Does the Future Lie in Manufacturing?

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ABSTRACT
Manufacturing is the growth engine in an emerging economy. Its growth should be higher than that of Gross Domestic Product (GDP), but despite high growth optimism, manufacturing growth prospects continue to be uncertain and discouraging. It is imperative to invest in manufacturing for sustainable high growth trajectory.

This research paper seeks to explore –
1. The euphoria of 7.4% of GDP growth (New Series) and how this optimism is triggered by hopes of revival in industrial and investment activity.
2. How improved manufacturing performance will raise consumption, hence demand for consumer goods and services, leading to greater production.
3. The need of a new complete ‘ecosystem’ to evolve in manufacturing supported by the ‘Make in India’ mantra which will then see a pickup in industrial growth in favour of breeding new entrepreneurs resulting in sustained high growth.

Key Words: Growth engine; Value-added; Ecosystem; Human Resource Capability; Capacity utilization; Industrial Productivity; Financial savings; Inflation hedges; Multiplier effect; Capital expenditure: Make in India; Smart factories.

Introduction:
The International Monetary Fund (IMF) and World Bank have predicted that India is on track to outpace China in the next few years and become the world’s fastest growing economy. IMF in its World Economic Outlook (WEO) Report said India is likely to grow 6.5% in 2016-17 higher than 6.3% for China. Earlier World bank said that India is expected to outpace China in 2017-18 with growth of 7% (as against China’s 6.9%) on the back of reform initiatives.

The slowdown in China could drag the growth rates of most emerging Asian countries except India. India’s growth will not slide with others as it reaps huge net gains from fall in global oil and commodity prices. The weaker external demand is offset by the boost to the terms of trade from lower oil prices and a pick up in industrial and investment activity after policy reforms. World growth (according to IMF) for 2015 and 2016 is projected at 3-5% and 3.7% respectively, a downward revision of 0.3% as against October 2014 forecast.

The Chinese Government is slowing down, Russia is tanking, Europe cannot seem to get out of debt and currency crisis, Japan cannot seem to get growth going, Brazil is troubled by more than lower oil prices, while in Europe it is not just Greece and Spain that are the problem, Italy’s economy has shrunk for the past 5 years and has enormous debts weighing down in future. The US economy has been the only bright spot in recent months while India’s Gross Domestic Product (GDP) has done a rope trick.

Objectives:
Over several decades, India’s GDP growth rate has risen steadily. It was below 2.5% in the 1970s. It rose to 4.5% in the 1980s, and to 6% in the 1990s, and to over 7% in the 200-2011 period. The
rolling ten-year GDP average growth rate is about 7.5%. In that sense, the dip to below 5% in the last two financial years is an aberration. Manufacturing, the biggest constituent of Indian industry shrunk 0.7% in 2013-14 against 1.1% growth in the previous year. This long period of low GDP growth and high inflation could represent a decadal trough if things turn around.

In the far East, young population was harnessed to build better infrastructure and to boost manufacturing in the early stages of each economic boom. As quality of education and of life improved, the respective economies turned more service-oriented and manufacturing moved to cheaper locales.

The objective of this research paper is to examine how India’s confused policy-making and the insane regulations in areas such as labour and land rights, have more or less strangled conventional manufacturing and impacted infrastructure badly as well. As a result, India has an extremely service-oriented economy, given its low per capita income and poor human development indicators. Policy has to change in order to create manufacturing jobs and to allow the creation of better infrastructure.

Research Methodology:

This is a research paper which draws on secondary data of Central Statistical Organisation (CSO) and National Sample Survey Organisation (NSSO). The analysis examines the fact that manufacturing needs to build a new ecosystem such that the present boost to GDP growth rate continues to be a sustainable one. Not only should the share of manufacturing rise from 16% to 25% by 2025 through “Make in India”, but manufacturing employment share should rise above the current 11% of total employment.

Main paper:

Manufacturing sector will play a key role in development as the nation grows more urban and industrialized by providing jobs to a broad spectrum of workers and spurring income growth across different segments of the population.

Key Numbers which make up GDP

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<thead>
<tr>
<th>Table 1</th>
<th>(% Growth)</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
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<td>GDP *</td>
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<td>5.1</td>
<td>6.9</td>
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GDP is Gross Value Added (GVA) plus indirect taxes (minus subsidies)
At basic constant prices (2011-12)

Source: CSO

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<th>Table 2</th>
<th>(% Growth)</th>
<th>FY15</th>
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<td>Manufacturing</td>
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<td>GDP</td>
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<td>Q3</td>
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<th>Table 3</th>
<th>(% Growth)</th>
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<td>2012-13</td>
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<td>6.2</td>
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<td>2013-14</td>
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<th>Table 4</th>
<th>Year</th>
<th>%Share of Manufacturing in GVA at factor Cost</th>
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<tr>
<td>2013-14</td>
<td></td>
<td>17.9</td>
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<td>Source: CSO</td>
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GDP is now calculated as \textit{Value added} in market prices as against GDP at factor cost in accordance with global standards. Ministry of Corporate Affairs (MCA) data base that offers information for 5,00,000 Companies is used instead of the earlier practice of calculating on the basis of balance sheet of 2,500 Companies. The real GDP in 2014-15 is now projected at Rs 106.57 lakh crore as against Rs 99.21 lakh crore in the last fiscal. The Paris-based think tank – the Organisation of Economic Cooperation and Development (OECD) in its Report in Feb 2015 has opined that India’s growth at 7.4% is “firming up”.

The new series has seen the composition of certain sectors changing – the share of the services sector has been reduced roughly 52% from 57%, while that of manufacturing has gone up to over 18% from 15%.

The change in the base year for computation of National Income (from 2004-05 to 2011-12) and the consequent sharp upward revision in the last fiscal’s growth rate has stirred up a hornet’s nest – \textit{expansion in output and growth in value addition are not always correlated}. What the new set of GDP data reveals is that over the three-year period (through FY14) when the economy did not do particularly well, companies became more \textit{efficient}. The present high growth rates is puzzling, given that 2013-14 was a crisis year marked by import decline, high inflation, monetary tightening and capital outflows. This is because the general \textit{productivity} of the economy has \textit{improved}. The GDP is a measure of value added. So it is entirely possible theoretically to have a situation when output is completely stagnant but value addition is going up. In other words, production may be constant, but efficiency may have gone up, which means using less input to produce the same output. But it may also reflect that imports may have come down because of less use of material.

The Index of Industrial Production (IIP) which is a measure of physical output has been poor or negative for four years and 1.7 in Dec 2014, but it cannot be wished away. The basic facts remain unaltered: that industry is down and inflation is not really the problem anymore. \textit{Physical output} requires a \textit{push}, notwithstanding the ‘value added by the new estimates.

A lot of recent discussion on macroeconomic policy has revolved around the “output gap” and the “potential output” of the economy. With corporate capacity utilization languishing at around 70%, the majority of economists believe that there is a negative output gap- ie. Growth is well below potential output. Based on the earlier series of GDP data, economists grudgingly admitted that the potential output growth was at best between 6.5% and 7%. With the new series showing a print of 7.4%, potential output growth seems closer to 8.5% than 6.5%.

Looking on the \textit{trade front} exports contracted by 11.9% in Jan 2015 but trade deficit improved marginally because of cheap oil imports. The decline in exports was mainly on account of poor demand from the European and Japanese markets. Further decline in imports reflects slowdown in the manufacturing activities in the country.

While much appears favourable for the economy at present, trend reversals in just a couple of factors – crude oil and global growth for instance – have the potential to undermine the revival.

\textbf{Creation of an Ecosystem:}

\textbf{1.} A pick up in industrial growth will have to be supported by a revival in \textit{Consumer demand}, which has been weak as indicated by the continued fall in consumer goods production. As per the National Manufacturing Policy, manufacturing contributes about 16% to the GDP and the Government is pooling in efforts through the ‘Make in India’ campaign to increase it to 25% by 2022.

For example automobile industry is very important for the Indian economy, given its significant contribution to the national GDP. - as a sector it contributes 7% to GDP, and the employment it generates directly and indirectly. Manufacturing requires sustained investment. This could be a challenge as \textit{financial savings} are on the decline. The country’s savings rate has dipped sharply since 2008. Financial savings as a percentage of GDP declined from 10.1% in 2008-09 to 7.1% in 2012-13. Savings in physical assets increased from 13.5 to 14.8% in this period. With inflation in double digits since 2009, the real interest rates on financial assets have been negative over the last five years. This is one of the main reasons households preferred to invest their savings in...
inflation hedges such as gold. If industry does not give much return on investment, people prefer to keep their money in physical assets such as gold and real estate which are unproductive than in productive financial assets.

With the decline in inflation in recent months, the real rate of interest is now close to 2%. This could probably be the right time to move money into financial assets. To incentivize savings, there is a dire need to increase disposable incomes of households, which could be done by raising the exemption limits and removing surcharges. However the Government should be clear about where the savings would be channeled and which segment it wants to incentivize. For instance if the Centre wants to encourage investments in the infrastructure segment, it should provide tax savings on infrastructure bonds.

2. **RBI’s repo rate cut** to 7.75 % has brought much relief to industry. The timing of the cut could not have been delayed further, since industrial output and inflation have confirmed a trend of benign inflation and disturbingly tepid growth. – factory output grew just 2.2% between April and November 2014. An interest rate cut can provide immediate succor on the inventories front and spur demand for automobiles, home loans and other consumer durables, reeling under recession-provided banks pass on the reduction. But for growth to return to a higher trajectory, investments have to go up which can happen only when banks step up lending. Banks need to move from risk-aversion to **growth-promotion, focusing on small and medium enterprises in particular.** India Inc, too, needs to seize the opportunity to deleverage balance sheets and move ahead with investments.

Typically the reduction of interest rates impacts credit growth for **retail consumers** first i.e fence-sitters react swiftly to such actions and this will kickstart confidence to buy their car or home, as the EMI will have reduced. For a typical loan of Rs 50 lakh loan for 20 years, a 25 basis point (bps) reduction in rates will result in an EMI reduction by about Rs 800. Couple this with the fact that fuel bill of an average household has come down by Rs 500 because of reduction in fuel prices. This leaves an additional Rs 1300 per household in the pockets. When calculated over millions of borrowers, this will lead to a huge spending power, which will raise consumption and, hence, demand for consumer goods and services leading to greater production. At first look 25 bps reduction may appear modest, but the **multiplier effect,** coupled with sentiment is significant. Consumers are understandably cautious, having seen a difficult period of sustained high inflation. Most **infrastructure** developers are still hurting under huge debt burden and poor returns on their investment. Both the Government and the RBI have to complement each other if the economy has to revive quickly. Since private sector plays an important role in infrastructure formation, it is imperative to work out an innovative and fair bailout mechanism involving the Government, banks and the private infrastructure developers.

3. **Smart Factories:** A Research and Consulting Firm, Frost and Sullivan has recently brought out a white paper on ‘Enhancing India’s Manufacturing’ where it has said that the Indian manufacturing sector is on the verge of scripting a new chapter for itself. Conventional manufacturing shop floors have been converted into smart, safe and environmentally sustainable ones by Information Technology(IT). Smart factory is a smart environment which is closely and invisibly connected with sensors, actuators, displays and computer elements, all connected by a network. It is a single functioning mechanism, seamlessly co-ordinating every aspect of manufacturing. They have the ability to interact with customers and business partners with great adaptability and efficiency. The smart manufacturing process facilitates the flow of information about the manufacturing process whenever and wherever required as well as the form it is needed in across entire manufacturing supply chains and complete product lifecycles. Increased operational efficiency, and worker productivity, increased equipment effectiveness, low technology cost owing to converged network, high flexibility due to real-time tracking of information on operation, inventory and supply chain and ease of customization of products.
Conclusion:

With Government’s agenda of turning India into a manufacturing hub for the world, it will take more than cheap labour to pull global companies to use Indian resources and services for their products; it will need **good quality human resource capability** that can deliver at par with standards in their nations. Technical skills, soft skills and extensive exposure to entrepreneurship is needed to enhance development. The induction of global manufacturing practices on a large scale will bring a paradigm change in the growth of the manufacturing sector.

Thus new manufacturing involves a complete ecosystem that goes into the making of a product. This new ecosystem will be the cogs that turn the wheel of India’s journey to a $10 Trillion economy in about a decade and a half.

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