

Economic Management of India and Its Growth Rate

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Abstract: Gross domestic product (GDP) growth in India, in the long run, will tend to converge around the long-term annual average of 4 percent to 5 percent. This article attempts to explain India's growth rate in terms of a Pyramid Model of Growth Process. The pyramid model is layered with credibility, credit, capital and confidence. When all elements in the layers are in place the economy achieves high rate of growth in a circular flow functioning of a market economy. The missing elements are: (a) a better industrial and manufacturing policy (b) a better business environment (c) better policies and linkages with international financial markets to attract more FDI and portfolio investments (d) less corruption and bureaucracy (e) timely performance of contractual obligations and (f) quality control for better products and services. Until then India will remain in the 5 to 6 percentage in the long run.

Key words: India; growth; pyramid model; credibility; credit; capital; confidence

JEL code: E2

1. Introduction

The concluding assessment in my article "India's Democratic Economic Transformation", which appeared in the September–October 1996 issue of *Challenge*, stated: "The foundation laid in the past fifty years is poised to produce sustainable rates of 5 to 6 percent growth in real GDP for the foreseeable future. India's future is promising." Factually, this is true, as from 1950-1951 to 2012-2013 the economy has grown at about 5 percent a year. This article attempts to explain the average growth rate, otherwise called the Hindu rate of growth (HRG). The culture of a society and the values underscoring it guide laws, institutions, and policies and therefore determine inputs and outputs. In the long run, however, globalization will tend to reinforce values, institutions, policy, and therefore outcomes toward convergence of the growth rate at global sustainable levels.

Gross domestic product (GDP) growth in India, in the long run, will tend to converge around the long-term annual average of 4 percent to 5 percent. India's growth rate is already down in this range in 2012-2013 and 2013-2014 after achieving 9 to 10 percent for only for a couple of times in recent years. The 10 percent-a-year rate in China from 1980 to 2011 is unlikely in India. The long-term HRG is explained here in terms of India's policies since its independence from Great Britain 1947 and formation of a republic in January 1950.

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The accelerated globalization of India's economy since 1991 is a continuation of the openness and connectivity of ancient Vedic culture, which thought of the whole world as one and as its home. Recorded history attests to this fundamental and powerful cultural trait in modern India, or what remains of India since its independence from Great Britain in 1947.

Adam Smith developed the idea of competitive drive in economic evolutionary history. It is perhaps the oldest continuous characteristic of social structures and fundamental economic institutions and mechanisms in the process of achieving economic prosperity. More open and competitive systems have done better and are postulated to do better than less competitive, closed societies. Smith advocated more competition at home in Britain and increased trade with other countries. Globalization leads to convergence of comparative advantage based uneven rates of growth in different countries in the short run to similar rates of in the long-run. India's economy gets a slight benefit from globalization, though it is far from being fully integrated into the global economy. In the long run Indian growth rate in the 4 to 5 percent will be able to sustain itself.

2. Hindu Rate as the Sustainable Growth Rate for India

The HRG, as made famous by Indian economist Raj Krishna, is true not just in the first fifty years of independent India following the previous ninety years the British Raj (1858-1947) but for the Indian economy in the long run. The British went to India as part of the East India Trading Company, chartered by Queen Elizabeth I in 1600. Its success allowed Britain, under Prime Minister Benjamin Disraeli, to take over governance of India from the Company and anoint Queen Victoria as the empress of India in 1858. Thus, for some 350 years, the British had considerable influence on modern India. That influence has continued in the management of independent India in the policies of successive governments largely run by its first Prime Minister Pt. Jawaharlal Nehru and his successors.

The belittling expression HRG refers to the low annual growth rate of the socialist economy of India before 1991, which was around 3.5 percent from the 1950s to the 1980s, while per capita income growth averaged 1.3 percent. India's annual growth rate for the sixty-two-year period from 1950-1951 to 2012-2013 is 5.06 percent; for the thirty-year short-term period from 1980 to 2010, it was 6.11 percent a year (Table 1).

From 1930 to 2010, the average U.S. nominal GDP growth rate was 6.2 percent, while the real GDP growth rate, at 2005 prices, was 3.4 percent a year (Figure 1). Perhaps it is not a coincidence that the U.S. rate of growth over the first 225 years since 1776 is essentially the same. It is remarkably similar. Given the physical, human resources, and environmental constraints going forward, it is most likely that the world economy will regress to the sustainable HRG of about 4 percent a year.

The potential gains in productivity from technology, better human capital, and more financial capital, may make a 3 percent-plus annual per capita real growth possible after allowing for a 1-1.5 percent growth rate in population. We are not advocating low rates for India, the United States, or the world. Rather, our focus is on reality and not empty dreams, not to mention externalities (destructive results of high growth rates) on the environment, quality of life, and indeed the sustainability of life on earth, because of carbon dioxide (CO₂) and other threats to the planet.

India will not have China's high growth rates for any significant period. Even China is projected to have growth of less than 6 percent a year in the next thirty years versus the 10 percent of the past thirty years. It is not bad, notwithstanding the desire to grow faster and achieve sooner the higher living standards like those prevailing of the West. The equivalent to the HRG has made the United States what it is, with growth at 4 percent a year for a

very long period—300 to 500 years since perhaps Columbus, certainly since 1776 as far as recorded numbers show—of course, with a very different market basket and technology over time.

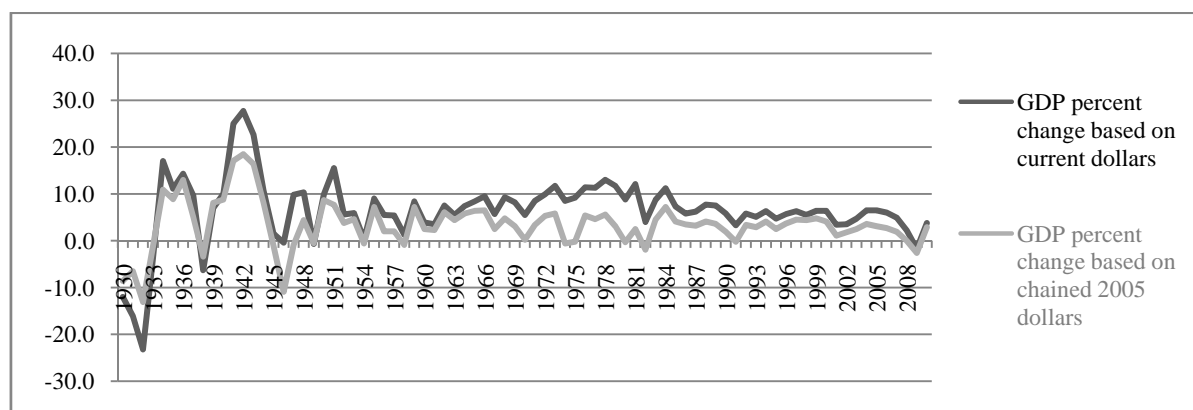


Figure 1 United States Economic Growth 1930-2010

Source: Bureau of Economic Analysis, U.S. Department of Commerce

Table 1 GDP Growth Rate

Annual growth rates of real gross domestic product at factor cost by industry of origin						
					At 2004-05 Prices	(Percent)
	Agriculture,	Manufacturing,	Trade,	Financing,	Community	Gross
	forestry &	construction,	hotels,	insurance, real	social	domestic
	fishing,	electricity,	transport &	estate	and	product at
Year	mining and	gas and water	communication	and business	personal	factor
	quarrying	supply		services	services	cost
						(2 to 6)
1	2	3	4	5	6	7
1951-52	1.9	4.6	2.6	2.3	3.0	2.3
1952-53	3.1	-0.4	3.3	4.2	2.1	2.8
1953-54	7.5	6.2	3.7	1.4	3.1	6.1
1954-55	3.0	8.8	6.5	3.7	3.6	4.2
1955-56	-0.8	11.7	7.3	4.0	3.1	2.6
1956-57	5.4	9.0	7.3	1.6	3.8	5.7
1957-58	-4.1	-1.8	3.1	3.8	4.5	-1.2
1958-59	9.8	7.4	5.0	2.8	4.1	7.6
1959-60	-0.8	7.0	6.3	3.8	4.3	2.2
1960-61	7.1	10.8	8.6	2.1	4.9	7.1
1961-62	0.3	6.9	6.5	4.3	4.7	3.1
1962-63	-1.4	6.2	5.9	3.4	7.1	2.1
1963-64	2.4	10.7	7.1	3.1	6.6	5.1
1964-65	8.8	7.4	6.8	2.7	6.6	7.6
1965-66	-9.9	3.2	1.8	3.0	4.0	-3.7
1966-67	-1.2	3.7	2.6	1.8	4.6	1.0
1967-68	14.1	3.3	4.3	2.7	3.9	8.1
1968-69	0.0	5.1	4.5	4.9	4.5	2.6
1969-70	6.3	7.8	5.4	4.2	5.5	6.5
1970-71	6.3	1.6	4.9	4.2	5.5	5.0

(Table 1 to be continued)

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(Table 1 continued)

Table 1 continued

1971-72	-1.7	2.5	2.3	5.2	4.5	1.0
1972-73	-4.4	3.4	2.2	3.9	3.3	-0.3
1973-74	6.9	0.5	4.2	2.4	2.6	4.6
1974-75	-1.2	1.0	6.0	-0.3	4.7	1.2
1975-76	12.8	6.5	9.1	6.9	3.5	9.0
1976-77	-5.2	9.3	4.5	7.9	2.8	1.2
1977-78	9.6	7.4	6.7	4.9	2.7	7.5
1978-79	2.3	7.3	8.2	7.1	4.3	5.5
1979-80	-11.9	-3.6	-0.8	1.0	7.3	-5.2
1980-81	12.8	4.5	5.6	1.9	5.0	7.2
1981-82	5.2	7.4	6.1	8.1	2.1	5.6
1982-83	0.6	0.2	5.5	9.5	7.7	2.9
1983-84	9.5	8.5	5.1	9.8	3.7	7.9
1984-85	1.6	4.4	4.8	7.5	6.9	4.0
1985-86	0.7	4.3	8.0	9.8	5.7	4.2
1986-87	0.6	4.9	6.0	10.5	7.5	4.3
1987-88	-1.1	5.8	5.1	7.3	7.2	3.5
1988-89	15.7	8.2	6.0	9.8	6.0	10.2
1989-90	1.8	8.4	7.4	12.4	7.9	6.1
1990-91	4.7	6.9	5.2	6.2	4.4	5.3
1991-92	-1.4	-0.1	2.3	10.8	2.6	1.4
1992-93	6.0	3.6	5.6	5.4	6.0	5.4
1993-94	3.1	6.1	6.9	11.2	4.5	5.7
1994-95	5.2	9.1	9.9	3.9	2.3	6.4
1995-96	0.0	12.0	13.4	8.1	7.3	7.3
1996-97	8.9	7.2	8.1	6.2	8.1	8.0
1997-98	-1.3	3.3	7.5	11.7	8.3	4.3
1998-99	5.9	4.3	7.7	7.8	9.7	6.7
1999-00	2.8	6.2	11.1	8.8	13.7	7.6
2000-01	0.3	6.5	6.4	4.5	4.6	4.3
2001-02	5.5	2.7	8.6	7.1	4.1	5.5
2002-03	-4.9	7.1	8.5	7.7	3.9	4.0
2003-04	8.2	7.9	11.1	5.8	5.4	8.1
2004-05	1.1	10.0	9.7	8.7	4.9	7.0
2005-06	4.6	10.7	12.0	12.6	7.1	9.5
2006-07	4.6	12.7	11.6	14.0	2.8	9.6
2007-08	5.5	10.3	10.9	12.0	6.9	9.3
2008-09	0.4	4.7	7.5	12.0	12.5	6.7
2009-10 (3R)	1.5	9.5	10.4	9.7	11.7	8.6
2010-11 (2R)	7.5	9.5	12.3	10.1	4.3	9.3
2011-12 (1R)	3.1	3.8	7.0	11.7	6.0	6.2
2012-13						4.5
Source: Central Statistics Office.						
1R: 1st Revised Estimates.		2R: 2nd Revised Estimates		3R: 3rd Revised Estimates		
Note: For the year prior to 1999-2000 totals under col. 7 may not add up to totals of individual item under col. 2 to col. 6 due to splicing technique applied independently at the level of each industry and at the total level.						

Source: Govt. of India, Economic Survey, 2012-13.

Table 2 Savings and Capital Formation

Gross domestic savings and gross domestic capital formation							
(As per cent of GDP at current market prices)							
	Gross domestic saving			Gross fixed capital formation			
Year	House-	Private	Public	Total	Public	Private	Total
	hold	corporate	sector	(2+3+4)	sector	sector	(6+7)
	sector	sector					
1	2	3	4	5	6	7	8
1950-51	6.5	0.9	2.1	9.5	2.5	6.8	9.3
1951-52	5.7	1.2	2.8	9.8	2.8	6.7	9.5
1952-53	6.4	0.6	1.8	8.8	3.0	6.0	9.0
1953-54	5.7	0.8	1.5	8.0	3.2	5.0	8.2
1954-55	6.9	1.1	1.9	9.9	4.1	5.9	10.0
1955-56	9.2	1.2	2.2	12.5	5.4	6.7	12.2
1956-57	9.0	1.1	2.4	12.5	5.3	7.8	13.1
1957-58	7.4	0.9	2.4	10.6	5.4	7.5	12.9
1958-59	6.3	0.9	2.1	9.3	5.3	6.2	11.5
1959-60	7.7	1.1	2.1	11.0	6.4	5.8	12.2
1960-61	6.8	1.6	3.2	11.6	6.8	6.0	12.8
1961-62	6.5	1.7	3.4	11.6	6.7	6.8	13.4
1962-63	7.4	1.7	3.7	12.8	7.4	6.5	13.9
1963-64	6.8	1.7	4.0	12.4	7.6	6.7	14.4
1964-65	6.9	1.4	3.9	12.3	7.7	6.8	14.5
1965-66	9.0	1.4	3.8	14.2	8.1	7.2	15.3
1966-67	9.7	1.3	2.9	13.9	7.2	7.7	14.9
1967-68	8.6	1.1	2.5	12.1	6.1	8.0	14.1
1968-69	8.1	1.1	2.9	12.0	6.0	8.0	14.0
1969-70	9.8	1.2	3.1	14.1	5.7	8.2	13.9
1970-71	9.5	1.4	3.4	14.3	5.8	7.9	13.6
1971-72	10.3	1.5	3.3	15.1	6.4	8.3	14.7
1972-73	9.5	1.4	3.2	14.1	7.4	7.6	15.1
1973-74	11.7	1.6	3.5	16.8	6.8	7.4	14.1
1974-75	10.7	1.8	4.1	16.7	6.1	8.8	15.0
1975-76	11.3	1.2	4.8	17.4	7.4	8.6	16.0
1976-77	12.0	1.3	5.6	18.8	8.6	8.0	16.6
1977-78	12.9	1.3	5.0	19.2	8.3	8.5	16.8
1978-79	14.4	1.4	5.2	21.0	8.4	8.8	17.2
1979-80	13.0	1.9	5.0	19.9	9.2	8.8	17.9
1980-81	12.1	1.6	4.1	17.8	9.1	8.8	17.9
1981-82	10.8	1.5	5.2	17.5	9.9	8.7	18.6
1982-83	11.2	1.5	5.1	17.8	11.3	8.5	19.8
1983-84	11.8	1.4	3.9	17.1	10.6	8.6	19.2
1984-85	12.8	1.6	3.5	17.8	10.8	8.8	19.7
1985-86	12.7	1.9	3.9	18.4	11.3	9.3	20.6
1986-87	13.0	1.6	3.5	18.1	12.3	9.2	21.4

(Table 2 to be continued)

(Table 2 continued)

1987-88	15.6	1.6	2.8	20.0	11.2	10.9	22.1
1988-89	15.3	1.9	2.7	20.0	10.9	11.0	21.9
1989-90	16.5	2.4	2.4	21.3	10.5	12.2	22.7
1990-91	18.5	2.6	1.8	22.9	10.2	13.6	23.8
1991-92	15.7	3.0	2.6	21.3	10.5	12.1	22.6
1992-93	16.5	2.6	2.2	21.3	9.2	13.8	23.0
1993-94	17.0	3.4	1.3	21.7	8.9	12.6	21.5
1994-95	17.9	3.4	2.3	23.6	9.8	12.1	21.8
1995-96	16.2	4.8	2.6	23.6	8.6	15.4	24.1
1996-97	15.8	4.4	2.2	22.4	7.7	15.5	23.1
1997-98	18.1	4.2	1.9	24.2	7.2	16.5	23.7
1998-99	19.5	3.8	-0.2	23.2	7.1	16.5	23.7
1999-2000	21.8	4.3	-0.5	25.7	6.9	17.2	24.1
2000-01	21.4	3.7	-1.3	23.8	6.7	16.1	22.8
2001-02	23.2	3.3	-1.6	24.9	6.8	18.3	25.1
2002-03	22.3	3.9	-0.3	25.9	6.6	17.1	23.8
2003-04	23.2	4.6	1.3	29.0	6.7	17.9	24.6
2004-05	23.6	6.6	2.3	32.4	6.9	21.8	28.7
2005-06	23.5	7.5	2.4	33.4	7.3	23.0	30.3
2006-07	23.2	7.9	3.6	34.6	7.9	23.4	31.3
2007-08	22.4	9.4	5.0	36.8	8.0	24.9	32.9
2008-09	23.6	7.4	1.0	32.0	8.5	23.8	32.3
2009-10	25.2	8.4	0.2	33.7	8.4	23.3	31.7
2010-11	23.5	7.9	2.6	34.0	7.8	24.0	31.7
2011-12(1R)	22.3	7.2	1.3	30.8	7.4	23.2	30.6
Note: 1R: 1st Revised Estimates.							

Source: Govt. of India, Economic Survey, 2012-13.

As can be seen in Table 3, growth rates in the world and the advanced countries also converge toward the HRG over the long run. There are sound reasons for the long-term low rates of growth in India, the United States, and Europe. Every American textbook makes reference to the 3 percent real rate of return (or GDP growth rate) based on Irving Fisher's study of returns on investment in American industry from 1870 to 1900. In his empirical studies published in the early 1900s, he found a real rate of return of 3 percent. His work and analysis, with its implicit forecast of an annual growth rate of U.S. GDP at about 3 percent, has generally held up from 1900 to 2011.

GDP can be interpreted as the return on the total capital stock, the marginal efficiency of capital or the internal rate of return. The stability of this low number of 3 percent, in the context of remarkable innovations increasing productivity of labor and capital over the past one hundred years and more, is also relevant to the HRG, as there are many similarities in the business and cultural context of India and the United States.

3. Globalization and Its Impact in the Twenty-first Century

The re-establishment of the paradigm of openness in the economy and its active exchange with the rest of the world is a harbinger of activism in trade, investment, and general engagement with the rest of the world to build

external confidence in the Indian economy. India is marching forward with the underpinnings of its long and successful history of an open economy. Economic liberalization, including industrial deregulation, privatization of state-owned enterprises, and reduced controls on foreign trade and investment, began in the early 1991. It has helped accelerate the country's growth in the short run to more than 6 percent per year since 1980. From 2004 until 2010, India's average quarterly GDP growth was 8.4 percent, reaching an all-time high of 10.1 percent in September 2006 and a record low of 5.5 percent in December 2004. GDP in India expanded 8.2 percent in the fourth quarter of 2010 over the same quarter in 2009. GDP growth in India accelerated to an average annual rate of 8 percent from the second quarter of 2007 to the first quarter of 2011 (Figure 2). It would be desirable for this high rate of growth to continue for decades. India's long history, however, indicates regression to the very long-term trend line of 4 to 5 percent. After achieving a ten year average of 7.9 percent from 2003 to 2012, the growth rate slowed down to 4.5 percent in 2012-2013 and 4.7 percent (forecast) for 2013-2014 which is consistent with the sustainability of a growth rate of 4 to 5 percent a year.

Table 3 GDP Growth Rates in the World Economy

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
World	2.1	3.6	4.7	2.2	2.5	3.4	4.9	4.4	5.1	5.0	2.3	1.3	4.5	3.3	...
Advanced Econ's	2.3	3.6	4.0	1.4	1.5	1.9	3.0	2.5	2.9	2.6	-0.1	-3.7	2.7	1.4	1.5
Emerging and developing countries	1.9	3.7	5.9	3.5	4.3	6.1	7.8	7.1	8.2	8.5	5.9	2.1	7.2	6.1	...
Developing Asia	2.8	6.6	6.7	5.9	6.8	8.8	8.6	9.1	10.3	11.2	8.1	7.5	9.5	7.5	...
Europe	-1.0	2.5	7.6	2.4	4.7	6.3	7.7	6.1	7.5	7.0	4.0	-6.1	4.6	5.0	...
Middle East and North Africa	4.0	1.8	4.9	3.0	4.0	6.6	8.4	5.9	6.9	6.8	4.8	3.3	5.6
Sub-S' a Africa	2.2	3.6	4.9	4.3	4.1	3.6	6.5	6.2	5.9	6.1	4.6	0.3	4.3	4.0	...
Western Hemisphere	1.8	0.6	4.2	0.6	0.2	2.0	6.2	4.5	5.7	5.8	3.9	-1.7	6.0	4.4	3.9

Source: IMF Data, <http://elibrarydata.imf.org/DataReport.aspx?c=1449326&d=33061&e=169393>,
<http://tradingeconomics.com/Economics/GDP-Growth.aspx?Symbol=USD>.

The worst U.S. recession in recent decades in terms of lost output occurred during the 2008 financial crisis, when GDP fell by 4.1 percent from the spring of 2008 to the spring of 2009. In the most recent period, real GDP—output of goods and services produced by labor and property located in the United States—increased at an annual rate of 2.61 percent in the fourth quarter of 2010, and 3.1 percent in the first quarter of 2011 and 3.3 percent in the last quarter of 2013.

Globalization, like any dynamic system, has pockets of discontent and some negative impacts, but for the most part, it has contributed to economic progress. Countries in East Asia, such as Singapore, Taiwan, Hong Kong, Malaysia, Indonesia, Thailand, and South Korea, benefited from their investment in education, technology and open economies. They laid the foundation of their human capital base in the second half of the twentieth century, following the successful pattern of development in Europe, North America, and Japan in the nineteenth century.

India is now experiencing the positive results of expanding economic, political, and strategic connections to an increasing number of countries. The Vedic philosophy and approach to the world will help India sustain itself in the future. As reported by the International Monetary Fund, the world as a whole and the advanced economies reinforced the long-run growth rates in the United States and India from 1996 to 2010. The emerging and developing markets (including Brazil, Russia, India, and China) had higher rates in the same period.

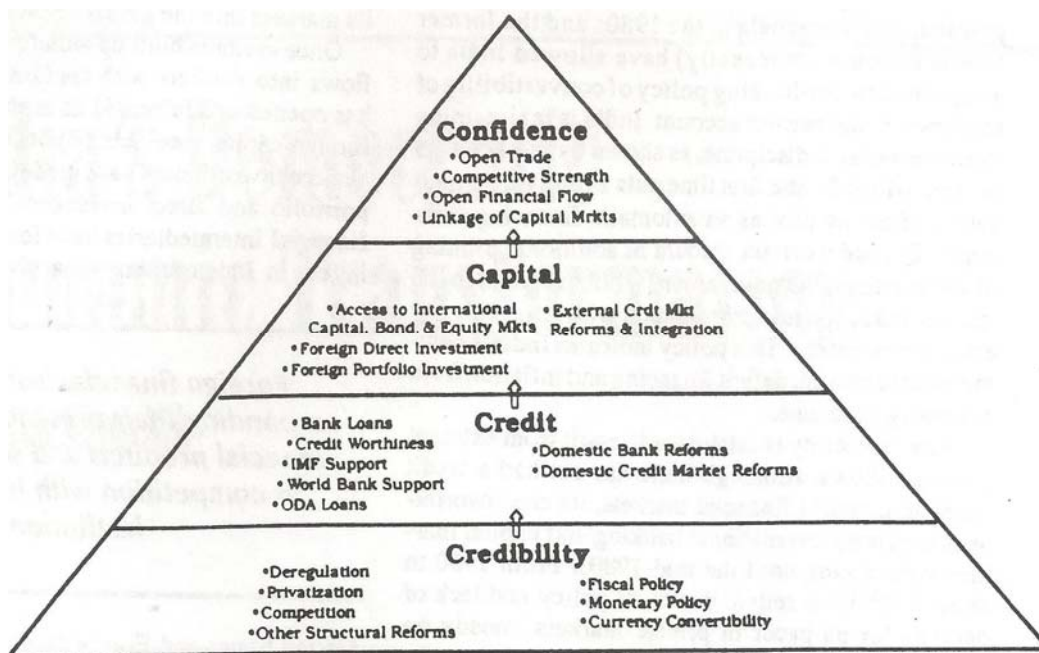
4. India's Upwardly, Unsteady and Uneven Growth

From 1951-1952 to 1980-1981 India's annual real GDP growth rate ranged from -3.7 to 7.5.

From 1981-82 to 2010-2011 it ranged from 3.1 to 10.5. So there is decidedly an uptrend in the second thirty year period compared with the first. The average for the first period is 3.5 percent and second period 6 percent. There is decidedly an uptrend in the second thirty year period compared with the first. But it is a weak upward trend and without traction with a wide range and year to year fluctuation. There is no steadiness even with all the reforms in economic policy and management of the economy since 1991. Only from 2003 to 2010 the growth rate was in the higher range of 6.72 to 9.6 percent-again a fifty percent variation from one year to another.

The question therefore is: What explains the uneven growth rate with lack of traction at higher rates in the 7 to 10 percent range which have been achieved but only for a year or two?

Six percent average annual growth is not bad but it is not good given India's needs for almost 1.3 billion people half of whom are below the age of 25. India has been calling it the demographic dividend but unless growth stays in higher numbers and serious unemployment is avoided the demographic dividend could go back to be the old fashioned population problem as it was known from the 1950s to the 1980s. The picture looks even gloomier when one compares India's growth rate with its neighbor China which has a track record of about 10 percent a year for the last thirty five years from 1979 to 2014.



Pyramid Model of Growth Process

Source: Surendra K. Kaushik, "India's Democratic Economic Transformation", *Challenge*, September-October 1996, p. 58.

One way to try to answer the question of low and uneven growth of India is to use the Pyramid Model of Growth Process developed and published in 1996. The model was developed to suggest the economic and financial environment that would be needed for a sustained period of high growth rate. The pyramid is built in four layers where each layer becomes the foundation for the one above and ultimately the first three layers support the process, policy, programs and outcomes in the fourth and top layer with a peak of success and high growth rate.

India has tried to build the pyramid and its elements but not in a systematic and functionally coordinated way. The timing of laying the parts in the pyramid has also been a problem so that the old bottlenecks, the variable supply of the needed elements create a dysfunctional policy regime, actions and outcomes. It is this hodge-podge of uncoordinated policy for various sectors of the economy, the magnitude, timing and implementation that act as a drag on the growth rate. So in this paper we explain uneven and unsteady growth rates in terms of the elements in the four layers of the pyramid.

4.1 The Credibility Foundation

In the credibility elements forming the foundation of the economic pyramid, India has made considerable progress in deregulation, competition, monetary policy but less so in privatization, fiscal policy and currency convertibility since the reforms were introduced in 1991. Structural reforms in agriculture, international trade, investment, and currency convertibility are still partial after more than two decades of opening the economy internally and externally. The reforms that have been implemented have increased the GDP growth rate. Remaining foundational reforms when implemented would enhance growth rate further. Industrial policy:

Table 4 Index of Industrial Production

(Base: 2004-2005 = 100)

Industry	Weight	2005-2006	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
General Index	100.00	108.6	141.7	145.2	152.9	165.5	170.3
10 Mining	14.16	102.3	112.5	115.4	124.5	131.0	128.5
15-36 Manufacturing	75.53	110.3	150.1	153.8	161.3	175.7	181.0
15 Food products and beverages	7.28	113.2	147.5	135.4	133.5	142.9	164.8
16 Tobacco products	1.57	101.0	98.4	102.7	102.0	104.1	109.7
17 Textiles	6.16	108.3	124.6	120.1	127.4	135.9	134.0
18 Wearing apparel... fur	2.78	114.1	149.9	134.6	137.1	142.2	130.1

Source: Govt. of India, Economic Survey, 2012-2013, pp. A-34.

4.2 Credit

The banking sector has expanded significantly in the last two decades both in the public and private sectors to expand bank loans, creditworthiness, IMF and World Bank support, and domestic banking and credit market reforms. Growth of the financial sector has translated into more loans to consumers, agriculture, and small businesses fueling consumption led growth in the household sector by buying credit funded consumer goods, housing and vehicles. Money and credit have grown fueling consumption over production resulting in demand pull inflation of around 10 percent in the consumer price index (CPI) and 5 to 6 percent wholesale price index (WPI) in recent years. Credit growth coupled with discretionary government spending, which is about 10 percent of the GDP has created strong demand which exceeds supply. An aggressive poverty reduction program through distributive policies and programs of the government and slowing growth of industrial production and manufacturing require a policy rebalancing towards more incentives on the supply side in the economy.

4.3 Capital

Access to international capital markets has expanded to attract equity and bond financial investments by foreign institutions and individuals as portfolio investments but not enough for India's needs to achieve higher growth rates. Foreign Direct Investment (FDI) has grown but it has come in much less than desired and expected

amounts while the dependence on it had grown due to trade and fiscal deficits. Foreign capital inflows have not stabilized at high levels and there is a great deal of fluctuation from year to year indicating firmness of returns and confidence in the management of the Indian economy. Trade and investment environment needs further reforms to take advantage of growing economic and financial links with the rest of the world.

Table 5 Current, Capital and Financial Flows
(Percent of GDP)

	2009	2010	2011	2012	2013 (Jan.-June)
Current Account	-8.9	-6.0	-0.5	1.6	-0.8
Capital Account	1.6	1.5	1.3	1.3	1.9
Financial Account excl. Reserves	-1.2	-3.9	-5.2	-7.3	-13.1
Net Foreign Direct Investment	3.2	9.5	2.7	0.7	3.5
Net Portfolio Investment Equity Flo's	-0.5	-0.3	0.0	0.2	-7.0
Net Portfolio Debt Flows	-32.0	-50.0	-46.9	23.7	-51.3
Net Financial Derivatives	-2.0	0.4	0.4	0.4	1.2
Net Other Investment Flows	30.1	36.6	38.6	15.0	40.5
Reserve Assets	0.0	-0.40	0.8	-1.8	-1.8

Source: Govt. of India, *Economic Survey*, Nov. 2013.

The 30 percent or so aggregate savings rate—23 percent private and 7 to 8 percent public—still leaves a gap of 5 to 6 percent. It is interesting to note that whereas the household savings and private sector investment have stabilized at around 23 percent in recent years and the corporate savings and public sector investment have stabilized at 7 to 8 percent, GDP growth rate has fallen from 9 percent to 5 percent. In some quarters the growth rate has gone in the 4 to 5 percent range in 2013-2014 indicating an almost doubling of the capital-output ratio or cutting the efficiency of capital by half. So either there is leakage of investment somewhere in the system or it is poorer technology in use to reduce the total productivity of the aggregate economy. This in turn has led to reduction in the inflow of FDI from foreign investors in factories and enterprises in India, especially in the manufacturing, agriculture and distribution industries.

Table 6 Index of Industrial Production
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17 Textiles	6.16	108.3	124.6	120.1	127.4	135.9	134.0
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Source: Govt. of India, *Economic Survey*, 2012-2013, p. A-34, Table 1.31.

Table 7 Receipts and Expenditure of the Central Government
(As per cent of GDP)

	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13 (BE)
1. Revenue receipts (a+b)	10.9	9.6	8.8	10.1	8.8	9.3
(a) Tax revenue (net of states' share)	8.8	7.9	7.0	7.3	7.4	7.7
(b) Non-tax revenue	2.1	1.7	1.8	2.8	1.4	1.6
2. Revenue expenditure of which:	11.9	14.1	14.1	13.4	2.2	12.8
(a) Interest payments	3.4	3.4	3.3	3.0	3.0	3.2
(b) Major subsidies	1.3	2.2	2.1	2.1	1.5	1.8
(c) Defense expenditure	1.1	1.3	1.4	1.2	1.1	1.1
3. Revenue deficit (2-1)	1.1	4.5	5.2	3.2	3.4	3.5
4. Capital receipts of which:	3.4	6.1	7.0	5.2	5.2	5.5
(a) Recovery of loans	0.1	0.1	0.1	0.2	0.2	0.1
(b) Other receipts (mainly CPSEs)	0.8	0.0	0.4	0.3	0.4	0.3
(c) Borrowings and other liabilities \$	2.5	6.0	6.5	4.8	4.6	5.1
5. Capital expenditure	2.4	1.6	1.7	2.0	1.8	2.0
6. Non-debt receipts	11.7	9.7	9.4	10.6	9.4	9.7
7. Total expenditure [2+5=7(a)+7(b)] of which:	14.3	15.7	15.8	15.4	14.0	14.9
(a) Plan expenditure	4.1	4.9	4.7	4.9	4.9	5.2
(b) Non-plan expenditure	10.2	10.8	11.1	10.5	9.1	9.7
8. Fiscal deficit (7-6)	2.5	6.0	6.5	4.8	4.6	5.1
9. Primary deficit [8-2(a)]	-0.9	2.6	3.2	1.8	1.6	1.9

Source: Govt. of India, Economic Survey 2012-2013, p. 59, Table 3.3.

4.4 Confidence

Elements in the fourth and top layer of the pyramid are still not up to the global standards. Trade is open but not quite, especially in agriculture and tourism. Comparative cost advantage is marred by quality control problems in all sectors. Insurance is still not fully open. Full capital convertibility is also missing not to mention lack of full equity and bond market linkages with the key reserve currencies of the world. The stability of FDI as well as portfolio investment inflows hasn't been achieved yet to earn full confidence of the global investment community. The GDP growth rate has come down to 5 percent range and the budget and current account deficit remain around 5 percent in recent years. Revenue remains around 10 percent and expenditure around 15 percent—5 percent plan and 10 percent non-plan discretionary. Portfolio and direct investment are unstable as can be seen in Appendix 1. Going forward in the next five years, IMF projections to 2018-2019 are only slightly higher for most of the macro economic variables.

As regards overall competitive strength the World Bank's global ease of doing business index at 134 and 179 out of 189 puts India among the least attractive places. Likewise forming new businesses is even more difficult compared with most countries in the world. The registration requirements and bureaucratic steps and delays in approvals as well as corruption linked to it make the ultimate return on investment less competitive with other opportunities in an open world economy. The potential GDP and the size of the market remain strong to attract FDI and portfolio investments but they are negated by other shortcomings of the business environment in India. Yet, until that confidence is gained India will continue to be receiving only about one-fifth of the amount of capital China (96 and 158 out of 189) continues to receive even after forty years of growth at about ten percent a year! Something is significantly different between the doing of business attractiveness of India compared with its neighbor China.

Table 8 India: Macroeconomic Framework, 2009/10-2018/19

Actual	Projections									
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Growth (percent change)										
Real GDP (at factor cost)	8.6	9.3	6.2	5.0	4.6	5.4	6.4	6.5	6.7	6.7
Non-agricultural sector	10.1	9.6	6.6	5.5	4.6	5.6	6.8	7.0	7.2	7.2
Prices (percent change, period average)										
Wholesale prices (2004/05 = 100)	3.8	9.6	8.9	7.4	6.4	6.7	5.6	5.4	5.3	5.2
Consumer prices	12.4	10.4	8.4	10.4	10.5	8.6	8.0	7.1	6.6	6.6
Fiscal position (percent of GDP)										
Central government balance	-7.0	-6.4	-6.0	-5.1	-5.3	-5.6	-5.3	-5.2	-5.1	-5.1
General government balance	-9.8	-8.4	-8.5	-7.8	-7.7	-8.0	-7.6	-7.4	-7.3	-7.1
General government debt	72.5	67.4	67.0	67.6	67.3	67.3	66.3	65.3	64.6	63.9
External trade (percent change, BOP basis)										
Merchandise exports (in U.S. dollar terms)	-3.5	40.5	21.8	-2.1	4.2	6.6	6.7	6.7	6.7	7.2
Merchandise imports (in U.S. dollar terms)	-5.0	28.2	32.3	0.8	-1.0	5.2	7.0	7.0	7.0	7.5
Balance of payments (in billions of U.S. dollars)	-38.2	-45.9	-78.2	-88.2	-61.6	-59.9	-62.8	-66.5	-67.9	-72.8
Current account balance (in percent of GDP)	-2.8	-2.7	-4.2	-4.8	-3.3	-3.1	-3.0	-2.9	-2.7	-2.7
Foreign direct investment, net	18.0	9.4	22.1	19.8	23.1	25.0	27.3	29.9	32.7	35.6
Portfolio investment, net (equity and debt)	32.4	30.3	17.2	26.9	-5.0	19.8	25.9	28.3	30.9	33.7
Overall balance	13.4	13.1	-12.8	3.8	4.5	17.7	17.5	20.8	26.0	30.8
External indicators										
Gross reserves (in billions of U.S. dollars, end-period)	279.1	304.8	294.4	292.0	296.6	314.3	331.8	352.6	378.7	409.5
(in months of imports)	7.2	6.3	6.1	6.0	5.8	5.7	5.6	5.5	5.5	5.5
External debt (in billions of U.S. dollars, end-period)	260.9	305.9	345.8	392.1	459.1	499.5	537.1	576.7	623.1	675.3
External debt (percent of GDP, end-period)	19.1	17.9	18.5	21.3	24.8	25.9	25.5	25.1	24.8	24.6
Of which: short-term debt	6.6	7.0	7.4	8.9	10.6	10.7	10.7	10.5	10.6	10.8

Source: IMF, India Staff Report for 2014, Table 7.

5. Conclusions

India's GDP growth rate over a period of more than sixty years is analyzed by applying a Pyramid Model of Growth Process. It shows that India's growth has benefited from placing some key elements in the pyramid. There are several elements still not in place to achieve a higher sustained growth rate which India desires at around 8 percent and above. The actual average achieved is just above 5 percent for the entire sixty year period and a little above 6 percent for the most recent thirty year period. Focusing on strengthening the missing elements (building blocks) and placing them in the pyramid will push the growth rate higher whenever it is done. The missing elements are (a) a better industrial and manufacturing policy (b) a better business environment (c) better policies and linkages with international financial markets to attract more FDI and portfolio investments (d) less corruption

and bureaucracy (e) timely performance of contractual obligations and (f) quality control for better products and services. Until then India will remain in the 5 to 6 percent range in the long run.

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Appendix 1

Key Measures Adopted in 2013/14

Monetary Policy

Changes in policy rates.

Cut in the repo rate by 25 bps to 7¼ percent in May, increase in the repo rate by 50 bps to 7¾ percent since July.

Liquidity measures.

Temporary liquidity window for banks to meet the cash requirements of mutual funds; reduction in the minimum daily maintenance of the CRR from 99% of the requirement to 95%; recalibrated bank access cap to the Liquidity Adjustment Facility to 0.5% of bank's net demand and time liabilities (NDT L); additional liquidity availed through 7- and 14-day term repos for an amount equivalent to 0.5% of banks' NTDL through variable rate auctions; RBI also announced plans to conduct open market operations of INR 80 bn.

Changes in Marginal Standing Facility (MSF). Increase in the MSF rate by 200 bps to 10.25 percent in July, increment tally reduced to 8¾ percent.

Financial Sector

Corporate bond market.

Short-term debt securities made eligible for trading. Credit default swaps allowed for unlisted rated-corporate bonds.

Non-performing assets.

Provisioning rate for restructured loans rose to 5% from 2.75%.

Risk management.

Exporters (importers) to cancel and rebook forward contracts to the extent of 50 (25) percent of the contracts booked in a financial year for hedging their contracted export (import) exposures.

Branch licensing.

Further liberalization of branch licensing in Tier 2 to Tier 6 cities.

Bank provisioning.

Incremental provisioning and capital requirements for lending to corporates with foreign currency exposures introduced.

External Sector

Gold imports.

Import duty on gold was incrementally raised to 10% from 4%; restrictions

introduced on nominated agencies and trading houses; restrictions on advances against gold coins introduced; at least 20% of every lot of gold import must be exclusively made available for export purposes; customs duty on gold and silver jewelry raised to 15%.

Remittances.

Existing limit on outward remittance e scheme reduced from US\$200,000 to US \$75,000 per financial year.

FDI outflows.

Limit for overseas direct investment was reduced from 400% of the net worth to 100 percent under the automatic route. Measure was partly reversed on September 4.

Foreign institutional investors (FII) investment.

Increase in FII investment limits in government securities and corporate bonds by US \$5 billion each. Tax rate on interest income.

Source: IMF, India: *Staff Report for 2014 Article IV Consultation*, February 20, 2014, p. 47.