

# Manufacturing in Malaysia: Main Issues and Challenges (Jan 2018)

## An Overview

In striving towards a high-income nation status by 2020, the Malaysia's manufacturing sector remains a core sector for sustainable growth under the 11th Malaysia Plan. The manufacturing sector has played a vital role in the economic transformation in Malaysia. Malaysia has continued to attract huge investments in the manufacturing sector despite a challenging economic environment due to its highly-diversified economy, strong manufacturing foundation, developed infrastructure and connectivity, proactive Government policies and hardworking workforce. Nikkei Malaysia Manufacturing Purchasing Managers' Index (PMI) rose to a 43-month high of 52.0 in November from 48.6 in October 2017 (a reading above 50 indicates economic expansion, while a reading below 50 points toward contraction). Some of the key sub-sectors within the manufacturing industry in Malaysia are petroleum, chemical, rubber and plastic products; food, beverages and tobacco; and electrical and electronic products.

The manufacturing sector comprises both export and domestic-oriented subsectors:

- E&E products; chemicals and chemical products; refined petroleum products; wood and wood products; and textiles, apparel and footwear form the majority of export products.
- The domestic-oriented sub-sectors include basic metal and fabricated metal, non-metallic mineral products; transport equipment; food products; and beverages.

In July 2017, manufacturing sales continued to record a strong growth of 22.2%, rising to RM63.9 billion as compared to RM52.3 billion reported a year ago. Contribution to sales value is mainly from Electrical and Electronic Products (27.6%) Petroleum, Chemical, Rubber and Plastic Products (24.0%) and Wood, Furniture, Paper Products & Printing (22.4%). These three sub-sectors contributed 80.4% to the sales value of the manufacturing sector, as at July 2017.

## Main Issues/Challenges

### 1. Lack of Innovation

#### 1(a) Resources for Research and Development

- R&D and innovation involve high risk, long gestation period and high investment to procure machinery and testing equipment – adopting risk-taking culture leads to innovation and creativity that drive economic culture.
- Lack of upfront investment by the manufacturers to undertake product and process improvements is one of the biggest challenge in manufacturing industry.
- Manufacturers, particularly SMEs, are often constrained to conduct R&D and commercialization due to inadequate resources.
- This issue affects most of the subsectors particularly machinery and equipment (M&E), transport, chemical and wood-based industries.
- Most R&D efforts are undertaken by the Government and multinational corporations (MNCs). Although there are a number of public research institutions that undertake R&D activities in specific sectors, research findings by these institutions often do not match industry requirements.
- Collaboration between academics and the business world may result in ideal resources utilization in R&D.

#### 1(b) Risk-Averseness

- Attitude and mindset of manufacturers who are risk averse further impede innovation initiatives. Generally, manufacturers are reluctant to change their current operations due to fear of disruption to production and comfortable with their current business operations.

- In addition, product innovation usually involves high risk, high cost and long duration, thus making it unaffordable and less attractive.

### 1(c) Intellectual Property

- Lack of understanding on the importance of IPs such as industrial design, trademark and copyright hamper the opportunity to enhance creativity, promote technological innovation and improve competitive.
- The need to obtain IP rights is commonly perceived as a huge upfront cost and an administrative burden to comply.
- The main reasons given by SMEs for shying away from patenting their inventions include high costs and complexity of the patent system.

## 2. Competitiveness

### 2(a) Diversification of Exports

- Lack of product diversification creates a threat to manufacturers' business sustainability.
- Apart from product diversification, market diversification may also help to spread the investment risk over a broader portfolio of economic.
- The **diversification of exports increased rapidly** from 490 products in 1980 to 750 products in 1990, but stagnated at 760 products in both 2000 and 2010.
- In addition, the composition of the exports changed from primarily raw materials to manufactured products, indicating a move towards more complex products.

### 2(b) Compliance to Standards

- World markets are progressively moving towards green production and environmentally safe products. Compliance to standards requires investment in testing and certification.
- However, due to **lack of awareness, intellectual knowledge**, difficulties are faced to comply with global environmental requirements. Failure to adhering to requirements result in the goods not being able to be exported.

### 2(c) Utilization of Free Trade Agreement (FTA)

- There are increasing numbers of FTAs signed. However, the **utilization rate of most of these FTAs is low at an average of 40%** as compared to 45% by other Asian firms. This low utilization is partly due to lack of awareness of FTAs as only 30% of firms understand the benefits of FTAs. The utilization tends to be driven primarily by one or two major sectors and a few large firms.
- The inability to utilize FTAs resulted in manufacturers focusing on the domestic market and forgoing opportunities in the FTA partner markets.

### 2(d) Industry gaps between MNCs and SMEs

- One of the measures taken to increase demand for SME products was by developing domestic linkages/business relationships with MNCs. However, SMEs are not able to meet the standards or fulfill the demand of MNCs.
- This is mainly due to the high cost of acquiring new technology, R&D and testing. These shortcomings hinder them from participating in the global supply chain through MNCs, resulting in weak global trade linkages.

### 3. Labour Intensive Industries

#### 3(a) Dependency on Low-skilled Foreign Workers

- In 2016, 42.0% of foreign workers were employed in the manufacturing sector of which 74.0% were employed in seven subsectors namely E&E, wood and furniture, plastic, food processing, rubber-based, textiles and fabricated metal.
- The easy access to **low-skilled foreign workers** discouraged manufacturers from innovating and investing in automation and technology upgrade to enable higher productivity.

#### 3(b) Talent Gaps

- The shift towards producing higher value and more complex products requires skilled, creative and innovative personnel with technological knowledge to constantly improve products and processes.
- In this regard, manufacturers often find it difficult to secure talent that can assist them to innovate and increase productivity.

### 4. Inadequate Enablers

#### 4(a) Insufficient Infrastructure

- There are over 600 industrial estates, many of which do not have adequate facilities. They are also **not well maintained due to the absence of dedicated park managers** and limited resources of the local authorities.
- In addition, accessibility and coverage of broadband is still inadequate in many industrial areas. This hinders the use of ICT among manufacturers, particularly SMEs, to increase their efficiency and to gain for better market access. Additional challenges confront manufacturers in Sabah and Sarawak.
- Inadequate infrastructure has resulted in low connectivity and poor quality of utilities.

Manufacturers in Sabah and Sarawak also face greater challenges in trade facilitation, difficulty in registering businesses and limited market access.

#### 4(b) Poor Logistics Support

- **Inefficiency and high costs of logistics and trade facilitation** cause Malaysia to fall behind some of the ASEAN countries such as Indonesia, Singapore and Thailand.
- Cost related to customs clearance, land transportation and goods handling in Malaysia is higher compared to these countries.

All the above issues and challenges have eventually affect **productivity of manufacturing sector**:

- Based on the Productivity Report 2016/2017 by Malaysia Productivity Corporation (MPC), the **overall growth of Malaysia labour productivity at 3.5% is still low compared with emerging countries** such as People's Republic of China (7.1%), Thailand (4.0%) and India (5.6%) **reflecting reduced competitiveness** in the global market.
- Among the manufacturing subsectors, only four surpassed the productivity level of RM100,000 per worker, namely tobacco, refined petroleum, chemicals and chemical products.

### **Key Takeaways**

The manufacturing sector is envisaged to expand and spur. Conclusively, Malaysia is likely to benefit from these developments:

- Resilient domestic demand and favourable external demand support the growth of investment activities amid continued recovery in the advanced economies and better growth prospects in the region.
- Additionally, production of domestic-oriented industries is expected to expand further due to increasing domestic consumption and investment:
- As external demand improves, the manufacturing sector is anticipated to grow at a faster pace on higher shipments of electrical and electronic products.