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India: From White Collar to Blue

Summary

India has joined China as the darling of the global investor community. Much of this is well deserved since fourteen years of economic reform have genuinely transformed the economy. However, the main driver of this success has been India's educated, urban middle class. From software exports and back-office outsourcing to civil aviation and mass media, this competitive middle class has been the key to India's success. Even in manufacturing, most of the recent successes have been due to the availability of high quality engineering skills rather than the deployment of cheap labour. Thus, India's growth trajectory has been very different from that of other Asian countries where growth was mainly due to the mass mobilization of labour and capital (China being the latest manifestation of this phenomenon).

In our view, India's skills-driven growth trajectory it is about to change. The small but highly educated middle-class is rapidly re-pricing itself. Rapid increases in urban costs (salaries, real estate and so on) will soon mean that cost arbitrage alone will not be able to compensate for shortcomings such as poor infrastructure, complex regulations, legal bottlenecks, inefficient taxation and so on. Does this mean that the India story is about to end? No. In our view, the country is about to benefit from a new dynamic – a primary education revolution that will soon make available a mass of cheap low-skill labour. Combined with cheap capital (both domestic and international), this mass of labour can potentially generate a powerful growth dynamic similar to the usual Asian pattern of growth through accumulation of labour and capital.

This has two important implications. First, this new dynamic will depend crucially on the institutional ability of the economy to absorb labour and capital. This means that conventional constraints (such as archaic labour laws and poor infrastructure) will be far more binding than has been the case thus far. Second, the new growth paradigm will require more active management of systemic stresses such as environmental degradation, skill shortages, legal delays and general governance.

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India's Future on the March

Morning assembly at a rural school in Arunachal Pradesh, photographed by author in February 2005

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Introduction

Three years ago, we published a report "Will India Challenge China?" in which we argued that India was emerging as a major economic power[1]. We had argued that India's new-found economic prowess would manifest itself not just in services but even in manufacturing, and that it would require active effort to stop this from occurring. At that time, the idea was considered too radical and many commentators ridiculed our arguments. However, after a short span of three years, our arguments are considered mainstream. The global media now talks of India in the same breath as China, the stock-market is at an all time high largely on the back of foreign portfolio inflows, and multinational companies are making a beeline to expand back-office operations in the country. The change is palpable not just in foreign perceptions of India, but also in India's perception of herself. Indian companies are increasingly expanding operations abroad rather than complaining about foreign competition.

Thus, there is greater interest that ever before about the likely future trajectory of India's emerging economy. In this report, we will re-examine the one key driver of India's recent success – the educated urban middle class. We will argue that this group is relatively small and is rapidly re-pricing itself. Thus, the future is not about the infinite supply of cheap white-collar workers that is envisioned in the popular view. Instead, we feel that the future trajectory of growth in India will rely less on its high-tech skills and more on its ability to absorb a mass mobilization of capital and low-skill workers. The "absorption" capability of the economy depends on certain critical reforms that need to be speeded up.

How has India been different?

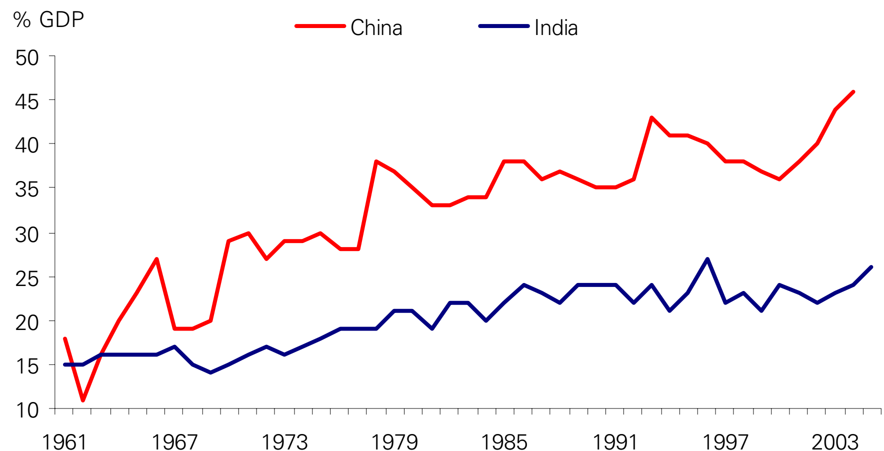
As we mentioned above, people increasingly talk about how India, along with China, will be amongst the important economic powers of the twenty-first century. However, most commentators still see India as an outlier in the Asian growth experience. India's growth trajectory has been unique in having been driven by the services sector, especially the white-collar segment of services. This does not mean that incomes have not percolated down – absolute poverty fell at its fastest pace ever during the nineties[2]. Nonetheless, it is fair to say that it is the well-educated and urban middle-class that drove the economy through the software/BPO export boom as well as other services successes such as telecommunications, airlines, banking, media and so on. Even in the newly restructured manufacturing sector, we find that successes have usually been due to the availability of engineering/design skills rather than that of cheap labour. Indeed, the manufacturing sector has generated few new jobs in the last decade.

In contrast, the "Asian Miracle" that has cascaded through the rest of Asia (and is now is playing itself out in China) is far more due to the mass mobilization of labour and capital. This is reflected in bulk manufacturing and in massive infrastructure projects. China, for instance, currently has an investment rate of 45-47% of GDP. In contrast, India's investment rate has only occasionally crossed 25% of GDP. This contrast is mirrored in the relative importance of various sectors. In India, the services sector accounts for 55% of the economy, manufacturing for 23% and agriculture for 22% while in the China the proportions are 33%, 53% and 14% respectively.

[1] "Will India Challenge China?", by Sanjeev Sanyal & Michael Spencer, Global Markets Research, Deutsche Bank, December 2002.

[2] The population below the poverty line fell from 36% in 1993/4 to 26% in 1999/0.

India & China: Investment Rates



Source: WDI database, World Bank

The Re-pricing of India's Middle Class

The liberalization process that began in 1991 created the opportunity for India's skilled (and cheap) middle class to participate in the global production process as well as take advantage of new economic freedoms at home. Prior to this shift, India's educated had essentially two choices – apply for jobs in the public sector (including the elite Indian Administrative Service) or emigrate. Indeed, thousands of the country's most talented students headed for the West in the seventies and eighties – and are now the backbone of India's successful diaspora.

This began to change gradually following the 1991 reforms. By the mid-nineties, there were a few sectors such as finance and management consultancies that began to pay higher salaries as a means to attract talent. The openings were still quite limited, but the entry of foreign brokerages and consultancies did break open the hierarchical "public-sector" pay packages that had until then characterized even the private sector. Then, in the late nineties, came the software boom and suddenly there were a several IT millionaires in their late twenties and early thirties. The number of people who initially benefited from this boom was still small, but there was a mindset shift for India's middle class as it realized that it could compete globally. Despite the global dot-com bust, the IT boom continued in India and began to widen into back-office outsourcing, call-centers, and so on. At the same time, other domestic sectors began to grow – new airlines, new banks, new hotels, new TV channels, mobile telephony and so on. All these sectors created job opportunities for the educated youth even as the traditional public sector and the manufacturing sector underwent fairly drastic restructuring.

The above process did cause some increases in salaries, but there was enough slack in the labour market that overall salary costs did not rise drastically in the nineties. Indeed, efficiency gains and restructuring may have reduced the burden of salaries in many companies. However, this may now be changing because of a number of factors. First, boom sectors such as back-office outsourcing, banking, media and civil aviation are employing ever larger numbers of employees and are making a significant dent in the pool of available educated workers. Second, the emergence of new sectors has created skill shortages in specialized areas. Human resource experts expect severe shortages of pilots, high-end software engineers, bio-chemists, project managers and so on[3]. Third, the manufacturing sector has largely restructured itself

[3] Special Report: "Searching for Mr. Right", by Prince Mathews Thomas, The Week, 7th August 2005.

and is now globally competitive. Net redundancies are falling and there has been perhaps some net hiring this year. Finally, the surge in white-collar jobs in the private sector appears to be causing manpower shortages in certain areas in the public sector (such as for officers in the Army, aeronautical engineers in the Air Force).

Suddenly, companies are finding that despite India's one-billion population, the effective employable pool for white-collar workers is smaller than anticipated. This is causing salaries to ratchet upwards. A recent survey of universities by Assocham Eco Pulse showed that starting salaries for new recruits rose four-fold between 2000 and 2004. What is more, the pace of change is accelerating relative to other countries. Recent studies by Mercer Human Resource Consulting and Hewitt Associates indicate that Indians will enjoy the sharpest increases in salaries in the world in 2006. Importantly, this is no longer just true of the globalized services export sector and the new "emerging" domestic sectors. The phenomenon is now generalized enough that salaries have begun to rise sharply even in "old" domestic sectors such as print journalism. We are told that salaries for talented journalists may have risen as much as 40% in Mumbai this year.

In our view, this is a sign that Indian salaries are internationalizing and that, in a few years, mere cost arbitrage will no longer be adequate to ensure competitiveness. Indian salaries are, of course, still far lower than Western salaries but the cost arbitrage may well disappear well before salaries equalize. First, operating in India entails several hidden costs such as poor infrastructure and regulatory delays. Furthermore, urban India is becoming expensive in other ways – real estate prices have spiralled up in the last two years, hotel room rates are amongst the highest in the world (a five star hotel room in Bangalore can cost USD350 per night) and so on.

Second, a simple comparison of salaries between Indian and US employees does not take into account several other alternative locations. A recent survey[4] of technical professionals working in a major international IT company shows that equivalent employees in India and in the US earned USD14,518 and USD62,993 respectively in 2004. This may appear like a gap worthy of cost arbitrage. However, the equivalent salary in Singapore was USD25,081. We feel that the gap is very small after adjusting for factors such as taxes and infrastructure. If Indian salaries and real estate costs keep rising at current rates, it will soon be profitable to shift these same Indian professionals to Singapore (or other locations such as Dubai). In short, the educated urban middle class will soon have to rely on productivity rather than cost competitiveness. This is a more difficult source of growth and the economy will have to find another engine. Fortunately, a new source of growth may be emerging due to a silent revolution in the countryside.

The Primary Education Revolution

One of the most dramatic social changes in recent years has been the spread of primary education across the country. The achievement has gone largely unsung even in India and most public debate still assumes that a large proportion of the population is illiterate, and that it will remain so for the foreseeable future. This perception should not be surprising given the very slow spread of literacy in the first fifty years after independences (the literacy rate rose gradually from 18% in 1950/51 to 52% in the mid-nineties). Yet, the combined efforts of the government, NGOs, private schools, charities, religious institutions and individuals are finally making a dent.

Let us first consider the statistics. Between 1990 and 2002, the primary school enrolment rate went up from 80% to over 100% of the relevant age group (it is over hundred per cent because some older students are also enrolling for basic education). The shift is even more dramatic for girls where the proportion has jumped from 64%

[4] "International Cisco Salaries: The Money Questions" by Dian Schaffhauser (www.tcpmag.com).

to 94.4% during this twelve year period. It is also significant that 72% of the students stayed on till middle school in 2002 compared barely 42% in 1990. As a result, there has been a palpable drop in illiteracy across the country. As already mentioned, almost half of India's population was illiterate in the mid-nineties. Most recent estimates suggest that this ratio has now fallen to a third of the population, and is falling rapidly. Indeed, the age structure will ensure that the proportion of illiterates will decline significantly through natural attrition even if no additional efforts were made in improving enrolment. We can reasonably expect the literacy rate to rise well above 80% within a decade.

Some critics will, of course, question the statistics. However, the difference is palpable from first hand experience in some of the country's remotest corners. Until fifteen years ago, a traveller visiting a remote hamlet could expect to be followed around by a band of children demanding sweets. Today, one is likely to witness groups of children – sometimes barefoot and yet in uniform – walking to/from school. Even when a band of children does follow around the visitor (almost exclusively out of school hours), they are more likely to ask for pencils and erasers rather than sweets. This is not just true of the more developed states but even of inaccessible villages in Arunachal Pradesh, Ladakh, Assam, and Rajasthan. This is not to say that more should not be done for primary education, but merely an observation that ground realities are changing.

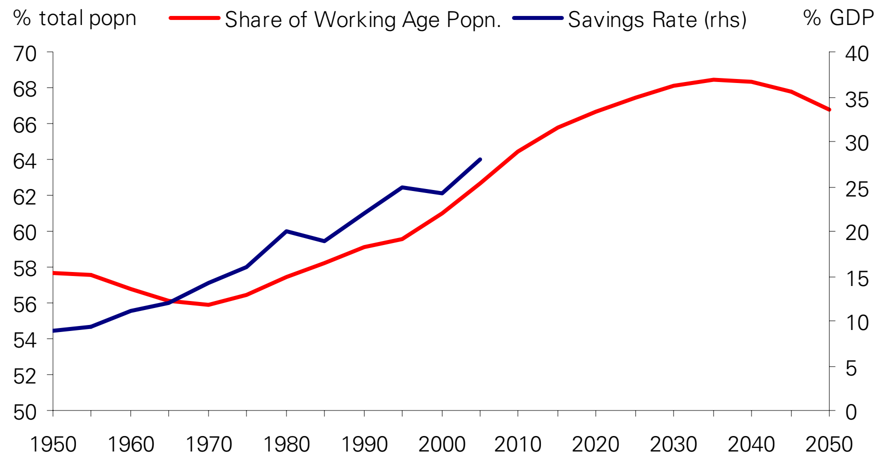
In our view, this has very important implications for India's growth trajectory. India has long had a skewed human capital profile with a highly-educated urban middle-class combined with a largely illiterate hinterland. This is an important factor that has created the common picture of bullock-carts transporting food to feed some of the world's most talented rocket-scientists and software engineers. However, this may be about to change. As the impact of the primary education revolution feeds through the age structure, the country will suddenly have a pool of human capital that fills the middle ground. This will significantly change the availability of blue-collar workers to employers as well as the type of consumer available to producers.

The Coming Savings Boom

There another fundamental shift that will affect future economic trajectory – the availability and cost of capital. Capital has historically been expensive in India and it is partly responsible for its services based growth model. As we have argued in previous reports[5], this is likely to change dramatically over the next decade due to a demographic shift. In common with the rest of Asia, we expect the savings rate to rise as the population of working age rises as a proportion of total population. Indeed, this process is already underway with the savings rate rising to a record 28.1% of GDP in 2003/04 compared to 26.1% in 2002/03 and 23.4% in 2001/02. This is still low compared to other Asian countries (China is currently at its demographic peak and has a savings rate of 48% of GDP). In our view, India's savings rate will drift up more slowly as its demographic profile is smoother. However, it is very possible that India's savings rate will be almost 35% of GDP by the middle of the next decade.

[5] "Demographics, Savings and Hyper-Growth", by Sanjeev Sanyal, Global Markets Research, Deutsche Bank, July 2005.

India: Demographics and Savings



Source: UN Population Statistics, Economic Survey 2005

If savings rates do rise as we expect, conditions will be ripe for a growth dynamic that is driven by the mass mobilization of labour and capital. This will be a process far closer to the "Asian Miracle" experience than India's past trajectory. We feel therefore that the initial conditions are right for a shift from a skill-intensive model to labour intensive model. This could feed large-scale manufacturing, mega-infrastructure projects, and so on. However, this process will not just contribute to industry but will also transform the domestic services sector away from white-collar jobs. A recent study of India's retail sector by UNCTAD showed that barely 3% of the population shops at modern retail outlets while the remaining 97% depend on tiny "mom-and-pop" shops. Barely, 4% of the shops have more than 500 square feet. Although modern malls have been constructed recently in boom-towns like Gurgaon, retailing is an example of a services sector that could dramatically change in the near future with the availability of cheap capital and semi-skilled labour.

Bottlenecks & Policy Imperatives

The reform process has delivered growth and stability in the last fourteen years but this process needs to be taken forward. The time is now ripe for the next generation of reforms. We list below the areas that we feel require the most attention. Some of these reforms have been widely debated in policy circles (such as labour reform and infrastructure) while others (such as reform in the judiciary and in tertiary education) have received relatively little attention from economic policy-makers:

Higher education: Most commentators argue that the failures of India's education lie in its inability to deliver primary education. In contrast, tertiary education is seen as a success. It is true that India's elite institutions (IIMs, IITs, Delhi University) have produced good quality human capital but, as we have already discussed, the skill base remains very narrow. Even as the primary education revolution is pumping out literate workers, there is likely to be a severe shortage of people with specialized skills. This is not just a constraint on growth but on social mobility. Therefore, there is an urgent need to establish/upgrade universities, technical institutes, polytechnics and so on. We can understand that fiscal constraints will make it difficult for the government to meet this demand. Thus, a clear framework needs to be created in order to encourage private investment in this sphere. So far, the unclear regulatory environment has either discouraged private participation or encouraged fraudulent practices.

Labour Laws: The country's outdated labour laws have long been a topic of discussion but they remain unreformed. Under the Industrial Disputes Act of 1982, it is impossible for firms with 100 or more employees to retrench their workers under almost any circumstance. However, this is not all. Employers have to deal with a patchwork of state and central laws (that often contradict each other) such as Minimum Wages Act, 1948; Trade Unions Act, 1926; Contract Labour Act, 1970; Weekly Holidays Act, 1942; Beedi and Cigar Workers Act, 1966. It is true that Indian companies have learned to work around these laws and have used various strategies to restructure themselves over the last decade (from voluntary retirement schemes to natural attrition). However, the process is still onerous and slow. In our view, these laws will add far more friction in the future as the economy moves to a model that relies on mass mobilization of labour. A study by Burgess and Besley[6] of labour laws in Indian States show how these regulations significantly lowered investment, employment, productivity and output in registered manufacturing units. The study suggests that the so-called attempts to redress the balance of power between capital and labour can end up hurting the poor.

Judicial Reform: A market based economy depends crucially on the enforcement of contracts and on general governance. In turn, these depend on the judicial system. On paper, India has a good judicial system based on the English common-law model However, the system is now in desperate need of reform. Delays are so long that even ordinary cases can take over a decade to be resolved. It is estimated that in 2001 there were 24 million cases pending in the courts and that at current rates of resolution it would take the courts 350 years to clear up the backlog even if no new cases were brought before it. In our view, this is a pity because India's respected judicial institutions should be an asset rather than a liability.

Infrastructure: India's poor infrastructure has been a focus of discussion and criticism for many years. Nonetheless, the middle-class growth engine was able to squeeze out growth from it by using strategies that by-pass public provision of amenities (for instance, through captive power generation). The white-collar economic revolution was also helped tremendously by the one area of improvement – telecommunications. However, growth through mass factor accumulation will be more dependent on the provision of basic infrastructure. Indeed, the creation of this infrastructure is in itself an important source of growth. In particular, we are concerned that the country's transportation capability now seriously lags its communications capability. This is serious constraint on manufacturing as well as agriculture – and therefore on the ability of the economy to incorporate the newly literate into the workforce. Projects such as the Golden Quadrilateral highway network will provide some relief but they fall far short of the scale required. In our view, the solution lies in revitalizing the country's extensive railway network. Indian Railways has 63,140 km of tracks, employs 1.6mn workers and transports about 5.5bn passengers every year. Mumbai, the country's largest city, would cease to function without its suburban rail system. Yet, the railway network has barely expanded since the British era and suffers severely from a lack of investment. We feel that the quickest and cheapest solution to the country's transportation requirements is to revitalize this asset.

Environmental regulation: Growth through factor accumulation, aided by the above mentioned reforms, can potentially generate growth rates similar to those being enjoyed by China today. However, it has one major downside in that it could come at serious environmental costs – rising use of fossil fuels/plastics, deteriorating water resources, destruction of forest cover and so on. We have seen these trends in China but there is an impression that it would be avoided in India because of its democratic institutions and vocal environmental groups. However, we feel policy-makers should be concerned about this issue before it becomes a vicious cycle of deteriorating

[6] "Can labour regulations hinder economic growth? Evidence from India." By Tim Besley & Robin Burgess, LSE, June 2003.

environmental conditions and ever more expensive rectification measures (such as the Three Gorges Dam). The catastrophic decline in India's tiger and bird populations in recent years should be seen as a warning.

Conclusion

India's economy has undergone a dramatic transformation in the last decade and a half of reform. It is now seen by many as one of the emerging economic super-powers of the twenty-first century. However, most of this shift is directly or indirectly the result of a "white-collar revolution" that has drawn from the country's educated urban middle-class. In this report, we have argued that this class is rapidly re-pricing itself and that cost arbitrage alone will not sustain it beyond the end of this decade. We think that India's economic engine will draw increasingly upon a large pool of newly literate workers who are entering the workforce. A rising savings rate (and international capital inflows) will make enough capital available to the economy to employ these workers. However, unlike the white collar phenomenon, the new trajectory will be less able to by-pass systemic constraints such as poor infrastructure and archaic regulations. Policy-makers, therefore, should concentrate on improving the capacity of the real economy to absorb the mass deployment of labour and capital. If successful, India will sustain growth rates comparable to China's and will become the next country to experience the "Asian Miracle".

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