
The India Manufacturing Opportunity

India's emerging global
challengers, a report by
BCG/CII



India's manufacturing sector has evolved through several phases - from the initial industrialisation and the license raj to liberalisation and the current phase of global competitiveness. Today, Indian manufacturing companies in several sectors are targeting global markets and are becoming formidable global competitors. Many are already amongst the most competitive in their industries.

At the same time, the Indian manufacturing sector is also providing opportunities for leading MNCs, looking to leverage India's manufacturing advantage. For many MNCs, India is a design house, a tooling centre, a components base and/or a manufacturing hub.

Yet, the India manufacturing opportunity is not fully understood. What is most often discussed is the low cost labour or the skilled manpower. However, few realise the full range of India Advantage in manufacturing.

In this note, we try to highlight the importance of manufacturing in India and the different facets of the India Advantage.

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PHASES OF MANUFACTURING IN INDIA

Manufacturing in India has evolved through several phases, each of which has contributed to the shape of manufacturing in India today.

The first phase, from 1947-65, focused on government-led investments in manufacturing, with the aim of creating a strong industrial foundation. Several large public sector units in steel, chemicals and power were set up. Many of these companies exist even today and are amongst the largest companies in their sectors.

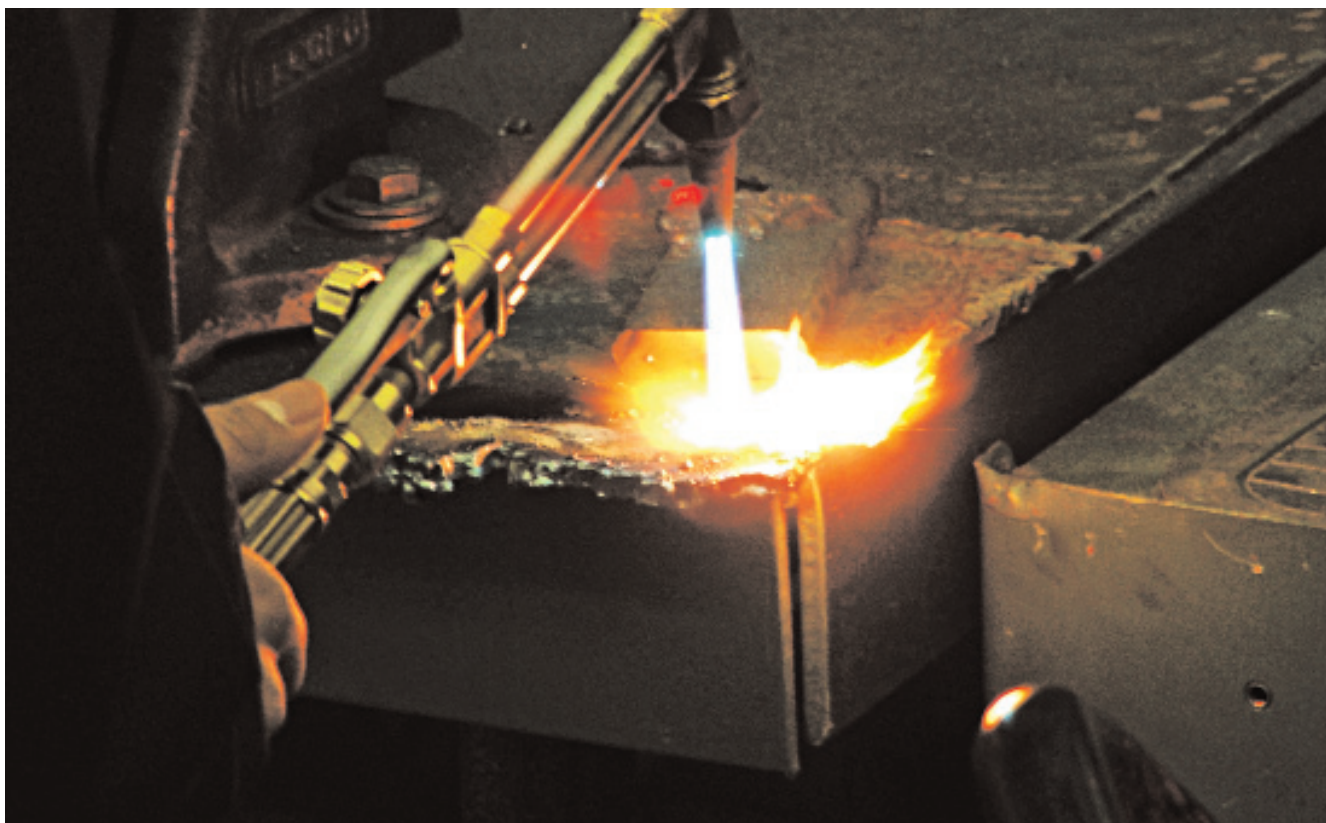
The second phase, from 1965-80, was marked by the continued high levels of government involvement in industry, the introduction of strong licensing laws and a sustained focus on import substitution. This led to further growth in public sector units and formation of several low-

scale private sector manufacturing entities. It also led to the broadening / diversification of the manufacturing base in India.

In the third phase, from 1980-1990, India partially opened its economy to external trade and de-licensed some key sectors for private participation, leading to strong growth in a few sectors. A key event was the formation of the Maruti-Suzuki JV between the Government of India and Suzuki of Japan, reflecting a change in the attitude of Indian government and business towards MNCs.

In phase four, in the early 1990s, Indian industry was further liberalised. The scope of licensing was significantly reduced. Custom duties were slashed. FDI in various sectors was allowed. The spectre of global competition, especially from Chinese and South East Asian players in the late 1990s seemed very real, leading to intense introspection and uncertainty among the Indian manufacturers. This phase forced Indian manufacturers to focus on improving productivity, scale and efficiency.

Today, Indian manufacturing is in





phase five, characterised by confidence and global aspirations. Companies are beginning to reap the rewards of the various phases of development and learning. Many have become quite competitive and are looking to take on global players in their markets. Many are also venturing abroad with global acquisitions. Indian manufacturing is showing the promise of emerging as a potential hub for the world.

THE ECONOMIC RELEVANCE OF MANUFACTURING

The criticality of manufacturing often goes unnoticed in the economy. Agriculture gets all the political attention, while the service sector gets the media attention. However, the impact of manufacturing on the economy is very significant. While manufacturing forms only 16% of India's GDP, it contributes ~53% of exports and receives ~79% of foreign direct investments into India.

Manufacturing also plays a vital role in

job creation. It currently employs 45 million people (11% of the workforce) but its role is much more important. It forms a transitional alternative to the manpower in agriculture. In expanding manufacturing, India creates a channel through which low skilled labour in agriculture can access more value added jobs.

It must also be noted that domestic demand for services is significantly driven by growth in manufacturing. Several global economic studies have estimated that every job created in manufacturing has a multiplier effect, creating 2-3 jobs in services. Also, there is an increasing level of 'software' or services involved in manufacturing.

THE MANUFACTURING BASE IN INDIA

We disaggregated Indian manufacturing output into its constituent key industries. The picture highlights the diversity of the manufacturing base in India.

The total value of output from the manufacturing sector is about \$450 billion. A significant share is composed of process-based manufacturing industries such as chemicals, basic metals, etc.

Food, beverage and tobacco and chemicals together comprise 32% of India manufacturing output and have shown consistent growth. Following them, there are a large number of industries like textiles, basic metals and rubber and petroleum, indicating the dominance of process based manufacturing in India.

Some of the faster growing sectors include machinery and equipment, transport, etc, which involve discrete manufacturing. Sectors such as transport equipment and diamonds are not yet large in value, but have grown at a tremendous rate.

INDIA'S COMPETITIVENESS IN MANUFACTURING

Most discussions on the competitive-



ness of Indian manufacturing focus on the labour cost advantage that India has. These discussions are often followed by debates about labour productivity and flexibility. However, this view does not fully explain the fact that India has several companies that have won the Deming award for quality, the largest number of US FDA registered companies in the pharma industry outside the US, the lowest cost producers in several areas such as iron and steel, aluminium and several companies that are displaying the confidence of undertaking global acquisitions to build scale.

In our work, we have found that India's competitiveness in manufacturing is more broad-based and involves four key factors.

Labour cost advantage

India's labour cost advantage is well understood. Labour wage levels in India are amongst the lowest in the world. What is less understood is that this advantage is likely to continue. This is due to the demographic advantages that India enjoys (young population entering the workforce, low dependency ratio).

Savings due to lower labour cost can account for between 25-90% of the cost advantage that India offers, depending on the nature of the industry. In areas such

as maintenance, overheads and repairs, there can be savings upto 90% in the hidden costs of labour.

Skilled manpower

India has one of the largest pools of English speaking, high quality, skilled manpower. Indian universities churn out engineers, MBAs, PhDs, chemists etc. in large numbers. In fact, India produces 3 million graduates and 700,000 post-graduates every year. This provides India not only with a cost advantage but also access to a large pool of highly skilled resources in some areas where global companies are facing bottlenecks.

The impact of this pool of talent is already becoming visible. India is the largest filer of patents among the developing economies over the last few years. In industries such as pharmaceuticals, Indian companies have achieved significant cost advantages by leveraging process improvements in manufacturing.

Effective use of capital

India also provides a capital cost advantage to companies seeking to build a long-term advantage through a local presence. In our experience, the capital cost advantage can enhance the return on investment in a manufacturing facility. This has significant advantages beyond

cost, such as reduction in hurdle rates for investments, lower fixed costs, greater flexibility and easier risk management.

This advantage stems from three key sources. Firstly, assets can often cost less to buy in India compared to developed countries. It may be possible to set up a full-fledged manufacturing facility in India, including roads, power and buildings at about 60-80% of the cost in a developed market, due to savings in material costs, equipment and construction services.

Secondly, companies often use fewer and smaller assets than they would in developed countries. Most plants in developed markets are heavily equipped with sophisticated machinery designed to replace high cost labour. However, in India, the dynamic is reversed. Companies have the opportunity to reduce the capital cost of complex machinery and replace it with labour. In fact, several companies, including MNCs like GE are reevaluating the labour-capital trade-off in India.

Thirdly, companies can also rethink the make-vs-buy decisions in India. Instead of having integrated plants that make all the components, several MNCs like LG and others actively outsource key components to low cost producers that exist in India's diversified manufacturing industry.

Raw material competitiveness

In some industries India has a significant advantage due to its natural resources and raw materials. For example, India has one of the richest sources of iron ore, which is a key ingredient into the competitiveness of Indian steel companies. In addition, India has advantages in other upstream areas such as bauxite, which leads to increased competitiveness in alumina. Also, in area such as textiles, India has a significant raw material advantage. This provides a significant advantage to any producer looking to convert these materials into higher value-added products to serve adjacent markets.

In summary, India's advantage goes beyond labour, into capital productivity and better process knowledge. There are significant savings to be had from the manufacture of select products in India, compared to the cost in developed markets. 