

The Economic Foundation of National Power: From Multi-Polar to Tri-polar World? Arvind Virmani

The economy is the foundation of power. Power according to Mearsheimer is always relative. Therefore, absolute size of the economy does not matter; it is the relative size that matters. Unlike perhaps in the 18th or 19th centuries where economy and defence were the only things that mattered, there are a number of other factors that we have to keep in mind in the 21st century. One is democratic accountability. Powers like India, US, and the EU are restricted in what they can do by democratic accountability. One element of this is the effect of globalisation and human rights. Moral legitimacy of the use of power becomes important and soft power, in this case, plays an important role. The second factor is nuclear weapons, which have changed the dynamics of power in the 21st century. In that I believe, as Mr. K. Subrahmanyam has often said, war between global powers is not very likely. The third factor is the issue of non-state actors which complicates the situation. Most importantly, the fourth factor is the will to exercise power, which is an issue as far as India is concerned. Does India have the will to exercise power? The events of the last year have heightened my own apprehensions about it. There are of course scholars who have asserted that India does not have a strategic culture and therefore will have difficulty being a power and using power.

Before discussing some of these factors, let us compare the economic size of countries. In comparing the economic size of countries, what is basically used is PPP or purchasing power parity. The PPP is a very simple idea. For example if one can buy a certain basket of goods in the US with a 1000 USD, how many Indian rupees can buy the same basket of goods? This turns out to be around 12,000 rupees. So the PPP exchange rate is 1:12 and not 1:40. Therefore the purchasing power parity GDP, which is your ability to buy a certain basket of goods, is what measures the real economic size of a country. The welfare of the people depends on how much they can buy from their income. Hence, we have to measure GDP in terms of PPP. It is the only way to compare the relative size of economies and the relative welfare of per capita income. GDP mechanically can be thought of as population times per capita GDP. Similarly, when you think of national income, it is population times the average income per person.

Figure 1: Regional Shares of World GDP at PPP

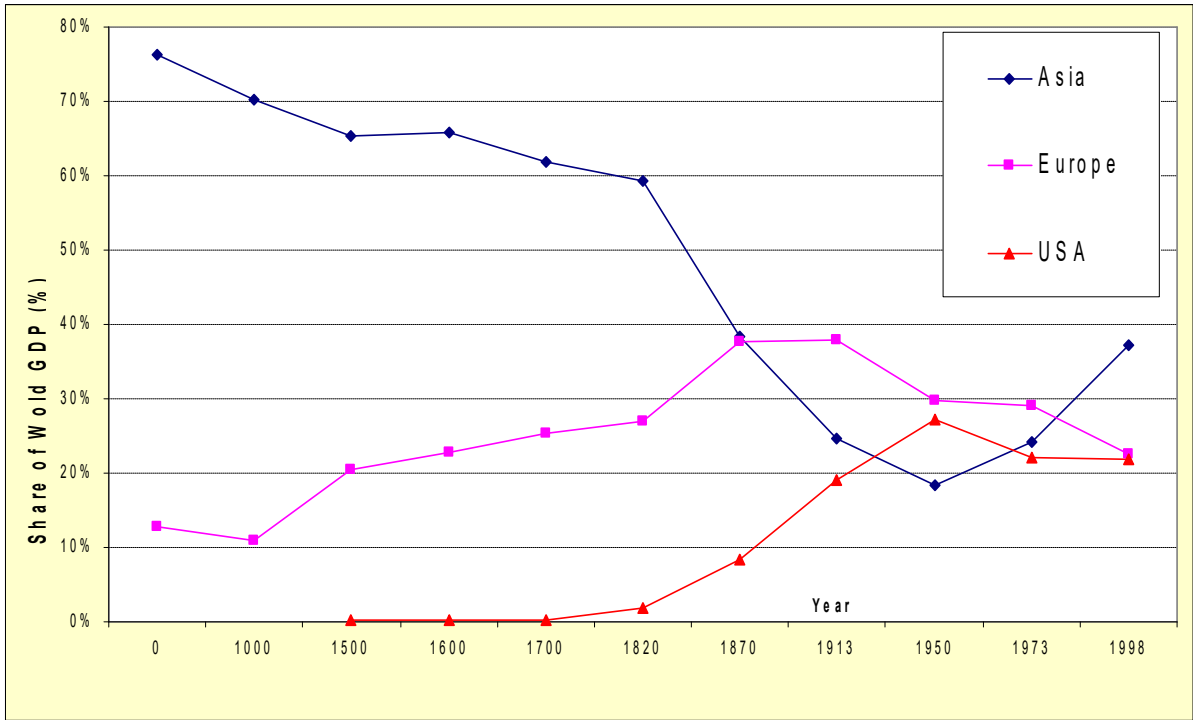
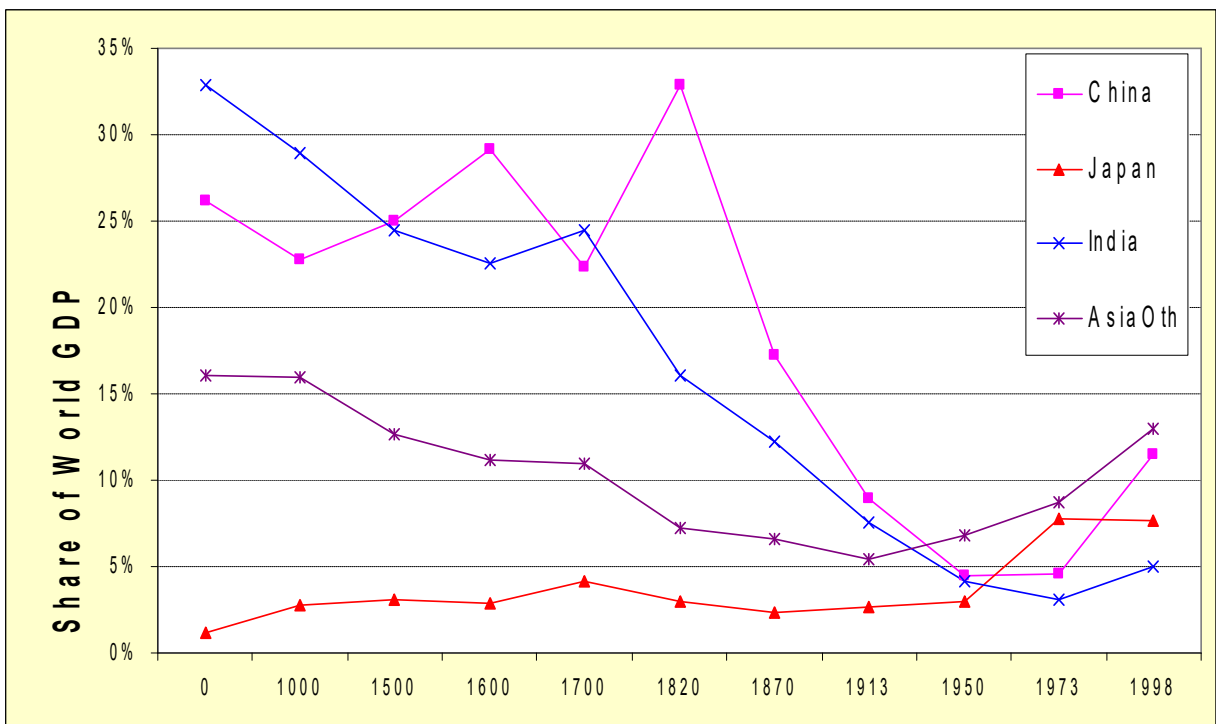


Figure 2: Asian Countries' Share in World GDP



As Figure 2 indicates, at the start of the millennium, Asia had roughly 80% of world GDP. It was more or less constant till the Industrial Revolution and then there was a sharp decline from 60% to a minimum of 20%. This was around the end of the Second World War. Similarly the corresponding rise in Europe (Figure 1) is from 10% to a maximum of roughly 40%. In the case of US, being a new country, it started at 0% and then rose rapidly. At the

end of the Second World War, the situation started to change. Asia began its rise again, Europe started declining and America was more or less stable.

Individual Asian countries also show the same pattern (Figure 2). India was larger than China in only in two periods; otherwise China's share of the world GDP has always been higher than India's. The second point to make note of is that Japan was the first to start rising followed by ASEAN, then China and India. So the growth began between 1950 and 1970. Figure 3 shows the picture from 1975 onwards. There is a revival of Asia from 15% of world GDP to about 30% and Europe is on the decline. The basic thesis today is that this is going to continue into the whole century.

Figure 3: Changing Global Economy

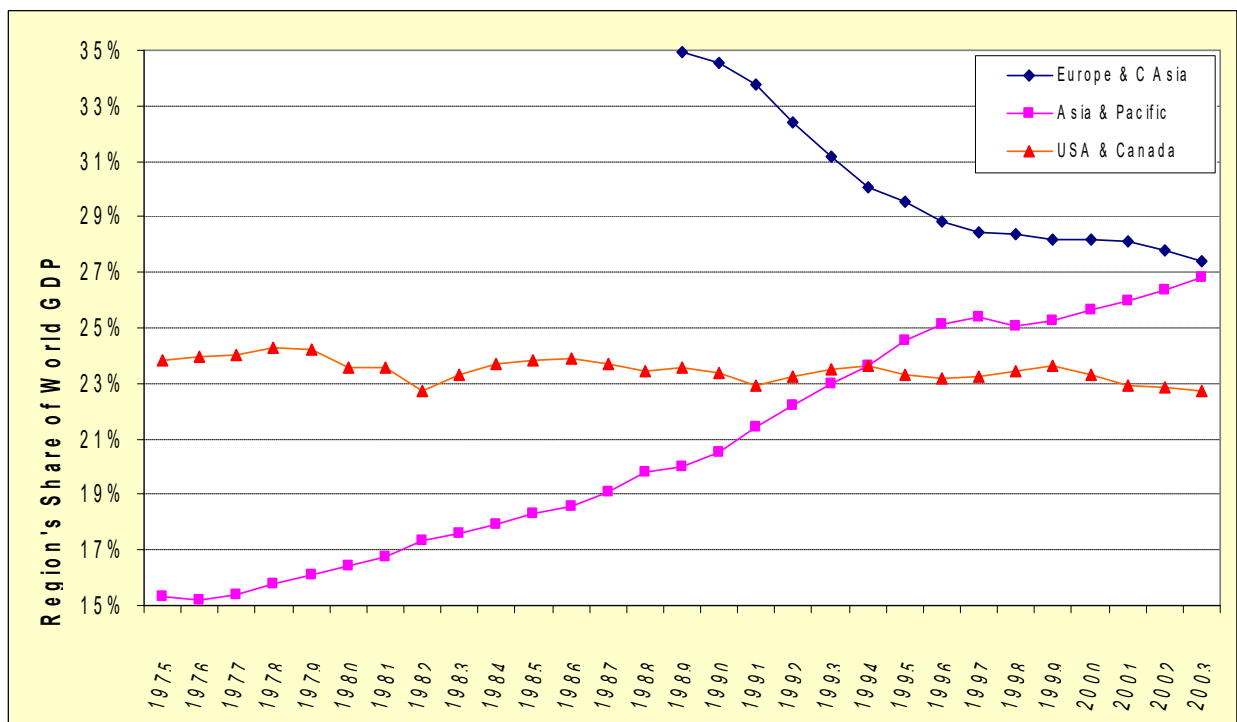
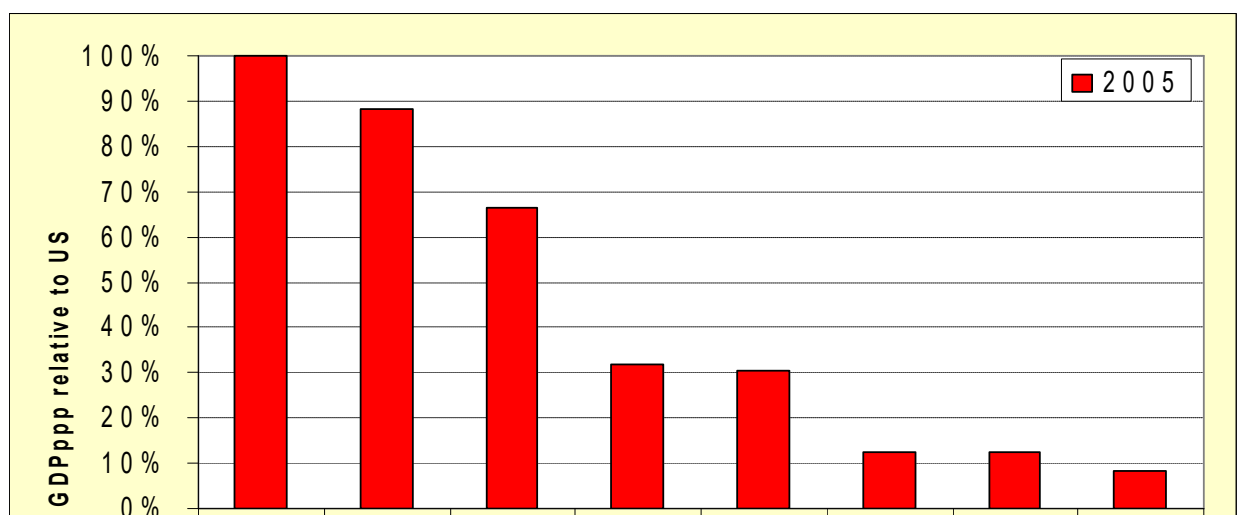
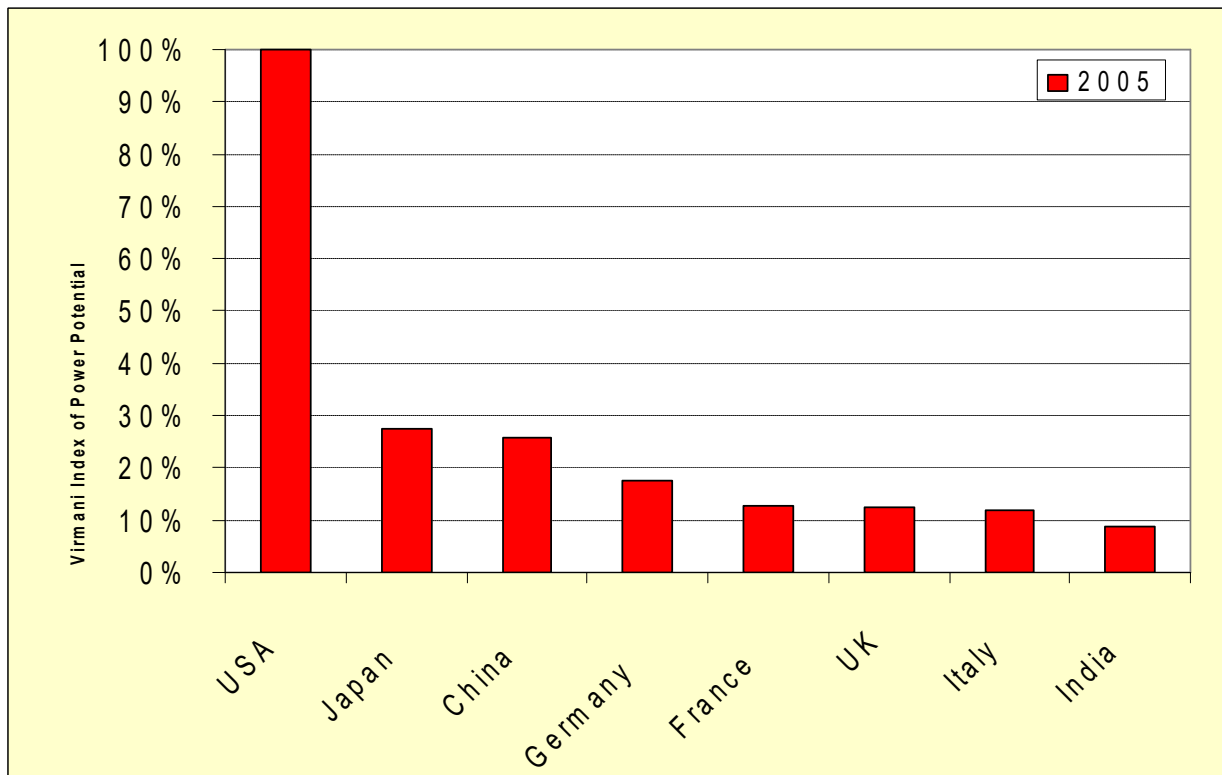


Figure 4: Multi-polar World Economy



What is the situation today? Figures 1 to 3 compared the economic might of countries based on GDP world share. Figure 4 compares GDPs of countries relative to the US. The EU which is EMU + UK is taken as one unit because of the argument that as an economy the EU acts as a single unit. Figure 4 allows for an argument that the world economy is multipolar. The US, EU and China are more or less equal while Japan and India are less than half the size of the US, which shows the inequality in the size of the economies.

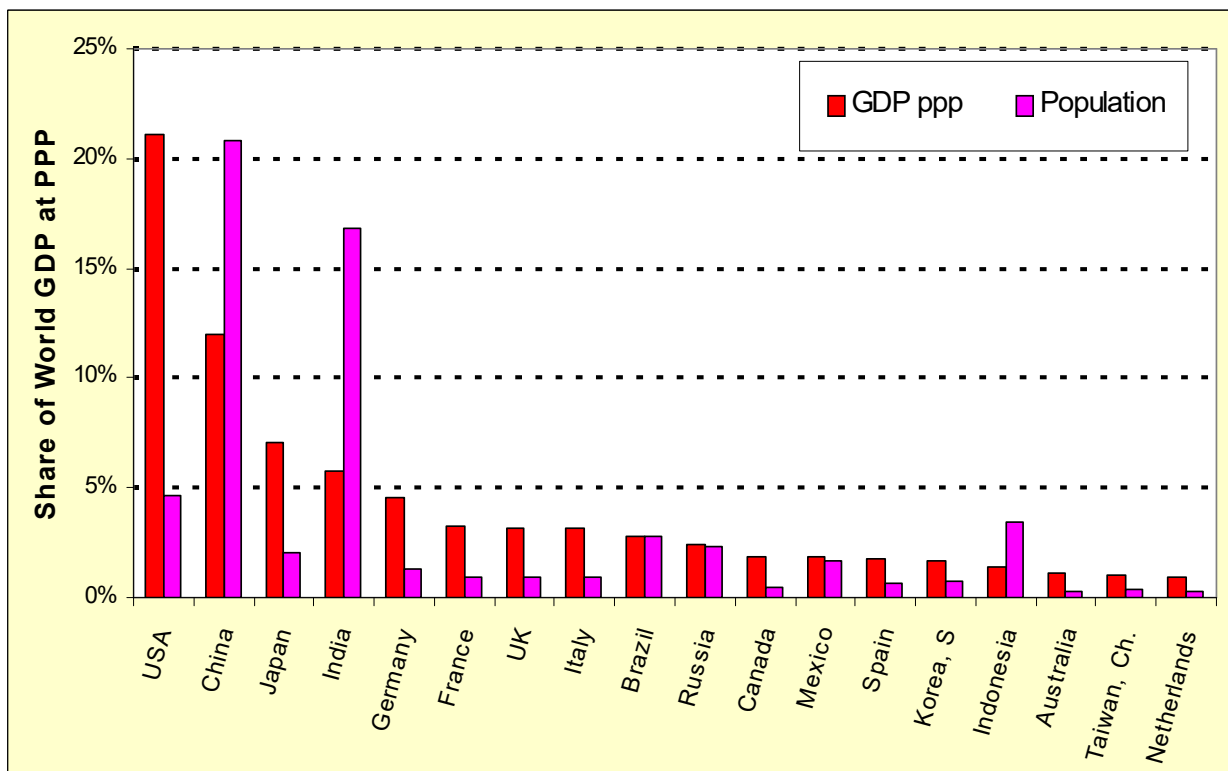
Figure 5: Uni-polar Global Power Structure



This picture changes completely when economies are measured in terms of their power potential¹. In Figure 5, the US lead over Japan and China becomes huge. US power potential is three times that of the next power which is Japan. Although this is changing so rapidly that China could already be interchanging positions with Japan, the inequality between the economies is evident. Therefore the world is still overwhelmingly uni-polar.

Looking at the future, let us see how these inequalities or gaps between the economies will be closed. By comparing the GDP share and population share, my thesis is that the gap will close because of the per capita income, which is a phenomenon of catch up growth currently occurring in India and China.

Figure 6: Global Imbalance: GDP and Population Shares



The US share of world economy is 21% and China's share is around half of that of the US. Similarly, India's share is around one fourth that of the US. In terms of population, China and

¹ I have devised a simple index of power potential based on economic factors which I call the Virmani Index of Power Potential (VIP²). The VIP² is based on concepts of the production function of the economy which includes the physical capital stock, human capital stock, including educational skills and technology. When all of these are put together into a function, it gives us the economic power of a country. The specific defences, aerospace and nuclear equipment which we define as strategic assets, do not form part of the overall physical, human and technological capital.

India's share is much larger than that of the US followed by Indonesia, Brazil and Russia. In Figure 6, where both the GDP and population shares are shown together the gaps become evident. The US has a huge positive gap i.e. its share of world GDP is much larger than the share of its population. However in countries like China, India and Indonesia, it is the other way round. An important point to note is that there is a very small gap in the case of Brazil and Russia. My assertion is that the negative gap in case of India and China and the positive gap in case of US, Japan and other countries will close because of what is called the 'catch up growth'. Figure 8 shows the catch up growth potential by taking the ratio of the per capita income of each country to that of the US. India's per capita income is 1/10th that of the US. The huge gap is seen as a positive factor in terms of catching up with the West and therefore increasing the relative position. India, China, Indonesia have this negative gap while most of the developed countries have a positive gap. Over this century this gap is going to narrow and close. One may raise a question that while this gap did not close in the past what are the possibilities that it will happen in the future? The reason for this is the increasing per capita income and the GDP growth rates over the last 20-30 years. This can be explained in terms of the rate of growth of each country as well. Table 1 shows the ranking of countries by their rate of growth. China is on the top; both its GDP growth rate and per capita growth rate have been the highest and India is at the ninth position. For a period of 25 years from 1980 to 2007, the growth rates of both China and India have been high. With the higher growth rates, the per capita income gap is closing rapidly in the case of China and less rapidly in the case of India.

Figure 7: Catch Up Growth Potential - Globalisation and Growth Potential

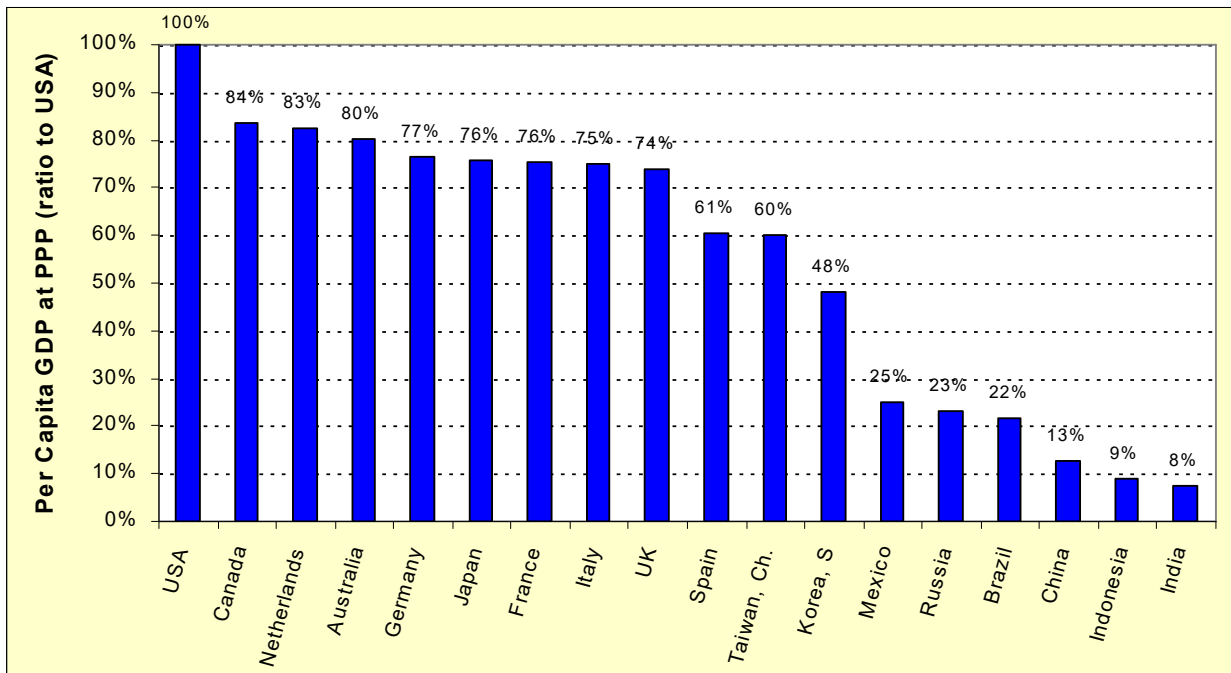


Table 1: Average GDP Growth - 1980 to 2004

Economy	Per capita GDP growth rate		GDP growth rate (avg)	
	Rank	Average gr rt	Rank	Average gr rt
China	1	8.2	1	9.6
Korea, Rep.	2	5.6	3	6.7
Taiwan, China	3	5.2	4	6.4
Thailand	4	4.7	7	6.0
Ireland	5	4.6	13	5.3
Singapore	6	4.4	2	6.9
Hong Kong, SAR	7	4.0	11	5.4
Vietnam #	8	4.0	8	6.0
India	9	3.8	9	5.8
Luxembourg	10	3.7	17	4.7
Indonesia	11	3.6	10	5.4
Malaysia	12	3.6	6	6.3
Note # Growth for 1980 to 1984 is estimated				

An interesting aspect is how the population shares play an important part in the catch up growth. When we look at the population projections (Figure 8), they show that by latest 2035

India's population will be larger than that of China but we take it as roughly equal. The third largest in population is the US and the fourth is Indonesia. The population shares of Russia and Germany are going to decline sharply over this half century. The interesting point here is that just arithmetically India and China only need 1/4th per capita income to be equal in size with the US because they are four times the population, whereas any other country has to have a higher per capita income than the US to catch up. My thesis, therefore, is that it is only India and China who over the next 50 years have the potential of challenging the US in terms of size and power potential. Hence only tri-polarity is possible. Alternatively, there are chances of quadri-polarity if EU becomes a virtual state. But this is not likely at least for the next 20-30 years and that is why I have left the EU out of this picture. The conventional wisdom (Figure 9) is that even by 2025 China's economic size (GDP relative to the US) will still be smaller than Japan and India would be smaller than Germany, UK and France. In terms of the US perceptions, China therefore will not be a major threat to the US and the world will still remain uni-polar even going out to the middle of the century when China would roughly be half the size of the US.

Figure 8: Population Projections - UN 2004

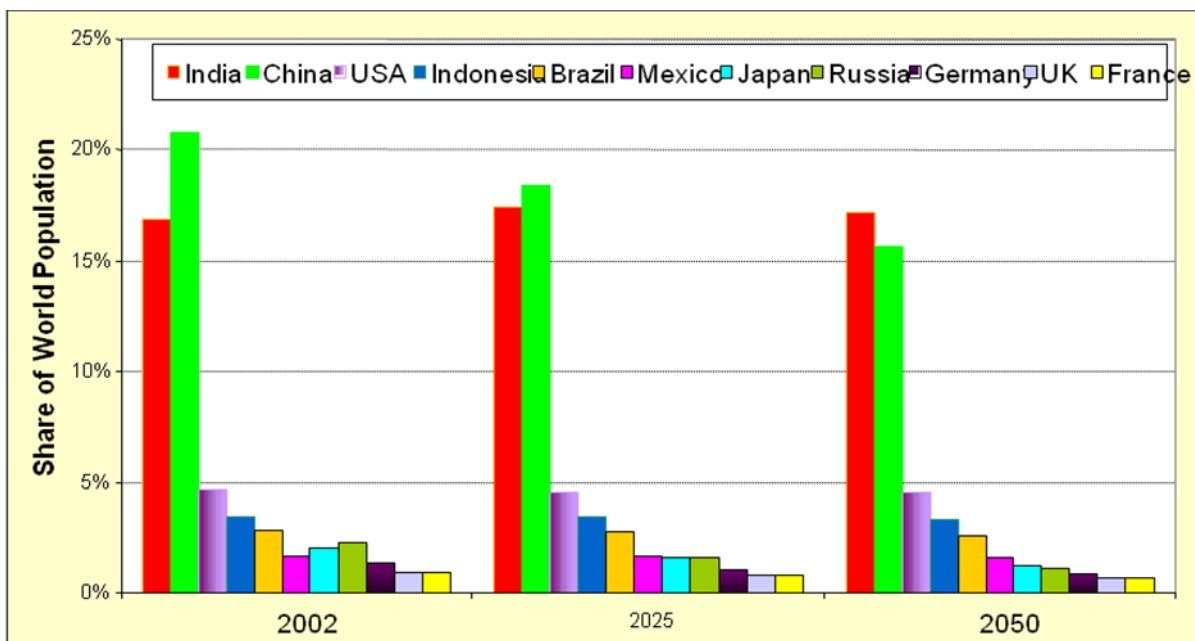
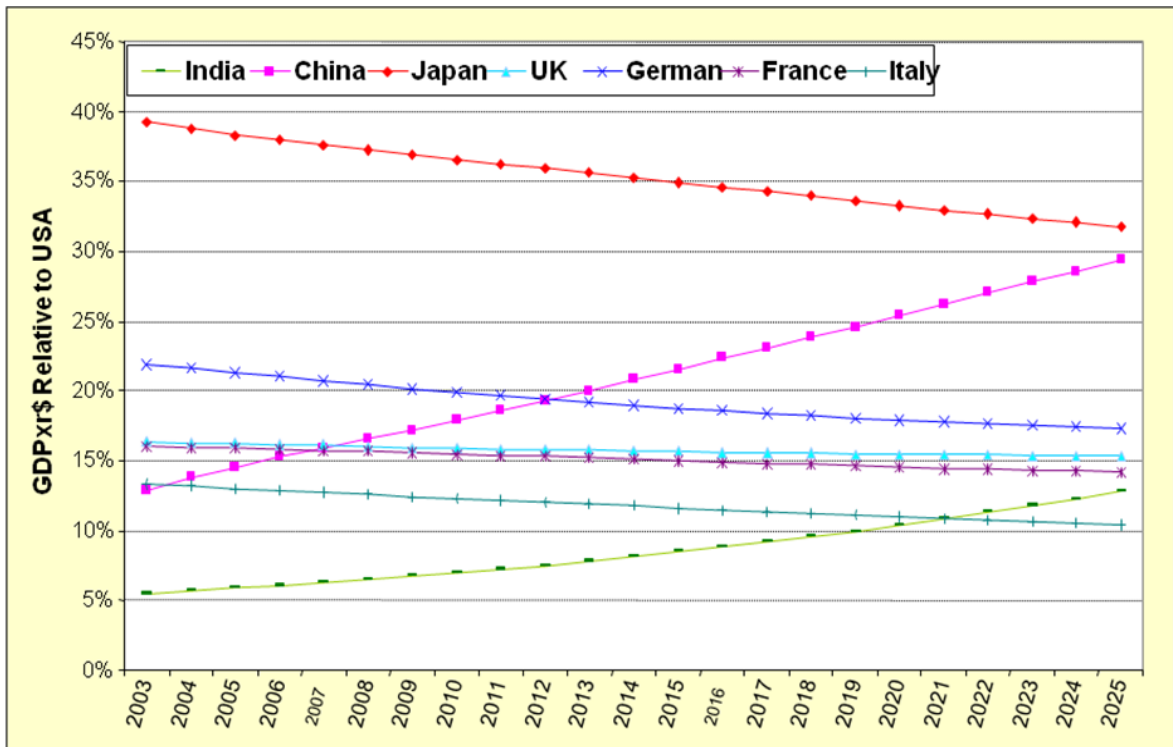


Figure 9: Conventional Wisdom - Uni-Polar



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Figure 10: Multi-polar World Economy

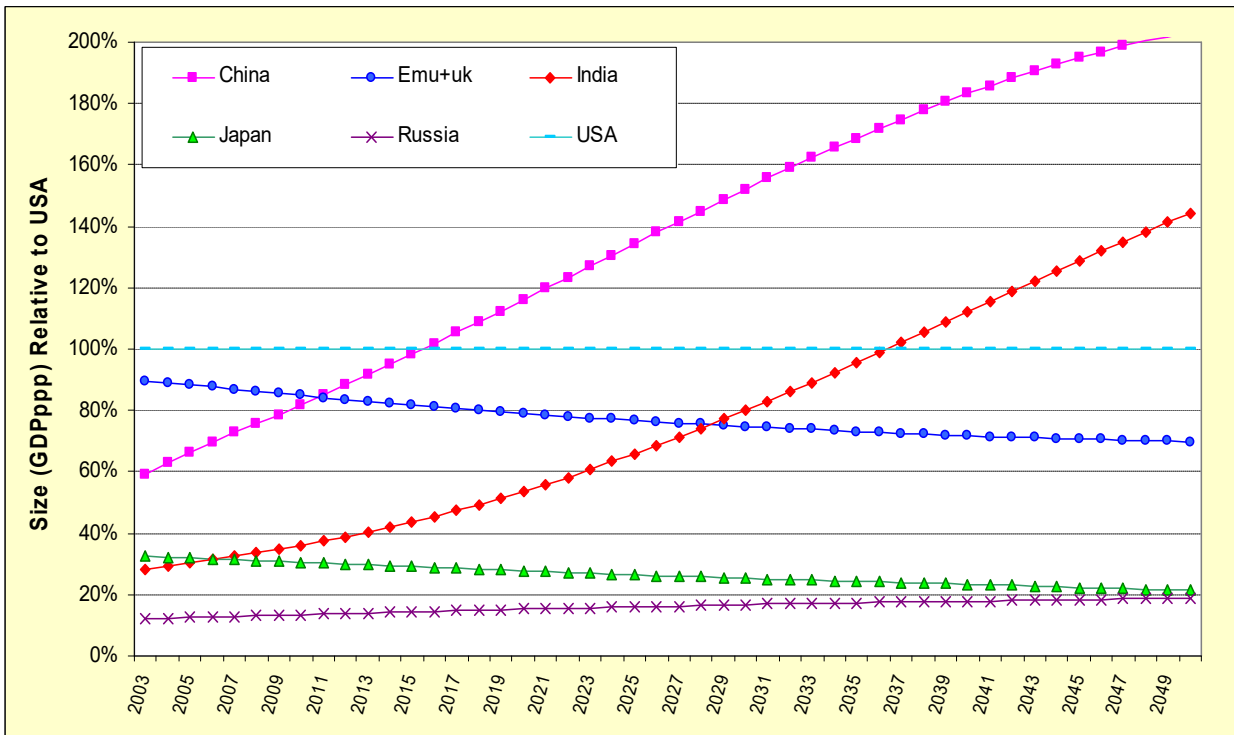
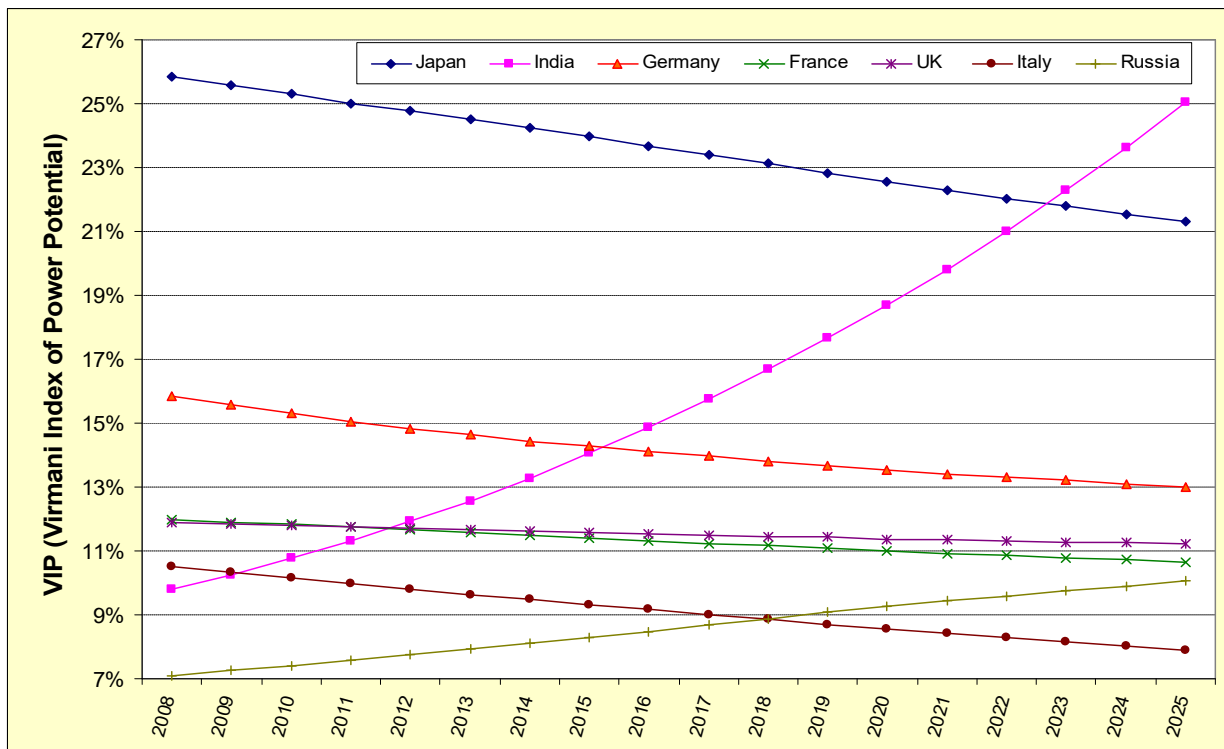


Figure 11: Evolution of Power Potential: VIP squared



I have projected a completely different picture in Figure 10 which is extended up to 2050. Accordingly, China's economy becomes twice the size of the US by the middle of the century and around 2035 India would equal the size of the US economy.

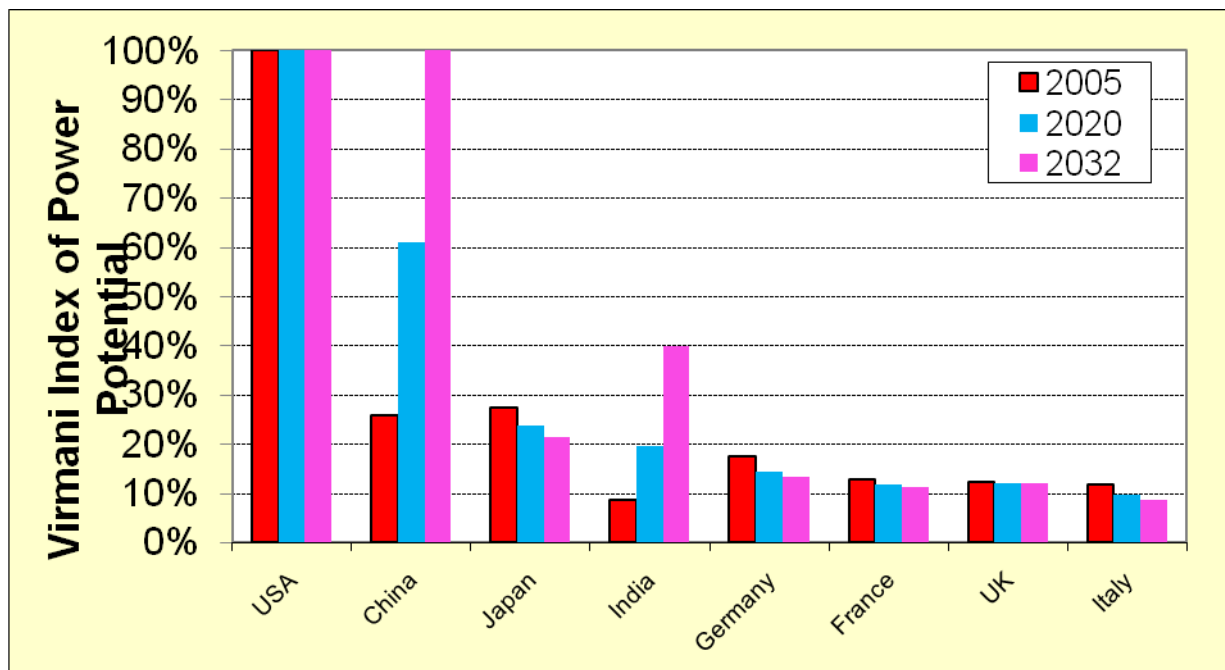
Let me come to power (power measured according to the power potential-VIP squared index) The projections in Figure 11 were more modest when I first made them, but in the last 3-4 years China and India are growing much faster than my projections had assumed. It is important to note here that US strategic assets are huge and they will remain much larger than China's for a long time. But these projections are purely economic since economic size is going to have a big effect on the way the world power structure will play out. The period between 2020 and 2035, where the world in my view would basically be bipolar, will be the period of potential conflict and danger for many countries.

With regard to India, if it continues its current growth rate it will be a significant power. India is rising and will rapidly overtake many developed countries in terms of power potential - Italy first, then France, UK, Germany and Japan. Japan will remain a significant power for the next 10 to 20 years. It is, therefore, very important for India to have good relations with

Japan because it is an Asian power, a democracy and it still has general technological capabilities which are sustaining its power status in spite of the decline in its population.

What is the likely power structure in 2020? In Figure 12, China's power potential is shown at 60% of that of the US. Since the power potential of the US still remains much higher, one may ask whether there is a change in the uni-polar structure. Yes, there is. My backward projections show that the USSR, at the peak of its power, had only 40% of the power potential of the USA. China will have 60%. Therefore in 15 years time the world will be bi-polar and this will be a very difficult period for Asia. India will have only 40% of the power potential of the US by 2030 but that is the same figure that I mentioned for the USSR. It is in this period that India would become potentially significant and the tri-polar structures will start to emerge.

Figure 12: Bi-Polar Global Power Structure



Actual power depends on strategic and defence technology, which in turn depends on public expenditure and development of such technology. This is affected by the will to exercise power. When discussing this, the example of China and Japan come to mind. China clearly has the will and has shown it repeatedly. The Chinese have always had the idea of being a

global power, as against which, Japan after losing in World War II, had a peace constitution. Japan has deliberately eschewed power even while it was still the second strongest power. There was no will to exercise, use or develop this power since the Second World War. Japan made this deliberate choice. The fact is that a country that does not show the will, cannot be powerful.

Strategic technology is a critical element in power. The cost and efficiency of strategic technology varies widely across the world. Alliances which give you this technology and equipment, can not only reduce the cost but can improve the efficiency of the acquisition. Much of the Soviet and American technology after the Second World War was dependent on the German technologists, who they stole from defeated Germany. When the Pentagon had hired experts to study India, I told them that in order to have good relations with India it is important to remove the technological apartheid. Russia, France and the UK have had oligopoly in our market. Clearly, adding Israel and the US will improve our terms. It is a simple matter of economic logic. The more players there are on the seller's side, the better deal you get.

The lessons of history show that there is a significant risk of conflict between the rising power and the dominant power. The only exception is the US and UK. One has to remember that China is ruled by a Leninist party. Private consumption in China is 37% of GDP as against 70% in the US and about 60% in India. Therefore, in China, the rest of the economy - 60% - is directly controlled by the party. This gives it enormous control over the money it can spend. The Americans would have to have huge taxes to match the money at the disposal of the Chinese. If China has a democracy in the future, this scenario will completely change. The fact that two middle income countries - China an upper middle income country and India a lower middle income country - will be a part of the global power structure is unprecedented in history. One can choose to be sceptical of the projections made above. The conventional Western wise men are still not willing to believe firstly that this is going to happen and secondly the serious implications this shall have for the world power structure.

With regard to maintaining a better balance of power in Asia, I have advocated that we use the concept of democracy to develop better relations with Japan, Indonesia, Australia etc. because even put together these will be smaller in power potential than China. There are new approaches and capabilities which India needs to focus on - one is power projection, the second is intelligence and the third is covert action, which is something India is very

squeamish about. What has amazed me in observing the US is the way it controls the discourse, language and agenda of foreign policy. India should develop the same capability. Motivation, toughness, and unity of purpose seem lacking right now. Institutions of governance are the greatest weakness and we have to improve, evolve and focus on these.

In the past, until the 1980s, India was very poor and weak with little prospects of major improvement. This is not true any more. Some of us who focus on the future forget about the present. Presently we are a low income country - in impolite terms, a poor country. The average income is still very low, but we have managed to be one among the powers in the multi-polar world. This is not contradictory but unusual. India is soon to become a lower middle income country. In the next 15 years things are going to change drastically. People who are presently below the poverty line will rise above that level and people will be able to see this change physically. India will be a global power if we are able to maintain growth and inclusive development, which is important for our democratic system of governance.