation, strengthening governance and developing infrastructure to support this growth, and making growth more inclusive. To keep rapid growth economically sustainable calls for having a strong supply side. Realistically, much of this will have to come from higher TFP growth. India lags China substantially on all key determinants of TFP growth as suggested by the cross country evidence. The paper indicates how all these determinants are affected by governance.

Section 4 tentatively brings up institutional and political economy issues. In both countries the key obstacles to implementing the 12th 5YPs are of an institutional and political economy nature.

This section identifies some features of China's governance system that seem to have supported the consistency and comprehensiveness of policymaking and planning, and to have aligned the incentives of different parts of the government and individual officials in recent decades. However, it remains to be seen whether China's policymaking process can successfully deal with a changed and wider set of policy objectives. The section discusses the limited success in recent years in changing the pattern of growth and raising the role of consumption, pointing to political economy reasons.

In India, political economy issues are major bottlenecks to more progress on the key objectives of the 12th 5YP. In the face of short term costs or costs to specific groups, it is hard in India to reach agreement among all stakeholders on projects or reforms, even those with clear overall benefits. However, there are some signs that progress has been made in this regard, especially in some states. This is notwithstanding the current macroeconomic challenges.

Section 5 presents some tentative scenarios. In China the key uncertainty is how rapidly China will re-balance its pattern of growth. The ability to reach the government's growth targets is not much doubt and China should be able to grow at about 8 per cent per year on average until 2020. In India the key question is whether the key obstacles to raising potential growth can be overcome. Our base scenario has growth in India at around 7.4 per cent on average until 2020. To achieve the 12th 5YP target of 9 per cent without lifting dramatically the investment to GDP ratio requires higher TFP growth and thus more progress on governance.

2 Current Growth Patterns and Challenges

China and India have both seen rapid growth, development and opening up in recent decades, especially China. They have combined rapid economic growth with substantial improvements in living standards, poverty alleviation, and health and education indicators.

2.1 Initial Conditions

They entered their reform process with different initial conditions. Table 1 shows some notable differences. In 1978, China started its reforms with relatively good “raw input” in the form of the population’s education and health. This was a major support for growth in the reform period. On the other hand, China’s economy was heavily distorted, with production factors strongly misallocated, as shown by the particularly low level of total factor productivity (Table 2)¹.

Table 1 – Initial Conditions in 1980

China	India
<i>Production factors and physical setting for economy</i>	
Good basic public health & education	Much weaker basic public health and education
Wide spectrum of formal industrial companies	Some strong large conglomerates; many small firms
<i>Economic institutions</i>	
Institutional set up often not compatible with market economy	Institutional set up broadly compatible with market economy
Market distortions severe → very low TFP	Market distortions less severe, shown by TFP
<i>Other institutions and aspects</i>	
Egalitarian land reform & distribution	40% rural people (almost) landless → Thus without subsistence floor
Little gender imbalance	Major gender inequality (literacy, participation)
Relatively homogenous society	Heterogeneous society (religion, language, caste)
"Political and social priming" 1949-1978 1/	Less "docile" population and workforce 1/

Source: Studies listed in References, and Fung Global Institute.

1/ Bardhan (2008)

Table 2 – China and India in 1980

	China	India
GDP per capita (US\$2005)	219	304
Capital-labour ratio (US\$2005)	1105	1650
Labour force/population	49	36
Average number of years of education	4.7	2.3
Total factor productivity (level) 1/	11	18

Source: NBS (China), Statistics India, and FGI estimates.

1/ Based on CD production function discussed in Box 1.

India’s education and health indicators were markedly weaker at that time. Moreover, fewer people worked, relative to the total population, with female participation in the labour market particularly low. A more unequal land distribution and a more heterogeneous society have been additional factors inhibiting inclusive growth. However, its economy was less distorted and production factors less misallocated and

¹ Total factor productivity is calculated using the Cobb-Douglas production function discussed in Box 1.

the amount of physical capital (machinery and construction) per worker exceeded that in China. As a result, India's GDP per capita was higher than China's in 1980.

2.2 China's Reform Since 1978

Opening up and gradual market-oriented reform were key to China's impressive industrialisation and growth performance over the last decades. Since 1978, China introduced a sequence of market-oriented reforms that dramatically improved economic incentives and efficiency and reduced distortions. In line with the Washington Consensus, and motivated by an increasingly open and transparent multilateral trading system, opening up to foreign trade and promoting exports were key elements, accentuated by the WTO accession in 2001.² In line with both the Washington Consensus and strategies of other East Asian countries, China also increasingly pursued orthodox macroeconomic management.

However, China explicitly pursued investment and industry-heavy growth, with a strong role for the government (Table 3). In its transition from a centrally-planned to a market economy, China diverged from the "shock" approach to economic reform used in the Soviet Union. Instead, China followed the successful East Asian economies in combining export-oriented opening up to the global economy with maintaining a leading role for the government in allocating and mobilising resources towards selected industrial sectors and investment, including infrastructure.

Table 3 – Economic Growth Strategies: Some Characteristics

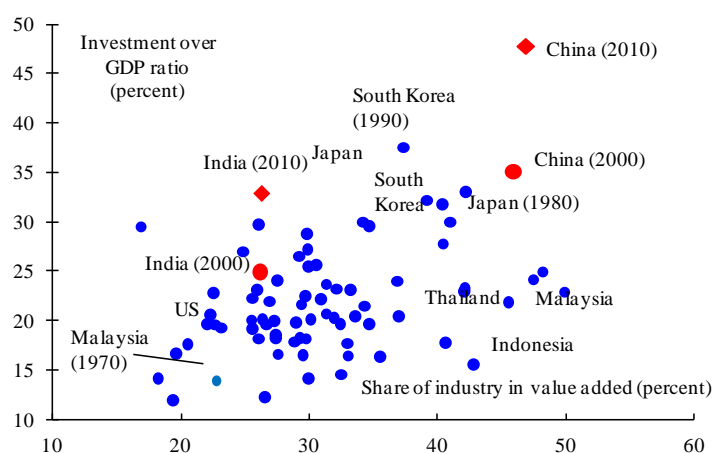
China	India
<i>Policies (in reform period)</i>	
Steady opening up to global economy, emphasis on export promotion	Gradual opening up to global economy
Active government role mobilising resources	Less explicit role government
Explicit preference and encouragement of industry and investment	Less explicit preference & encouragement
Emphasis on infrastructure	
<i>Strength</i>	
Rapid supply side growth without macroeconomic tension	Does not create international friction
<i>Weakness</i>	
Has led to economic, social, environmental and external imbalances	Weaker supply side growth; macroeconomically less robust

Source: Fung Global Institute.

² Coined by John Williamson of the IIE, the Washington Consensus is a set of economic policies that the IMF and the World Bank have recommended to developing countries, such as orthodox macroeconomic policies, trade liberalisation, privatisation and deregulation to strengthen the role of markets and limit that of the government.

The government also encouraged and subsidised savings, especially by companies; forfeited dividend from SOEs, channelled cheap credit to industry; underpriced key industrial inputs—energy, resources, land, and the environment; and managed the exchange rate. In this policy setting, investment reached a very high share of GDP while industry rather than services drove much of the growth (Figure 1). With the link between production and consumption loosened by access to the open multilateral trading system, China became an export powerhouse. Industrial companies became increasingly profitable under this pattern of growth, which also benefited parts of the government, directly or indirectly. Thus, a constituency was built up in favour of maintaining the pattern of growth.

Figure 1 – Different Patterns of Growth



Source: World Bank Development Indicators, National Bureau of Statistics (China) and Statistics India.

China’s growth model has been very good for the supply side. Looking at the drivers of “potential” GDP (production) growth, reflecting China’s towering investment to GDP ratio, the contribution of capital accumulation has been very high (Table 4, Box 1). An important driver, particularly since the late 1990s, is that in a policy setting favourable to industry and capital, flourishing industrial firms ploughed back increasingly large profits into new capacity. With wage increases lagging behind productivity growth, the share of companies’ profits in GDP could rise—pushing up the national savings rate.

Table 4 – Growth Accounting for China and India

	China		India	
	1978-94	1995-2011	FY82-FY93	FY94-FY11
Potential GDP growth 1/	9.9	9.9	5.0	7.0
Employment growth	2.4	0.7	2.3	1.9
Labor productivity growth	7.3	9.1	2.6	5.0
From TFP growth	3.2	3.1	0.5	1.7
From higher H/L	0.5	0.6	0.5	0.4
From higher K/L ratio	3.5	5.3	1.7	2.8

Source: NBS (China), Statistics India, and FGI estimates.

1/ Based on Cobb Douglas production function.

Box 1: Accounting for Growth and Output Using Cobb-Douglas Production Function

Building on earlier papers on China by Kuijs and Wang (2006), He and Kuijs (2007) and Kuijs (2010), we use a Cobb-Douglas production function to explore the contribution to growth and output of (i) accumulation of physical capital via investment; (ii) employment, as largely determined by the size of the population between 15 and 64 years of age; (iii) human capital per worker, largely determined by education; and (iv) total factor productivity. We later also use the production function to project potential output in the coming decade.

Our key assumptions are in the middle of the range found in the literature: a starting capital-output ratio of 2.4 for China in 1978 and 2.0 for India in 1980, a capital share of 0.5, a depreciation rate of 5 per cent and a (Barro and Lee type) rate of return on education of 10 per cent. For details, justification and references on the specification and key assumptions for China, see these earlier papers. Following Bosworth and Collins (2007) in their China-India work, we use the same specification for India as for China.

The growth accounting results are not materially sensitive to reasonable changes in the assumptions. Bosworth and Collins (2007) assume a capital share of 0.5, a depreciation rate of 6 per cent, and a rate of return on education of 7 per cent. Annex Table 3 in He and Kuijs (2007) shows how for China, the results—on TFP growth and the contribution of capital accumulation—depend on the assumption on the capital share and the starting assumptions on the capital stock, but not in a way that changes any of the conclusions.

For China, we re-estimate this production function over the periods 1978 to 1994 and 1994 to 2010 (Table 4). For India, we estimate it over the period 1982-83 to 1992-93 and 1994-95 to 2010-2011. In both countries, the second period starts after the trough of macroeconomic turmoil that affected both countries in the early 1990s.

As many other studies have done, we use the production function for growth accounting purposes. Much less common, but equally informative, is to use it in level terms. This allows us to compare the usage of key production factors and levels of total factor productivity between the countries and compare it with the US.

At the same time, total factor productivity growth has—at more than 3 per cent per year, after subtracting human capital accumulation—been high, in comparison with other countries.³ It reflects a gradual

³ See He and Kuijs (2007), Annex Table 2 for comparisons across the world.

sequence of reforms, good infrastructure, reasonable health and education, and effective economic governance generally. Combined, the massive capital deepening and high productivity gains allowed China to grow 10 per cent per year for three decades without running into macroeconomic stress such as high inflation or external deficits.

However, rising imbalances suggest the investment and industry-heavy growth model is not sustainable. First, as a mirror image of the rising profit share, the share of wage income in GDP has declined. Combined with low deposit rates and a rising household saving rate—in no small part due to rising income inequality accentuated by this growth pattern—this reduced the share of consumption in GDP (basically, the capacity to consume has lagged the surging capacity to produce). For a while, rapid export growth absorbed the surge in production, driving up the current account surplus. However, international friction and more subdued global demand signal the limits of this avenue. External surpluses have come down recently, but that could be temporary in the absence of re-balancing.

Second, by creating fewer jobs than a labour-intensive, services-led growth pattern would have, the pattern of growth has limited the absorption of surplus agricultural labour and contributed to the rising rural-urban income inequality, a key source of rising inequality.

Third, the capital-intensive, industry-led growth has also been particularly intensive in energy and natural resources, and tough on the environment. After two decades of growth along this pattern, the disadvantages are starting to outweigh the advantages.

2.3 India's Reform Since the Mid-1980s

Since the mid-1980s, India also embarked on reform and saw growth picking up.⁴ Since the mid-1980s, and reinforced in the early 1990s, key reforms included trade liberalisation and domestic market liberalisation and integration, although India's economy remains less open to foreign competition than China's. In addition, since the macroeconomic crisis of the early 1990s, macroeconomic management also improved, with fiscal deficits declining. India's policies have until recently not explicitly targeted at industrialisation and investment—infrastructure and otherwise—as much as China.

India's growth pattern model has been less industry- and export- oriented. In terms of outcomes, industry has been much less important than in China, in recent decades (again Figure 1).⁵ However, it is hard to

⁴ Initial conditions in the early 1980s differed. India scored lower on education and health but its economy was less distorted and it also—then—had a larger capital stock per worker.

⁵ Many opinion makers in India and the government itself want to boost the role of industry and are looking at some of the policies used by China and other East Asian countries. Others in India are more agnostic about it and point out the difficulties of successfully and efficiently guiding the economic structure.

say what the impact of less explicit targeting of industry has been, compared to the impact of a less convincing general investment climate and macroeconomic stability. Exports have risen in importance, particularly of business services, but they have been less transformative for the economy than in China.⁶ With fewer jobs created by industry and exports, urbanisation has progressed slower in India: the urbanisation rate stood at 31 per cent in 2011, compared to 51 per cent in China.

India's potential GDP growth has risen because of higher investment and TFP growth. Taking a medium-term perspective, the accumulation of reforms is encouraging and India's GDP growth of 7 per cent in the last 17 years is a major step up compared with the past and compares well internationally. Looking at the drivers of growth, the increase in potential GDP growth since the early 1990s is the result of rising capital accumulation and TFP growth, in part offset by a decline in employment growth and nudging down of the contribution of education (again Table 4).

- Investment used to be a major bottleneck, hovering between 20 and 25 per cent for a long time (Figure 2). But since 2000, it has risen impressively, as a share of GDP. This happened alongside rising domestic savings, especially by the corporate sector.
- TFP growth rose from only 0.5 per cent per year until the 1990s to 1.7 per cent in the period 1993-94 to 2010-2011—a pace comparable to most other emerging markets. There are tentative signs of some further recent improvement in TFP growth.⁷ This remains however, significantly lower than in China, though, reflecting less steady market-oriented reform and other governance issues discussed below.
- India's labour force will still grow substantially in the coming two decades, unlike China's. However, labour force growth has already been declining in recent decades and will continue to do so in the coming decade.
- The contribution of human capital accumulation has declined somewhat, confirming the relatively slow progress with improving (access to) education. The average number of years of schooling now is similar to what it was in China in the early 1980s (Figure 3).

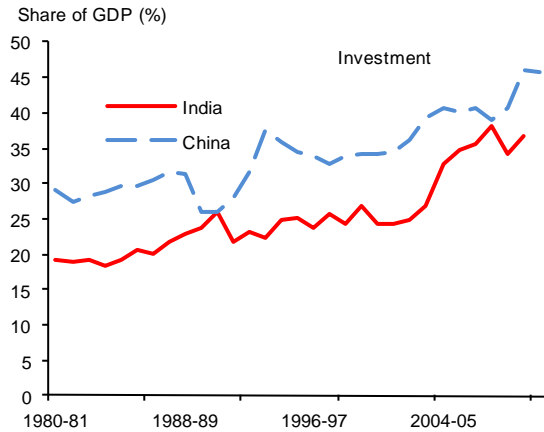
However, expectations and demand ran ahead of the supply side in recent years. In the four years through 2008-09, high investment pushed up potential GDP growth to a record 8.3 per cent on average in our estimate. However, amidst strong growth aspirations, actual GDP growth was 8.8 per cent on average, leading to increasing supply constraints. Indeed, the recent re-emergence of high inflation and a sizeable

⁶ In India, the rise in exports of goods and services from 2000 to 2010 was 38 per cent of GDP in 2000. In China it was 100 per cent.

⁷ Bosworth and Collins (2011) find an increase in TFP growth for India from 1.6 per cent in the period 1990 to 2000, to 2.9 per cent in 2000-08. This is in part because their production function is different. The main reason, though, is that 2000-08 was a boom period, which tends to inflate measured productivity growth. Using our growth accounting framework and including recent data, our estimate of 2 per cent in the period 2006-07 to 2010-2011 may reasonably reflect the most recent trend.

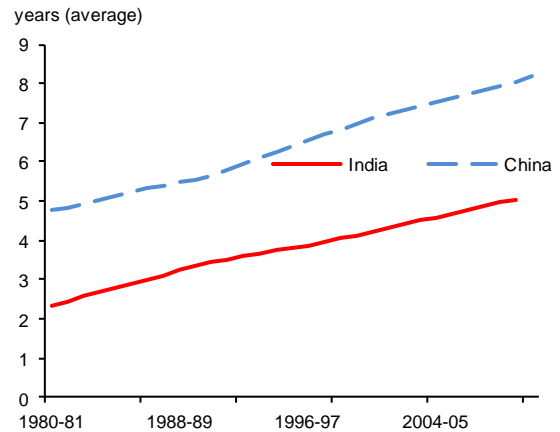
current account deficit recently in large part reflect supply constraints. The resulting monetary tightening, combined with concerns about economic governance, has caused a pronounced slowdown in investment. This, in turn, has brought back down potential growth to around 7.5 per cent in recent years. Unlike China, India cannot yet target high single-digit growth without running into macroeconomic tension (Figures 4 and 5).

Figure 2 – Investment Has Risen in Both



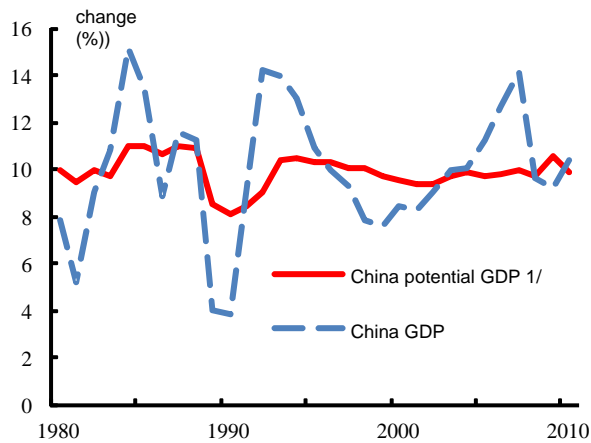
Source: CEIC, FGI estimates.

Figure 3 – India Lags on Education



Source: CEIC, FGI estimates.

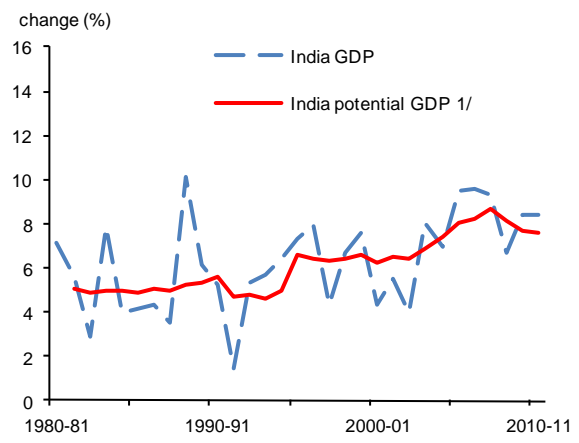
Figure 4 – China’s Potential Growth Has Remained High



Source: CEIC, FGI estimates.

1/ based on the Cobb-Douglas production function.

Figure 5 – India’s Potential Growth Has Fallen Recently



Source: CEIC, FGI estimates.

1/ based on the Cobb-Douglas production function.

Moreover, fiscal pressures have re-emerged in India. Higher expectations and a disappointing performance of the government in more broadly sharing the benefits of growth and providing basic public services have led to pressure on government spending, including on subsidies for fuel, energy and water that are not well targeted to the poor. As a result, the fiscal deficit has been on the rise again, at a time that government debt is already relatively high at around 65 per cent of GDP. Better access of the poor to

basic public services and more equal sharing of the benefits of growth are key to implementing growth-enhancing reforms and developing the modern infrastructure India requires.

2.4 Current Challenges in China and India

Sharing the benefits of growth more equally and improving access to public services are the major challenges for both China and India. It is to be expected that income inequality rises as a country takes off. However, countries such as South Korea have shown that, with good, inclusive policies as health, education and housing, growth can be broadly shared and inequality can be contained in a rapidly growing economy. In China and India, access to education, health and other public services is distributed unequally, with access in poor areas, and for poor people generally, substantially worse than in better off areas and for better off people. Especially in India, large groups of society (on the countryside, women) have particularly poor access to such services. The inequality in access to public services accentuates the income inequality. It could also become a constraint on growth in the future, as large sections of the population do not receive the basic education and health services needed to be productive members of society.

Incremental Capital Output Ratios (ICORs) have been broadly similar recently. ICORs are a crude way of comparing the efficiency of use of capital. But the fact that they are easy to calculate make them popular. Applying the same methodology, with the same method of constructing the capital stock, the ICOR over the last five years was 3 in both countries with depreciation; assuming no depreciation, it was 4.3 in China and 4.5 in India. Thus, using the same yardstick ICORs were broadly equal between the two countries. In interpreting the rise in the recent decade, it is useful to keep in mind that China's composition of investment changed in recent years towards infrastructure, which tends to generate growth over a longer time span than machinery. Something similar may have happened in India.

What does a comparison of the levels of output, factor input and TFP suggest?

China and India both saw GDP per capita catching up with the US in 1980-2010, although both still lagged far behind in 2010 (Table 5). We can use the Cobb-Douglas production function of Box 1 to compare the levels of the factors determining production.

- With investment much higher in China and India than in the US, as a share of GDP, their capital-labour ratios increased to 14.3 and 6.5 per cent of the US level by 2010, up from 2.8 per cent and 4.2 per cent respectively in 1980.

- The capital-labour ratios (K/L) are now closer to the US level than GDP per capita (Y/L). Thus, economy-wide, the capital-output ratio (K/Y) in both is now higher than in the US. This may seem counter-intuitive. But it is consistent with distortions in capital and labour markets in both countries that make production relatively capital-intensive, given their level of development and underemployed labour in low productive agriculture.

Table 5 – China and India in 2010

	China	India	US
GDP per capita (US\$ 2005)	2,863	1,049	42,351
Capital per worker (US\$ 2005)	14,319	6,580	100,590
Labour force/population	57	38	47
Average number of years of education	7.9	5.1	13.1
Total factor productivity (level) 1/	28	26	843

Source: NBS (China), Statistics India, and FGI estimates.

1/ Based on CD production function discussed in Box 1.

- As to the mobilisation of labour, China has a substantially larger share of the population works than in the US, reflecting both China’s “demographic dividend” and a high participation rate. In India the share of employment in the population is substantially lower than in the US, reflecting mainly very low participation of women.
- Both China and India started out with much lower levels of education and skills than the US. Both have caught up—China more than India. These crude estimates, using average number of years of education, suggest that the average Chinese worker is now half as skilled as his US peer and the average Indian worker one-fourth as skilled. However, these estimates are not adjusted for the quality of education.
- Our estimates suggest that, with TFP growth substantially faster in China than in India in recent decades, China’s level of TFP is now slightly higher than India’s. Nonetheless, it is still very low compared to that in the US, pointing to the need and room for further catch up.⁸
- In all, the key reasons why India’s GDP per capita is now lower than China’s are: a much lower share of the population works, the capital stock per worker is half of that in China, and people are on average less educated.

⁸ Measured TFP is a residual. Thus, potential issues with the other variables are reflected in TFP. For example, if differences in the quality of education are incorporated, estimates of human capital in China and India would come out lower. As a result, the estimates of TFP would be higher.

It is sometimes said that India is about 10 to 12 years behind China in its reform and development process. With regard to GDP per capita this is about right, in the sense that India's GDP per capita from 2010 to 2011 was 5 per cent less than China's was in 2000. This is however not uniformly true for all determinants. Human capital per worker in India now is still substantially lower than in China in 2000, and labour force participation as well. On the other hand, TFP and capital per worker in India now are both substantially higher than they were in China in 2000.

3 Government Plans and Policy Implications

Looking at the key objectives of economic policy, what are the main challenges and uncertainties? In both countries, in principle, there are challenges and uncertainties on both the rate of growth in the coming decade and the pattern of growth. But the achievement of some objectives is less uncertain than others. In both countries, institutional and political economy questions turn out to be key.

In China the key uncertainty is how rapidly China will re-balance its pattern of growth. On the other hand, in our view, the ability to reach the growth targets is not much in doubt. Upgrading of the industrial structure is also likely to be successful—indeed, this is already happening.

In India, the key question is whether the key obstacles to raising potential growth to 9 per cent can be overcome. Key bottlenecks include infrastructure, education and the quality of governance. In addition, many believe that raising the role of industry is necessary to sustain higher growth. However, it is not clear to what extent this is possible.

Meanwhile, the international outlook is challenging. The global financial crisis has led to lower growth in much of the developed world. Given plans for fiscal consolidation countries and the need for balance sheet adjustments in many high income countries (HICs), demand is likely going to remain constrained in the coming five years.

This limits export prospects for Asian countries, notwithstanding better domestic demand prospects in developing countries and emerging markets (EMs). Moreover, with subdued global growth prospects and fears about strongly competitive Asian exports in both HICs and other EMs, the open multilateral trading system and globalisation are potentially under pressure.

Both governments want to adjust their growth models to sustain growth and development and meet domestic and global challenges. Their 12th 5YPs reflect these aims.

3.1 China: Aiming For Re-balancing and Moving Up the Value Chain

The government wants to transform the pattern of growth more towards consumption and services. Such a shift means more labour-intensive growth, with more urban employment creation. By boosting the share of wages and household income in GDP, this would increase the role of consumption in a way that is economically sustainable. It would also lower the tendency for external surpluses and reduce the sensitivity of the economy to global demand shocks. By reducing the role of industry, such rebalancing would also make growth less intensive in energy and resources and less detrimental to the environment. The 5YP also focuses on livelihood issues and reduces the GDP growth target to 7 per cent.

The second objective is industrial upgrading and moving up the value chain, with an emphasis on technological upgrading, investment in “new strategic industries” and innovation. The 5YP discusses the role of the government in leading the industrial upgrading and promoting the development of new industries. The role of the government as envisaged by the 5YP is different than in most market economies, where the role of the government in pursuing such objectives would largely be to provide an enabling framework, leaving commercial enterprises to do most of the upgrading and innovation. In any case, given the track record over the last decade, industrial upgrading is likely to continue.

To achieve the re-balancing China would need to implement a comprehensive set of reforms. The reforms should help channel new resources to new sectors, rather than traditional ones, and support more full migration to the cities, with migrants able to behave and spend like other urban citizens to foster more labour-intensive, services-oriented and consumption-based growth.

The reform agenda is extensive. Key reforms include removing the subsidies to industry by raising prices of inputs such as land, energy, water, electricity, and the environment; increasing private-sector participation and removing entry barriers in several service industries; financial sector reform towards more competition and more non-bank financing, better access to finance for small- and medium-sized enterprises and service-sector firms, a stronger role for the interest rate in the conduct of monetary policy and more exchange rate flexibility; continuing state-owned enterprise dividend reform and actually channelling the revenues to the Ministry of Finance; liberalising the *hukou*, or household registration system and reforming the inter-governmental fiscal system to give local governments the means and incentives to fund public services and affordable housing for migrants; and pursuing land reform to increase the mobility of migrants and, by facilitating land consolidation and mechanisation, boost per capita incomes and consumption in the countryside.

3.2 India: Aiming for Faster and More Inclusive Growth

India's highest-profile objective is to raise economic growth. The rise in trend GDP growth—until recently—has raised expectations among policymakers, opinion makers and the public. Amidst high growth aspirations, raising GDP further is a major overall objective in the 12th 5YP that was prepared in recent years (Planning Commission (2011)). It targets 9 to 9.5 per cent GDP growth for the next five years, noting that meeting 9.5 per cent would require extra effort including in infrastructure. The slowdown in growth since early 2011 has only increased its prominence.⁹

India's 12th 5YP also includes other goals. India's government aims at (i) faster overall development and urbanisation; (ii) strengthening governance and developing the infrastructure to make this happen; (iii) making growth more inclusive.

To keep rapid growth economically sustainable calls for a strong supply side. Going back to the determinants of growth of potential GDP—the capacity to produce—we can see what is needed to meet the targets of the 12th 5YP. The empirical research done in this area actually leads us to the key bottlenecks and policy challenges in India.

The growth ambitions call for higher TFP growth. Given that demographics are given and the measured contribution of human capital accumulation to growth is modest, there are in principle two ways to raise trend growth. One route would be to further ramp up investment and capital deepening. Investment could trend up somewhat further in the coming 15 years, as a share of GDP, because of favourable demographics.

However, relying on this to raise potential output growth would require investment to GDP ratios that are difficult to attain and probably not desirable. Thus, realistically much of the further increase in potential GDP growth will have to come from higher TFP growth.

In turn, higher TFP growth points to the need for better governance. The empirical literature on the determinants of TFP growth suggests a set of factors that can explain differences in TFP growth across countries. In his survey of the empirical literature, Isaksson (2007) concludes that they are infrastructure, physical capital generally, human capital (largely via education but also health), the quality of governance, technological transfers via imports, financial development, competition and geography. Most of these factors are considered as key bottlenecks to higher growth, in particular infrastructure, education and health, and the quality of economic governance generally. Besides being identified in the literature as a

⁹ India's short term macroeconomic challenges are in principle not the subject of this paper. However, these macro tensions in part reflect the structural issues that make the supply side lag the demand side.

key direct factor, the quality of economic governance affects most other factors, directly or indirectly (Table 6).

A factor typical to India is that the small average size of Indian firms constrains TFP growth. Xu and others (2007) reported that in a World Bank survey on manufacturing firms of 2003, the average firm in India had 88 employees, compared to 398 in China. The city-average share of firms larger than 50 employees was 22 per cent in India and 78 per cent in China. There are various reasons behind the small size of Indian firms. The policy-induced causes include labour legislation. The fact that it is more difficult for large firms to shed labour appears to discourage the emergence of larger firms. Other reasons include “reservation” rules favouring small firms.

Table 6 – Key Drivers of TFP Growth

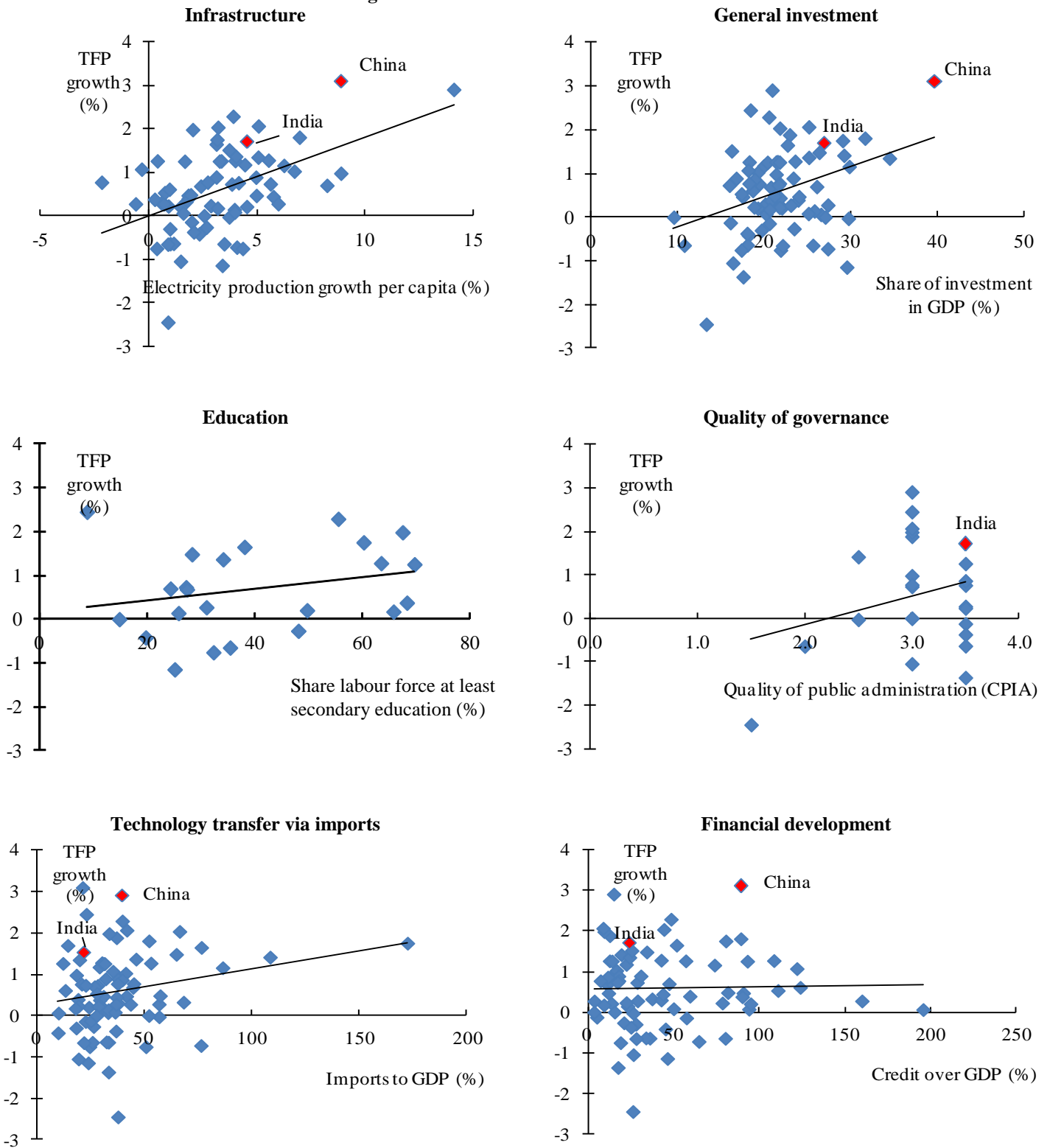
Factors considered in literature to influence TFP growth	Affected by governance		Source of Complaints in India	Chart in Figure 5 confirms relationship
	Directly	Indirectly		
Infrastructure	*		*	*
General investment		*	*	*
Human capital (education)	*		*	*
Quality of governance	*		*	*
Technology transfer via imports		*		*
Financial development	*			no
Competition	*			
Geography				

Source: Isaksson (2007), Fung Global Institute.

India lags China substantially on all key determinants of TFP growth. For the first six of the key determinants, Figure 6 shows the relationship with TFP growth, based on TFP growth estimates kindly provided by Bosworth and Collins. All charts except the one for financial development confirm Isaksson’s findings as to their impact on TFP growth.

The charts show how China and India compare internationally. They indicate that China’s strong TFP performance is consistent with its high score on these key determinants. India’s performance on these dimensions has been reasonably good compared to many other emerging markets and developing countries. However, to achieve rates of growth of GDP and TFP comparable to China's, India will have to raise its performance in all dimensions.

Figure 6 – Determinants of TFP Growth



Source: Bosworth and Collins, World Bank WDI, FGI

4 Institutional and Political Economy

In their 12th 5YPs both governments clearly state their visions for the future that, broadly speaking, rightly address their economic problems and challenges. Both have access to excellent policy advice. But

the key challenges in achieving the objectives appear to be neither technical nor intellectual but rather institutional and political. Policy formulation and implementation everywhere are complex. They involve many institutions and interest groups, many of which have influence on policy outcomes.

China’s policymaking process has been successful in delivering impressive growth and development along the investment and industry-heavy lines discussed above. Table 7 lists some key characteristics of the policy making process in China and India that seem to be important for how it functions. In China, incentives in different parts and layers of the government and corporate sphere appear to have been well-aligned with the overall policy objective of investment and industry-heavy growth.

Table 7 – The Policy Making Process – Key Characteristics

China	India
<i>Political governance</i>	
Politically centralised via unitary state	Politically decentralised via federal republic
Politicians & civil servants similar career track, run centrally via Party's Organisation Bureau	Politicians and civil servants in separate career tracks
Accountability of politicians upward to centre	Downward accountability to constituency
<i>Economic governance</i>	
Active government role in mobilising resources	Less explicit role government
Explicit preference and encouragement of industry and investment	Less explicit preference & encouragement;
Not always clear delineation between the state and the corporate sector	Clearer delineation between the state and the corporate sector
Economically decentralised	Economically decentralised
Fiscally decentralised; limited fiscal autonomy	Fiscally decentralised; limited fiscal autonomy
<i>Aspects of policymaking process</i>	
Directive planning, strong role of plans, but planning is iterative, detailed, bottom up	Indicative planning, more limited role of plans
NDRC coordinates economic planning and is engaged in implementation and execution	NPC coordinates planning but has less direct role in implementation and execution
<i>Formulation and implementation of reforms</i>	
Formulation driven by party/central government	Formulation is a participatory process; agreement of stakeholders required
Experimental reform using pilot projects	Reform rolled out after consensus reached

Source: Studies in References, and Fung Global Institute.

However, it remains to be seen how well China’s policy making process can manage a different, wider set of policy objectives. The rebalancing objective has meant the inclusion of social, environmental, and external objectives. Recent experience suggests that operationalising and achieving these objectives is difficult because it means removing subsidies and benefits to sectors, groups and spheres that benefit from the current policy setting.

The difficulty in changing China's pattern of growth and raising the role of consumption is a good illustration. Raising consumption calls for reforming the policies behind the investment and industry-heavy growth pattern along the lines discussed in section III. Raising consumption was an objective of the 11th 5YP adopted in 2006 but it does not seem to have been a prominent one. The government subsidised rural consumption of electric goods and has increased spending on health, education and social security. These measures encountered minimal political resistance and thus implementation was fairly smooth. However, there has been little progress on the politically difficult reforms of the policies noted above in the face of powerful vested interests such as industry, SOEs, other business interests and wealthier areas.

Some progress has been made, but institutional and political economy stumbling blocks remain. Higher consumption is a more prominent objective in the 12th 5YP, which envisages boosting household incomes, including the raising of minimum wages by 13 per cent per year and other fiscal measures to support household income. However, policies have not yet been able to address the root cause of a bias towards industry and investment. Key institutional and political economy reasons include:

- Strong, effective resistance from those that benefit from the existing policy setting;
- Limited understanding about the underlying reasons for the decline in the role of consumption;
- Local governments were often not on board because of a traditional mindset geared towards industry and the performance evaluation system for senior local officials;
- China's senior leaders lack a "reform" unit that can present the "big picture" to help guide policymaking on complex issues with many stakeholders; instead, different agencies and interest groups all make their own cases, trying to steer the policy debate;
- In this setting, with policymaking consensus-driven and cautious, decisions on a change of direction are slow and policymaking takes the path of least resistance, towards measures that do not attract strong resistance from vested interests.

China will need to make institutional changes. Important aspects of China's current institutional set up are unlikely to be consistent with transition to a high income country. Key directions are likely to be a clearer delineation between the state and the corporate sector as well as between regulators and regulated entities; more generally a revision of the role of the state in the economy towards less active involvement in the market; and a better level playing field between SOEs and other companies.

In India political and political economy issues are bottlenecks to more progress on the key objectives of the 12th 5YP. India needs more infrastructure to support high growth and much better public services. There has clearly been progress in infrastructure since the start of the 11th 5YP. This is in no small part because of Public-Private Partnerships (PPPs), which have removed the financial constraint from public finance. However, many major infrastructural and industrial projects are still delayed for a long time for other than financial reasons. One major reason is the following: the reforms and infrastructure

development to support accelerated economic growth and urbanisation often have short-term costs or costs to specific groups, for instance for the people whose land needs to be acquisitioned and those who need to relocate. In the face of these costs, it is often a challenge to garner effective political support for and implement them. This is true everywhere. But in India, devising arrangements that all stakeholders agree on seems very difficult. The political difficulty raising electricity tariffs to cost recovery levels is another case in point.

There are marked differences between governance performance of different states. One hopeful development has been the experience in states such as Gujarat, Maharashtra and Bihar. It appears that there voters have rewarded Chief Ministers who improved the quality of public services and infrastructure and boosted growth by voting them back. This is a promising development, especially if this maturation of politics can spread to other states.

In spite of the major governance challenges, India's basic institutional framework seems more compatible with a mature market economy than that of China's.

5 Medium-term Growth Projections

Given government plans and the challenges in implementing them, what is the medium-term outlook for China and India?

5.1 China

There has recently been a lot of debate about China's medium-term growth prospects. Some have argued that China is in for a major medium-term slowdown. This is in addition to the debates about short term prospects—which are not the subject of this paper.

Medium-term growth prospects are best analysed using the growth accounting framework. As discussed in Section III, there is a lot of uncertainty about the evolution of the pattern of growth. However, given China's track record of rapid growth and the government's intention of moderating growth, there is relatively little uncertainty surrounding the rate of GDP growth in 2012-20. Therefore, we present only one growth scenario.

Considering the prospects for its three key determinants, trend growth is on course to decline in the period 2010 to 2020, but to a still respectable rate. Our growth accounting exercise suggests that potential GDP growth gradually eases to 8.7 per cent from 2012 to 2015. This is higher than earlier estimates such as in Kuijs (2010), largely because investment has continued to surprise on the upside in recent years. It would

decline further to 7.3 per cent in the period 2016 to 2020 (6.9 per cent in 2020), compared to 10 per cent in the past three decades, as a result of the following assumptions (Table 8):

- The working population is on course to decelerate because of demographic developments. As a result, overall employment is set to shrink somewhat from 2015 onwards.
- Total factor productivity growth may also decline somewhat. This tends to happen as catch up proceeds. We expect the deceleration to be particularly noticeable in the coming years. In the last 15 years, SOE restructuring, WTO accession, and very successful integration of China’s manufacturing sector into the global economy boosted TFP growth to a remarkably high rate, including via large economies of scale. The contribution from these factors is likely to diminish somewhat in the coming decade, as SOE restructuring has largely finished and the integration of China’s manufacturing sector into the global economy—and the expansion of global market shares—is likely to slow down.¹⁰
- Human capital accumulation should continue, but—on mainstream calibration of the production function—it is unlikely to become a major driver of growth.
- With the ratio of investment to GDP easing mildly because of modest re-balancing, growth of the capital stock slows materially in the period 2012 to 2020. In principle, China could try to offset the above pressure by further raising (physical) capital accumulation. However, this would run counter to the government’s re-balancing plans.

Table 8 – The Medium-Term Growth Outlook and Its Determinants in China and India

	China			India		
	1995-2011	2012-2015	2016-2020	FY94-FY11	FY12-FY16	FY17-FY21
Potential GDP growth 1/	9.9	8.7	7.3	7.0	7.6	7.2
Employment growth	0.7	0.2	-0.2	1.9	1.6	1.2
Labor productivity growth	9.1	8.5	7.5	5.0	5.9	5.9
From TFP growth	3.1	2.7	2.5	1.7	1.7	1.7
From higher H/L	0.6	0.5	0.5	0.4	0.4	0.4
From higher K/L ratio	5.3	5.2	4.4	2.8	3.7	3.7

Source: NBS (China), Statistics India, and FGI estimates.

1/ Based on Cobb Douglas production function.

¹⁰ For an international comparison, see He and Kuijs (2007), Annex Table 2. In 1966-90, average annual TFP growth in Hong Kong, South Korea, Singapore, and Taiwan averaged between 1.7 and 2.3 per cent. This includes the contribution of human capital accumulation, which is separated out in our analysis. Benchmarking the stage of development, Korea’s GDP, as share of the US and in current US dollars, rose from 5 per cent in 1970 to 25 per cent in 1990. On our projection, China’s GDP per capita would reach 21 per cent of the US level by 2020 on that metric and 37 per cent by 2030.

How much China's pattern of growth will change in the coming decade is much harder to say. Given the uncertainty about the extent of rebalancing it is appropriate to think about a range of outcomes. He and Kuijs (2007) present two scenarios based on CGE modelling—one on unchanged policies and one on re-balanced policies.¹¹ World Bank and Development Research Centre (2012) present an update of the scenario on re-balanced policies.¹² Here the share of the service sector and consumption in GDP would rise from 43 per cent and 48 per cent in 2011 to 48 per cent and 60 per cent in 2030 and rise further to 61 per cent and 66 per cent in 2030. However, in the “un” re-balanced scenario in He and Kuijs (2007), these shares would not materially change from current levels.

5.2 India

Compared to China, there is more uncertainty about the rate of potential GDP growth that India can achieve in 2012-20. In a base scenario (Table 8):

- TFP growth would remain at 1.7 per cent per year, the rate achieved during the period 1993-94 to 2010-11.
- Employment grows in line with demographic projections, with the participation rate assumed to be constant. The growth in the number of people of “working age” (aged 16-65) has come down gradually since early 1980s and the demographic outlook suggests that this continues.
- The ratio of fixed capital formation to GDP continues gradually to rise, from almost 33 per cent in 2011-12, to 35.5 in 2020-21, in constant prices of 2005-06. Using the “headline” number of total capital formation in current prices, this would mean a rise from 35.4 per cent to 38 per cent. On these assumptions, potential GDP growth would be 7.6 per cent in 2011-12 to 2015-16 and 7.2 per cent in 2016-17 to 2020-21 (Table 8). In this scenario it would take until after 2020 until India's growth would overtake that of China.

To achieve the objective of 9 per cent potential growth—the lower target in the 12th 5YP—purely via higher investment would require lifting the ratio of fixed investment to GDP to 54.6 per cent by 2020-21. The scale of the required rise underscores that it would be preferable to get more growth from higher TFP growth. As discussed above, this calls for more progress on governance. ■

¹¹ See Table 4.

¹² See Table 1.

References

- Bai, Taimur, and Kaushik Das. *Balancing Priorities: a Collection of Essays on India*. Deutsche Bank, 2012.
- Bardhan, Pranab. "The State of Health Services in China and India: a Larger Context." *Health Affairs* 27, no. 4 (2008): 933-936.
- Basu, Kaushik. "Asian Century: a Comparative Analysis of Growth in China, India and other Asian Economies." Working paper, eSocialSciences, 2010.
- Bosworth, Barry, and Susan Collins. "Accounting for Growth: Comparing China and India." Working paper, International Finance and Macroeconomics, The National Bureau of Economic Research, 2007.
- Bottelier, Pieter. "India's Growth from China's Perspective." *The Journal of Applied Economic Research* 1, no. 1 (2007): 119-138.
- CLSA. "Paradox Revisited: Land, Labour and Capital Twist the Tale." Special report, CLSA, 2011.
- Gerhaeusser, Klaus, Yoshihiro Iwasaki, and V.B. Tulasidhar. *Resurging Asian Giants: Lessons from the People's Republic of China and India*. Manila: Asian Development Bank, 2010.
- He, Jianwu, and Louis Kuijs. "Rebalancing China's Economy: Modeling a Policy Package." Working Paper, China Research, World Bank, 2007.
- Isaksson, Anders. "Determinants of Total Factor Productivity Growth: a Literature Review." Literature review, Research and Statistics Branch, United Nations Industrial Development Organization, Vienna, July 2007.
- Isaksson, Anders, and Thiam Hee Ng. "Determinants of Productivity: Cross-Country Analysis and Country Case Studies." Staff working paper, Research and Statistics Branch, United Nations Industrial Development Organization, Vienna, 2006.
- Kohli, Harinder S, and Anil Sood. *India 2039: an Affluent Society in One Generation*. New Delhi: SAGE Publications Pvt. Ltd, 2009.
- Kuijs, Louis. "China Through 2020: a Macroeconomic Scenario." Working paper, China Office Research, World Bank, June 2010.
- Kuijs, Louis, and Tao Wang. "China's Pattern of Growth: Moving to Sustainability and Reducing Inequality." *China and the World Economy* 14, no. 1 (February 2006): 1-14.
- Li, Wei, Taye Mengistae, and Lixin Colin Xu. "Diagnosing Development Bottlenecks: China and India." Working paper, World Bank Policy Research, April 2011.
- Lim, Edwin, Ian Porter, Paul Romer, and Michael Spence. "Medium and Long Term Development and Transformation Of the Chinese Economy: an International Perspective." Synthesis report, Beijing Cairncross Economic Research Foundation, Beijing, March 2011.
- McKinsey Global Institute. *India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth*. McKinsey Global Institute, McKinsey & Company, April 2010.
- O'Keefe, Philip. "Social Protection in India and China: Two Worlds of Reform." Presentation to AusAID, Beijing, February 2012.

Organisation for Economic Cooperation and Development. “Economic Survey India.” Survey, Organisation for Economic Cooperation and Development, June 2011.

Planning Commission, India. *Faster, Sustainable and More Inclusive Growth: an Approach to the 12th Five Year Plan*. Working paper, Planning Commission, India, New Delhi, September 2011.

World Bank. *China 2030: Building a Modern, Harmonious, and Creative High-Income Society*. Conference note, Development Research Center of the State Council, the People’s Republic of China, The World Bank, 2012.