

Relying on manufacturing is unrealistic

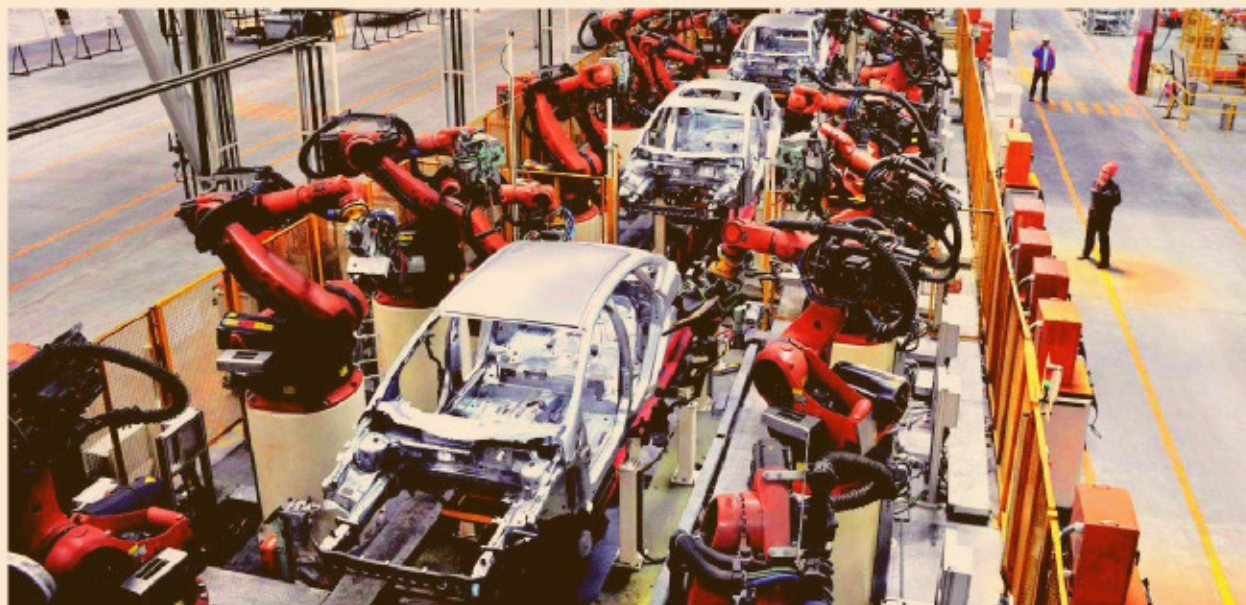
Global trends suggest that the simple-minded notion of encouraging large-scale labour-intensive industries is no longer relevant



RAJIV LALL

In my previous article, I had suggested that it is not realistic for us to rely on the manufacturing sector to become the principal engine of employment creation in the Indian economy (*Job creation: A counter-intuitive model, March 12*). The conventional wisdom among policymakers is that India must seek to replicate the enormously successful experience of our East Asian neighbours, including, most notably and recently China, in using low-cost labour-intensive manufacturing as the ticket to structural transformation and prosperity. The reality is that the drivers of manufacturing activity have undergone a fundamental change over the past decade, such that it will now be very hard, if not impossible, for India to replicate the trajectory of those who have come before us in the journey of economic transformation. What has changed?

During 1990 and 2008, the dominant trend in global manufacturing was outsourcing. This was principally about labour-cost arbitrage and re-organisation of the global supply chain for cost optimisation. China played this game so well that it became the workshop of the west. Over this period, it managed to position itself at the centre of global supply chains for a very broad array of manufactured products by offering an unbeatable combination of cheap labour complemented with a growing pool of engineering talent, an undervalued exchange rate, superior infrastructure and access to cheap land. Between 1990 and 2008, China's share in global manufacturing exports rose from under two per cent to about 10 per cent. Over the same period, labour-intensive industries in advanced countries shed close to 40 per cent of their jobs. But the world is not static. Since the so-called Great Recession triggered by the 2008 financial crisis, we have seen "re-shoring", a term used to describe the relocation of man-



REUTERS

ufacturing capacity back to developed country markets, particularly the US, where a sharp fall in the cost of natural gas following the torrid growth in shale gas production has prompted on-shore capacity creation in energy-intensive sectors such as petrochemicals, fertilisers and steel. This trend now seems to be giving way to the next frontier in manufacturing that some have dubbed "next shoring", a phenomenon that is likely to drive a massive restructuring of global manufacturing supply chains¹. This new reality is being shaped by several important trends.

First, China's wage cost advantage has begun to erode rapidly. From 2005 to 2010, Chinese wage hikes averaged 19 per cent per annum, almost double the annualised growth rate of the previous five years period. Growth in labour productivity is no longer keeping pace with wage growth as China begins to enact an aggressive minimum-wage legislation in the wake of rising social pressures. Labour is not the only factor in escalating production costs in China. The cost of electricity has surged by over 15 per cent since 2010 and the renminbi has appreciated steadily versus the dollar. BCG has estimated that by 2016, the total cost (adjusted for productivity differences, transportation costs and so on) for many products will only be 10-15 per cent less in coastal China than some parts of the US². This may not result in any large-scale shutdown of existing manufacturing plants in China, but when it comes to

creating new capacity, it does mean that global companies are now likely to explore other options rather than automatically opting for China.

Second, as China's labour advantage dissipates, the competition for the preferred low-cost manufacturing location is intensifying. Today there are as many as nine emerging market economies that each account for more than one per cent of global merchandise exports compared to only five in 2001. The new players that have benefited from rising labour costs in China include the likes of Mexico, Indonesia, Thailand, Philippines, Malaysia, Pakistan, Vietnam and Peru. While the labour cost advantage has become more commoditised across countries, the range of manufacturing products, for which it is still an important differentiator, has also become quite narrow, spanning only a few industries such as garments, textiles, leather goods, furniture, jewellery, and toys. These industries together account for only seven per cent of global manufacturing value added. The implication is that it has become tougher for any one country to sustain a competitive advantage in manufacturing based on low labour costs.

Third, innovation has re-emerged as the key focus area of competitive advan-

Between 2000 and 2010, the US shed almost six million manufacturing jobs. Most of the job losses were attributable to productivity growth that outpaced demand growth, and came from unrelenting technological and process innovation

tage across manufacturing companies globally. Robotics, 3-D printing and the digitisation of operations (the so-called "Internet of Things") through cloud computing, mobile communications and remote data gathering from sensors embedded in products and equipment is set to bring about a revolutionary change in manufacturing process. Investments in industrial robots have grown dramatically over the past five years, even in markets such as China, offering the tantalising prospect of partnering or even replacing human workers with mechanical ones. 3-D printing is an additive manufacturing technique that builds objects layer by layer, rather than through molding or machining (which is a "subtractive" technique). This is driving serious reductions in the time and cost of product development. It is also going to facilitate radical and product customisation at low cost through smaller production runs and more flexible supply chains. Digitisation is likely to allow managers to solve plant-floor optimisation problems through remote communications with intelligent machines and equipment. All these developments are making labour progressively less important to success in manufacturing. As a result, the world over manufacturing is becoming less of a force in job creation.

Between 2000 and 2010, the US shed almost six million manufacturing jobs. But only 20 per cent of these job losses were on account of outsourcing or a labour-cost arbitrage. Most of the job losses were attributable to productivity growth that outpaced demand growth, and came from unrelenting technological and process innovation that is now set to become even more disruptive for job creation in the years ahead.

Fourth, since 2008 there has been an accelerated shift in global demand for manufactured goods driven by emerging markets whose economies have grown, and will continue to grow, at a faster rate than the mature markets. These new emerging middle-classes are going to be the consumers of the future and will require a wider range of differentiated products than manufacturers have been used to supplying in the past. Proximity to demand is hence fast becoming an important consideration in the location of manufacturing capacity.

All these trends have profound implications for India. We need to think about the future of Indian manufacturing very differently. The simple-minded notion of encouraging large-scale labour-intensive industries is no longer relevant. We must rather take advantage of our large and growing domestic market to attract foreign direct investment from manufacturers eager to serve the burgeoning demand of our consumers in sectors such as automobiles, transport equipment, appliances, chemicals, food and beverages. In order to secure for ourselves a more sustainable competitive advantage in manufacturing, we must create and nurture the ecosystem that will embed our markets and firms in the innovation-driven supply chains of the future. This will mean, among other things, investing in skill development and infrastructure. Such a strategy will help increase productivity and the share of manufacturing value added in India's gross domestic product, but it will not directly create large-scale jobs. A strong domestic manufacturing sector will, however, generate robust demand for service sector jobs. As I intend to explain in my next piece, that is where the future of large-scale job creation lies for us.

¹The writer is executive chairman, IDFC *Shaping the Future of Manufacturing*.

²McKinsey Quarterly, 2014, Number 1

³Made in America, Again. BCG, August, 2011