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Global Economics Paper No: 109

India: Realizing BRICs Potential

- A highlight of our October 2003 BRICs report was the remarkable—and largely underappreciated—growth potential for India. India could be a bigger growth story than China over the long run.
- Fundamental changes in the economy support India's ability to meet our BRICs projections. India's services-led growth strategy, a departure from Asia's traditional manufacturing-led model for growth, is benefiting from both domestic and global demand. Globally competitive firms are emerging from the country's historically protected private sector, and broad-based reform is fostering infrastructure development and greater openness.
- India lags the other BRICs in levels of openness, basic education and infrastructure, meaning that it has work to do to make the BRICS projections a reality. If the country can strengthen these conditions, India may well realize its potential as the sleeper success story of the BRICs.

Many thanks to Jim O'Neill, Sun-Bae Kim, Sandra Lawson, Julio Quinteros and Dominic Wilson at GS, and Kulin Asher, Tabassum Inamdar, Ankit Kesarwani and Alroy Lobo at Kotak Securities for their contributions to this paper.

Roopa Purushothaman

14th April 2004

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SUMMARY

- One highlight of our October 2003 BRICs report was the remarkable—and largely underappreciated—growth potential for India. India could be a bigger growth story than China over the long run. Fundamental changes in the economy and its governance support India's ability to meet our BRICs projections. India's service-led growth strategy is benefiting from both domestic and global demand. Globally competitive firms are emerging from the country's historically protected private sector, and broad-based reform is fostering infrastructure development and greater openness.

- In this paper, we discuss India's progress on key macro and structural fundamentals, highlighting progress made to date as well as further challenges that still need to be addressed. India's macro policy consists of conservative monetary and FX policy to partially compensate for India's loose fiscal policy. The fiscal deficit, at 10% of GDP, is the main challenge for macro policy management. This large deficit hampers growth by diverting much needed funds for infrastructure, health and education to interest payments. Progress on privatizations and divestitures would ease the deficit significantly, but the process is slow.

- Infrastructure and education are two crucial structural conditions to keep India on a steady growth path, given India's tilt towards service-sector activities. Looking at our BRICs model, if India could match China in the quality of its infrastructure and education, growth rates over the next five years could jump from an average of 6.1% to 8.1%, hitting the government's target of 8% growth.

- The country has witnessed well-known success in tertiary education on the back of public investment in higher education. But at the broader level, encompassing primary and secondary education, India lags the rest of the BRICs. Similarly, on most infrastructure indicators, India does not—and historically has not—measured up to other developing countries. Making progress in infrastructure is one of the hallmarks of the present government's 'India Shining' campaign. Reform in key sectors for services such as power and telecom bode well for sustained services growth momentum.

- We follow with an overview of India's services-led growth model, which is a sharp change from the manufacturing-led growth seen historically across much of Asia. India's IT sector has caught the world's attention, but at 3% of GDP it is just one part of a general services story, with the services sector making up 56% of GDP from 35% of GDP in the early 1960s. While services strength bodes well for productivity gains and lends expansionary growth potential to agriculture and particularly manufacturing, the limited amount of job creation stemming from services will remain a challenge for the labor market.

- We close with a look forward at whether India can become 'the next China'. Both China and India have witnessed strong growth over the past decade; both have large labor pools; and both countries have large diasporas to contribute to economic development. However, the economic orientation of the two countries represents two different approaches to development, one manufacturing-led and the other services-led. Moreover, India and China are at completely different places in their approaches to investment and openness. India is about 10-15 years behind China in the reform process, suggesting that better growth is yet to come.

- With still much scope for reform, India's healthy progress in liberalization; private sector-led development; and newly established political support for economic and structural reforms suggest that India could be setting up the necessary conditions to support the type of long-term growth path we project. If these conditions continue to strengthen, India may well realize its potential as the sleeper success story of the BRICs.

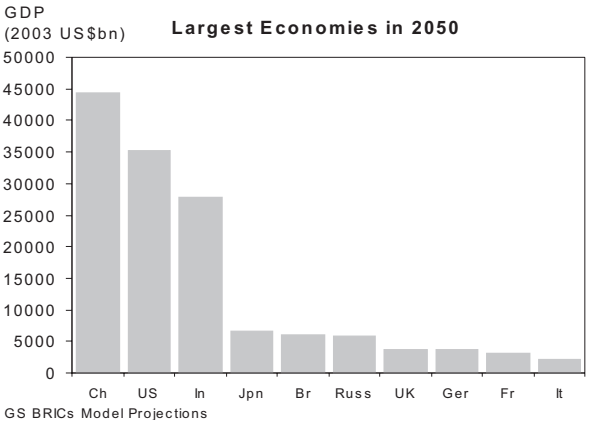
Last October, in *Dreaming With BRICs: The Path to 2050*[1], we laid out growth paths for today's largest emerging markets: Brazil, Russia, India and China (BRICs). We painted a broad picture of relative shifts in global economic power over the next half-century and suggested a dramatic change in the world economy, with China and India becoming the world's first and third largest economies respectively by roughly 2040.

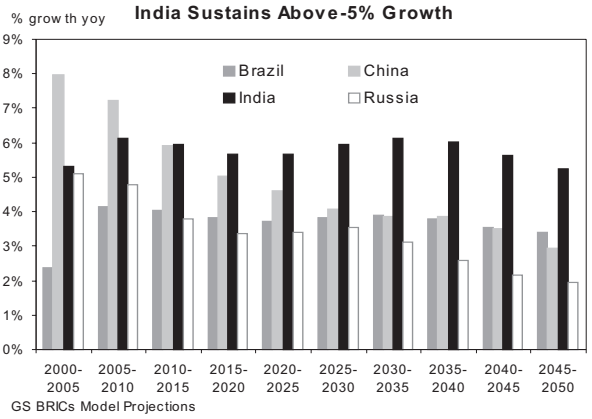
One highlight of our findings was the remarkable—and largely underappreciated—growth potential for India. While investors and corporations have focused intensively on China, India could potentially be a bigger growth story over the long run. Under our projections:

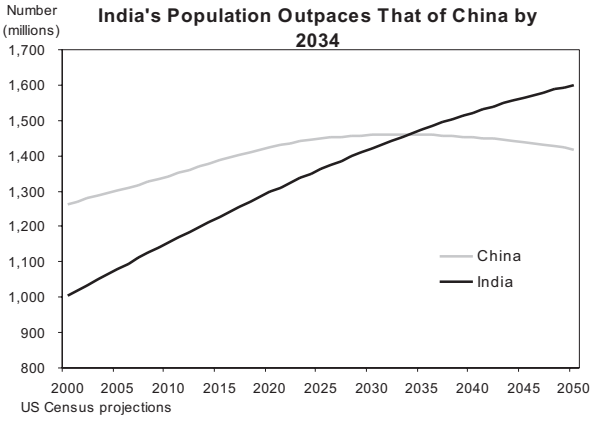
- India becomes one of the world's three largest economies in less than 30 years;
- It is the only BRICs economy to sustain above-5% growth throughout the next 45 years;
- India has the only population in the BRICs that continues to grow throughout the period. The country's population will overtake that of China in 2034;
- Income per capita in 2050 increases by 35 times current levels;
- Still, India's income per capita will be significantly lower than the other BRICs as well as today's G6.

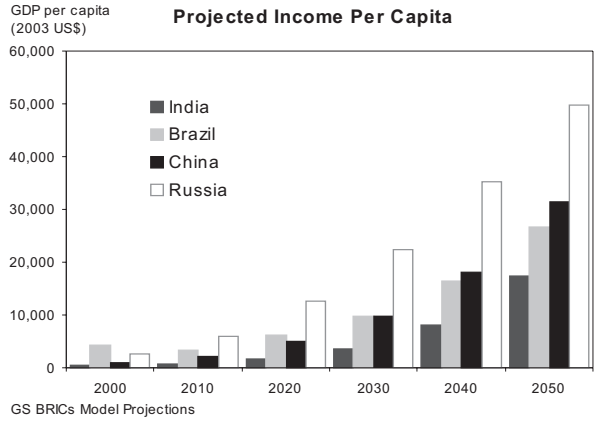
Two main factors underlie India's sustained growth potential: the scope for it to 'catch up' with developed economies and its very favorable demographics. These factors are of course not new, and India bulls have been disappointed in the past. Indeed, our own back test of the BRICs projections showed that India undershot its potential between 1960 and 2000, largely on the back of disappointing productivity growth. What has changed to account for our optimism now?

We think fundamental changes in the economy and its governance, as well as in the world economy, support India's ability to meet our BRICs projections. India's service-led growth strategy is benefiting from both









1 *Dreaming With BRICs: The Path to 2050*, Goldman Sachs Global Economics Paper 99, October 2003.

domestic and global demand. Globally competitive firms are emerging from the country's historically protected private sector, and broad-based reform is fostering infrastructure development and greater openness.

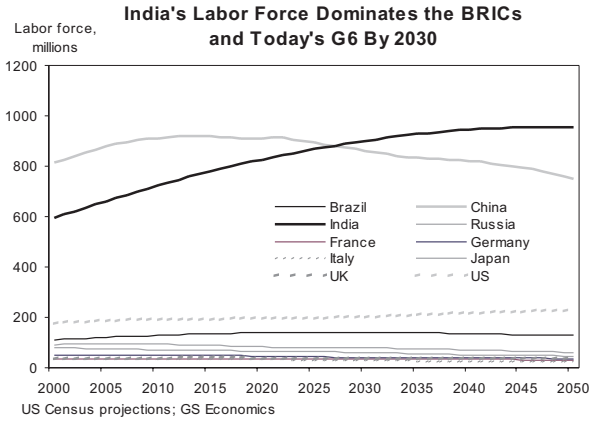
India is often characterized as a country of contradictions. This idea is exemplified by the popular phrase that India accounts for close to a third of the world's software engineers and a quarter of the world's undernourished. Below we discuss India's progress on key macro and structural fundamentals, highlighting this duality: for every positive development, a host of significant challenges within the same areas still need to be addressed.

Following this, we take a closer look at industry dynamics , focusing on the benefits of and challenges to India's services-led growth model, which is a sharp change from the manufacturing-led growth seen historically across much of Asia. For India to continue on this path, it must make further steps towards improving education and infrastructure. After considering these key features of the Indian economy, we close with a look forward. Can India become 'the next China'? India is about 10-15 years behind China in the reform process, suggesting that better growth is yet to come.

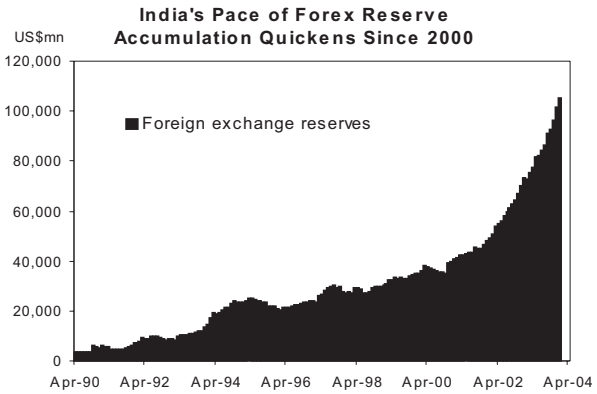
Separating Reality from Hype

Market interest in the world's fourth largest economy (in PPP terms) has gathered striking momentum on the back of strong signals from India over the past year. Much of the interest stems from recent developments such as India's strength in IT services, cyclical factors like the effects on demand of a fruitful 2003 monsoon, and the growth of India's record forex reserves, $110 billion at last count and rising. The benchmark Sensex equity index rose by 72% over 2003, outpacing equity markets across most of Asia.

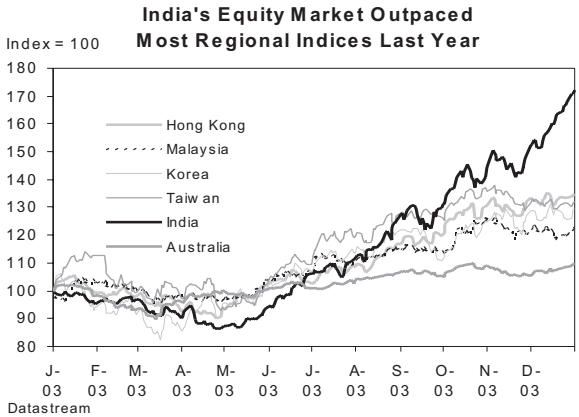
These recent developments are encouraging, but more important is the story of improving growth over a sustained period. India's pace of reform, and the pace of growth, has been slower—at times painfully slower—than the likes of China, but it is occurring steadily nonetheless. Taking a smoothed average,



US Census projections; GS Economics



Reserve Bank of India



Datastream

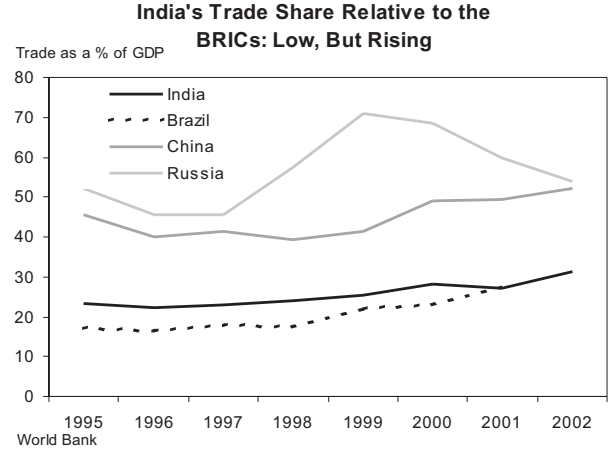
CMIE, Planning Commission (GOI)

India's GDP growth has remained above 5% from the early 1990s, indicating a marked improvement in performance over the past decade compared to the period between the mid-1960s and the mid-1980s. And growth is taking place in an environment of low inflation and low interest rates, coupled with a balanced current account.

Our BRICs estimate of 5.9% average growth through 2010 is more conservative than the government's target of 8% growth over the Tenth Plan period (2002-2007). But both figures are in line with rates of growth seen across the region during the development process. Through the 1960s, Japan saw an average growth rate of 10.5%. Korea experienced 9.3% growth from the late 1960s through the 1970s. Malaysia, Taiwan, Korea and Singapore realized growth ranging from 8.4%-9.3% on average from the late 1980s through the mid-1990s. And most recently, China's growth averaged 9.8% through the 1990s.

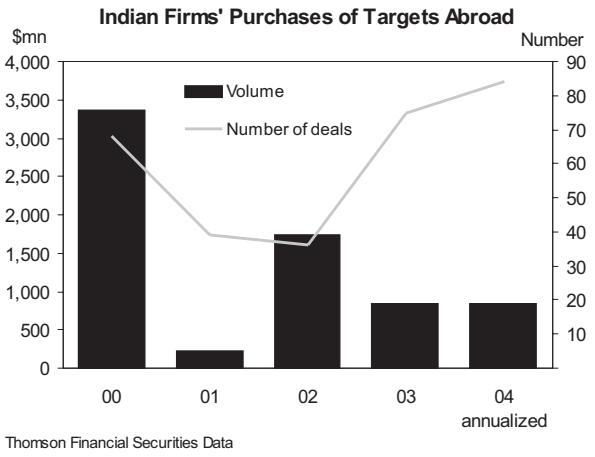
In order to experience the long-term growth path we envisage, it is crucial that India, like the other BRICs, maintains steady progress in strengthening the conditions for growth that we laid out in the paper last fall. Chief among these are openness to trade and investment, sound macroeconomic policies, strong institutions and infrastructure, and high education levels. These conditions provide the key to delivering the kind of sustained higher productivity growth that has eluded India in the past.

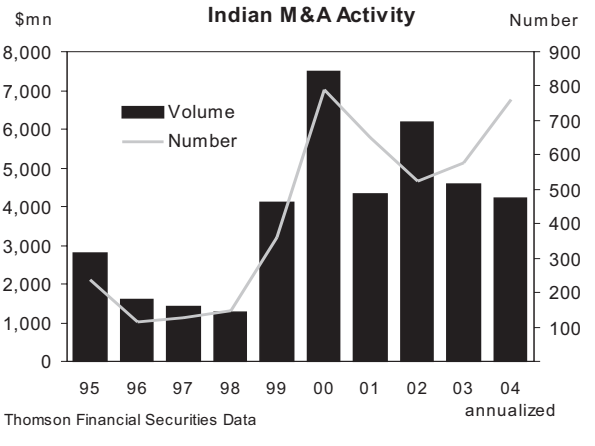
Each of the BRICs faces its own challenges in strengthening the conditions for growth. India is starting from a low base, and maintaining reform momentum will be key over the long term. India lags China and Russia in levels of openness, basic education and physical infrastructure, leading us to caution that India has work to do to build the foundation for realizing its long-term potential. But as we set out below, in each of these critical areas there are signs that things have been changing for the better, sugesting that India has an opportunity to achieve the productivity growth that would allow it to meet the BRICs projections. We address each of these areas in turn, before focusing on the crucial role of the services sector in India's development path.



Openness and Institutional Progress Led by the Private Sector

Dismantling the 'License Raj'. We see openness as a core condition for growth, which will allow the BRICs access to imported inputs, new technology and larger markets. India's economy is less open than most of the other BRICs: trade amounts to 31% of GDP in India, but 52% in China. Nonetheless, India is making encouraging moves towards more





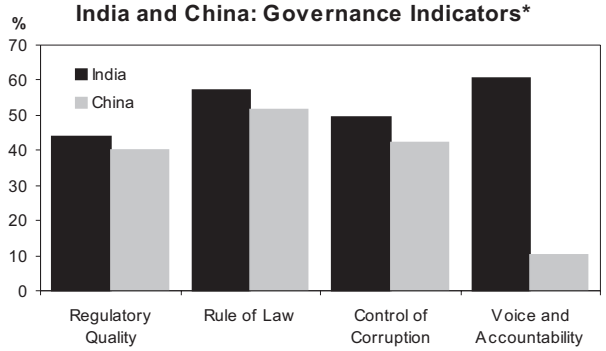
openness. Trade has roughly doubled to 31% of GDP from 15% in 1980.

Until the early 1990s, growth in the private sector was hampered by the license raj—the system of industrial licensing, price controls, selected credit allocation and capital controls. This had been gradually dismantled since the early 1990s, setting the stage for growth in the external sector. Average weighted customs duties have been reduced significantly to 30% from 87% in 1991, and tax incentives to exports are gradually being phased out.

Alongside liberalization, one of the most exciting developments in India is private sector initiative. Globally competitive services firms, particularly in software and IT services, are raising the bar for internationally competitive products and strong corporate governance. Increased confidence has led top Indian companies in both the manufacturing and services sectors to join the global scene, seeking markets—and M&A targets—abroad. 2003 saw 75 cross-border M&A acquisitions by Indian firms, up from 36 deals in 2002.

Reforms in this area are a good example of progress in opening up the economy: previous ceilings on investment abroad by Indians have been removed, and firms will be able to raise foreign loans abroad to fund overseas mergers and acquisitions. Corporate governance has gained increased attention in India, and accounting standards have become more stringent.

At the same time, capital markets are expanding rapidly. Daily traded volumes average about $1.5 billion per day in the cash market and about $2 billion per day in the derivatives market. This compares with $0.7 billion per day and $0.6 billion per day just a year ago.



Source: World Bank Governance Indicators 2002

* The above chart depicts the percentile rank on each governance indicator. Percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error).

Despite inefficiencies, India has the institutional building blocks in place to sustain growth in the private sector: a functioning independent judiciary, stronger property rights than in the rest of the BRICs, and public efforts to support market competition. For example, India has a quasi-judicial body to address antitrust issues (the Competition Commission of India), whereas China lacks a counterpart. India ranks higher than China on a number of governance indicators, including regulatory quality, rule of law and control of corruption, according to the World Bank.

Cutting Through the Red-Tape Blues. India still needs to make significant strides in building an efficient administrative bureaucracy in order to support private entrepreneurship. Work done by the World Bank shows that it takes 88 days to start a business in India, twice the regional average. While the number of procedures required to start a business is higher than in other regional economies, it also takes almost twice as long to close a business in India than the regional average of 5.4 years. India has more regulation than others in the region regarding conditions of employment and labor market flexibility.

Macro Policy: Prudent Monetary and FX Policy Counter Daunting Fiscal Challenges

An unstable macro environment can hamper long-term growth by distorting prices and incentives. A key focus for macro policy is price stability, achieved through fiscal deficit reduction, tighter monetary policy and exchange-rate realignment. India's conservative monetary and exchange rate policies can be seen as attempts to partially compensate for India's loose fiscal policy, which is the main challenge in India's macroeconomic policy management.

Monetary Policy. India's central bank, the Reserve Bank of India (RBI), states that its objective is "…to

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India's Interest Rates at Historically Low Levels							
% per annum					2003		2004
	1990-91	2000-01	2001-02	2002-03	November	December	January
Bank Rate	10.0	7.0	6.5	6.3	6.0	6.0	6.0
364 Day T-Bill	--	9.8	7.2	5.9	4.4	4.3	4.4
10-year Government Bond Yield	--	11.0	8.7	6.8	5.7	5.2	5.2

regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage." In the absence of an explicit inflation target, the major objectives of monetary policy in India have been maintaining price stability and ensuring an adequate flow of credit to the economy.

Compared to other developing countries, India has been able to maintain a moderate level of inflation. Inflation rates have mostly remained below 10%. Spikes into the double-digits have mainly been the result of supply shocks through rises in agricultural commodity prices or oil prices. Interest rates in India have been constantly falling for the past several years and the bank rate—the key policy signaling rate—is at a historically low level of 6%.

The Reserve Bank's current policy focus is management of the external sector. The RBI is optimistic about growth, and its recent statements can be read to indicate that the risks to its forecasts have shifted towards inflation, especially on the back of higher oil prices.

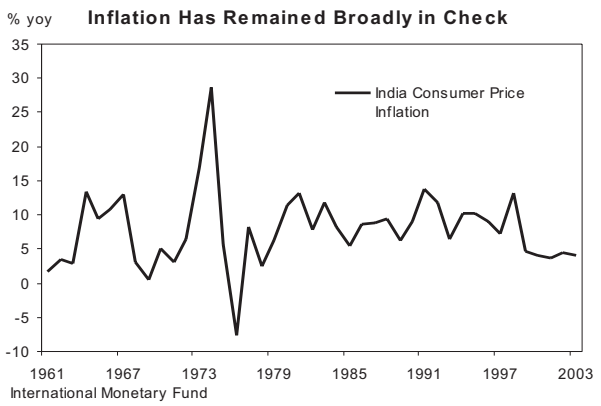
FX Policy. Last year, the IMF reported that India's FX policies are in line with global best practices. India's FX reserves position, rising to $110 billion from $1 billion in 1991, is an important buffer for crisis prevention, which provides confidence to the markets and protects against exchange rate volatility.

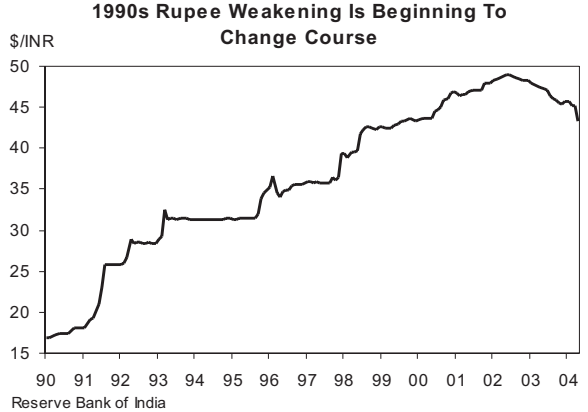
The RBI does not have a target or a range for the exchange rate, but important objectives include intervention in the currency market to contain volatility. Liquidity is also an important consideration in reserve management: India intervenes in the market to even out demand or supply imbalances, preventing destabilizing speculation.

The currency has been managed so that it depreciated nominally by roughly 6.5% a year on average through the 1990s. Over the past year, the rupee has reversed its path and appreciated by 5%. We expect further strengthening in the rupee. Going by recent performance, $/INR will exceed our 12 month forecast of 43.00.

Fiscal Policy. India's fiscal deficit has been running at 10% of GDP for the past six years. The government's Tenth Plan fiscal deficit target (for the years 2002-07) is a reduction of the fiscal deficit to 6.8%.

Fiscal deficits financed by borrowing increase government debt. General government debt is at 85% of GDP, with the debt of the public sector enterprises adding another 10% of GDP and contingent liabilities adding yet another 10% of GDP. These components as a share of GDP are markedly higher than they were at the start of the reform period in 1991.





Following the 1991 crisis, government financing shifted towards long-term domestic debt. Out of the central government debt, 11% is composed of external debt, leaving the rest to be made up of domestic debt. Although there is little sign of an imminent crisis given a reduction in external vulnerability, this large deficit hampers growth by diverting much needed funds for infrastructure, health and education to interest payments, now at 6.5% of GDP from 3.8% of GDP in the mid-1980s.

Progress on privatizations and divestitures would ease the deficit significantly, but the process is slow and actual divestment has historically fallen short of targets. Improving the tax revenue to GDP ratio (currently at 10% of GDP) would help reduce the burden as well. Passage of the Fiscal Responsibility and Budget Management Bill will bring structure and discipline to the budget process through targets and fiscal rules.

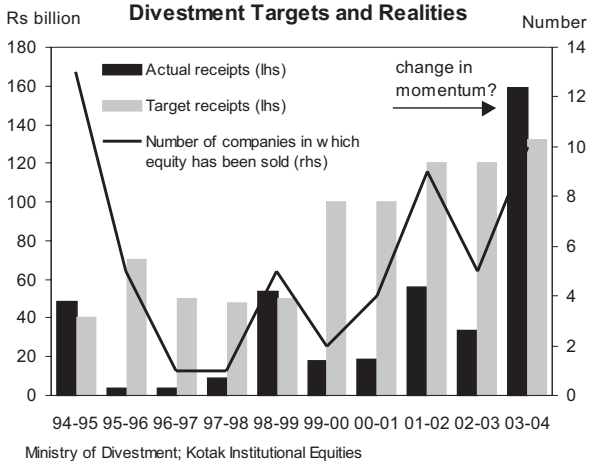
Structural Reform: India's Services Focus Calls For Education and Infrastructure Gains

Infrastructure and education are two other crucial conditions to keep India on a steady growth path. Infrastructure is a component of institutional factors that affect the efficiency of an economy much in the same way as technology does: more efficient infrastructure as part of the institutional structure allows an economy to produce the same output with fewer inputs. High education levels sustain upcoming stages of growth as the need for skilled workers grows. India's tilt towards services makes education and human capital stock critical; however, at the basic levels of education India receives low marks relative to the rest of the BRICs.

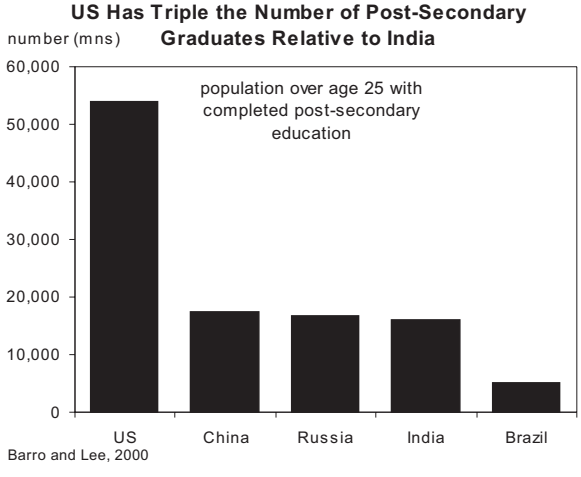
Looking at our BRICs model, if India could match China in the quality of its infrastructure and education, growth rates over the next 5 years could jump from an average of 6.1% to 8.1%, hitting the government's target of 8% growth. With improved infrastructure and education, India could see US$GDP per capita in 2025 rise to $4,200, almost double our current projections for India's 2025 income per capita.

Broadening Education. While India's demographics are a beneficial driving factor behind our long-term growth projections, the demands of a growing workforce will also fuel the need to fund education more effectively. As India continues down a path of services-led growth, investment in human capital will become key. The country has witnessed well-known success in tertiary education on the back of public investment in higher education. India's supply of engineers and knowledge workers has been an advantage for services activities. On the back of a steady flow of technical graduates, India should easily be able to absorb demand coming from the domestic market as well as from the export market over the next decade (see box on p.14).

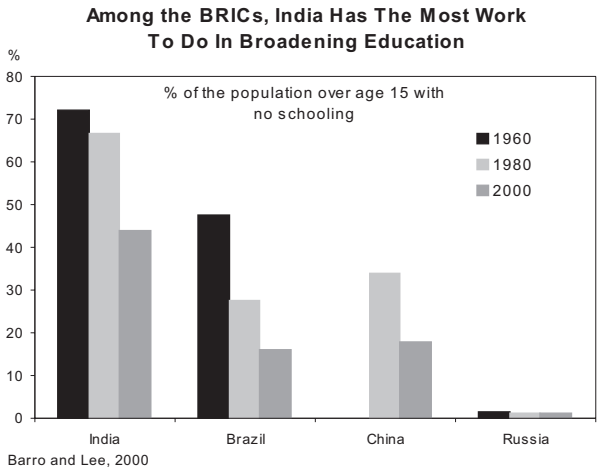
Looking at the pool of post-secondary graduates, the US population over age 25 with post-secondary education is just over three times as large as India's. India's, China's and Russia's stock of tertiary-level educated population is about the same with India at

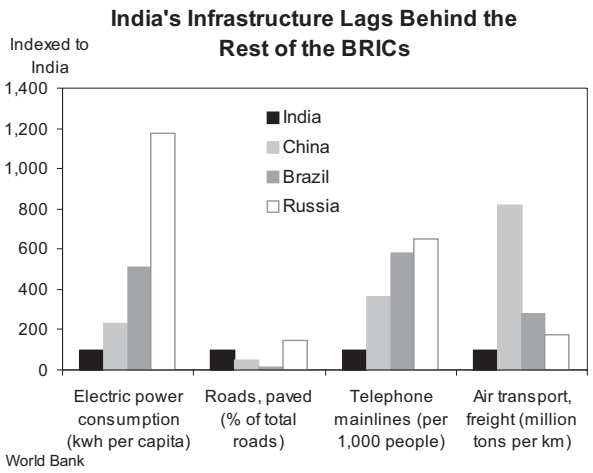


Ministry of Divestment; Kotak Institutional Equities



Barro and Lee, 2000





16.1 million, Russia at 16.8 million and China at 17.5 million.[2]

At a broader level, India's low levels of education, particularly at the secondary level, are a major obstacle to achieving long-term growth potential. As of 2000, the proportion of the population over the age of 15 with no schooling was 44% (down from 72% in 1960), compared with 18% for China, 1% for Russia and 16% for Brazil. According to UNESCO, in 2000-2001, only half of the children who enter primary school in India reach class five, mainly because of inadequate public funding. The dropout rate is 53%, the poorest in South and East Asia.

Spinning the Infrastructure Bottlenecks. On most infrastructure indicators, India does not—and historically has not—measured up to other developing countries. This has been a longstanding feature of India's economy. Looking at many of the basic infrastructure indicators, India scores below the rest of the BRICs. For example, cargo transit time to the US from China is 2-3 weeks against 8-12 weeks from India.

India's road network may be among the most extensive in the world—much higher than that of China or Brazil—but the reality is that the quality needs to be substantially upgraded and connections between the major centers as well as crucially rural-urban connections need to be improved. Economic losses from congestion and poor roads are estimated to be as high as $4-6 billion a year.[3]

Progress in infrastructure is one of the hallmarks of the present government's 'India Shining' campaign. Road building plans, the most visible part of India's infrastructure story, include the completion of the Golden Quadrilateral, which will connect the four urban centers of Delhi, Mumbai, Chennai and Kolkata. Other ambitious roads projects are scheduled to be completed by 2008. The ability to carry out this effort is still up to debate, but it is the only infrastructure project ahead of schedule. If completed, this will amount to more kilometers being built than has been built since Independence. For detail on infrastructure momentum in other sectors, see the table on p.10.

Different Growth Models Call for Different Infrastructure Measures

For Asia to carve out a place in the manufacturing process, physical and logistical infrastructure were crucial. And this is still important for the Indian economy. However, the provision of services is much more dependent on electrical power supply and communication infrastructure, and less reliant on physical transportation infrastructure.

In the power sector, fundamental problems affect the channels of generation, transmission and distribution. Energy demand shortages have been around 8% and 12% on average between 2000 and 2003. The power sector has largely been in the hands of state electricity boards (SEBs), and losses made

2 For data on human capital stock, see *International Data on Educational Attainment: Updates and Implications* by Robert Barro and Jong-Wha Lee, Harvard Center for International Development Working Paper 42, April 2000.

Infrastructure Momentum				
Project	**Investment (US$ bn)**	**Period**	**Comments**	**Funding**
Port upgradation	1.6		Upgradation of Navi Mumbai and Cochi ports User charges and additional revenues flowing in to cover debt service obligations	Government to contribute a part of the initial commitment
Sagar Mala Project	22	8-10 years	a) Modernization of existing ports; b) Setting up of new ports; and c) Connecting all ports to the GQ and NSEW 50% of investment for ports, 25% for shipping, the remainder for inland waterways, coastal shipping etc. Phase 1 from Mar 2004 at an investment of $1.6 billion	
River linking project	122	10-12 years	To resolve the problem of drought in rain-deficient areas, generation of hydro power and effective use of rain water	
Railways	3.3	5 years	Removing capacity bottlenecks and strengthening railway network $1.7 billion towards strengthening the GQ and NSEW corridors to increase reach of railways $660 million towards strengthening connectivity to ports $760 million to build four mega bridges	$660 million Government of India equity, $1.1 billion debt
Airports	0.8		Modernization of Mumbai and Delhi airports 2 separate companies to be formed with initial equity participation from AAI Management to be leased out post-completion	Government to contribute part of initial commitment

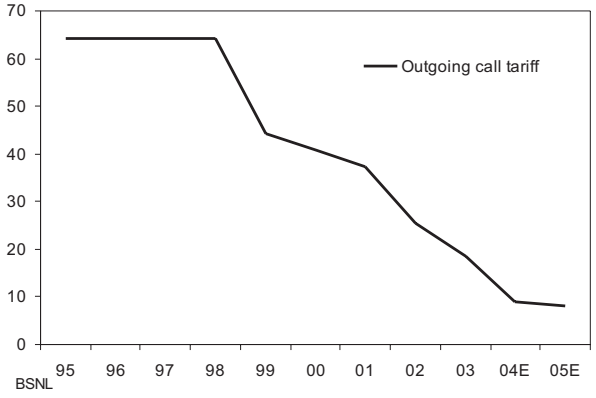
Union Budget 2004; Media; NHAI; Kotak Institutional Equities

by SEBs contribute to India's fiscal deficit challenges. However, the power sector is witnessing significant change on the back of reform. The power sector could see $46 billion investment during 2002-2007, translating into 91% growth against the previous 5-year period, when investments fell short.[4]

The services sector is also an important user of information and communications technologies. India's communication services, as a subsector of services itself, registered growth of 14% a year during the 1990s, and made a significant contribution to services growth. Growth in communication was mostly due to telecom, which accounted for 80% of output and grew at 17% a year on average during the 1990s.

The opening up of the telecom sector and the rapid increase in the use of fixed-line and mobile phones contributed to a dramatic drop in telecom costs. For example, the cost of local telephone calls fell by over 60% during the 1990s. International outgoing call tariffs plunged by 71% from 1995 to 2003. Meanwhile, the cellular subscriber base rose by 75% during the same period. Although there is still more that needs to be done, arguably the drop in costs and the growing availability of fixed line and mobile communications spurred growth in the IT services sector and will continue to support overall services growth.

International Call Tariffs Have Dropped Dramatically



3 For more information, see *The Infastructure Challenge in India*, by Louis de Jonghe, paper contribution in the India Resident Mission for the J.R.D. Tata Special Commemorative Volume released by ASSOCHAM, August 2003.

4 See *India Strategy: Great Story, Finely Priced*, Kotak Institutional Equities, January 2004.

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Improving education and infrastructure will be crucial to increase the pie of service sector activities that dominates the Indian economy. The demand for skilled labor in services call for a growing base of education, while improvements in communications connectivity and accessibility can remove impediments on the spread of services growth.

Cruising Past Manufacturing

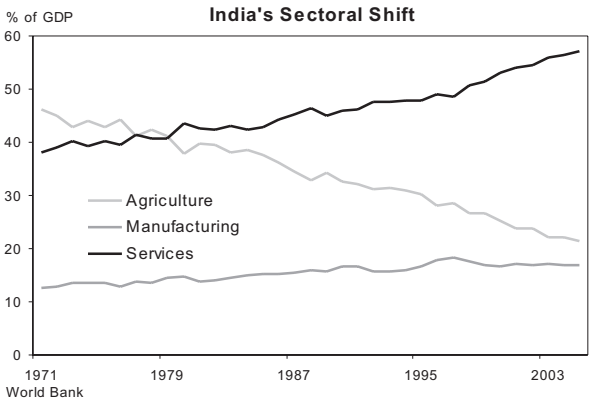
Our above discussion of the conditions for India's growth makes many references to India's strength in the services sector. Below, we tie in India's sectoral composition to the larger picture to see how these conditions can support economic development on the ground.

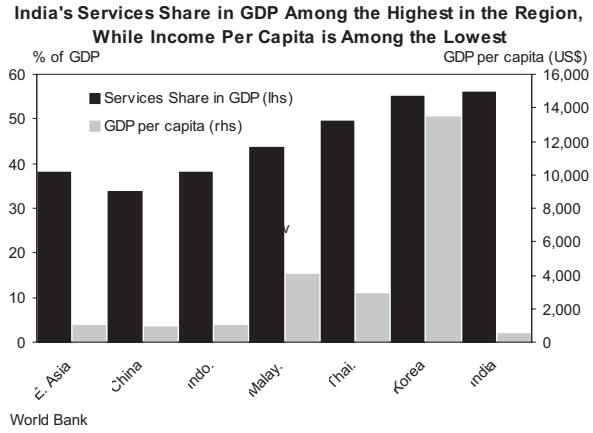
At the sector level, India is taking a different path to reaching its growth potential relative to much of the region. Traditionally, the move into services happens after an economy moves through a phase of manufacturing-led growth. This was the pattern that occurred in much of East Asia, led by Japan, Korea and Taiwan over the past 50 years, with China as the most recent example.

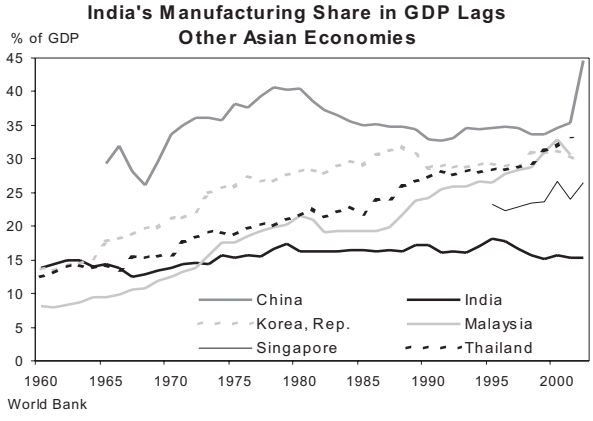
The shifting composition of the Indian economy towards the services sector highlights a departure from the manufacturing-led model for growth seen across most of Asia in recent history. India's services sector, led by strength in IT services, is considered by many to be the economy's engine of growth. The country has experienced a large sectoral transformation in its economy over a relatively short period of time. Services, at 35% of the economy in the early 1960s, now make up 56% of GDP.

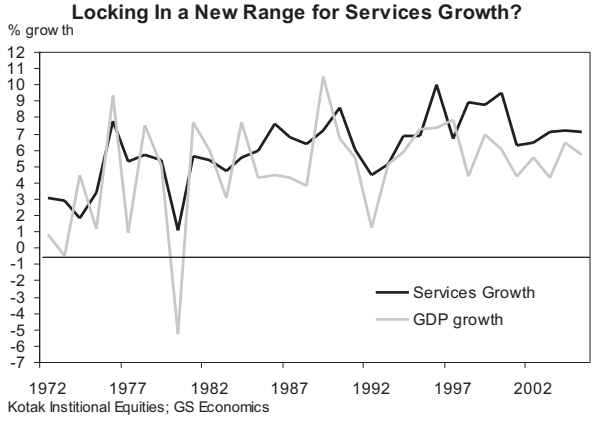
What Makes Up India's Services?

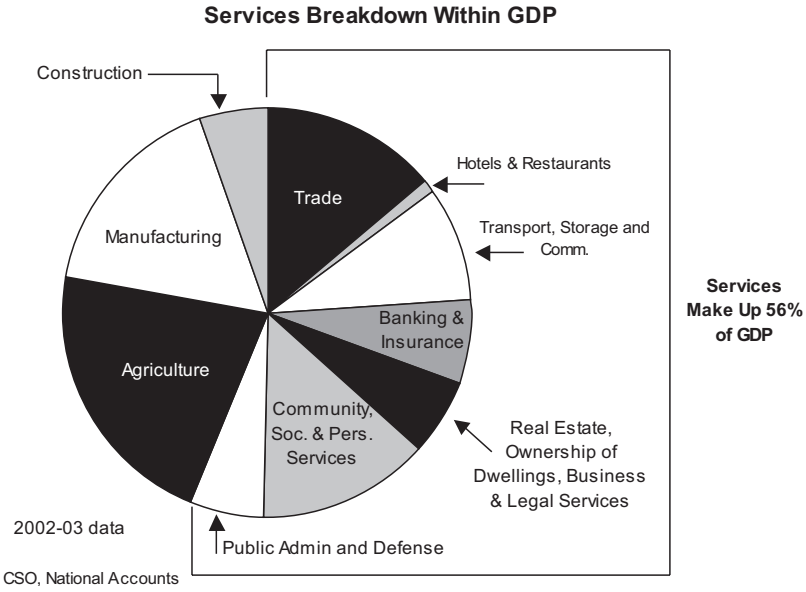
India's dynamic IT services sector is only one part of a broader growth story in the Indian services sector. Trade and distribution services followed by community, social and personal services are the largest components of services. Banking and insurance along with public administration and defence are the other major subsectors within services.











Business services—the component that embodies services in the IT sector—has shown the fastest growth of any of the services sub-sectors in recent years. Throughout the 1990s, business services grew on average by 20%, but it started from a low base (composing only 1% of services during this time).[5] Beyond IT services, growth in the other major services subsectors, along with communications, have been impressive. Communication grew by 22% in 2002-2003 while banking and insurance grew at 12%.

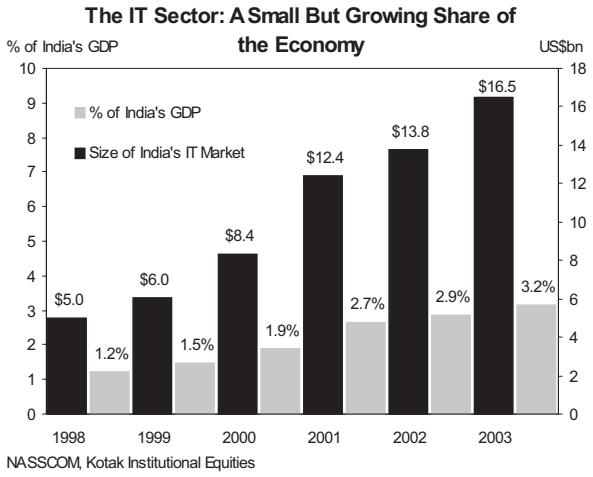
IT May Be Small, But Growing

India's IT sector has caught the world's attention, but it is in fact only a tiny component of India's economy. It is the growth potential in the broader IT sector that is considerably more exciting than looking at the current presence of IT in the economy. The IT sector is only 3% of India's GDP, but is slated to account for 8-10% of India's GDP by 2008.

Set against a backdrop of liberalization during a period of global growth in demand for IT services coupled with a global IT skill shortage, India's IT services exports benefited from a comparative advantage in knowledge workers with a specific set of software and language skills. A generally 'hands-off' policy by the government with respect to the software sector, along with encouragement of private investment in services infrastructure, sustained high growth in the sector.

India may have missed the wave of labor-intensive manufactured exports that contributed to growth across much of East Asia, but it may now be able to create a parallel process with labor-intensive software and IT services. The ongoing fragmentation of manufacturing and of services, coupled with developments in telecommunications and information technology, has made what used to be 'nontradable' now 'tradable'.

In contrast to the foundations needed for a manufacturing expansion, an extensive industrial



5 See *Understanding India's Services Revolution,* Jim Gordan and Poonam Gupta, IMF Paper, November 2003.

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base is not required for India's specialization in services. India's supply of engineers and knowledge workers; English-speaking population; and concurrent deregulation and liberalization in the communications sector—dramatically reducing the cost of communication and fostering the development of a communications infrastructure—allows India to take advantage of the increased demand for services, both domestically and through external demand.

Services overall have grown at a rate above 6% since 1994. In contrast, manufacturing's presence in GDP has remained virtually unchanged since 1970. Manufacturing has grown to become only 22% of GDP from 15% in the early 1960s. The manufacturing sector has never taken the lead in growth—hampered by heavy state intervention, poor physical infrastructure and unproductive investment. Instead, the largely unregulated, 'dynamic services sector' has been taken by many to be the sustainable model for India's growth going forward. But is services really India's ticket to growth? While there are solid grounds for optimism, we also see reasons to temper the sentiment that this is a foregone conclusion.

Sector Spillovers Positive for Growth…

The IT sector can be a major driver of growth, along with other services sectors like financial services, telecommunications and transport because these sectors can fuel growth in a wide range of industries.The ability of IT to sustain innovation and promote organizational efficiencies can give the growth process an extra kick, enhancing productivity across the economy.

The services sector has strong links to manufacturing and agriculture—particularly manufacturing—which increases the potential for growth spillovers to affect other parts of the economy. If there is significant interlinkage between these sectors, there is greater scope for growth in services to have beneficial impacts on other parts of the economy.

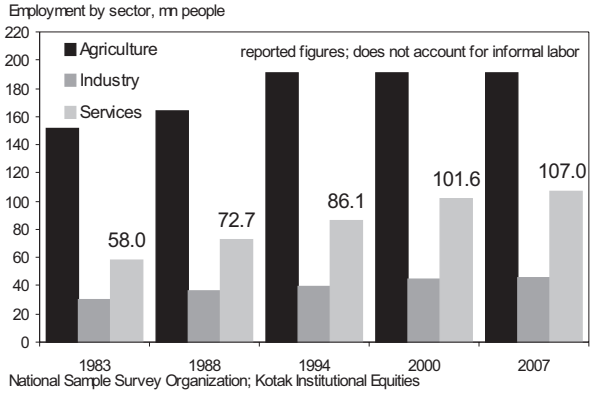
The process of breaking up manufacturing production into various steps performed in different geographical areas—which characterized growth in manufacturing exports across Asia—has moved further to include fragmenting services that were once produced in industry. For example, according to NASSCOM estimates, the manufacturing sector accounted for 12% of Indian software exports in 2002-03.

Within India, work by the Reserve Bank of India suggests that 70% of industry activities are services-intensive and 23% of services activities are industry-intensive, indicating a complementary relationship between the two.[6] Key sectors in terms of backward linkages (the promotion of production in other sectors which is used as an input into a given activity) and forward linkages (the extent to which a sector provides inputs for other sectors) are trade, transport services and other services, construction and other crops. On the back of these interlinkages, services have expansionary potential. However, the services sector is not an isolated growth engine; sustained services growth needs a growing manufacturing base too.

…But Employment Will Remain an Issue

Despite the declining presence of agriculture in India's output, the share of employment in agriculture has remained roughly unchanged at 60% of the labor force. In contrast, services have grown in output with little change in employment. This is positive from the perspective of productivity: productivity in services has improved as services

The Services Sector Will Not Solve India's Labor Market Challenges



National Sample Survey Organization; Kotak Institutional Equities

6 *Sustainability of Services and Services-Led Growth: An Input Output Exploration of the Indian Economy,* RBI Papers 2002

India and the Offshoring Debate

The offshoring of business services has taken off as an election-year issue in the US, with commentators suggesting that the shift to offshore is hollowing out the US services sector. While offshoring opportunities in other industries are emerging quickly, IT services exports are leading the offshore model.

India's IT exports are a tiny share of the global market. Despite the public focus on India's offshoring capabilities, India's software and services exports industry only make up about 2% of worldwide IT spending. Although a small player in global IT services, India's IT services exports are crucial to India's IT industry. Software and services exports already have had a profound impact on India's balance of payments, with software and services exports clocking in annual growth of 30% in 2003 and making up 32% of India's exports.

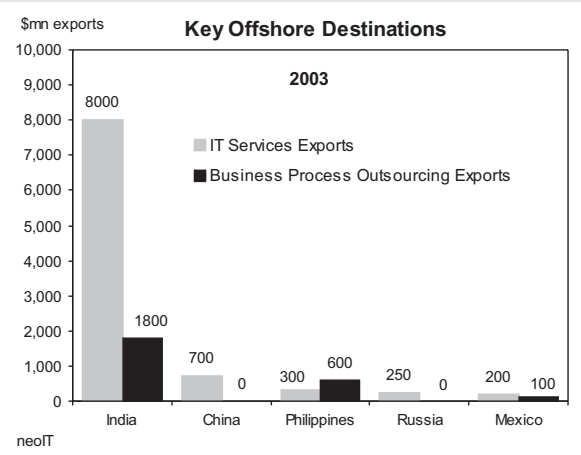
Beyond IT, offshoring opportunities exist in a number of industries including accounting, financial services, medical services and pharmaceuticals. In the pharmaceutical sector alone, offshoring opportunities could double by 2007 to roughly $50 billion.

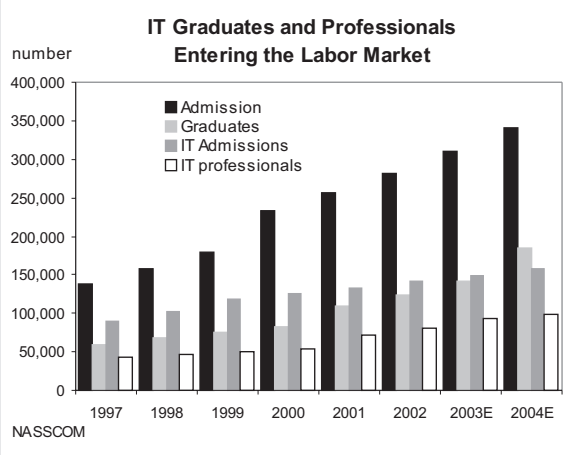
India can meet offshoring demand. India's English-speaking population and the country's steady flow of knowledge workers will keep it at an advantage over other competitors in the medium term. Roughly 7% of India's population is composed of English speakers, making it the second largest pool of English speakers in the world after the US.

India's knowledge worker population has increased to 650,000 software and services professionals currently from 6,800 in 1986. Our IT services team forecasts that the IT labor workforce could grow in size to a pool of 2 million in ten years. Estimates point out that the supply of IT professionals will outstrip demand by 48,000 in 2008, suggesting that the healthy supply of IT workers will also curb wage inflation pressures.

The potential number of jobs coming into the Indian economy is a drop in the bucket for the Indian labor pool. Employment in tech and business services is a tiny share of total employment, and still roughly 60% of the labor force is in agriculture. IT professionals make up only 0.1% of India's labor force.

A significant proportion—but not all—of the jobs offshored from the US could go to India, but offshoring is not an answer to India's broader labor sector woes, as some make it out to be. India's labor force will average 520 million people over the next ten years (from 470 million currently). Estimates of the potential number of US offshorable professional services jobs range from 3 million to 4 million over the next decade. Even if this number were doubled to consider potential offshoring jobs from other parts of the world, it would only represent 1.5% of India's labor pool.





output growth has outpaced growth in services employment, lending support to the idea that services is increasingly moving towards skilled labor.

India's experience is in stark contrast to the shift into services seen in other economies. Traditionally, an economy's large-scale shift into services is characterized by a transition in the composition of employment towards services. The change in employment dynamics usually precedes a rising services share in output.

Growth in IT—and services overall—will not result in a massive shift in employment, as has happened in other economies. India's services sector may provide some incremental job growth, but it will only be a drop in the bucket for the labor force. Services employment is expected to rise to 107 million by 2007 from 102 million currently, creating only 5 million new jobs in a roughly 500 million strong labor force. Employment in agriculture is expected to remain roughly stable at 190 million.

Also, services tend to concentrate in urban centers, potentially exacerbating the differences in income and development between the rural and urban sectors. A bias in activity and employment towards the urban sector could have significant effects on income distribution patterns, with implications for broad-based consumer market dynamics. Although we haven't seen much evidence of an urban bias in India's development experience, with 48% of services employment taking place in the rural sector and 52% of services employment occurring in urban centers, it's something to monitor.

BRICs Real GDP Growth: 5-Year Period Averages

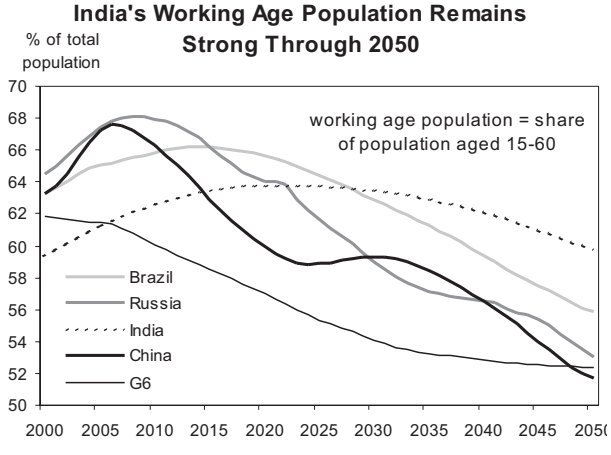
%	China	India
2000-2005	8.0	5.3
2005-2010	7.2	6.1
2010-2015	5.9	5.9
2015-2020	5.0	5.7
2020-2025	4.6	5.7
2025-2030	4.1	5.9
2030-2035	3.9	6.1
2035-2040	3.9	6.0
2040-2045	3.5	5.6
2045-2050	2.9	5.2

GS BRICs Model Projections

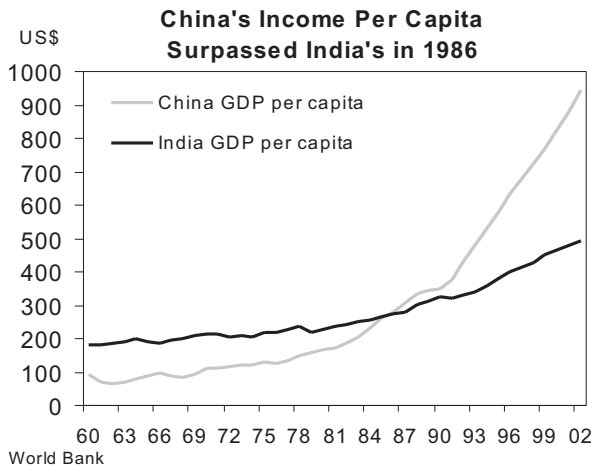
Looking Ahead: Is India Poised to be the Next China?

China and India have some important similarities. Both have experienced strong growth over the past decade, although China's growth performance has clearly outshone that of India. India and China's GDP growth has outpaced world GDP growth since 1985. The growth rates of China and India contributed 1.6% to world growth last year (China contributed 1.2% and India contributed 0.4%). And both are expected to continue growing. The table above shows the growth rates that could be seen in both countries over the long term.

Both countries also have massive labor force potential. The labor forces in China and India dwarf those of other BRICs and G6 economies, shaping the competitive advantage of labor–intensive goods and services for both economies. India's labor force is expected to overtake China's in 2028. While 66% of



US Census projections; GS Economics



World Bank

India and China: A Snapshot		
	India	China
2003 Population (billions)	1.0	1.3
2050 Population (billions)	1.6	1.4
2005 Elderly Dependency Ratio*	8.0	11.0
2050 Elderly Dependency Ratio	22.0	37.0
2003 Urban Population (% of total)	29.2	40.5
2003 Rural Population (% of total)	70.8	59.5
2003 Diaspora (millions)	20.0	55.0
2003 Gross Investment (% of GDP)	23.3	43.9
2003 Gross Savings (% of GDP)	24.2	44.3
2003 Foreign Direct Investment (US$bn)	3.6	53.5
2003 NPLs (% of GDP)**	1.3	50-55
2003 Manufacturing Exports (% of total exports)	49.7	86.0
2003 Services Exports (% of total exports)	32.3	9.7
2003 Total Public Spending on Public Infrastructure ($bn)	7.3	36.1
2003 Literacy Rate (% of population)	65.4	86.4
2000 Poverty headcount (% of population)	28.6	4.6
2000 Schooling (average number of years)	5.1	6.4
2000 Post-Secondary Education (% of population over age 25)	2.2	2.1

CEIC; World Bank; Kotak Institutional Equities; GS Economics
*The elderly dependency ratio is the ratio of the population aged 65 years or over to the population aged 15-64
**India data refers to FY2003

China's population currently falls in the productive cohort, the corresponding figure for India is 60%. However in 20 years, China's labor force will fall to 62% while India's will rise to 64%. The bulge in India and China's labor force mirror the previous demographic dynamics seen across much of East Asia that supported the process of rapid economic development in these countries.

In addition, both have strong diasporas to participate in economic development. At 20 million, the Indian diaspora is second in size only to China's 55 million and its combined income is $160 billion, or 35% of India's GDP. However, the contribution of the two communities to home-country GDP is different. China's expatriates contribute over half of China's $54 billion in FDI; in contrast, overseas Indians account for only 9% of India's FDI. Instead, overseas Indians have been active in deposits and remittances. The stock of non-resident Indian (NRI) deposits now amounts to about $28 billion. Remittances from workers overseas are also important, averaging about $7-8 billion annually.

But that's about where the broad similarities end. The economic orientation of the two countries represents two different approaches to development, one manufacturing-led and the other services-led. Moreover, India and China are at completely different places in terms of their economic structure. India can learn from China in harnessing capital and managing the transition to a more open economy. At the same time, India's strength in services and incipient moves to support home-grown private sector initiative provide good examples of more micro-level innovations to lead economic growth.[7]

Comparisons between the current economic environment of India and China are misplaced. From a point in 1986 where China's and India's per capita incomes were equal at $275, China's per capita GDP has more than tripled while India's per capita income has crawled up to $494. China's export sector is nearly six times that of India. Much of China's improvement comes on the back of the country's reform program—largely focused on the external sector—which began in earnest in 1978.

India's liberalization and reform period began about a decade later, and it is still about 10-15 years behind in the reform process (for more detail, see table on p.17). India's earlier stage of the reform process explains much of its lag behind China in areas such as openness and infrastructure described earlier.

In addition, India's coalition politics make it more complicated to push through reform than in China. With general elections coming up at the end of this month, it is likely that the current administration will stay in power, continuing the current reform momentum (see box on p.17).

7 For more information, see *Can India Overtake China?*, by Yasheng Huang & Tarun Khanna, Foreign Policy July-August 2003.

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India's Reform Track	
Industrial Policy	**Electricity Bill**
De-reservation of industries: Only 3 reserved now for public sector (defense, railways and nuclear power) from 18 earlier. Industrial licensing abolished except for environment sensitive industries.	To improve efficiency by reducing T&D losses.
MRTP Act replaced by Competition Bill.	100% metering to prevent theft.
Comments: Expected, gradual de-reservation of SSI sector.	Seeks to address the issue of cross-subsidization.
	Comments: Benefits to start accruing.
Trade Reforms	**Securitization Bill**
Import duties: Average rates brought down to 30% from 87% in 1991.	The Supreme Court recently cleared the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Ordinance, 2002.
Excise duties: Number of slabs and exemptions reduced.	*Comments: One key change is the removal of the previously mandatory 75% deposit for a borrower in case s/he appealed to the Debt Recovery Tribunal (DRT), likely delaying the settlement process.*
Comments: Average rates still significantly higher compared with other countries.	
State Related	**Privatization**
Rationalization in state sales tax rates across India.	VSNL, Balco, Maruti, CMC.
Withdrawal of fiscal incentives.	Supreme Court to decide further progress.
Comments: Expected, value added tax (VAT).	*Comments: More to come in energy sector, airlines. Supreme Court decision/Nature of the Government post elections to decide further progress*
Agriculture	**Governance**
Movement and storage controls lifted.	Minimum number of independent directors.
Comments: Marketing of produce still controlled.	Audit committee.
Labor Market Reforms	Quarterly results; Segment-wise results.
Initiated small steps.	Consolidated accounts.
Comments: Substantial progress still to come.	Stricter accounting standards, deferred taxation introduced.
Sector Specific	**Capital Market**
Telecom sector liberalized: Significant reduction in cost for consumers.	Settlement cycle reduced to T+2.
Banking Sector liberalized.	Introduction of equity derivatives market.
Insurance sector liberalized.	Abolition of badla market.

Kotak Institutional Equities

April/May Elections: The Current Administration Looks Set To Stay in Power

As campaigning ahead of the general elections enters the final lap, the country is gearing up for the world's largest democratic exercise with an electorate of roughly 675 million people. Voting will occur in five phases over different states throughout the country from 20 April to 10 May. Counting of the votes will take place on 13 May. It is unlikely that either of the two major parties will win enough seats to be able to form the central government on their own; support from party alliances will be key. All three major opinion polls indicate the ruling National Democratic Alliance (NDA)—in power since 1998 and led by the Bharatiya Janata Party (BJP)—is likely to win the majority of seats, setting the stage for another five-year term for the current administration.

While we and the market expect a continuation of a BJP-led coalition government, both of the mainstream national parties, the BJP and the Indian National Congress (INC), are pro-reform. The differences with respect to reform lie in the parties' alliances. The BJP's allies are largely pro-reform, while the more left-leaning of the Congress allies could affect the pace of reform under a Congress-led coalition.

Approaches to investment have also been historically different. Investment rates over the past decade have averaged roughly 22% in India against China's 36%. According to the OECD, China was the third largest R&D spender in the world in 2001. Though India ranked among the top ten spenders globally, it spent just a third ($19 billion in PPP terms) of China's R&D expenditure.

At 5.1% of GDP against China's 36.2% of GDP, cumulative FDI plays a much smaller role in India. For China, FDI was a key driver of the country's export-led manufacturing boom.

India has been moving in the direction of actively soliciting direct investment since the financial crisis of the early 1990s. On the back of investment policy reform (allowing up to 51 percent foreign equity in 'high-priority' sectors and the creation of export processing zones where 100% foreign ownership was allowed), the annual inflow of FDI in India ranged from two to three billion US dollars in the second half of the 1990s.

Despite the different routes to growth that the two 'economic giants' may follow according to their own relative strengths, the prospects for sustained and accelerating reform are encouraging. While there is still much scope for reform, India's healthy progress in liberalization, particularly in the services sector; the emergence of globally competitive firms from the country's historically protected private sector; broad-based political support for economic and structural reforms; and long-awaited infrastructure development suggest that India could be setting up the necessary conditions to support the type of long-term growth path we project. If these important conditions continue to strengthen, India may well realize its potential as the sleeper success story of the BRICs.

Roopa Purushothaman

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