Potential Growth Stars of the 21st Century: India, China and the 'Asian Century'!

by

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I. INTRODUCTION

Over the last two decades or so the important role played by economic factors in international relations has been recognised and appreciated. Prof. Kissinger has written about the emergence of six 'Great Powers' in the 21st century (USA, EU, China, Japan, Russia and India). This is particularly so since the disintegration of the Soviet Union, as poor economic performance and growth was a major factor in undermining its stability and power. Prof. Paul Kennedy, in his book, 'The Rise and Fall of Great Powers' also gave economics considerable weight in the evolution of the Global balance of power. In the last decade or two fast growing economies have received a lot of attention and importance not only in World Capital Markets but also in World Capitals. Fast growth of East and South East Asian economies between the mid-seventies to the mid-nineties (coupled with the large Japanese economy) led to talk about the 21st century being the 'Asian Century.' Others more cognisant about the growth of Latin American countries like Brazil, Mexico, Chile and Argentina (coupled with the largest economy-USA) talked about the 'Asia-Pacific Century'. The 'Tequila crises' along with the more recent 'Asian crises' seems to have put paid to such talk. This along with the strong US growth over the last decade has revived talk of a "Second American Century".

The problem with some of this speculation has been excessive dependence on short run economic performance devoid of underlying structure for analysing long term growth trends. The current paper attempts to provide a better basis for making economic forecasts that in turn can provide a sounder base for making power projections. It does this by first identifying the fastest growing economies of the last two decades of the 20th century (based on World Bank data). Using a framework of ‘catch-up growth’ it analysis the growth pattern of these high growth economies (for a longer period from the sixties). This forms the basis for making projections for the first decade of the 21st century.

In addition to economic growth, size is another feature of any economy, which determines its international importance. China and India are among the five largest economies in the world, in term of Gross Domestic Product at Purchasing Power Parity, with a growth rate much higher than each of the other three economies in this group. Though their per capita income (PPP) is between 5.5% and 17% of that of the other three economies, or perhaps paradoxically because of it, their future growth is of special interest to the World. This interest arises from the possibility of catch-up and large contributions to world GDP growth in the first two decades of the 21st century. The general consensus appears to be that China’s performance in the late 20th century has been outstanding while that of India has been quite poor (with some exception during a few years in the nineties) and far inferior, to the point of non-comparability, to the (former) “miracle growth economies.”[1] This paper looks more closely at the performance of these two countries, and makes explicit growth projections for them for the next decade.

Though the primary focus of this paper is on the high growth economies, large economies with relatively slow growth are brought into the picture to get a reasonable idea of overall global impact. This helps us in identifying counties, which from the limited perspective of economic

[1] Virmani (1999) presented a contrary view.

performance, are likely to have the greatest global impact in the next few decades.

The next two sections IIA & IIB examine GDP & per capita GDP growth trends in the last two decades of the 20th century. Sections IIIA & IIIB model and examine the growth pattern of the high growth economies. Section IVA then uses this analysis to make growth projections for the first decade of the 21st century. Section IVB focuses on the largest economies in the world, including China and India, with growth projections for other large high-income economies brought in at this stage to derive the emerging distribution of Global economic power in the 21st century. Section V concludes with some observations on the foreign policy implications of the projected shift in global economic power.

II. **GROWTH PERFORMANCE**: End 20th Century

A. GDP Growth Trends

Table 1 shows the ten fastest growing medium-large countries in the world during the last two decades of the 20th century. Among the top 10 there are three broad growth clusters: There are four countries having a trend growth rate of between 5.3% and 5.7%, three between 6% and 6.2% and four having a growth rate of 6.9% or higher. It is interesting that even if we make a downward adjustment of 2% points in the average growth rate of China it would still be the best performer over this period. Out of the 10 High Performing East Asian economies (HPEs), referred to in the World Bank's Asian Miracle study (1993) only one (Japan) has clearly dropped out of the top 10. Given its poor performance in the nineties, Japan is no longer among the high performers.

Many observers of ‘emerging market’ economies will, however, be surprised by the absence of their favoured countries from this list of high growth countries. The greatest surprise is the appearance of India among the top ten performers. Most observers would have stated that India’s performance ranks at the bottom third or at best the mid-range of the entire set of medium-large countries. A few may have been willing to concede that India may have performed a little better during part of the nineties to reach the top half or top third. It would be difficult to find more than a handful of people who could have imagined that for a continuous period of two decades India will be the sixth fastest growing economy in the World. One valid reaction of sceptics would be that this is all very well for the GDP growth rate, but India could not possibly have performed so well in terms of growth in per capita GDP. We return to this aspect below.

Table 1: Growth Trends for Medium-Large Countries: 1980-2000 (est)

Country	GDP Gr. Trend	GDP Rank	Per Capita GDP Gr. trend	Per Capita GDP Rank
China	10.1(8.1)	1	8.8(6.8)%	1
Korea, Rep.	7.7	2	6.6%	2
Thailand	7.1	3	5.7%	3
Singapore	6.9	4	5.1%	4
Ireland	5.3	10	4.9%	5
India	6.0	6	4.1%	**6**
Vietnam	6.2	5	4.1%	7
Chile	5.6	9	4.0%	8
Indonesia	5.7	8	3.9%	9
Hong Kong	5.3	11	3.7%	10
Malaysia	6.0	7	3.5%	11

Notes:

1) The growth trend for 1980-98 is a log average of the growth trends for 1980-90 & 1990-98, from WDR 1999-2000.

2) Population growth trends from WDR 1998-1999 and projections.

3) Forecasts of 1999 and 2000 are from ADB AEO 1999, IMF WEO where available.

Chile is the only country in this group that is not located in Asia. Those dealing with Latin America may be surprised that no other country from their region is represented, while those outside the region may be surprised that it falls in the top ten. The numerous international fans of Chile's policies may be surprised that India's trend growth rate of GDP was higher than that of Chile. Those outside Asia may be equally surprised to find Vietnam among the top five performers. Vietnam, India and Chile performed better than Hong Kong which just makes it into the list at the number 11 position.

Another noteworthy fact about these three countries is that each of them started economic reforms during the eighties and continued it in the nineties. Though the popular perception is that India started its reforms in the nineties, Virmani (1989) had shown that there was a significant improvement (break) in India's growth performance in the eighties, from its dismal performance from the mid-sixties to the end of the seventies. This paper had also argued that this was due to economic reforms undertaken during the eighties, which started (albeit slowly) reversing the policy distortions introduced in the seventies.

B. Per Capita GDP Growth

Per capita GDP growth is a better measure of economic performance, viewed from the perspective of the welfare of a country's people. If both economy and population grow rapidly, the former may be partly a consequence of the latter, while the welfare of the public may not have improved much because of poor growth of per capita income. Table 1 shows the ranking of medium-large countries in terms of the trend rate of growth of per capita income. For the period 1980-2000 the ranking of the top four is the same as the one for GDP growth. China is the top performer with a trend growth rate of per capita GDP of 8.8% (table 1). If we adjust its growth rate by 2%, then it and S. Korea form one cluster with a growth rate in the range of 6.6% to 6.8%. Thailand is the only country with a per capita GDP growth between 5.5% and 6.5%. The third cluster with a per capita income growth of 4.5% to 5.5%, which includes Singapore, has an interesting addition. Ireland is the fifth fastest growing economy in the world in terms of per capita GDP (10th in GDP growth). There is a fourth cluster with a per capita growth around 4% (3.5% to 4.5%) containing all the other high growth economies. India is the fastest growing economy within this cluster, with its overall rank unchanged at number 6.

Malaysia's performance appears much worse in terms of per capita income than it does in terms of GDP growth and both Vietnam & Indonesia move down in the ranking. The ranking of Chile and Hong Kong is on the other hand better in terms of per capita GDP than it is for GDP growth. Out of the 10 High Performing East Asian economies (HPEs), referred to in the World Bank's Asian Miracle study (1993) Malaysia at 11th place would therefore clearly be the second country from among the HPEs to drop out of the set of star performers.

Thus the star performers of the last two decades of the 20th century are China, S. Korea, Thailand, Singapore Ireland, India, Vietnam, Chile, Indonesia, and Hong Kong. Of these only two are from outside Asia, while none are from East Europe. The representation from Latin America and E. Europe is unchanged even when we bring in the next tier of medium-large countries, which have a per capita growth trend of around 3% (2.7% to 3.3%). These are Sri Lanka, Norway, Turkey and Portugal. Thus out of the 15 fastest growing economies during the last two decades of the 20th century

11 are from Asia. The possibility of an Asian century is therefore still alive despite the 'Asian Crises.'

III. GROWTH PATTERN:

A. Bell Curve of Catch Up

We hypothesis that, low or lower-middle income countries which have been able to achieve high market based growth and reach a high income level follow a (stylised) Bell shaped 'catch up' curve. At the left of the Bell curve are the low-income countries caught in a 'low level equilibrium trap,' growing at 0% to 2.5% per annum in terms of per capita GDP. At the other end of the curve are the high-income (developed) countries also growing at around 1% to 2.5% per annum. Countries that are successful move up the left of the bell curve, remain for a time at high growth rates and then move down the right of the curve. These can be called the accelerating, plateau and decelerating sub-phases of the 'catch-up' represented by the 'bell curve' (figure 1). The critical factor in moving and sustaining an economy on such a high growth path is economic reforms, including related institutional reform.

In the recent past few decades there has been a surge in private international capital flows particularly direct and portfolio investment. Portfolio investment acts as a channel for transmitting expectations. Consequently 'Market Euphoria' has played an important role in determining how high the growth rate reaches and for how long it is sustained.[2] Any attempt to sustain euphoria by suppressing negative developments and possibilities, so as to keep growth above the sustainable levels, can only be temporarily successful. Eventually growth will fall

[2] Perhaps ideological fervour or geo-political considerations have also played some role.

(even) below the sustainable level. The more closed, undemocratic and repressive (intellectuals, media) the country, the longer the period for which the cumulating weakness can be suppressed and the longer this 'temporary' success can last.[3] If this happens in a situation in which "euphoria" is keeping the growth rate from falling steeply, the correction could be so drastic that it results in "panic" and growth collapse (crisis). This in turn is likely to disrupt the institutional fabric and impose a permanent cost in terms of lower cumulative growth than would have taken place if strengths and weaknesses were continuously exposed to open debate and discussion as is the case in a truly free society.

B. HGE Growth Patterns

Vietnam was and remains a low-income country at the end of the century. But over the last decade and half it has gone through the entire Bell curve (acceleration, plateau & deceleration), with catch up aborted prematurely.[4] Its further progress is therefore dependent on a new spurt of reforms to put it back on the high growth catch up curve.

India and China (a low-middle income country) were the only two star performers in the 'accelerating' phase of 'catch-up' during the eighties and part or whole of the nineties. India whose per capita income is about half that of China's, remains unambiguously in the 'acceleration' phase, which appears to be the most gradual and prolonged compared to the other high growth countries. China seems to have completed the 'acceleration' phase and reached the 'plateau' phase during the second half of the nineties and seems to be entering the decelerating phase at the end of the century.

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[3] In exceptional cases suppression of inconvenient facts/problems may go hand in hand with genuine efforts to address the problems.
[4] The figures are not included here because of space limitations. They are available from the author on demand.

The growth pattern of Indonesia, Thailand (lower-middle income countries) and Malaysia (upper-middle income country) show some signs of a unsustainable 'Euphoria' before the 'Asian crises.' All three countries also have two sub-cycles underlying the stylised bell pattern over the last four decades of high growth. These sub-cycles are, however of different length with the second sub-cycle starting in a different years (between 1987 & 1989). Indonesia's aborted bell curve is very angular and appears more as a step function. During the second sub-cycle and immediately preceding the crises, per capita GDP growth remained above the (four-decade) average for eight contiguous years before collapsing. Both Thailand and Malaysia appear to have been in the plateau phase since 1962, with a gradually decelerating trend during the last two decades. In Thailand the per capita GDP growth rate averaged an unprecedented 8% per annum in the ten years preceding the crises (second sub-cycle). Out of these ten years there was only one in which the growth rate fell below the average rate for the four decades. Malaysia shows similar but less pronounced trends.

Indonesia's growth pattern is consistent with the hypothesis that 'euphoria,' sustained perhaps by tacit collusion between Indonesia's rulers (who suppressed negative news & information) and external players (by ignoring negative factors), kept actual growth above the sustainable level. As a result, a possible gradually declining growth trend was converted into a potential crisis. In our judgement a soft landing and gradual deceleration would have been much more likely if the society had been more democratic, and media and political & civil society truly free. This would have allowed weaknesses and problems to be exposed and addressed gradually thus diffusing any euphoria. In fact they accumulated without public acknowledgement by the significant economic and political actors (domestic and foreign) till they had reached explosive dimensions by about 1996.[5]

In the case of Thailand, 'euphoria' seems to have led to ignoring negative structural factors such as the great divergence in the Agriculture sector between the share of Value Added (12.5%) and the share of labour force (64%).[6] The ratio of these two, a measure of the relative productivity of agriculture, was 0.2 in 1990, the highest among the economies considered here. Poorer countries like India (31%, 64%, 0.48), China (27%, 72%, 0.37) and Indonesia (19.4%, 55%, 0.35) had much better performance (1990).

One reflection of euphoria in Malaysia was the difference in perceptions about India whose trend growth of per capita income differed by only 0.2% per annum for 1980 to 1998. Nobody operating in East Asia would have put India even in the next lower, leave alone the same, performance category as Malaysia. Another reflection was the change of Malaysia's international ranking with respect to political freedom, freedom of press and civil liberties, from that before to that after the crises.[7] This is a factor, which it shares with other East Asian countries, where good performance led observers to classify countries as more democratic and free than they were.

International (including US) ranking of political, media and civic freedom routinely rated most East and South East Asian countries above India till 1996. These rankings have been dramatically revised since the

[5] In late 1996 the author, on learning from an economist who had worked in Jakarta, that about half the capital of Indonesia (from which almost half of GDP originated), did not have a modern water and sewage system, concluded that there were a lot of suppressed/unknown negatives in Indonesia and its growth would slow in the next few years. Such negative facts about the HGEs were never even hinted at in publications or by experts. This forecast was made to Mr Rajiv Lal (at that time of Morgan Stanly, HK) and Surjit Bhalla in early 1997.

[6] The author first noticed this in 1996 and wondered whether it was reflective of structural problems, which must eventually slow growth from its searing pace. The subsequent observation of an 8% current account deficit increased the unease despite the explanation provided by Thai colleagues at an ESCAP meeting in Bangkok that being financed largely by FDI it was quite sustainable, and a better measure of risk would be CAD-FDI.

crisis so that in 1999 India is ranked as a ‘largely free’ country for the first time ever.

The ‘euphoria-panic cycle’ revealed in Asia has a wider lesson for other closed, authoritarian countries even when they are overlaid with a veneer of democracy. In addition to the normal institutions two key objective tests of a democracy is frequency of change in the country’s leadership (ruling party) and political, civic & media freedom. To determine the latter, the following tests can be used: 1) The Mars test: How long would it take for a person from Mars to learn about the country’s problems and negatives by listening to TV or reading the newspapers. 2) Do academics & intellectuals feel free to fearlessly criticise the government, is such criticism actually made and is it accessible to the general public? 3) Does one ever hear criticism of the country’s leader (Prime Minister, President or Party Chief) to the extent of questioning his honesty?

The growth patterns of S. Korea, Hong Kong and Singapore do not show any signs of ‘euphoria.’ During the last two decades S. Korea had a very gradual and smooth ‘accelerating’ ‘plateau’ and ‘decelerating’ phase from 1961 to 1997, with a modest peak around 1983. It appears to still be on the decelerating phase despite the crises of 1998. Among the set of high growth countries in our set, perhaps Singapore comes closest to the ideal bell curve of ‘catch up’ growth. In terms of this curve, per capita income growth increased in the sixties to reach a peak around 1972. Growth has been on a gradually declining trend since then, as Singapore raced to reach and then exceed the per capita income of the USA. Despite the sharp fall in growth in 1998 and 1999, the trend growth rate still appears to be above 3%. Hong

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[7] A country that (observers would now agree) had one man, one party rule for decades, was showcased as an ideal Asian Democracy, with a very free press, judiciary et. al., a view that political events since 1997 have changed significantly.

Kong in contrast was in the deceleration phase with a much faster rate of deceleration than Singapore, so that its per capita GDP has not caught up with the USA.

IV. STARS OF THE 21st CENTURY!

A. Growth Projection: HGEs

This section attempts to answer the question; "Which will be the ten fastest growing countries in the first decade of the 21st century." A corollary of the answer is an inter se ranking of these countries. The per capita GDP growth forecasts on which the ranking is made, are based on the growth trend analysis and examination of the 'catch up curves.'

Three of the eleven high growth economies from the 1980-2000 period, Hong Kong, Malaysia and Indonesia loose their place among the star performers in the 21st century (table 2). In fact Malaysia is no longer in the top ten during 1980-2000 (table 1). Hong Kong growth has been on a declining trend, which had already taken it to the bottom of the star set during 1980-2000. It seems to have reached the end of its high growth curve. There is a question mark on whether it can even grow at the top of the high-income countries' growth range, given the change in its political status coupled and its currency board system. The Asian crises coupled with the additional costs imposed by the Euphoria-Panic cycle will push Indonesia down from 9th position. The political upheaval and transformation may also add to the delay in recovery as the new political system takes time to settle down. Half a decade may pass before Indonesia can hope to get back into the ranks of the star performers.

Table 2: Per Capita GDP Growth Forecast for 2000-10			

Country		**Rank**		**Avg gr rt**
Ireland		Top 3		**6.9%**
China*		Top 3		**5.9(4.9)%**
India**		Top 3		**5.7%**
Chile		Top 5		4.6%
Korea, Rep.		Top 5		4.4%
Vietnam		Top 10		**3.5%**
Singapore		Top 10		**3.0%**
Thailand		Top 10		**3.0%**
X		Top 10		
X		Top 10		
Notes:				
1) The forecast for 2000-2010 is based on analysis of past trends.				
2) * The forecast for China assumes that past over-estimates of growth by 2%				
would be gradually corrected over the decade (0.2% point per annum).				
Actual growth could be lower or higher as correction is faster or slower respectively.				
3)** The min is based on a worst case scenario which has a few years of very low growth.				

The top three performers in the first decade of the 21st century are forecast to be Ireland, China and India. Ireland and India share two characteristics. They were the two surprise entrants to the ranks of the star performers in the last two decades of the 20th century, and the only two in the accelerating phase of high growth during these decades. Even if Ireland reaches a plateau, maintenance of this growth rate would make Ireland the fastest growing economy.

China in contrast to the other two countries went through its accelerating and plateau phase during this period and seems to have entered the decelerating phase. Any forecast of China's growth is, however, complicated by the fact that past growth is over estimated by an average of 1 to 2% per annum. It is therefore difficult to estimate whether it will grow faster or slower than India. We have assumed an overestimation of 2%, and projected it to be corrected through better statistical systems over the next decade, to become 0% by the end of the decade. This yields an average growth rate of 5.9% per annum which is marginally higher than that estimated for India.

Conversely if we look only at the statistically corrected growth rates of per capita GDP it would have an expected value of 4.9%. This would lower China's rank below that of India, but still leave China among the top three performers during the next decade. Our reasons for taking the upper end of the statistical error (2%) and for forecasting a real underlying per capita GDP growth rate of 4.9% per annum over the next decade requires some justification. It is based on our analysis of euphoria and the possibility of accumulated negatives in a society and polity such as China. Among the inconsistencies or incongruities, which suggest such hidden negatives are the following:

a) Reports of masses of unemployed people roaming the countryside (or trying to enter cities without authorisation) looking for work. A typical low-income Asian "labour surplus economy" (a la Arthur Lewis) is characterised by disguised unemployment or underemployment in the rural sector. For such a country to have mass open unemployment after 18 years of 10.6% (or even 8.6%) growth, denotes inconsistency.

b) One of the enduring facts about low-income developing countries is that they have relatively low domestic saving rates, higher domestic investment and a corresponding deficit on the current account of the Balance of payments. China in contrast has phenomenal levels of domestic savings and investment coupled with very high levels of FDI and a surplus on the current account for 12 of the past 17 years (with an average surplus about 0.5% of GDP). This is a historical anomaly, which is unlikely to be sustainable.

c) China has comprehensive capital controls, a current account surplus and rising foreign reserves for much of the period. Yet the last two years have seen repeated discussion/speculation of a Chinese devaluation. With capital account controlled, a devaluation in the presence of current account surplus and rising reserves is a complete violation of market economics (but perhaps not of socialist mercantilism). Yet this does not seem to figure in discussion or analysis raising a suspicion of (euphoria sustaining) tacit collusion.

d) China's labour intensive exports are highly competitive. This cannot, however, be said of the capital-intensive exports produced by the state enterprises. Yet a very large variety of such exports at unbeatable prices are increasingly found in developing countries. The possibility that these entail implicit subsidies in the form of losses financed by loans from the State banks cannot be ruled out. Recent estimates of non-performing loans of around 24% of GDP support this hypothesis.[8] It would also suggest future difficulties with respect to export growth.

Despite these potential negatives our forecast assumes a decline in average real per capita GDP growth of only about 2% points from its performance in the last two decades.

India on the threshold of the 21st century is still a low-income country on the accelerating phase of its catch up, with an enormous amount of catch up still left. The greatest strength (some would say weakness) is the free, open and democratic society and polity, which ensures that all weaknesses and problems are fully exposed and debated. The actual growth rate will depend on the pace and depth of reforms that follows from this knowledge. Growth may be slower than projected if some critical reforms such the reallocating and improving the quality of government expenditure are not undertaken in the next 5 to 10 years. Achievement of per capita GDP growth above the projected 5.7% would require a substantial step-up in the pace of economic reforms on the lines indicated in Virmani (1999). The projected growth rate of 5.7% per annum over the next decade is 1.6 per cent point higher than the trend growth rate during the last two decades. It would move India from 6th rank in 1980-2000 to third or higher rank in 2000-2010. This is a feasible proposition, because;

a) A spurt of reforms in 1991 and1992 increased growth by about 1 % during the next eight years compared to the previous 12 years, and

b) India will undergo a demographic transition during the next two decades which will lower the dependency ratio (Bloom and Williamson (1998)) and could increase per capita GDP growth rates by about 0.7%.[9]

South Korea is the only other country to retain its position among the 6 fastest growing economies while Chile moves up to this sub-category. Korea has previously had very sharp drops in growth. The current drop is however much sharper and reflects a larger accumulation of negative factors requiring policy reform and new approaches. It is likely to move back towards its long-term trend growth rate, ensuring its position in the top six. Chile has been moving up the growth rankings and appears set to continue on this path even though its past recovery-record is mixed. Several setbacks were semi-permanent and reduced trend growth while others were followed by a renewal of vigorous growth. The growth slowdown this time is relatively minor and therefore expected to be reversed.

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[8] Fred Hu of Goldman Sachs, Hong Kong (Economist, December 11, 1999; pp 73-74)
[9] The dependency ratio is the ratio of dependants (children & aged) to working age population.

Vietnam, Singapore and Thailand are the other three star performers of the last two decades, which may remain stars. Though Vietnam seems to have come to an end of one bell growth cycle, it has the potential to re-accelerate given sufficiently purposeful reforms. There is however the possibility that such reforms will not take place for political reasons and Vietnam will drop out of the top ten. Thailand still has high growth potential but also an accumulated baggage of un-addressed negatives. The degree of attention and success in dealing with the accumulated problems will determine its growth ranking. In both cases we have assumed an average pace of reforms in making the judgement that they will remain in the top ten. There is much less uncertainty about Singapore, which will continue on its gradually declining growth trend. Growth is however, unlikely to decline so much as to remove it from the top ten during the next decade.

With two slots opening up in the top ten, promising potential candidates for inclusion among the star performers of the first decade of the 21st century are Sri Lanka, Norway, Laos, Poland, Bangladesh and Uganda. Thus for the two slots vacated by Asian countries in the top ten, three of the six potential candidates are from Asia and four out of six are poor countries in which policy reforms will play an important role. Over a slightly longer horizon Indonesia remains a candidate while Malaysia's performance could still be in the top 15. In the case of Sri Lanka and Bangladesh, the creation of a South Asian common market could also play a catalytic role given the projected growth rate of India.[10] Given that 11 of the 16 fastest growing economies in the next decade could well be Asian the possibility of an 'Asian century' cannot be ruled out.

B. Size: China and India

We have shown in the previous section that India and China are likely to be among the three fastest growing economies in the World in the first decade of the 21st century. This has certain implications for the Global Economy. In terms of relative size, measured by GDP in purchasing power parity, the five largest economies in the world in 1998 were the USA, China, Japan, Germany and India.[11] By the end of 1999 India will overtake Germany to become the fourth largest economy. Taking the tentative growth projections in Table 2 and estimating a per capita GDP growth rate for the USA, Germany and Japan as 2%, 1.5 to 1.9% and 0.9 to 1.5% per annum over the next decade we make some illustrative projections for the large countries. The Indian economy is projected to be 7-15% larger than that of Japan (in terms of GDP at PPP) in 2010. Thus by 2010 India's economy will be among the three largest in the world after the USA and China. Its per capita GDP (at PPP) would still however be about one-fifteenth to one-twelfth of Japan's and about one-tenth that of Germany.

The countries with the largest contribution to World GDP growth in 2010, in terms of absolute US $ value of additional GDP (at market exchange rate) will also be China, USA, Japan and India.[12] In that year, China's contribution is projected to be about 45% and India's about 18% that of the USA. Japan's contribution will be 17-24% and Germany's 13-18% of that of the USA. These increments to GDP would also be an approximate measure of their incremental contribution to World trade in goods and traditional services (e.g. international transport &

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[10] Perhaps followed by an Asian Common Market including ASEAN.

[11] This is a much better way to compare the relative size of different economies than nominal exchange rate based estimates, even though it is far from perfect.

[12] Market exchange based estimate has some value if our main focus of interest is trade, as tradable goods are the ones least affected by the application of PPP measures.

communication). With a host of newly tradable services likely to enter world trade in the next decade, the PPP based indicators may provide better indicators for the increase in trade in previously non-traded services.

V. CONCLUSION

While attention has been focused on the Asian Tigers, Asian NICs and the Chinese dragon during the past two decades, the performance of the Asian Elephant, India has largely gone unnoticed.[13] In terms of per capita income the accepted measure of economic performance, India was the eighth fastest growing economy in the world during 1980-98. It is estimated to be the sixth fastest during the last two decades of the 20th century. Only S. Korea and Singapore among the 'Asian Tigers,' Thailand & Indonesia among the NICs (Newly Industrialised Countries) and China (the newest Asian HPE), will have a higher trend growth rate during these two decades.

In the first decade of the 21st century India's growth ranking is projected to improve further to the top three. In the next decade therefore India is forecast to grow faster than the 'Asian Tigers' and the 'Asian NICs'. Its only Asian (or Emerging market) competitor in the growth sweepstakes will be China the newest Asian entrant to the group of star performers. The cycle of history will after half a century have turned full circle, with these two large emerging economies again engaged in friendly competition for the number two slot in the economic growth and development sweepstakes.

By 2010 India will be the third largest economy in purchasing power parity. In that year its contribution to the growth of the World economy in current US $ s will also be the third or fourth largest. Despite its relatively low per capita income, India will therefore be (along with the USA, EU,

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[13] Virmani(1999) was perhaps the first to point this out.

China and Japan) one of the five most important economies in the world in 2010. Further 11 of the 16 fastest growing economies in the next decade may be Asian countries constituting half the World's population (in 1998). Though the next quarter century will still be part of the previous American century, the contours of the 'Asian century' will be clear even to sceptics by 2025.

A stable 'Balance of Power' within Asia will be critical to World peace in the last three-quarters of the 21st century. It is therefore in the interest of the USA to use its position as the sole super power, to help build (during the next decade or so) an internally consistent and stable balance of power within Asia, that is sustainable without American military intervention.

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Potential Growth Stars of the 21st Century:
India, China and the 'Asian Century'!

by

Author

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Abstract

Over the last two decades or so the important role played by economic factors in international relations has been recognised and appreciated. Prof. Kissinger has written about the emergence of six 'Great Powers' in the 21st century (USA, EU, China, Japan, Russia and India). This is particularly so since the disintegration of the Soviet Union, as poor economic performance and growth was a major factor in undermining its stability and power. In the last decade or two fast growing economies have received a lot of attention and importance not only in World Capital Markets but also in World Capitals. The current paper attempts to provide a better basis for making economic forecasts that in turn can provide a sounder base for making power projections. It does this by first identifying the fastest growing economies of the last two decades of the 20th century (based on World Bank data). Using a framework of 'catch-up growth' it analysis the growth pattern of these high growth economies (for a longer period from the sixties). This forms the basis for making projections for the first decade of the 21st century.

The paper shows that by 2010 India will be the third largest economy in purchasing power parity. In that year its contribution to the growth of the World economy in current US $ s will also be the third or fourth largest. Despite its relatively low per capita income, India will therefore be (along with the USA, EU, China and Japan) become one of the five most important economies in the world in 2010. Further 11 of the 16 fastest growing economies in the next decade may be Asian countries constituting half the World's population (in 1998). Though the next quarter century will still be part of the previous American century, the contours of the 'Asian century' will be clear even to sceptics by 2025.

	Appendix Table 1a: <u>Trend Growth Rate of Large economies: 1980-98</u>																					
	Avearge annual (%) growth																					
Country	**Gross Domestic Product**															**Per Capita GDP**						
Economy								**proj**	**Population**						**proj**							**proj**
	60-70	70-80	80-90	90-98	**80-98**	**90-00**	**1980-00**	**2000-10**	60-70	70-80	80-90	90-98	**80-98**	**1980-00**	**2000-10**	60-70	70-80	80-90	90-98	**80-98**	**1980-00**	**2000-10**
<u>Largest</u>																						
USA	4.3	2.8	3.0	2.9	2.9	2.9	3.0	2.8	1.3	1.0	*0.9%*	*1.0%*	0.9%	0.9%	0.8%	3.0	1.8	2.1%	1.9%	2.0%	2.0%	2.0%
China	5.2	5.2	**10.2**	**11.1**	**10.6**	10.1	10.1	6.8	2.3	1.8	1.5%	1.1%	1.3%	1.3%	0.9%	2.9	3.4	8.7%	**10.0%**	**9.2%**	8.8%	5.9%
Japan	**10.4**	4.3	4.0	1.3	2.8	1.2	2.6	1.7	1.0	1.2	*0.6%*	*0.3%*	0.5%	0.4%	0.2%	9.4	3.1	3.4%	1.0%	2.3%	2.1%	1.5%
Germany	4.4	2.6	*2.2*	*1.6*	1.9	1.7	1.9	1.6	0.9	0.0	*0.1%*	*0.5%*	0.3%	0.3%	0.1%	3.5	2.6	2.1%	1.1%	1.7%	1.6%	1.5%
India	3.4	3.4	**5.8**	**6.1**	**5.9**	6.3	6.0	7.0	2.3	2.3	2.1%	1.8%	2.0%	1.9%	1.3%	1.1	1.1	3.7%	**4.3%**	**3.9%**	4.1%	5.7%
France	5.5	4.6	2.3	1.5	2.0	1.7	2.0	1.7	1.1	0.6	0.5%	0.5%	0.5%	0.5%	0.4%	4.4	4.0	1.8%	1.0%	1.5%	1.5%	1.25%
UK	2.9	2.0	3.2	2.2	2.7	2.0	2.6	2.2	0.6	0.1	0.2%	0.3%	0.2%	0.2%	0.2%	2.3	1.9	3.0%	1.9%	2.5%	2.4%	2.0%
Italy	5.5	3.8	2.4	1.2	1.9	1.3	1.9	1.3	0.7	0.5	0.1%	0.2%	0.1%	0.1%	0.0%	4.8	3.3	2.3%	1.0%	1.7%	1.7%	1.3%
Brazil	5.4	8.1	2.7	3.3	3.0	2.9	2.8	3.2	2.8	2.4	2.0%	1.4%	1.7%	1.7%	1.2%	2.6	5.7	0.7%	1.9%	1.3%	1.1%	2.0%
Canada	5.6	4.6	3.3	2.2	2.8	2.3	2.8	2.2	1.8	1.2	1.2%	1.2%	1.2%	1.2%	0.9%	3.8	3.4	2.1%	1.0%	1.6%	1.6%	1.3%
Spain	7.1	3.5	3.0	1.9	2.6	2.2	2.6	1.9	1.0	1.0	0.4%	0.2%	0.3%	0.3%	-0.1%	6.1	2.5	2.6%	1.7%	2.2%	2.3%	2.0%
Russia			2.8	-7.0	-1.7	-5.9	-1.7	2.0			0.6%	0.0%	0.3%	0.3%	-0.2%			2.2%	-7.0%	-2.0%	-2.0%	2.2%
Mexico	7.6	6.3	0.7	2.5	1.5	3.0	1.9	3.3	3.3	2.9	2.3%	1.8%	2.1%	2.0%	1.3%	4.3	3.4	-1.6%	0.7%	-0.6%	-0.2%	2.0%
<u>Miracle</u>																						
Hong Kong	**10.0**	**9.2**	**6.9**	4.4	**5.8**	3.7	5.3	3.5	2.6	2.4	1.2%	1.9%	1.5%	1.5%	2.1%	7.4	6.8	5.7%	**2.5%**	**4.3%**	3.7%	1.4%
Indonesia	3.9	**7.2**	**6.1**	**5.8**	**6.0**	5.2	5.7	3.5	2.1	2.4	1.8%	1.7%	1.8%	1.7%	1.4%	1.8	4.8	4.3%	**4.1%**	**4.2%**	3.9%	2.1%
Korea, S	**8.6**	**9.6**	**9.4**	**6.2**	**7.9**	6.2	7.7	5.5	2.6	1.8	1.2%	1.0%	1.1%	1.1%	1.1%	6.0	7.8	8.2%	**5.2%**	**6.8%**	6.6%	4.4%
Malaysia	**6.5**	**7.9**	5.3	**7.7**	**6.3**	6.7	6.0	4.9	2.9	2.4	2.6%	2.3%	2.5%	2.4%	2.4%	3.6	5.5	2.7%	**5.4%**	**3.9%**	3.5%	2.5%
Singapore	**8.8**	**8.3**	**6.6**	**8.0**	**7.2**	7.1	6.9	4.8	2.4	2.0	*1.7%*	*1.9%*	1.8%	1.8%	1.8%	6.4	6.3	4.9%	**6.1%**	**5.4%**	5.1%	3.0%
Thailand	**8.4**	**7.1**	**7.6**	***7.4***	**7.5**	6.7	7.1	4.4	3.0	2.7	*1.7%*	*1.2%*	1.5%	1.4%	1.4%	5.4	4.4	5.9%	**6.2%**	**6.0%**	5.7%	3.0%
Vietnam	3.8		*4.6*	***8.6***	**6.4**	7.7	6.2	5.6	3.1		*2.1%*	*2.1%*	2.1%	2.1%	2.1%	0.7		2.5%	**6.5%**	**4.3%**	4.1%	3.5%
Taiwan*			7.9	6.3	7.2	6.2	7.1	4.4			1.6%	1.3%	1.5%	1.4%	1.4%			6.3%	5.0%	5.7%	5.6%	3.0%
<u>Medium</u>																						
Chile	4.4	1.4	4.2	**7.9**	5.8	7.1	5.6	6.0	2.1	1.6	1.6%	1.6%	1.6%	1.6%	1.4%	2.3	-0.2	2.6%	**6.3%**	**4.2%**	4.0%	4.6%
Ireland	4.2	4.9	3.2	**7.5**	5.1	7.4	5.3	7.3	0.4	1.5	0.3%	0.5%	0.4%	0.4%	0.4%	3.8	3.4	2.9%	**7.0%**	**4.7%**	4.9%	6.9%
EU5/USA															1.7%							

Appendix Table 1b: Growth Pojection for Large economies																				
	PPP: Per capita gnp					PPP GNP (bi $)							GDP at 1998 exchange rt (bi$)							
	1998	2000	2010	2020	2030	1998	2000	2010	2020	2030	2040	2050	1998	2000	2010	2020	2025	2030	2040	2050
Largest																				
USA	29340	30644	37355	45536	55508	**7923**	8429	**11110**	14379	**18610**	24086	31173	**8211**	8736	**11514**	**14902**	**16953**	**19287**	24961	32306
China	3570	3943	6996	11287	18386	4383	4961	**9579**	**16418**	28141	43855	68341	961	1088	2100	3600	4713	6170	9616	14985
Japan	23180	23249	26982	31313	36340	2928	2964	3508	3906	4350	5090	5955	3783	3829	4532	5047	5326	5620	6575	7693
Germany	*20810*	21502	24954	28960	33609	1709	1776	2081	2362	2680	3195	3808	2142	2226	2609	2961	3154	3360	4005	4775
India	1700	1876	3266	6130	10979	1661	1902	**3741**	7717	15193	28546	53633	383	439	864	1781	2500	3507	6590	12381
France	22320	23244	26319	29800	33742	1312	1380	1625	1836	2075	2524	3070	1433	1507	1775	2005	2132	2266	2756	3353
UK	20640	21116	25741	31378	38250	1219	1253	**1565**	1892	2286	2763	3339	1357	1396	1743	2107	2316	2546	3078	3719
Italy	20200	20933	23820	27104	30841	1163	1209	1376	1444	1516	1705	1918	1171	1217	1385	1454	1489	1526	1716	1931
Brazil	6160	6135	7479	9117	11113	1021	1052	1442	1912	2536	3704	5412	778	802	1099	1457	1678	1932	2823	4124
Canada	24050	24704	28110	31985	36395	736	774	962	1164	1408	1825	2364	599	630	783	947	1042	1146	1485	1925
Spain	16060	17071	20810	25367	32472	632	675	815	962	1193	1409	1664	552	590	712	841	937	1043	1231	1454
Russia	3950	3808	4734	5771	9400	580	562	686	898	1426	2058	2969	447	434	529	692	872	1099	1586	2289
Mexico	8190	8680	10581	12899	15723	786	866	1199	1611	2166	2912	3915	393	434	600	806	935	1084	1457	1959
Miracle																				
Hong Kong	22000	21706	24944	28665	32940	147	150	211	226	241	273	310	167	169	239	255	264	273	309	351
Indonesia	2790	2860	3521	4334	6415	569	603	851	1229	1973	2877	4194	96	102	144	208	264	334	487	710
Korea, S	12270	13502	20768	30741	43364	569	640	1093	1618	2284	3071	4130	298	335	572	847	1006	1195	1607	2161
Malaysia	6990	7059	9037	11568	14808	155	164	266	353	468	590	744	71	76	123	162	187	215	271	342
Singapore	28620	29745	39975	53724	68771	91	97	156	209	267	325	396	85	92	147	197	223	252	307	373
Thailand	5840	6141	8253	11091	16418	357	386	597	804	1192	1604	2160	154	166	257	346	422	514	691	931
Vietnam	1690	1763	2488	3509	5716	131	142	246	364	622	966	1502	25	27	47	69	90	118	183	285
Taiwan*	10550	11510	15468										227		393					
Medium																				
Chile	12890	13450	21088	33064	46641	191	206	368	580	870	870	870	78	84	150	237	290	355	355	355
Ireland	18340	20939	40806	66469	98390	68	78	157	289	484	484	484	81	93	188	346	448	580	580	580