

Chinese and Indian Economies since the 2008 Financial Crisis

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ABSTRACT

The considerable similarity in the growth paths of the Chinese and Indian economies since their respective reforms has changed after the 2008 crisis. Growth in both has declined, more consistently in China. Share of exports in GDP has declined in both economies. The dependence of the Chinese economy on exports has decreased; however, its dependence on investment has increased; as investment's share in GDP has increased, whereas it has decreased in India. There is also a change in the structure of the manufacturing sector in China, though not in India.

Introduction

Chinese reforms initiated in 1979 ushered in a long period of very rapid increases in GDP. This increase was accompanied by high and rising levels of investment and booming exports that resulted in an increase in Chinese share of world exports and of their share in China's GDP. India experienced a similar process of growth acceleration and higher levels of investment and exports. An earlier paper had compared the economic experience of these two economies since their respective reforms (Agarwal and Whalley, 2015). We recapitulate the main findings of the earlier paper in Section one. We then analyse the impact of the 2008 global crisis on the two economies. Section two discusses the policies they adopted to counter the effects of the crisis and the policy dilemmas and choices policy makers faced. Next, in Section three we discuss the effect of the policies on the performance of their economies. In Section four we discuss whether the imbalances in the economies at the time of the crisis have been rectified by the policies that were adopted to tackle the crisis.

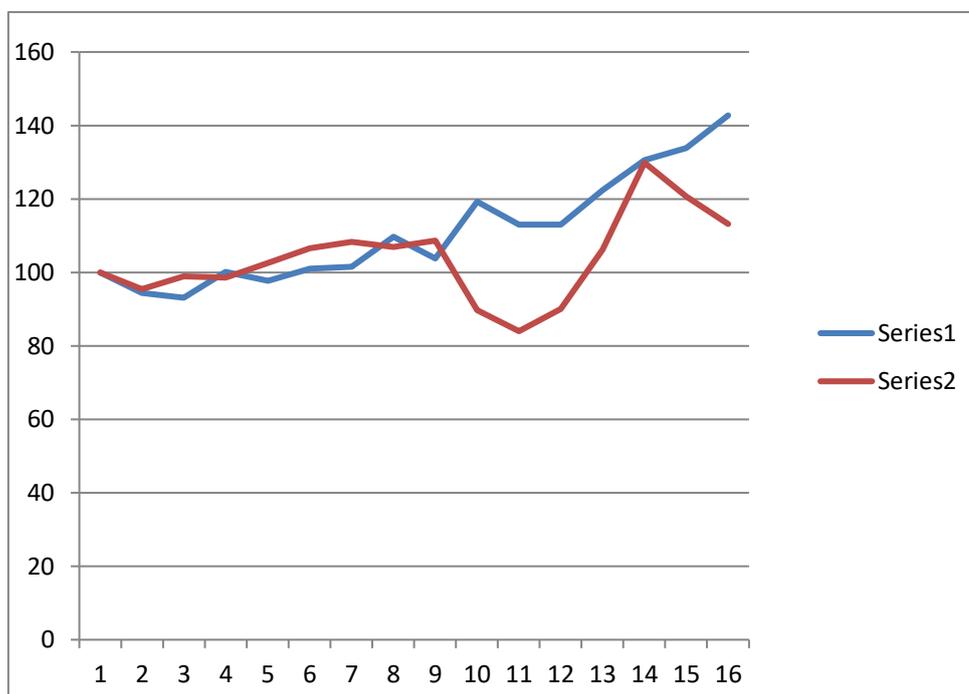
Section 1

Reforms and performance

Reforms were undertaken starting in 1979 in China and 1991 in India. We try to see the effect of these consequential reforms on the economies. We do this by comparing their performance since the respective reform years. We do not directly compare calendar years, say 1995, but compare the years since the reforms. We compare the state of the economies, say 15 years since the respective reforms. So, we compare the state of the Chinese economy 15 years since the reform, namely in 1994, with that of the Indian economy after the beginning of the reforms, namely in 2006. We find considerable similarity in the paths of the economics since their respective reforms.

The economies grew rapidly in the years after the reforms. The Chinese economy grew much faster, with per capita GDP growing at an annual rate of 8.7 percent in the 16 years since the reforms, 1980 to 1995. During the first 16 years after the reforms namely 1992 to 2007 per capita GDP in India grew at an annual rate of 4.6 percent. This growth was accompanied by a high share of gross fixed capital formation (GFCF) in GDP and much higher share of exports of goods and services in GDP.

Figure 1 Share of gross fixed capital formation in GDP (%)



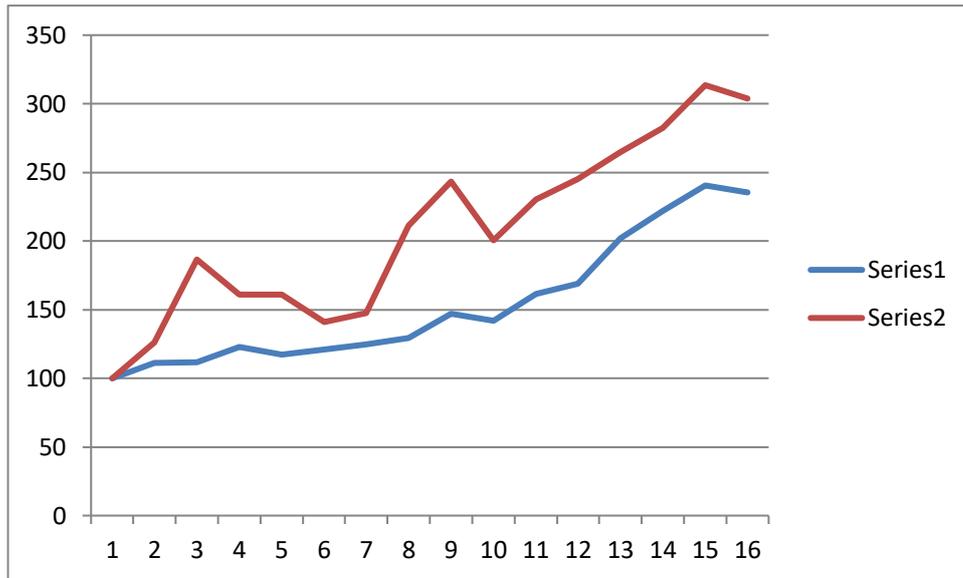
Blue – India; Red – China

Source: Author's graph based on data from World Bank World Development Indicators

The share of GFCF in GDP increased steadily in the first 16 years after reform from 25.1 % to 35.8 % in India, an increase of 40 percent, and from 28.6 percent to 32.34 percent in China, a somewhat smaller increase of about 13 percent (Figure 1).¹ Furthermore, in China the behaviour of this share showed considerable fluctuation. There was a substantial decrease in the share of GFCF in GDP in the mid-1980s before recovering to earlier levels before another decrease in the 16th year of the reform.

¹ The share was much lower in the years 1989 to 1991.

Figure 2 Share of exports of goods and services in GDP (%)



Source: Author's graph based on data from World Bank World Development Indicators

The share of exports of goods and services (XGS) in GDP increased substantially in both economies after the reforms (Figure 2). The share increased by about 150 percent in India but much more, 200 percent, in China. Again, the share increased steadily in India while there are fluctuations in China. Furthermore, there is an almost parallel performance after ten years of reform. Because of China's higher growth rates, the incremental capital output ratios (ICOR) are substantially lower than those in India. China's ICOR is almost 3.5 while that of India is almost 5.

Section 2

Policies after the 2008 crisis

In this section, we first discuss the policy response to the 2008 crisis, which was expansionary monetary and fiscal policy to counteract the recessionary effect of the decline in world economic activity. We next discuss the imbalances that this created and made the subsequent efforts to wind down the expansionary policies difficult.

The policy response to the 2008 crisis

A. The immediate response

Policy makers in both the countries sought to counter the fall in international demand because of the 2008 crisis. However, the situation of the two economies was very different at the commencement of the crisis. China's economy was in a very favourable situation at the time of the crisis. It had US\$1.6 trillion in international reserves along with a current account surplus of almost \$400 billion or 10.4 percent of GDP in 2008 and a fiscal surplus of 1 percent of GDP (World Bank, 2009). On the contrary, India's economic position was much less favourable. The economy was experiencing excess demand that was manifesting itself in rising inflationary pressures and a rising current account deficit at the end of 2007. Because of the high rate of inflation, the Reserve Bank of India had been following a contractionary monetary policy (Reserve Bank of India, 2009. World Bank, 2009).

The Chinese fiscal stimulus package envisaged spending about \$575 billion, about 12 % of GDP spread over 2 years, 2008 to 2010 (World Bank, 2010). This was financed partly through credit expansion, with total new lending equivalent to 30 percent of GDP in 2009. The expansionary monetary programme reversed the earlier contractionary monetary policy regime aimed at slowing the 11-12% rate of growth over the previous years and reining in inflationary pressures. The shift involved that interest rates were cut five times between September and December (Wong, 2011). Conditions for loans to small to medium-sized enterprises and issuing corporate bonds were eased. The credit quota was abolished, and a call was made for increasing credit (Wong, 2011).

The combined fiscal deficit of the centre and states in India including off-budget bonds was estimated to cross 11 per cent of GDP for 2008-09, a huge rise from about 5 per cent of GDP in 2007-08, a total fiscal stimulus of about 6 per cent of GDP (Mathew, 2009).

The Reserve Bank had lowered the repo rate by 425 basis points,² and the cash reserve ratio (CRR) by 400 basis points over a period of about seven months between October 2008 and April 2009. The overall provision of potential liquidity through conventional and non-conventional measures was about 9.0 per cent of GDP (Reserve Bank of India, 2010).

These expansionary measures were in line with the recommendations of the International Monetary Fund and G20 summit meetings at London. The communique from the London summit said the G20 were undertaking an unprecedented and concerted fiscal expansion of

² The repo rate is the rate which the RBI lends reserves to banks.

\$5 trillion. The central banks which have aggressively cut interest rates will continue to maintain expansionary policies for as long as needed (G20, 2009).

B. The unwinding of the special measures

The expansionary fiscal and monetary measures, while necessary, strengthened inflationary pressures; the monetary measures had meant a reversal of the RBI's earlier contractionary policy, and the fiscal measures meant a deviation of the government's announced path towards reducing the fiscal deficit, the Fiscal Responsibility and Budget Management Act, 2003.³

Towards this end, the monetary policy normalisation process started in October 2009 was continued between February 2010 and July 2010 as the effective policy rate was raised by 250 basis points and the CRR by 100 basis points. The fiscal stimulus was reduced in 2009-10 to 1.8 per cent from 2.4 per cent in 2008-09 (Reserve Bank, 2011). Despite tightening monetary policy year, inflation remained sticky forcing the Reserve Bank to raise its policy rate more aggressively in 2011-12. It hiked the repo rate by a total of 125 bps during the year so that the operational policy rate was raised by 475 bps in less than 17 months since March 2010, when the rate hikes began (Reserve Bank of India, 2012).

The RBI was also concerned with a number of structural features that were affecting economic performance. On the fiscal side its main concern was that given the limitations of raising fiscal resources, the fiscal need was for a shift in the government's expenditure from current expenditures to investment expenditures. It called for broader rebalancing demand from private and government consumption to private and public investment. It particularly thought it important to raise infrastructure investments. The failure of public infrastructure investment had resulted in greater dependence on private infrastructure investment, which, in turn, depended on increased bank lending for such investment. The financing of long gestation projects with short term bank financing aggravated the deterioration of asset quality arising from the effects of the cyclical downturn.⁴ It sought to develop a bond market to

³ This act passed in 2003 became effective from July 5, 2004. The FRBM Act provided a legal institutional framework for fiscal consolidation, making it mandatory to reduce the fiscal deficit to 3% of the GDP by 2008-09 and to eliminate the revenue deficit. It provided for annual reduction targets. The Finance Minister had to justify any breaches and suggest corrective measures. Further, the Act prohibits monetization of the government deficit by prohibiting the purchase of primary issues of Central Government securities by the RBI after 2006.

⁴ The RBI noted in the annual report that the banking system, despite the risk of asset liability mismatch while lending long-term for infrastructure projects, has seen high growth in credit to this sector in recent years.

finance long term infrastructure investment but banks continued to play an important role that adversely affected the quality of their assets.

Also, the government encouraged investment in construction through various tax concessions. This was partly because construction is labour intensive and so would help to boost employment as manufacturing was not providing sufficient new employment. This diverted resources from investment in manufacturing. The very sharp decrease in the share of household financial savings in shares and the conversion of the development finance companies, such as the Industrial Development Bank of India and the Industrial Credit and Investment Corporation of India, into commercial banks further reduced the sources of long term finance for industry. As a consequence, the share of machinery and equipment in total gross fixed capital formation declined.

The raised inflation rates because of the expansionary policies following the 2008 crisis created another dilemma for the RBI. Higher interest rates encouraged capital inflows which if unsterilised would lead to an appreciated exchange rate that would harm exports.⁵ As it was, exports had been severely hurt by the crisis.⁶ Sterilisation would lead to higher interest rates that would encourage further capital inflows while perhaps simultaneously discouraging investment.

China's export growth plummeted from the fourth quarter of 2008 through 2009. This had a stunning negative effect on growth, -41% in 2009, as exports comprised one-third of GDP (Wong, 2011). The larger Chinese stimulus programme raised somewhat similar concerns as in India. While the stimulus worked in bringing the economy to a high growth path it appeared to spin quickly out of control (Wong, 2011). Investment in fixed assets jumped to 66% of GDP in 2009, and infrastructure investment leapt to more than 18% of GDP, raising concerns about the economy's absorptive capacity and the care with which projects were selected and implemented. The big ramp-up in easy credit, for example, helped to fuel an asset bubble that sent prices of land and housing steeply upward, more than doubling in some big cities during 2009. The heavy pace of local investment was causing worries about rising local government debt. In early 2010, the government called for an immediate freeze and audit of local government investment corporations, and by year-end the urgent problem for macro management had shifted decisively to slowing growth and tamping down inflationary pressures.

⁵ The purchase of foreign currencies inflows by the Reserve bank would increase the money supply. Sterilisation is actions by the Reserve Bank to counter this increase in the money supply and return it to its earlier level.

⁶ For a detailed analysis of the effect of the crisis on Indian exports see **Rajiv Kumar and Dony Alex**, 2009.

A second issue had been arising even before the crisis was aggravated by the crisis. Rising wages were making its earlier labour-intensive strategy no longer viable. Also, a significant share of public enterprises was allowed to go bankrupt with a significant loss of jobs. In the decade after 1994, state enterprise jobs declined by 44 million and manufacturing jobs by 25 million (Overholt, 2010). For continued rapid growth higher value-added manufacturing growth would be required, and a shift toward the domestic market, a vast expansion of the service sector, and replacement of public enterprises by private firms. But it was claimed that the crisis generated expenditures concentrated on older sectors and the state enterprises that could create jobs quickly and were more likely to be able to pay back their loans. Small and medium industries, the service sector, and the private sector appear to have been severely damaged by the crisis (Overholt, 2010). However, Lardy (2011) in a detailed analysis of allocation of credit shows that this was not the case. He showed that the small sector received more of the credit than large enterprises; the former are predominantly private and the latter public. Withdrawal of the stimulus would need to be accompanied by measures that would help in the required restructuring. The GFC underlined that China needed to move beyond the hitherto dominant export oriented, low-cost growth model. The Chinese economy had grown dangerously over-reliant on exports and investments in the industrial sector. Due to a mixture of political interference and structural incentives, the growing Chinese capital stock had been allocated increasingly inefficiently, and as a result, China's growth model was in danger of leaving the country in a 'middle income trap' (Lynch, 2015). However, the 'One Belt, One Road' initiative relies on high levels of infrastructure investment, and also perhaps to encourage exports through reduced transport costs. It could connect Western China with newer export markets in Eurasia. Chinese construction companies and work crews are expected to be the main contractors for OBOR projects.

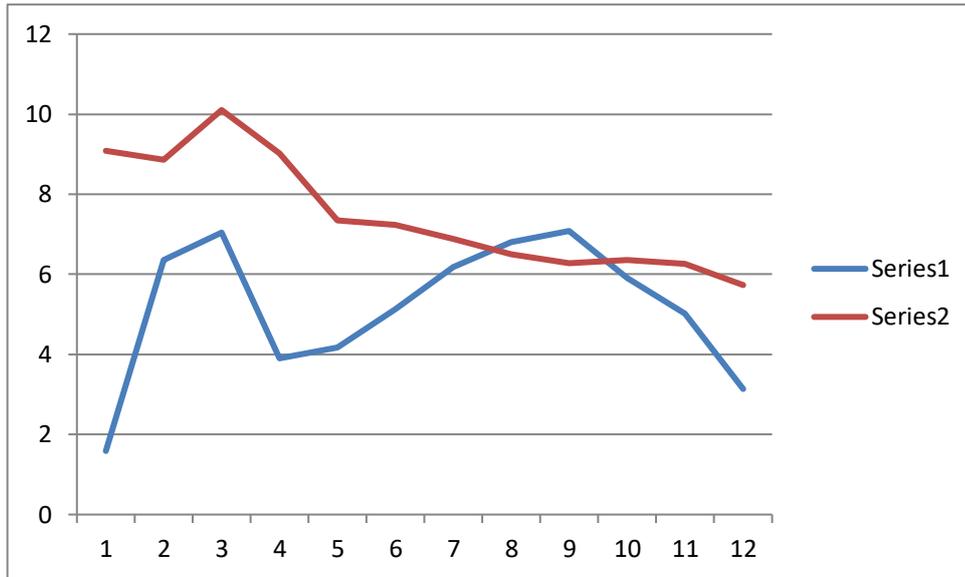
Section 3

The outcome for the Chinese and Indian economies

We now examine how the two economies have performed since the 2008 crisis. Initially the economies maintained their high growth rates and it was believed that not only had they become decoupled from the performance of the world economy but many believed that they could lead the recovery of the world economy (Justin Yifu Lin, 2012).

Growth of per capita income fell in 2008 in India but then it recovered strongly in 2009 and 2010. Since then it has fluctuated, but has trended down since 2016 (Figure 3 and Table1). Chinese growth after an uptick immediately after the 2008 crisis has declined steadily after 2010.

Figure 3 Growth of per capita income, China and India, 2008-19



Source: World bank World Development Indicators

Table 1 Growth of per capita GDP, 1992-2019

Country	1992-2002	2003-07	2009-13	2014-19
China	9.2	11.1	8.5	6.3
India	3.8	6.2	5.3	5.7

Source: World Bank - World Development Indicators

India's growth shows more of a cyclical pattern, though it has consistently declined over the past three years. China's growth slowdown since 2008 almost completely comes from a sharp slowdown in total factor productivity growth (Pingyao Lai, 2015). During this period, the positive effect on growth from expanding investment has been completely offset by the negative effect of the slowdown in total factor productivity growth. Supply factors caused China's growth to slow down when China crossed the Lewis turning point (Cai, 2015).⁷ This prolonged slowdown does not support the idea that it is caused by cyclical factors.⁸

The productivity slowdown is, however, just a statistical construct to reflect that high rates of investment are not generating high rates of growth. The causes for the slower productivity growth need to be explored. China's higher education and research system are expanding.

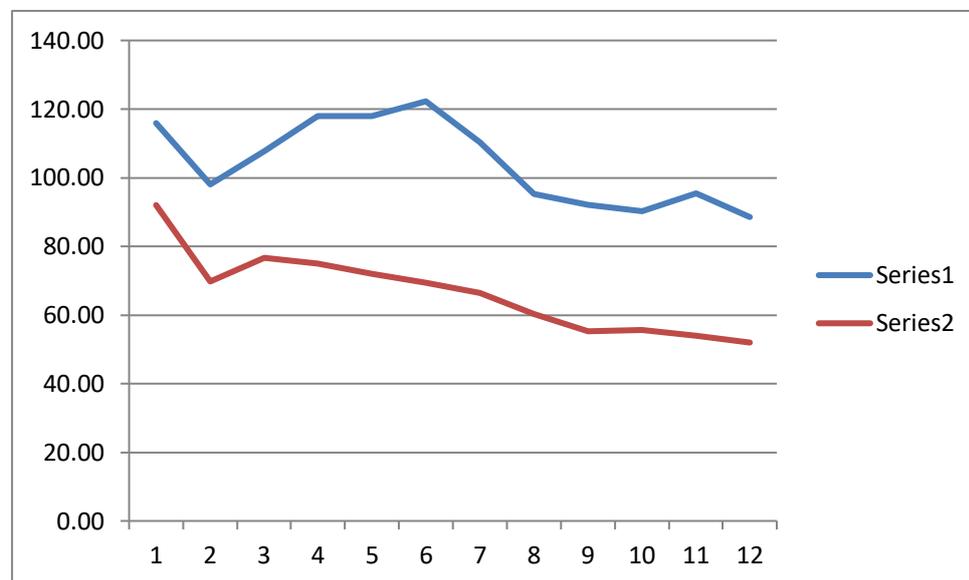
⁷ Also see Collins, Bosworth and Rodrik, 1996, for an earlier analysis of accumulation versus productivity growth.

⁸ This hypothesis of Justin Liu is quoted by Lai (2015)

The Chinese are now filing and owning the most patents. They are leaders in technology areas such as G5 technology. It is not clear whether the economy is in a phase where new machine producing industries are being established to take advantage of the new technologies being developed and the higher ICOR or lower productivity reflects a period before the new industries mature. Korea had gone through such a period when it was developing the next generation of technologically more sophisticated export industries.⁹

The slowdown in growth in the two economies was accompanied by a decline in the share of XGS in GDP (Figure 4). This share fell in India from 24.1 percent in 2008 to 18.4 percent in 2019, a decline of almost 30 percent. However, the decline was much sharper in China where the share fell from 32.6 in 2008 to 18.4 in 2019, a fall of almost a half. Again whereas the share of exports decreased steadily in China since 2010 they increased in India till 2013 before declining.

Figure 4 Index of Share of exports of goods and services in GDP (2007=100)



Source: World bank - World Development Indicators

The share of exports of goods and of services in GDP both declined after 2008 (Table 2). For both, goods and services, the decline was much greater for China than for India. The share of exports of goods which was 15.7 percent and 29.4 percent in India and China respectively in 2008 declined to 11.2 and 16.7 percent respectively in 2019, declines respectively of 30 percent and 50 percent. Share of exports of services in GDP fell by only 15 percent in India from 8.4 percent to 7.2 percent during the period, whereas it fell also by almost 50 percent in China from 3.2 percent to 1.7 percent.

⁹ Earlier Krugman had raised similar doubts about the sustainability of the Korean growth rate.

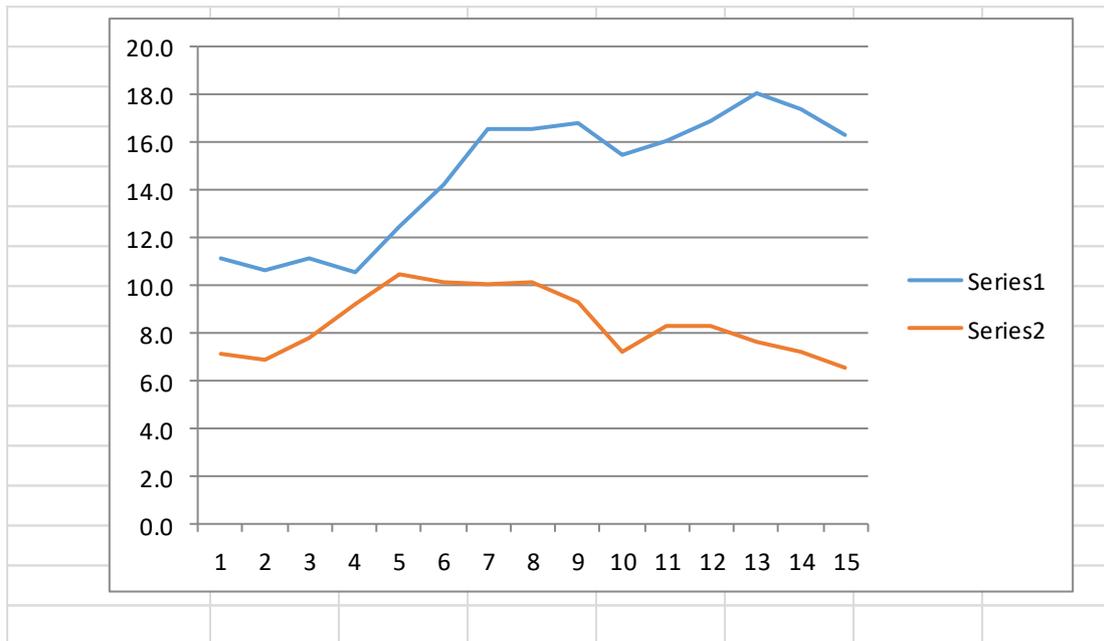
Table 2 Exports % of GDP

		1992-2002	2003-08	2009-14	2015-19
Goods	China	13.2	29.1	23.1	18.4
	India	8.6	12.5	15.7	11.9
Service	China	5.6	3.6	2.3	1.2
	India	2.6	6.4	7.7	7.3
ICT Goods	China	2.6	8.7	6.4	5.0
	India	0.2	0.4	0.3	0.1
ICT Services	China	.09	.12	.18	.11
	India	1.5	2.9	3.6	3.3

As a percentage of GDP, China exports more of ICT goods and India of ICT services (Table 2). Since the 2008 crisis, exports of ICT, goods and services, have declined in China and India both as a percentage of GDP and as percentage of goods and service exports respectively (Table 2). This doesn't bode well for the future as ICT exports are the most dynamic segment of world exports.

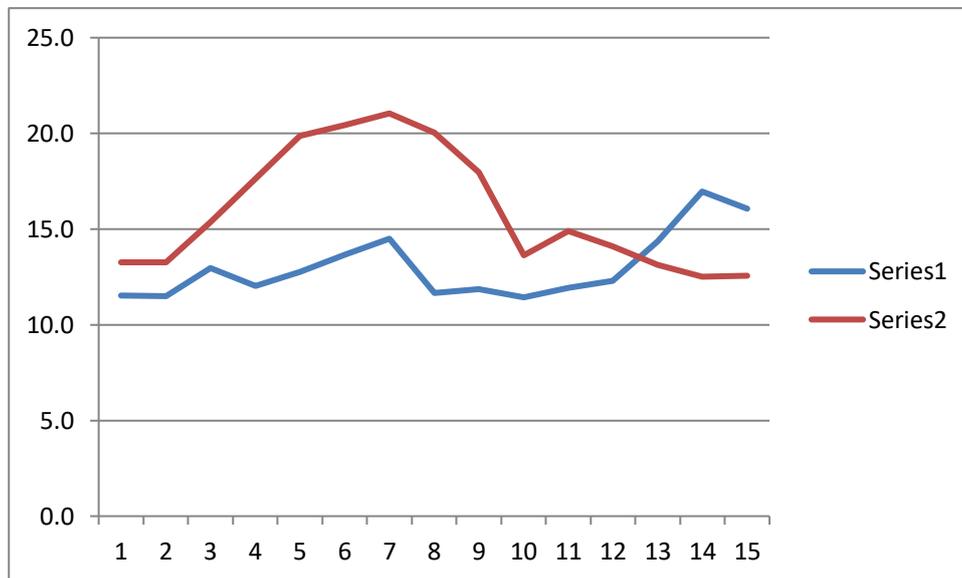
The percent of imports in gross value of output of manufactures has diverged since 2004, going up in India but going down in China (Figure 5). Also, the percent of exports in gross output of manufactures has been going down in China since 2006 and very sharply after 2008 (Figure 6). The behaviour has been very different in the case of India where the export percentage has grown since 2009. As a consequence, the export percentage has been greater in India than in China since 2012.

Figure 5 Imports as percent of gross output in manufactures



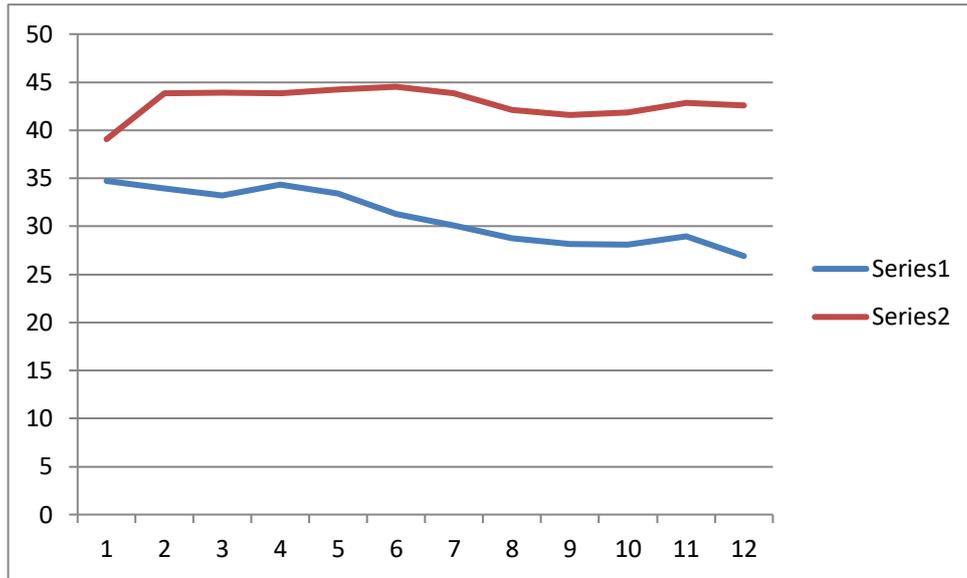
Source: World Input Output Tables, WIOD.

Figure 6: Percent of exports of manufactures in gross value of output, 2000-2014



The behaviour of GFCF after the 2008 crisis is also very different in the two countries. The share of GFCF in GDP increased further in China from 39 percent to 42 percent, whereas it decreased in India from 35 percent to 27 percent (Figure 7). ICOR has increased in both countries but more in China so that it is now more than in India.

Figure 7 Share of gross fixed investment in GDP



The change in ICOR reflects a change in the manufacturing structure in China. We calculate the percent of gross value of output in each manufacturing sector in total gross value of output of the manufacturing. We then calculate the correlation between the manufacturing sectors of different years. The structure of manufacturing does not change much between 2001 and 2008 in either country, correlation coefficient is over .9 (Table 3). However, there is a significant change after 2008. The correlation between the structure of the manufacturing sector in 2008 and 2014 is very high for India, .98, but is small in the case of China, -.26. There has been considerable change in the structure of the manufacturing sector in China.

Table 3 Correlation between manufacturing sector in different year

Years	China	India
2001, 2008	.93	.92
2008, 2014	-.26	.98
2001, 2014	-.16	.94

Source World Input Output Tables, WIOD.

Table 4 Correlation between export structure in different years

Years	China	India
2001, 2008	.91	.58
2008, 2014	.99	.98
2001, 2014	.90	.54

Source World Input Output Tables, WIOD.

However, the shifting manufacturing structure in China has not resulted in a change in export structure (Table 4). This implies that the newer industries are not export oriented and so the share of exports in manufacturing or in GDP has declined since 2008. There has not been much change in India's export structure since 2008. The significant change in export structure between 2001 and 2008 in India is mainly because of change in two export groups. Textile exports declined from 36.9 percent of total exports in 2001 to 15.9 in 2008 while in the same period the percent of petroleum products increased from 0.4 to 18.7.

Section 4

Imbalances in the Chinese and Indian economies

We now discuss the nature of imbalances in the Chinese and Indian economies. The Chinese and Indian economies have followed somewhat imbalanced growth paths. The Chinese economy is considered imbalanced because of its relatively small consumption, both personal and government, particularly the former, and considerable reliance on investment and external surpluses (Lardy, 2009). The latter was because of the large export sector fuelled by an undervalued exchange rate (Lardy, 2009). The Indian growth path is unbalanced in terms of large fiscal deficits and large current account deficits. Also, the production structure is imbalanced in the two countries. In China, the industrial sector is too large and the services sector is too small. In India, structural transformation has stalled as the share of industry has not been increasing as expected (Lele, Agarwal and Goswami, 2018). We analyse in this section whether post GFC growth has seen a rebalancing.

We first look at the production structure.

Table 5 Sectoral value added (% of GDP)

China		1998-2007	2009-14	2015-19
	Agriculture	13.3	9.1	7.6
	Industry	45.9	45.3	39.8
	Services	40.8	45.6	52.6
India	Agriculture	19.9	17.0	16.0
	Industry	23.8	29.6	26.3
	Services	43.5	46.2	48.3

We see that there has been a rebalancing of the Chinese production structure with decline in the share of industry and an increase in the share of services since the middle of the second decade (Table 5). This is in contrast to the immediate years after the 2008 crisis which saw little rebalancing. In contrast, structural transformation remains stalled in India. The share of agriculture seems almost constant and the share of industry has fallen.¹⁰ Even the share of services is more or less in line with that in low income countries generally.

We next examine the demand structure.

¹⁰ This might be a reflection of what Rodrik (2015) calls premature de-industrialisation.

Table 6 Demand Structure (% of GDP)

China		1998-2007	2009-14	2015-19
	Household consumption	42.6	35.4	38.5
	Government consumption	15.4	15.3	16.4
	Fixed capital formation	36.0	44.0	42.1
	External balance	4.1	2.9	1.8
India	Household consumption	60.8	56.5	59.4
	Government consumption	11.0	10.8	10.9
	Fixed capital formation	29.8	32.5	28.2
	External balance	-1.9	-4.9	-2.7

Source World Bank World Development Indicators

In the initial years after the GFC the imbalance in the demand structure increased in China as the share of household consumption fell and the share of GFCF increased (Table 6). However, the external surplus decreased, contributing a negative amount to growth in this period. The next period saw rebalancing as the share of consumption, both personal and government increased and the share of GFCF fell. The external surplus saw further adjustment as fell to only 1.8 percent of GDP.

There were only minor changes in the demand structure in India. The only significant change in the second period, 2016-19, from the years after the crisis is a decline in the share of GFCF and also in the external deficit. It is not clear that the fall in the share of GFCF is in the right direction if the economy is to grow at a rate needed to further reduce poverty levels and achieve other goals enunciated in the Sustainable Development Goals.

Conclusions

The Chinese and Indian economies had very similar paths after their reforms starting in 1979 and 1991 respectively. They also followed very similar policies to counter the effects of the 2008 crisis. Monetary policy, which had been contractionary to counter the inflationary pressures at the start of the crisis, was quickly reversed to tackle the deflationary pressures emanating from the world economic downturn. Fiscal policy also was expansionary more so in China which had more fiscal space.

These policies had long run effects that resulted later in divergent growth paths. The immediate effect was a quick economic recovery. Subsequently, the growth rate has tended to decline, consistently in China whereas in India it is difficult to disentangle the longer run trends from cyclical features. The changes in economic structure have been more in China than in India. In both economies the share of exports, both goods and services, in GDP declined, more in China than in India. The share of manufacturing output exported has declined sharply in China so that it is now lower than in India. Also the import content of manufactured declined in China whereas it increased in India. However, the sectoral composition of exports of manufactures did not change very significantly in either country. In contrast, the industrial structure changed considerably in China unlike in India, suggesting that the newer industries were less export oriented at least at this stage.

The changes in share of exports and in the manufacturing sector suggest that there seems a beginning of the correction of the structural imbalances in the Chinese economy. The increase in the share of services and decline in the share of manufacturing implies that the production structure is becoming less unbalanced. There is also less dependence on exports. However, the share of capital formation in GDP had increased still further so that consumption remains low. Also, the efficiency of this increased investment may be questionable as growth of GDP has declined leading to a much higher ICOR.

The decline in the share of investment and of exports in India raises questions of what will provide the demand impulse for growth. Also, the decline in investment raises doubts about increases in the supply potential.

References

- Agarwal Manmohan and John Whalley. 2015. 'China and India: Reforms and the Response-How Differently have the Economies Behaved' in Manmohan Agarwal and John Whalley (ed.) *India and China : Comparative Experience and Prospects*, Singapore: World Scientific.
- Cai, F. 2015. 'Haste makes waste: Policy options facing China after reaching the Lewis Turning Point', *China & World Economy*, Vol. 23, No. 1, 1–20.
- D.C. Lynch .2015. 'China's futures: PRC Elites debate Economics, Politics and Foreign Policy'. Stanford: Stanford University Press
- G20 (2009) Communique, accessed at https://www.imf.org/external/np/sec/pr/2009/pdf/g20_040209.pdf.
- Justin Yifu Lin. 2012. 'China and the Global Economy', in Reuven Glick and Mark M. Spiegel (eds.) *Asia's Role in the Post-Crisis Global Economy*,
- Lardy Nicholas R. 2011. 'Sustaining China's Economic Growth after the Global Financial Crisis', Peterson Institute for International Economics, Washington D.C.
- Lele Uma, Manmohan Agarwal and Sambuddha Goswami. 2018. 'Patterns of Structural Transformation and Agricultural Productivity Growth', Gokhale Institute of Politics and Economics.
- Matthew Joseph Senior.2009. 'Global Financial Crisis: How was India Impacted?', paper presented at *InWENT-DIE Conference on Global Financial Governance – Challenges and Regional Responses*, 3-4 September, 2009 in Berlin, Germany, https://www.diegdi.de/fileadmin/migrated/content/uploads/Global_Financial_Crisis_and_Impact_on_India_Berlin030909.pdf
- Overholt, William H. 2010. 'China in the Global Financial Crisis: Rising Influence, Rising Challenges', *The Washington Quarterly*, 33:1, 21-34.
- Pingyao, Lai. 2015. 'Growth Slowdown in China since 2008: Will There Be a Hard Landing in the Near Future?', *China & World Economy*, Vol. 23, No. 3, 42–58.
- Rajiv Kumar and Dony Alex. 2009. 'The Great Recession and the Collapse of India's exports', 27 November, *Vox EU*, <https://voxeu.org/article/great-recession-and-india-s-trade-collapse>

Rodrik Dani. 2015. 'Premature Deindustrialisation', Working Paper NBER 20935, National Bureau of Economic Research, Cambridge, Mass.

Susan M. Collins, B. P. Bosworth and D. Rodrik. 1996. 'Economic growth in East Asia: Accumulation versus assimilation', *Brookings Papers on Economic Activity*, Vol. 1996, No. 2, 135–203.

Wong, Christine. 2011. 'The Fiscal Stimulus Programme and Public Governance Issues in China', *OECD Journal on Budgeting*, Vol. 11/3. <http://dx.doi.org/10.1787/budget-11-5kg3nhljqrjl>

2009. 'Reserve Bank of India Annual Report 2008-09' Reserve Bank of India, Mumbai.

2010. 'Reserve Bank of India Annual Report 2009-10', Reserve Bank of India, Mumbai.

2011. 'Reserve Bank of India Annual Report 2010-11', Reserve Bank of India, Mumbai.

2012. 'Reserve Bank of India Annual Report 2011-12', Reserve Bank of India, Mumbai.

2009. 'Global Economic Prospects', World Bank, Washington D.C.

2010. 'Global Economic Prospects', World Bank, Washington D.C.

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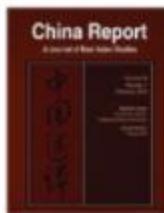


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China Report is brought out by Sage Publications Ltd, New Delhi.

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