

**The First A M Khusro Memorial Lecture**

**The Long Run Growth Prospects of the Indian Economy**

March 20, 2009

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## Introduction

It is an honour and privilege to be asked to deliver the first Khusro memorial lecture. For an aspiring policy wonk, Dr. Khusro's career has been a model. And I am struck by the similarities in our career paths, and that adds to the privilege of delivering this lecture. The similarity is in the path, not in the achievements, and Khusro's achievements were many, and varied. Academic (expert on agriculture (land reforms), fiscal policy (head of the 11<sup>th</sup> Finance Commission), University administrator (Vice-Chancellor, Aligarh Muslim University), diplomat (ambassador to Rome), editor (Financial Express). One can go on, but it is clear that Khusro was not just an academic, was not just a leading policy maker. He was a model intellectual, and a great human being, and one whose shami kebabs were much loved.

My talk today is on the long run growth prospects of the Indian economy, and for what I have to say, I think Mr. Khusro would have approved. I want to emphasize at the outset that there is much more to the economy than GDP growth or even per capita GDP growth. But we need to narrow the focus in order to get the message across, or else we will have a failure *to communicate*. And the message simply is that India is very likely going to be the fastest growing economy in the world in a year or two, and yes that very definitely means that Indian GDP growth will be faster than that of China. This is a statement about relative GDP growth. As we are all under the cloud of the deepest recession the world has seen, and if the emphasis is the world then this slowdown is even greater than the Great Depression, my conclusion about relative growth still stands. And if the world recovers by the end of the year, as I expect, then we can look forward to a growth of around 7 to 8 percent in the next fiscal year.

But that is getting ahead of the story, much ahead. In order to understand the prospects of future growth one has to take a detour, a journey into the deep past and the recent present. The deep past first.

### **The deep past: India China 1500-2025**

From basket cases to models of development. From pin-ups of dehumanizing poverty to emerging global powers. And all in a matter of just three decades. In the 1970s the world had set up institutions to attack world poverty, which really was poverty in China and India. Today, the world trusts, and believes, that these two countries will lead the world economic recovery. Some distance to have travelled in just 30 years.

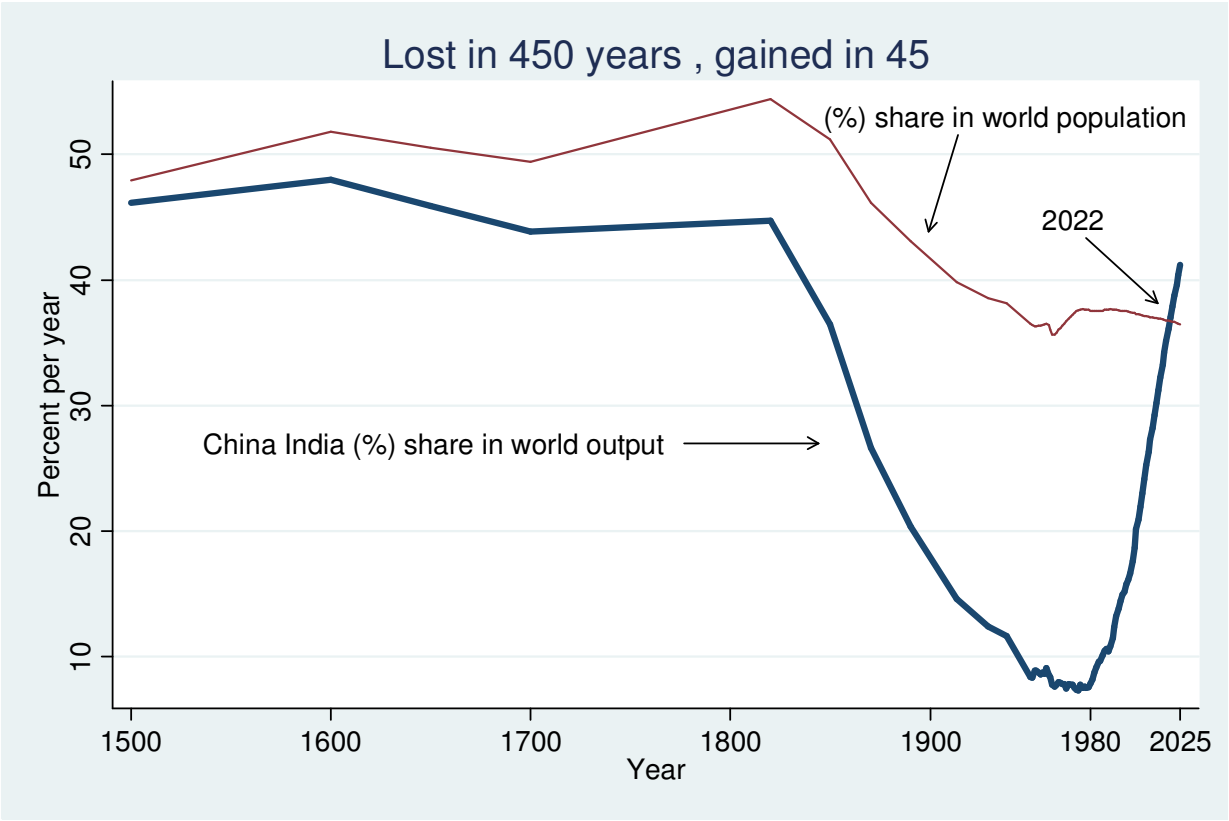
What happened? Never before has the world witnessed such a surge in fortunes of such a large humanity, and never again will it. Few of us realize the magnitude of this transformation, a transformation not just for China and India, but the entire world. Forget the Industrial revolution. No don't forget – remember. That happening did transform the world, and our lives. Historians now write about the discovery of electricity, the steam engine, about machines doing the work of men. Historians fifty years from now will write about machines doing the work of women, and about how the poor of the world became the middle. They will write about the revolutions of instant communication, and of near instant transportation. But they will write most about the emergence of India and China from long-term darkness to quite sudden light and prosperity.

Some facts about the developing India China story. Such a large mass of people having a per capita growth rate significantly above the world average? Never happened before. UK and US in the 19<sup>th</sup> century, Japan and Asean7 in the 20<sup>th</sup> century and every success story in between; get out the calculators and you won't get a different story.

The two continental size economies have achieved higher rates of growth for a longer period than most thought possible, or that was ever achieved before. Their combined 6.2 per cent per annum growth for the last twenty-eight years exceeds the performance of Japan for its peak growth period (1960-85) and is about identical to the growth achieved by Korea and Taiwan (1970-95). The big difference being, of course, that India-China did it on a population base about 14 times the size of Japan and 30 times the size of Korea and Taiwan.

The only common factor among the countries is that they are all Asian. But there were inevitably, and obviously, common practices among these countries that made this exceptional growth possible. The post-war story has been one of reconstruction in Europe and the emergence of Asia. Recall that in 1960 Asia, especially India and China, were given up for dead, and Gunnar Myrdal got a Nobel prize for writing about Asian misery, drama, and pessimism. Since precisely the time he wrote, the decades have been “owned” by Asia. Japanese decades, East Asian decades, and the Chinese decades. The next decade will be known as India’s decade. The present decade is appropriately termed the China-India decade. The weights, and roles, are set to reverse. *That is the long term story of Indian growth.*

Chart 1:



Let us look at a Chart which displays this historic recovery. This chart reports the share of world population contained in India and China since 1000 AD and their share in world income. When the two shares are equal, it means that the average income in India and China is equal to world average income. For several hundreds of years, India and China incomes were equal to the world average. In 1980, their share of world income had plunged to only 8 percent, or only one-fifth of the world average. Since 1980, the two countries have seen a turnaround unlike any other experience in history (and possibly a phenomenon not to be witnessed in the future as well). In 2008, India-China had increased their share of world output to 25 percent. And history is literally just around the corner. In another 10 to 15 years, if the *relative* growth rates of India and China are as today, as is likely, then the global share of these two economies will be 37 percent – their estimated population share 36.7 percent. Hence, India and China would have collectively recovered in 45 years what they lost in more than 450 years. That is the history we are witnessing.

Several factors are of course responsible for this transformation. We know well the oft-repeated story, even though often times we ignore it. Both countries opened up to the world, India more slowly than China. And no one can claim that it was a rising tide of global expansion that did it. The 1980s were not a great period for world growth - Latin America was in the throes of a debt crisis, and US witnessed a real estate savings and loan crisis.

### **The Importance of the Middle Class**

Several additional explanations abound; my favorite is that the **middle class** did it. Who is this middle class? Anybody not defined to be poor, or rich, in the developed world. Approximately \$ 10 to \$ 100 per capita per day in PPP prices. It is the sharp unprecedented growth in the middle class in China and India which was more than partly responsible for both the permanence and the acceleration in their GDP growth. This sharp rise in the middle class fed on itself, and because it emerged from the two largest economies, the expansion was larger than ever witnessed in history. And by definition will never occur again. This puts into perspective the growth experience of these two countries, and the unprecedented expansion in world output in the past decade. This necessitates a digression on why the middle class matters for growth.

The hypothesis that the middle class matter can be traced to Aristotle, and John Stuart Mill was an early champion of its virtues. The middle class got a bad press when the Communist Manifesto confused it with whatever was felt to be bad and transitory – feudalism, imperialism, and fascism. It was left to Barrington Moore to revive and justifiably credit the middle class with several liberal and progressive forces in history. *No bourgeoisie, no democracy* is how he eloquently and presciently put it.

Why does the middle class matter? First, size, for without achieving at least a 10 to 15 percent presence it is unlikely to be effective. But after attaining this size, the interests of the middle class begin to dominate political and economic discourse i.e. the implementation of policies and the development of institutions that yield better economic, and social, and cultural, performance. Empirically, each 10 percentage point gain in the size of the middle class adds about 0.4 percent to long run growth. China's middle class today is about 72 percent of the population; India about 40 percent.

There is method to the efficacy of the middle class. It is neither the feudal nor the industrial elite; it is not the poor. It gains, in a selfish way, from economic reforms. It only has merit to offer, and so it believes in meritocracy. It is composed largely of professionals, so it believes in openness. Incidentally, both the founders of the middle class theory were professionals. Aristotle's father was a doctor, Mills's father a lawyer. In contrast, Marx thought of professionals as the working class.

But onwards to the second part of my talk. The short run Indian growth experience. The above explanations do not explain several short-run puzzles about Indian growth. Not surprisingly, interest of policy is in the short-run factors, and I suffer from the same pre-occupation and disease. I wanted to emphasize, and demonstrate, the long run picture, the background, before proceeding to the short run picture of Indian growth over the last sixty years or so.

## Phases of Indian Economic Growth, 1950-2007

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### Three puzzles about Indian Economic Growth

- 1.) Growth Acceleration 1980-90 but no reforms.
  - 2.) **No** Growth Acceleration 1991-2002, but Big Bang (by Indian Standards) Reforms
  - 3.) Major Growth Accelerations 2003-Present without any reforms
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Phases, everyone has her own demarcation, and my friend Arvind Virmani has written extensively on this subject. My own phasing is as follows: 1950 to 1990, or the initial closed economy development phase; 1991 to 2002, as the initial open economy phase and 2003 onwards as the phase when India enters the world economy.

A strange thing happened in India in 1991. There was, by Indian standards, a big bang economic reform, a reform aimed at pushing India into the modern open world, something China had done 13 years earlier. This lag has dogged Indians, and the Indian economy, since then; today, with some improvement, India is still a China with a 5 to 10 year lag. The reforms implemented in a few short months, reforms that would enable India to catch up with its destiny.

The reforms had an effect – GDP growth accelerated to over 7 percent per annum for 3 consecutive years. But a stranger thing happened in the following years – GDP growth reverted back to its 1980s growth of 5.5 to 6 percent per annum. All the reforms and nothing to show. Major reforms and no extra growth. Obviously, the reforms were brought into question, and economists began to have a field day in explaining the lack of acceleration in GDP growth.

This brings the focus onto the three great puzzles about Indian growth. About the dog that did not bark 1980-1990; about the dog that did but no one heard, India 1991-2002. And then the biggest bark heard all around the world, India 2003 to present, and no one, has an explanation. I will now attempt to weave an internally consistent explanation for all the three puzzles. I may be wrong, but I think I am logical.

*Puzzle 1:* The GDP growth acceleration from 3.5 to 5.5 percent in the 1980s. Did India ever really grow at 3.5 %, coined the Hindu rate of growth by Khusro's colleague Raj Krishna. Yes, it

did but only for the short period in the 1970s. During the 50s and 60s the Indian economy grew at 4 and 4.2 percent per annum. Adding the 70s growth of only 2.9 percent, one obtains the Raj Krishna Hindu average of 3.7 percent per annum.

So the acceleration that needs to be explained is from 4 to 5.5 percent, since everyone recognizes that the 1970s was a turbulent, stagflation period for the world economy. Very simply, most of this acceleration was due to reallocation of labour from low productivity agriculture to higher productivity industry. It is the movement of surplus labor from 3 percent agriculture to 6 percent industry.

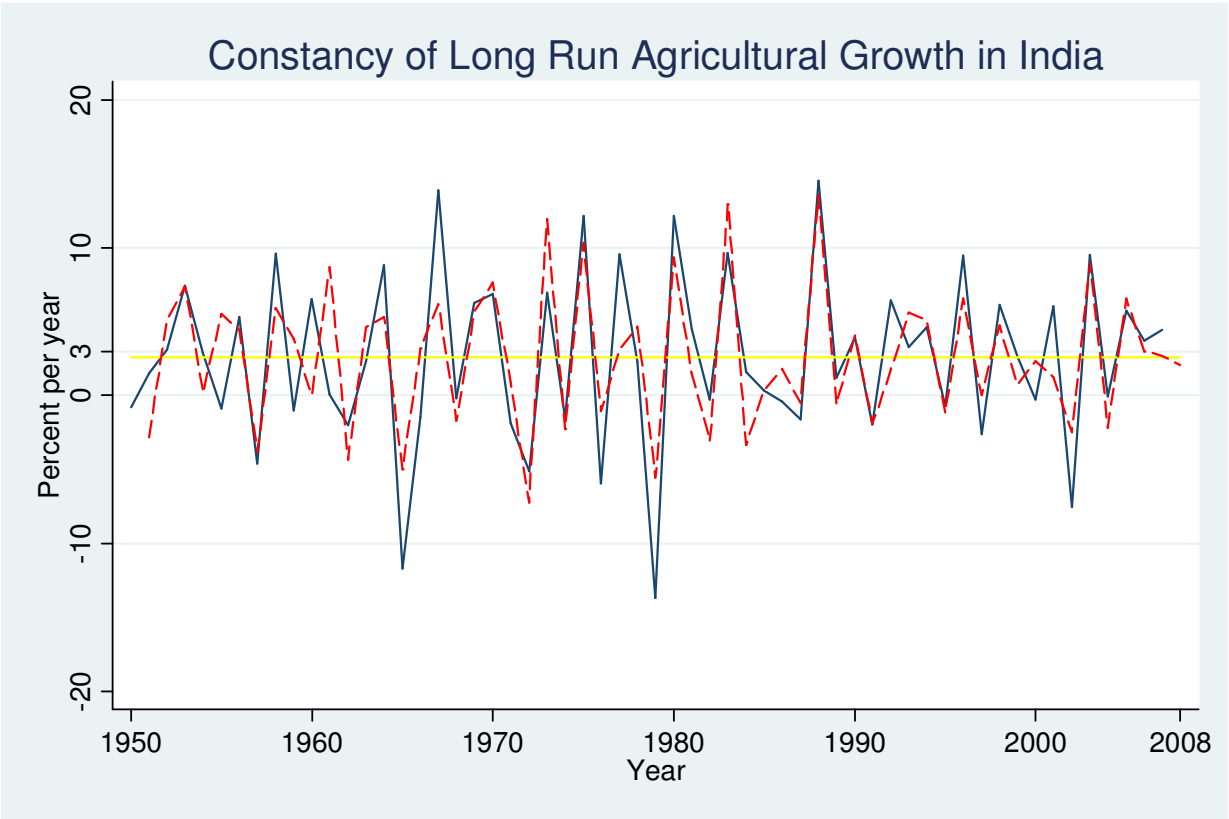
But scholars have a different view. One set - as argued by De-Long, Rodrik-Subramaniam, and Kohli - holds that there was indeed some, albeit vague, policy shifts in the early 1980s when Mrs. Indira Gandhi was returned to power. Some of her earlier policies were: nationalization of the banking sector in 1969; raising the marginal income tax rate to 98 percent in 1971 as part of her "*garibi hatao*" or "poverty removal" campaign; via a constitutional amendment, inserting the term "socialist" in the constitution in 1976; imposing a national emergency in 1974, and forcing a pliant parliament and judiciary to authorize her dictatorial interventions. All of this, but when she came back to power in 1980, argue the *pre-reform* growth advocates, she had a change of heart, became pro-business, winked at the industrialists, and caused the Indian growth rate to accelerate to 5.5 percent from the prevailing "Hindu rate of growth" of 3.5 percent per annum.

Let us examine the 1950 to 1990 period in a bit of detail. At the time of independence in 1947, India was a predominantly rural economy, with agriculture accounting for approximately 75 percent of the work force and 55 percent of GDP. The development literature, whether of the unlimited supplies of labor a la Lewis or the structural change school of Chenery, recognized that in the early stages of development, the *extra* growth that an economy receives is due to the reallocation of labor from the low productivity agricultural sector to the higher productivity non-agricultural (industrial) sector. Only later do factor accumulation and technological change matter as contributors to higher growth.

This factor reallocation has been estimated by Robinson(1971) to average around 16 to 18 percent of the early growth in developing countries. The same average applied to India means that we should have moved to 5 percent GDP growth, from 4 percent in the 1950s and 1960s. Add the exceptionally good weather in the 1980s and you have the above trend 5.5 percent GDP growth. Notice, with recourse to weather and factor reallocation alone, India's exceptional

growth in the 1980s, growth that has been termed by many scholars to various causes (public investment, bank nationalization, the construction of IITs etc.) turned out to be none of the above. Weather and simple accounting provides for most of the explanation.

Chart 2



Surprisingly, rainfall (lagged plus current) *alone* explains as much as 60 percent of the variation in the growth of agricultural output. Decomposition of the data into two different time-periods, pre and post 1978, yields the same result. The last three years India has had exceptional agricultural output growth averaging 4.7 % per year. The rainfall based prediction: 4.3 percent. For 2008/9, the rainfall model predicts agricultural growth at a much lower 2 percent.

## *Industrial growth*

However, one of the striking stories about economic growth, and economic reforms in India, is the lack-lustre performance of Indian *industry*. And this in large part explains the low rate of GDP growth in India in the first five decades after independence. Even today, profits and money making activity are viewed with contempt by many policy makers and most politicians. Industrialists are constantly under suspicion. For most of the post economic reform period, Indian industry has paid a considerably higher cost of capital than most of its competitors. In addition, the one advantage India ostensibly had, cheap labor, was reduced to zero (if not negative) by both an overvalued exchange rate and restrictions on employers for hiring and firing. All of these policies have contributed to India's pitifully lower share of industry, compared to an economy at its level of development and size. The figures are too stark to be missed: in 2006, industry's share of GDP in India was only 26 percent; in China it was 22 percentage points higher at 48 percent i.e. almost twice the size!

This low share is the result of low growth of industrial output. How low this share is, in comparison with other economies, is revealed by the following Table. The table reports the highest 10 year moving average growth in industrial value added in selected countries. Data are till 2006 and are revealing. The maximum 10 year average in China was 12.9 percent; the maximum ever achieved in India, at 6.9 percent, is a figure almost half that of China. Out of 81 developing countries, India's rank is 48. And several countries have exceeded India's maximum of 6.9 percent decadal growth - Brazil, Ethiopia, Pakistan to name a few. Several countries have a maximum industrial growth rate near *double* that achieved by India. India's position has improved in the last few years, but it is still revealing that India has never registered a decadal industrial growth rate of above 7 percent.

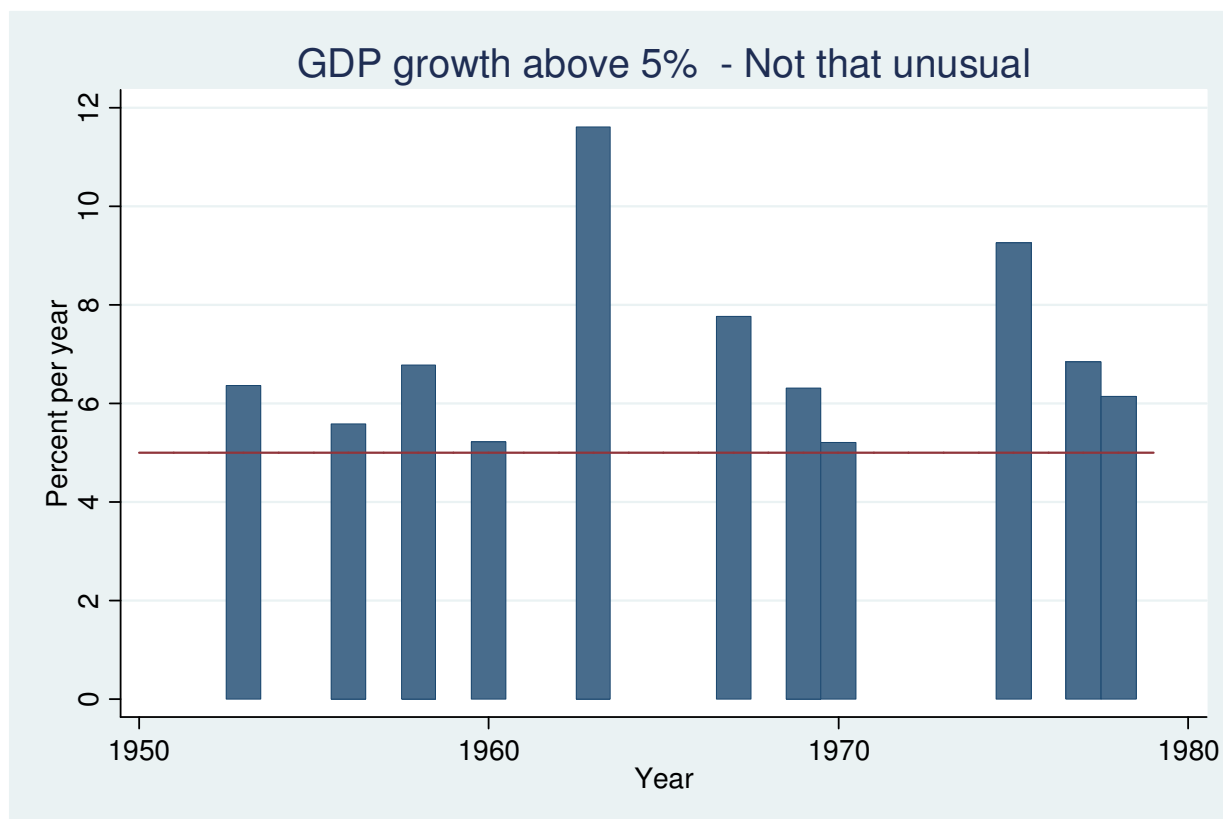
## Decadal Industrial Growth, 1960-2005

<i>Country Name</i>	<i>Average</i>	<i>Maximum</i>
Bangladesh	4.5	10.0
Brazil	3.9	10.0
China	10.4	12.9
Cote d'Ivoire	6.3	14.2
Ethiopia	1.2	7.6
India	5.3	6.9
Korea	8.8	12.0
Malaysia	7.5	10.4
Mexico	3.9	7.2
Pakistan	6.4	10.4

Source: World Bank, World Development Indicators, 2007

Notes: Figures represent the average for the entire period, and maximum consecutive 10 year growth in industrial value added for each country, 1960-2005.

Nevertheless, in good agricultural years, India has often exceeded the magical 5 percent mark in GDP growth.



The chart shows the number of times Indian growth has exceeded 5 percent *prior* to 1980. This happened frequently. Once every 3 years, on average, for the 30 year period 1950 to 1980!

To summarize, the resolution of the first growth paradox is as follows. What we know about the 1980s is that GDP growth accelerated. What we also know is that exceptionally good weather contributed about 0.4 percent of this extra growth. About 1 percent extra growth (over the 1960s) is due to the long run effects of the reallocation of labor from agriculture to industry. Which leaves only about 0.4 percent as genuine extra growth in the 1980s. In other words, there wasn't much growth acceleration in the 1980s. And if not much acceleration, no puzzle.

## **Moving on to the second puzzle – why did economic growth not accelerate in the 1990s post the reforms that were big even by world standards**

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Stage 2: 1992-2002

Second Puzzle: Lots of reforms and **no** acceleration in growth.

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The 1991 reforms were major: in a short period of time, the reforms achieved the following: devaluation of the rupee by 20 percent, reduction in the peak tariff rate 300 percent to 110 percent, elimination of the Monopolies and Restrictive Trade Practices act, a structural adjustment loan from the International Monetary Fund. Starting in 1994, the Indian economy felt the full impact of these reforms as growth accelerated to above 7 percent for three consecutive years. But this acceleration to potential had some unintended consequences. The irony is that the government itself (or elements within it) did not believe that the reforms it had instituted would increase the potential GDP growth rate to above 7 percent. Why the Indian government would engineer far reaching reforms in order to panic when growth accelerated by barely 1 to 1.5 percent per annum deserves deeper analysis

This acceleration died long before the East Asian crisis hit the world in June 1997. The economy stuttered and registered an average growth rate of only 5.1 percent for the period 1997-2002. Back to the 1980s.

What happened? Interest rates zoomed in the late 1990s. A hallmark of Indian macro economic policymaking has been its preoccupation with quantities, rather than prices. Most likely this is heritage of the central planning mentality. Whatever the cause, the fact remains that only in India do we talk quantities, not prices. Especially when it comes to the most important commodity of them all – money. In the mid 1990s, the inflation rate nudged upwards, and the authorities panicked about inflation. Any correlation with 2008 was not, is not, a coincidence.

As international and domestic inflation in the mid 1990s fell to around 4 percent (the only factor explaining domestic inflation is not domestic money supply, not fiscal deficits but international

inflation), the policymakers kept money supply growth tight and interest rates high. With each fall in inflation rate, from 9 percent to 4 percent, was a corresponding rise in the real interest rate. Industry, and economy, choked on 13 percent real rates, and the economy slowed down to 5 percent. All those reforms and no growth acceleration – no puzzle about the 1990s.

In retrospect, there is more to the Indian growth story: always desperately trying to reach potential but never achieving it. In the mindset of the Indian politicians, and most policy makers, it was inconceivable that the Indian economy could grow at East Asian growth rates; the doubling of the rate of growth above Hindu rates of 3.5 percent was considered impossible; the 7 plus percent growth rate was considered as an overheating phase deserving a strong policy response. Possibly it was the crisis of 1991 that prevented policymakers from realizing that an expansion from 5.7 to 7.4 percent growth was the mildest of accelerations. When this acceleration coincided with global, and domestic inflation, the RBI panicked and tightened monetary policy to an unprecedented degree. Further, the RBI did not cut interest rates in response to the decline in worldwide, and domestic, inflation in the mid-1990s. By keeping deposit rates at high double digit levels, and inflation collapsing, the RBI ensured that real rates reached double digit levels. This caused the growth to collapse, and reform led growth in the 1990s was the same as the no reforms 1980s.

*Which brings us to the 3<sup>d</sup> puzzle of Indian GDP growth*

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Stage 3: 2003-present, and confusing

Third Puzzle: **No** reforms and sharp acceleration in GDP growth

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In an eerie replay of the 1990s, there is a new controversy, this time about the dog that did bark. No economic reforms and growth acceleration; what happened? Many, including several economists, senior government officials, the RBI, the *Economist* and the IMF have claimed that the recent growth acceleration is proof of over-heating and growth much in excess of potential GDP growth of around 6 to 7 percent. Others, i.e. myself!, claim that there was a structural break in Indian growth rate starting 2003, and that the potential GDP growth of India, without

any additional economic reforms, is close to 9 percent, a finding supported by various statistical exercises reported on below.

Even the ruling Congress party hasn't dared to accuse itself of ushering in any positive economic reforms (one can count a number of negative reforms like gratuitous taxation in the form of surcharges and cesses of every denomination) - so how come no reforms and a growth rate of above 8.5 percent for the five years 2003/4 to 2007/8?

### **Because of a large decline in real interest rates**

In 1999, inflation had reached a low of 3.5 percent and the government took the first major step towards interest rate reforms. Within a space of four years, government bond yields were at 5 percent, down from double digit plus levels of the late 1990s. In "normal" economies, such a large decline in long-term real interest rates would ordinarily be headline news for several years. Analysts would relate industrial growth, GDP growth, stock prices, to this mega event. After all, in western economies, a mere 25 basis point change in interest rates is a momentous occasion. So it is in several developing economies, including China.

This interest rate change is most likely **the** major cause for the marked increase in investment that is observed for the 2003+ period. Savings rates had hovered around 25 percent the previous decade (1993 to 2002) and investment rates had averaged the same. Since 2002, in just five years, savings and investment rates increased by 12 to 14 percentage points.

Industry has most likely been the biggest beneficiary of this lower interest rate regime. Growth in industry rose at its fastest pace in 2004-2007. While industry grew at 8% for 2004-07, manufacturing growth was strong at around 9.1%. The increase in GDP growth since 2002 is the sharpest, and longest, in Indian history: a large 4 to 5 percentage point acceleration (near doubling) to beyond 9 percent per annum.

No policy maker, and very very few analysts, have pointed to the decline in real interest rates as an important cause, let alone *the* cause, for India's growth acceleration. Lower real interest

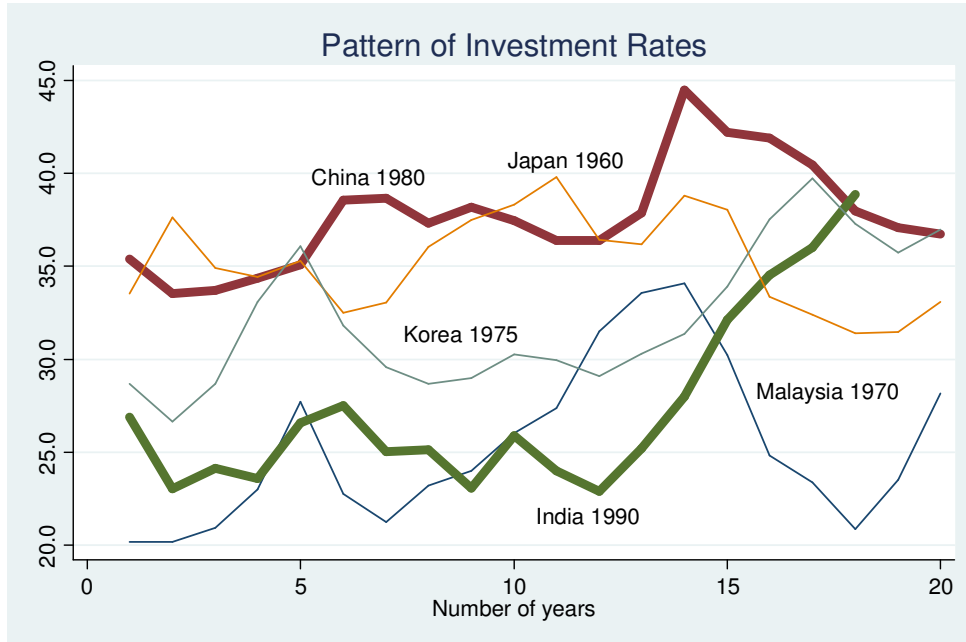
rates add to GDP growth, and a 500 basis point decline in real rates is enough to add somewhere between 1.5 to 3 percent extra GDP growth. And higher GDP growth leads to higher savings rates, and expectations of higher growth lead to an increase in investment rates. This is what explains the jump in investment rates, savings rates, and GDP growth rates in the last five years. And this change is structural, not cyclical.

However, like the 1990s, skepticism remains. Most analysts, and economists, and especially the monetary authorities, have doubted the sustainability of this acceleration and felt that the economy is or has been in a substantial overheating phase. The base case belief is that any growth rate above 6 to 7 percent per annum is not sustainable. All of this, of course, refers to the period before the crisis year of 2008. This skepticism suggests that India maybe *sui generis*.

There is now a new controversy about India's GDP growth. That India grew robustly between 2003 and 2008 there is no doubt; average growth rate of 8.9 percent; but controversy begins at home. Many contend that a major reason for the growth acceleration was a global liquidity boom. The same liquidity that has brought you the great crisis. Now, there is no liquidity, and we, including India, will all go back to the pre 2003 days. A compelling thesis, but one with the severe disadvantage of relying on spurious correlations.

While growth rates accelerated in the developing world, investment rates increased, on average, by only about 2 to 4 percentage points. That is, if one looks at investment rates circa 2002, the average investment rate was around 23 percent; circa 2007, that is, before the crisis, investment rates were at 26 percent, a mere 3 percentage points higher.

India's story has been different, radically different. Both savings and investment rates increased by not 2 or 3 percentage points, but by about 13 to 15 percentage points. Historically, such a large increase in investment rates is not transitory.



Note: The year next to each country is the year from which the number of years are counted.

The chart shows the evolution of investment rates for five very successful economies since the period of their own expansion. The Indian experience is extraordinary and unlikely to be transitory. And once the sub-prime dust settles, India should revert back to 8 percent plus growth rate, and do so without relying on additional economic reforms.

The pessimists contend that the investment boom is over, and the best expectation is that India will revert back to a trend potential rate of growth of around 6 percent. So far, for a brief last six months, these experts seem to be right. Growth for 2008/9 is likely to average less than 5 percent for the fiscal year 2008/9; but the growth pessimists are likely to be very wrong in the future. They cannot expect a Lehman debacle, a world crisis, to save their forecasts every year!

There are several reasons to suggest that long run forecasts of GDP growth of around 6 percent are likely to be wrong, and more or less for the same reason that such gloomy forecasts have been wrong for the last five years. A large part of the pessimism is in the mind, not in reality. There is the frozen attitude that we cannot do it, it is not possible here, we are not East Asia, our education levels are too low, etc. This is the attitude of a large segment of our intelligentsia and the policy making set.

This brings us to the last part of our speech, a part which deals with two major conclusions. First, more evidence that the potential GDP growth in India is close to 8.5 percent, and second that very shortly, if not now than latest in a year or two, Indian GDP growth will exceed that of China.

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Potential GDP growth in India: 8.5%

India to grow faster than China on a sustained basis

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### ***Potential GDP growth in India at 8.5 percent plus***

Various “models” of growth indicate that the potential GDP growth in India i.e. the rate at which overheating is zero, is close to 8.5 percent plus. The assumptions and framework behind each assessment, and forecast, is detailed next.

**Bosworth Collins model:** In a study ending with 2004 data, Bosworth-Collins(p.19) state that “current rates of capital accumulation are consistent with a GDP growth rate near 7 percent, but higher rates would require reductions in the public sector deficit or increases in capital flows from abroad”. It is useful to infer what the Bosworth-Collins “model” would state for Indian growth in 2008. Since 2004, capital growth has increased to above 10 percent from an average of 7.5 percent in 2003-2004; and investment and saving rates have increased by about 10 percentage points. Thus the new data would indicate that the Bosworth-Collins forecast of trend GDP growth in 2008 would be around 9 plus percent.

**Investment model:** An investment to GDP ratio of 36 to 38 percent implies that the growth of capital stock is upwards of 10 percent per annum. This “episode” of increasing investment rates, and then stabilization around 40 percent plus levels, is likely to occur over the next several years. Employment growth has averaged more than 3 percent per annum recently. Total factor productivity growth over the last five years has averaged close to 2 percent per annum (between 1.7 and 2.1 percent, various estimates). Adding it all up, potential GDP growth estimate is above 9 percent.

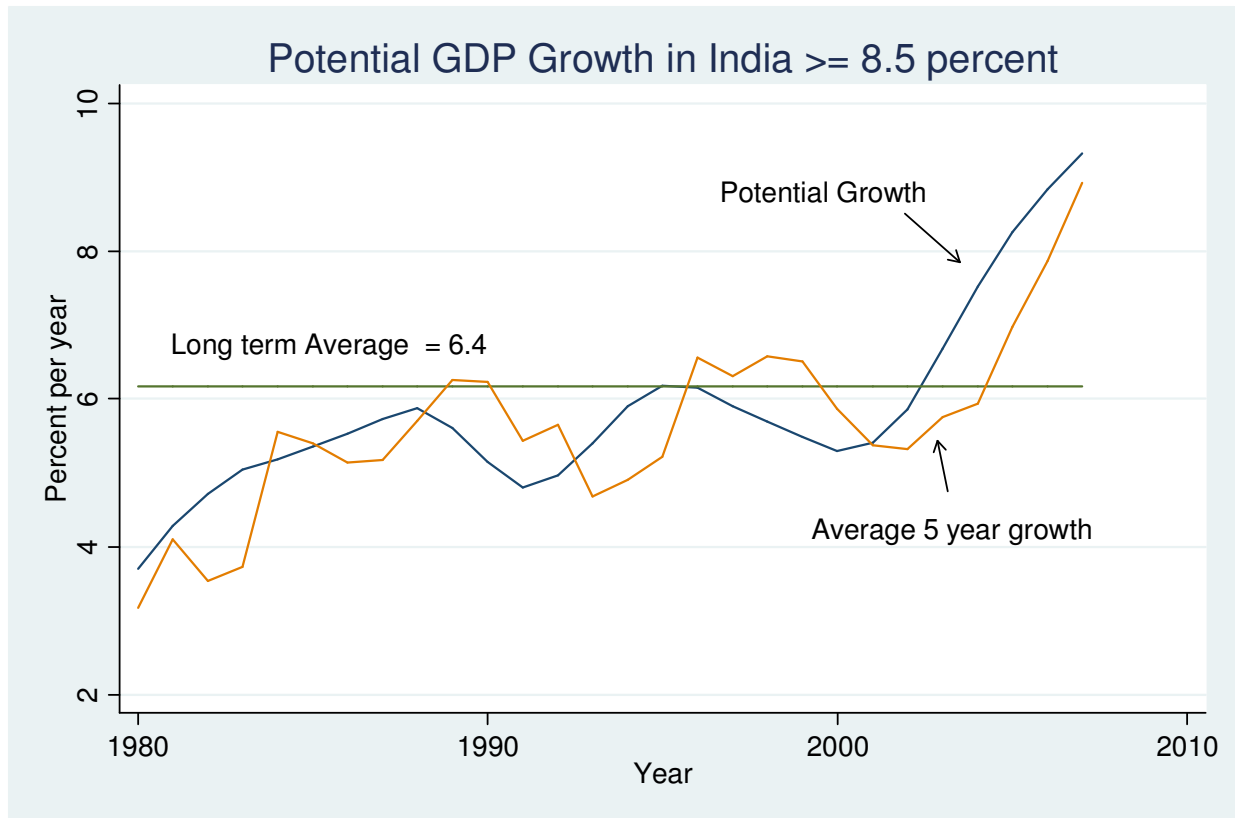
**Industrial growth model:** There will occur a time when India becomes an average developing country, with industrial growth averaging around 8 to 10 percent – the five year average before this crisis was above 8 percent. With services growth slightly higher (as is normal in all economies and happens through labor arbitrage) over 80 percent of output should have a growth rate above 9 percent. With agriculture growing at 3, one easily obtains an overall GDP growth rate of 8.5 percent.

**Econometric Model:** There are several sophisticated econometric techniques for estimating potential GDP growth. These filters, as shown in the chart, also suggest that there has been a sharp increase in potential GDP growth.

Now to our second major conclusion. India to grow faster than China

There are several reasons to believe that India's GDP growth will exceed that of China on a sustained basis. First, investment rates. China is on a downward trend, India on an upward trend. Investment rate in China should gradually decline to around 35 percent, India to above 40 percent. An additional argument for this expectation, besides historical trends, is that China has had, for several years, an extremely below average consumption ratio – a ratio less than 40 percent. This has been part of the global imbalances problem. China's exchange rate has to appreciate, and its consumption rate to go up, and its investment rate to go down. All of these factors taken together should subtract about 1 to 2 percent from China's potential GDP growth rate of 10 percent.

Even with no changes, even today, the potential GDP growth rates are very similar. Growth in capital stock in India is in double digits – the same as China. Growth of labor force in India, upwards of 2 percent per annum, is much higher than that of China – 0.7 percent. Total factor productivity growth in China is higher but this advantage cannot stay for long, especially as relative costs in China go up because of exchange rate appreciation. So, no matter how you slice it, the answer remains the same – India to grow faster than China. And soon. This is a radically different forecast than that articulated by other experts e.g. the market-oriented BRIC's report by Goldman Sachs



*Finally a brief note on the 2008 financial crisis:* The world is in the midst of a severe financial crisis and growth estimates for 2008 have been lowered for all countries. The above analysis suggests that while the level of GDP growth will be affected, India's relative standing as one of the fastest growing economies in the world will, or should not, be affected. In a globalized world, countries are impacted by global events to a much larger degree than anticipated or imagined. But this does not mean that domestic policy is unlikely to have any effect. Evidence suggests that some Indian policy makers have misused instruments for misunderstood economic crises. If this path is continued, then the Indian economy will suffer more than fundamentals indicate; if forward-looking policy initiatives replace the rear-view policies, then India could achieve its potential on a sustained basis.

In conclusion, policy makers in India can do some harm. But even they cannot deny India's tryst with destiny.

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