High-end manufacturing is the key

RAPID GROWTH: It can create jobs that pay better, foster innovation and productivity

ADVANCED nations may enjoy the luxury of industrial compression where manufacturing no longer merits a pride of place in the economy. Rather, information technology, biotechnology and high-value services, such as finance and banking, become the growth engine of a knowledge-based economy. These nations have debunked Adam Smith.

The founding father of economics had argued that manufacturing should be the mainstay of a country’s economy. Indeed, in Book II of The Wealth of Nations, Smith slammed unproductive industries such as lawyers, physicians, men of letters of all kinds; players, buffoons, musicians, opera-singers, opera-dancers, etc.

We may easily dismiss Smith’s rant over the services sector as being outdated and clearly at odds with that sector’s predominance in most developed economies. However, it will do well for developing countries to pay heed to Smith’s exhortation on manufacturing: for to ignore their manufacturing sector will greatly imperil their development aspirations.

It is, therefore, of great comfort to note that the recently-launched 11th Malaysia Plan (11MP) has continued to put manufacturing at the heart of the nation’s development efforts.

Manufacturing has achieved in national planning what it could not do in the economy, namely, to take the centre-stage in driving economic growth. At slightly more than half of the total, the services sector takes the lion’s share of the national output or gross domestic product (GDP). The share of manufacturing has remained dismally stagnant at roughly a quarter of GDP over the last plan period. Given its smaller stake in national performance, why is manufacturing still the darling of our national planners?

There are three reasons for this.

FIRST, high-tech services demand specialised skills. Therefore, they create relatively fewer jobs. Manufacturing, on the other hand, can absorb large numbers of workers with moderate to specialised skills.

Second, in the developing world, manufacturing remains a steady source of comparatively high-wage employment. In Malaysia, with nearly half-a-million unemployed graduates, manufacturing is a ready bastion of employment.

That is why the 11MP estimates that the manufacturing sector will create one-fifth of all jobs — or three million jobs — in the economy.

Second, manufacturing aids our exports. It will continue to comprise four-fifths of all exports during the 11MP. It is, thus, a huge foreign-exchange earner and a potential source of higher wages.

THIRD, given its long emphasis since the 1960s, the manufacturing sector has built up a vast body of productive knowledge and capabilities. Such a focus will prove handy in leaping to more technologically-sophisticated industries.

As we shift our manufacturing base from the traditional labour-intensive industries to one powered by high-end and robotic technologies, manufacturing will be a source of productivity growth and a stimulus for innovation.

High-end technologies will create a demand for the requisite skills and, consequently, offer jobs that pay better. This is especially so when we move up, and sideways, along the value chain into R&D activities, automated manufacturing and manufacturing-related services, such as logistics, marketing and after-sales services.

For example, the automobile today is a different vehicle from the black Ford Model T that Ford Motors introduced a hundred years ago. Today, the production line of a car is manned not by men, as was the case of the original Ford, but by robotics. Today’s car is fitted with cutting-edge electronics. It is increasingly battery-operated. Such manufacturing, therefore, will require people specialised in automobile R&D, battery chemistry, and electrical, electronic and mechanical engineering.

We will also need skilled marketers and researchers trained in information technology to sieve through mountains of data to discern emerging trends for new products. We need these big-data analysts to examine data on the performance of machinery and equipment to cull ideas for better manufacturing and maintenance.

That way, we can reduce manufacturing costs. We can also create value for customers by making better and quality products that are also affordable. Such innovations will encourage greater productivity and higher wages — the ingredients to making our nation rich.

Most of the advanced economies, such as the US, Japan and South Korea are what they are today by the strength of their manufacturing industries — textiles, steel, automobiles, chemicals.

China, which has over-taken the US economy on a purchasing-power basis, is an economic powerhouse. Thanks to its manufacturing sector, China is still growing three times more than the world superpower. Barring natural-resource rich countries, industrialisation has been the ticket for rapid economic growth. So, less industrialisation will mean shrinking the tapestry on which to weave the threads of growth.

We, too, have taken this well-trodden path of industrialisation. From the import-substitution policies of the First Malaysia Plan (1965-1970) to heavy industries first championed by the Fourth Malaysia Plan (1981-1985). Industrialisation has transformed our agrarian society into a largely urban one. Now, more than two-thirds of Malaysians are urbanites.

What we need to do now is to sustain our industrialisation efforts. As low-wage countries threaten to erode our manufacturing competitiveness, we can move into complex and resource-efficient technologies such as 3-D printing, biotechnology and nanotechnology. These green and sophisticated technologies are in the 11MP cards.

So, as other nations, such as Brazil and India, start to de-industrialise partly for their inability to compete with other Asian manufacturers — our planners have been wise to stick to what has worked in the past. We can neither ignore the imperative of economic growth nor the vigour manufacturing injects into our economy. We cannot also ignore the potential manufacturing has in creating jobs that pay better and in fostering innovation and productivity. Neither can we ignore its contribution to government coffers and enlarging our foreign currency reserves through export revenue.

So, let our fetish with manufacturing linger yet a little longer.

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