Small and Medium Enterprises in the Malaysian Economy: Some Lessons Learned for SME Development in the Philippines

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Abstract

Small and medium enterprises play a vital role in the agro-industrial development and growth of the Malaysian economy. This paper identifies development issues, major challenges and prospects faced by the Malaysian SMEs entrepreneurs and managers and discusses crucial SMEs development interventions as well as some important lessons learned from their experiences to serve as “guides” to the Philippine government and the local SMEs. Research findings reveal that development issues and challenges include limited adoption of technology, lack of human resources, competition from multinational companies and globalization. In addition, key factors of success were identified: ability to respond quickly to market signals, systematic production and operations management and personal networking. The Malaysian SMEs benefited from the economy’s resilience and competitiveness which are attributed to the continuing fiscal reforms, diversification of the economy and up skilling of capabilities and expertise among others. The country focuses on SMEs strategies such as product innovations in food and beverage manufacturing industry and technology adoption, human capital development, access to financing, market access and infrastructures.

Keywords: small and medium-scale enterprises, entrepreneurship, innovation and technology adoption, Malaysia

Introduction

‘Tiger cub economies’ are the so-called rising tigers because they undertake the same export-driven model of economic development pursued by Hongkong, Singapore, South Korea and Taiwan (collectively known as the Four Asian Tigers). Malaysia is one of the four vibrant tiger cub economies in Southeast Asia including the economies of Indonesia, the Philippines and Thailand (Malaysia Country Profile, BBC 2015). Malaysia has benefited from the growth of its manufacturing sector and political stability.

According to facts and figures provided by Asia-Pacific Economic Council’s Small and Medium Enterprises Working Group (SMEWG), small and medium-scale enterprises (SMEs) are the engines of growth and innovation in the APEC region. SMEs account for over 97% of total enterprises, employ over half of the workforce across APEC economies, and contribute significantly to the economic growth, with SMEs’ share of the gross domestic product (GDP) ranging from 20% to 50% in most APEC economies (The 22nd APEC SME Ministerial Meeting in September 2015). Hence, SMEs ought to build their management capability, engage in entrepreneurship, spearhead innovation and seek alternative financing to enable them to effectively engage in international trade. Promoting inclusive growth through sustainable and resilient micro, small and medium enterprises (MSMEs), APEC ministers also discussed ways to remove trade barriers (e.g., fostering MSMEs’ participation in the regional and global markets and promoting modernization, standardization and conformance of MSMEs).

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Taking the perspective of the APEC-SMEs, the Malaysian food processing industry is dominated by SMEs which have contributed substantially to the agro-industrial development and growth in the region. Malaysia exported processed food products to more than 200 countries, with top five export destinations such as Singapore, Indonesia, Australia, Thailand and Republic of China (Malaysian Investment Development Authority 2013). Processed seafood products (e.g., frozen and canned fish, crustaceans and molluscs, surimi and surimi products) remain as the main contributor to the exports of processed food. Malaysia is also the third largest producer of poultry meat in the Asia-Pacific region. Malaysia is self-sufficient in poultry, pork and eggs. Malaysia is currently the world’s fifth largest cocoa producer and the largest processor in the whole of Asia. Yet, it could not meet the huge demand from local grinding and processing industry. Malaysia is also a major producer of spice, being the world’s sixth largest exporter of pepper and pepper-related products (e.g., specialty peppers, processed pepper and pepper sauces). Other spices such as coriander, turmeric, lemon grass, cinnamon, clove and fennel are also being produced.

In the food processing industry of Malaysia, product innovation is attained by introducing new flavors, expanding existing product lines and improving the product packaging. This approach has effectively enhanced the attractiveness of the products to the customers (Ayupp and Tudin 2013). Important innovations are realized in biotechnology, providing concrete solution to the country’s food security (Said et al. 2013 as cited in Ayupp and Tudin 2013). The country is also heading towards innovative “green” products wherein selection of raw materials contributes to the reduction in pollution and it produces products that can be recycled, reusable and degradable. Product innovation consists mainly of new products, product improvements and process/operational improvements (Nor Haza, Eta and Alina 2010 as cited in Ayupp and Tudin 2013).

The National Key Economic Areas (NKEAS) of Malaysia focuses on selected sub-sectors such as aquaculture, seaweed farming, herbal products, fruits and vegetables and premium processed food with considerably high-growth potential. They fully recognized that there is a growing demand for these high value products which provide opportunities for farmers to improve their livelihood and increase their income.

This paper presents an overview of the Malaysian SMEs; identifies development issues, major challenges and prospects faced by the Malaysian entrepreneurs and managers and discusses crucial SMEs development interventions as well as some important lessons learned from their experiences to serve as “guides” to the Philippine government and the local SMEs. Given the researchers’ involvements in research and extension/training in agribusiness and entrepreneurship, this paper intends to support the efforts of the University of the Philippines Institute of Small-scale Industries (UP-ISSI) to develop and promote SMEs in the Philippines, particularly the effort to enhance SME development capabilities.

**Objectives of the Study**

In general, this paper discusses the growth and development of Malaysian SMEs as well as their roles and various contributions to the Malaysian economy in order to understand the business environment and performance of the SMEs.

Specifically, the objectives are as follows: (1) present an overview of the Malaysian SMEs; (2) identify the development issues, major challenges and prospects faced by the Malaysian SMEs entrepreneurs and managers; (3) identify the key factors contributing to the success and failure of the SMEs in Malaysia by reviewing key researches on success-oriented SMEs in Malaysia, with focus on food processing industry;
(4) discuss various development interventions directed towards Malaysian SMEs; and (5) obtain important lessons learned from various Malaysian SMEs’ experiences that could guide the Philippine government and the local SMEs in their efforts to build the nation.

Methodology

The methodology focuses on the following research activities or processes: a) presentation of an overview of Malaysian SMEs; b) focus on development issues, challenges, prospects and development interventions, among others; c) extensive review of key researches on SMEs in Malaysia, focusing on key success factors (KSFs) as applied to the local processed food sub-sector; d) assessment of SMEs’ performance in terms of productivity and competitiveness; and d) drawing of some valuable lessons learned from this study that will benefit the Philippine SMEs sector.

Based on the study entitled “Malaysia Food Processing Industry: Strategies for Growth” by Kartinah Ayup and Rabaah Tudin (Ayupp and Tudin 2013), about 15 SMEs food processing enterprises and key staff in Kuching, the capital city of Sarawak, Malaysia were interviewed. Kuching contributes substantially to the Malaysian economy and serves as an important source of employment. Moreover, the researchers had visited Kuala Lampur and Selangor in Malaysia several times in the past and made personal observations and key interviews of selected SMEs.

Conceptual Framework

The conceptual framework consists of two major parts: macro-level analysis and micro-level analysis.

Macro-level Analysis

At the macro-level, only a few SMEs succeed in achieving exceptional performance and sustainable growth. There still exists a gap for effective ways to increase the number of success-oriented SMEs. In the context of Malaysian SMEs, some key factors contributing to the development of the SMEs include development issues (e.g., innovations and technology transfer), major challenges/prospects (e.g., growing demand for functionally/healthy minimally processed fresh food, organic food and natural food flavors from plants and seafood and the growth and potentials of the halal food industry), and the development interventions (e.g., strong technology support and an environment conducive to business growth). The performance of SMEs is assessed in terms of productivity and competitiveness, linking key factors of SMEs development with the performance of the SMEs.

Micro-level Analysis

There seems to be a positive relationship between entrepreneurial traits and enterprise performance in the context of SMEs. However, key research variables used generally employ a multidimensional view. The paper identifies three determinants of SMEs performance: the management approach, attributes of the enterprise, and sales performance. Yet, the researchers seek key success factors (KSF) that are more meaningful and specific to encourage the local entrepreneurs to readily relate their “own” experiences with the identified KSFs.

An Overview of the SMEs in the Malaysian Economy

Of the 645,136 SMEs in Malaysia, micro-enterprises accounted for 77%, small enterprises, 20% and medium-scale enterprises, 3% (Department of Statistics, Malaysia and SME Corp. Malaysia 2014). In 2014, SMEs in Malaysia are classified based on sales turnover and number of employees (Table 1).
Table 1. SME definition based on size

<table>
<thead>
<tr>
<th>Category</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Sales turnover of less than RM 300,000 a</td>
<td>Sales turnover from RM 300,000 to less than RM15 million or employees from 5 to less than 75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>employees of less than 5</td>
<td>employees from 5 to less than 75</td>
<td>employees from 75 to not exceeding 200</td>
</tr>
<tr>
<td>Services and Other Sectors</td>
<td>Sales turnover of less than RM 300,000 a</td>
<td>Sales turnover from RM 300,000 to less than RM3 million or employees from 5 to less than 30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>employees of less than 5</td>
<td>employees from 5 to less than 30</td>
<td>employees from 30 to not exceeding 75</td>
</tr>
</tbody>
</table>

Source: Economic/SMEs Census, 2011 by the Department of Statistics, Malaysia

1 US$ = RM 3.54

The SMEs cut across all sectors of the economy: services (90.1%), manufacturing (5.9%), construction (3%), agriculture (1%) and mining and quarrying (0.1%). As a consequence, the SMEs contributed 33.1% to the gross domestic product over 57.5% to total employment and about 19% to the country’s exports (Department of Statistics, Malaysia and SME Corp. Malaysia 2014).

The Malaysian government have made various fundamental steps to accelerate the growth of SMEs. Particularly, the country adopted the Economic Transformation Framework to boost SMEs as the driving force in wealth and employment generation. It is indeed crucial to understand why some SMEs are successful and others fail in the Malaysian business context.

The SMEs in Malaysia include family-based or single proprietorship type of ownership, simple but flexible organizational structure and generally driven by consumers’ retail pull. In terms of attaining competitive edge, they aggressively pursue high rate of new product development and exploration of new markets, change at various stages of the production processes to accommodate consumer demand and a strong backward linkage that ensures availability of raw materials and supplies (Ayupp and Tudin 2013).

The SMEs Master Plan 2011-2020 intends to achieve the nation’s target of becoming a high income nation by 2020. Specifically, the plan addresses the needs of the SMEs based on their size category (Ministry of International Trade and Industry, Malaysia 2006). This is in recognition of the fact that many successful medium-scale and large organizations started off as micro and small-scale enterprises.

In general, the contribution of SMEs to the global value chain has been minimal (Table 2). The SMEs of both Malaysia and the Philippines contributed nearly one-third of the total GDP and nearly one-fifth of the total exports in 2012. Malaysian SMEs aim to increase the share of SMEs to GDP from 32.7% in 2012 to 41% by 2020.

According to SME Corporation in Malaysia, the percentage share of SMEs in the services sector is 90.1% (Table 3). The sub-sectors under services sector consists of telecommunications, private education, health care, finance, insurance, professional and business services, wholesale and retail trade, restaurants and accommodation.
Table 2. Role and performance of selected APEC-SMEs, 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Share of Total Number of Firms (%)</th>
<th>Share of Total Workforce (%)</th>
<th>SME Contribution to GDP (%)</th>
<th>Share of Total Exports (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>99.0</td>
<td>75.0</td>
<td>58.5</td>
<td>68.0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>99.9</td>
<td>97.2</td>
<td>57.9</td>
<td>15.8</td>
</tr>
<tr>
<td>Korea</td>
<td>99.9</td>
<td>87.7</td>
<td>45.7</td>
<td>30.9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>97.3</td>
<td>57.5</td>
<td>32.7</td>
<td>19.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>99.6</td>
<td>64.97</td>
<td>35.7</td>
<td>20.0</td>
</tr>
<tr>
<td>Singapore</td>
<td>99.0</td>
<td>70.0</td>
<td>Approx. 50</td>
<td>18.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>98.5</td>
<td>80.4</td>
<td>37.0</td>
<td>28.8</td>
</tr>
<tr>
<td>Vietnam (2010)</td>
<td>97.0</td>
<td>50.1</td>
<td>40.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>


Table 3. Number of establishments by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Total SMEs</th>
<th>Total SMEs</th>
<th>Large Firms</th>
<th>Total Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Establishments</td>
<td>% Share</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>21,619</td>
<td>13,934</td>
<td>2,308</td>
<td>37,861</td>
<td>5.98</td>
<td>1,808</td>
<td>39,669</td>
</tr>
<tr>
<td>Services</td>
<td>462,420</td>
<td>106,061</td>
<td>12,504</td>
<td>580,985</td>
<td>90.10</td>
<td>10,898</td>
<td>591,883</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3,775</td>
<td>1,941</td>
<td>992</td>
<td>6,078</td>
<td>1.00</td>
<td>2,121</td>
<td>8,289</td>
</tr>
<tr>
<td>Construction</td>
<td>8,587</td>
<td>6,725</td>
<td>3,971</td>
<td>19,283</td>
<td>3.34</td>
<td>2,857</td>
<td>22,140</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>57</td>
<td>126</td>
<td>116</td>
<td>299</td>
<td>0.05</td>
<td>119</td>
<td>418</td>
</tr>
<tr>
<td>Total SMEs</td>
<td>496,458</td>
<td>128,787</td>
<td>19,891</td>
<td>645,136</td>
<td>100.00</td>
<td>17,803</td>
<td>662,939</td>
</tr>
</tbody>
</table>

Source: Economic/SMEs Census 2011 by Department of Statistics, Malaysia

According to a survey conducted by the Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCCIM), of the 591,883 SMEs in services sector, about 25% fall under wholesale and trading. The service sector was followed by the manufacturing (5.98%), construction (3.34%), agriculture (1%) and mining and quarrying (0.1%), in terms of the percentage share of SMEs.

The SME Sectors and their Contributions

Selangor produces electronic goods, chemicals and automotive vehicles and engages in commerce, industry and services, contributing 19.5% of the total Malaysian SMEs (Table 4). In agriculture, Selangor is involved in the cultivation and growth of star fruits, papayas and bananas and the establishment of palm oil and rubber plantation sites.

On the other hand, Kuala Lumpur develops a vibrant service sector comprising of finance, insurance, real estate, business services, wholesale and retail trade, restaurants and hotels, transport, storage and communication, utilities, personal services and government services (13.1%), followed by Johor (10.7%) which concentrates on textiles and apparel due to availability of labor and logging activities; Perak (9.3%) which concentrates on food and food related manufactures; and Sarawak (6.8%).

SME businesses constitute the bulk of the Malaysian economy but their share of GDP is still slightly lacking as compared with their counterparts in the developed countries. In terms of GDP contribution by SMEs, the share of SME GDP to overall GDP at current prices was 35.8% in 2014 (Table 5).
Table 4. Top five states in terms of number of SMEs

<table>
<thead>
<tr>
<th>Selected State</th>
<th>Total SMEs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selangor</td>
<td>125,904</td>
<td>19.5</td>
</tr>
<tr>
<td>Kuala Lampur</td>
<td>84,261</td>
<td>13.1</td>
</tr>
<tr>
<td>Johor</td>
<td>68,874</td>
<td>10.7</td>
</tr>
<tr>
<td>Perak</td>
<td>60,028</td>
<td>9.3</td>
</tr>
<tr>
<td>Sarawak</td>
<td>43,830</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Source: Economic/SMEs Census 2011 by Department of Statistics, Malaysia

Table 5. Value added and percentage share in GDP at current prices and constant 2010 prices, 2014

<table>
<thead>
<tr>
<th>Category</th>
<th>Value Added (RM billion)</th>
<th>Share (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current prices</td>
<td>Constant 2010 prices</td>
</tr>
<tr>
<td>SMEs</td>
<td>396.6</td>
<td>363.5</td>
</tr>
<tr>
<td>Large Enterprises</td>
<td>710.0</td>
<td>649.0</td>
</tr>
<tr>
<td>GDP</td>
<td>1,106.6</td>
<td>1,012.5</td>
</tr>
</tbody>
</table>

Source: Economic/SMEs Census 2011 by Department of Statistics, Malaysia

In terms of contribution to overall GDP of RM 1,012.5 billion in 2014, the top three SMEs were those classified under services (53.5%), followed by manufacturing (23%) and agriculture (9.2%), a combined share of 85.7%. The Malaysian government wants to aggressively raise the share by 2020. As a consequence, the Malaysian government focused on areas like innovation and technology adoption, human capital development, access to financing, market access and infrastructures in order to enhance the growth of SMEs.

Productivity and Competitiveness

Competitiveness is a broad concept consisting of a set of institutions, factors and policies that determine the level of productivity of a country (World Bank 2006). Given some limits to the additions of capital and labor, most economists will declare that input-driven growth is not sustainable in the long-run. Hence, productivity-driven growth is found more relevant and practical, using total factor productivity (TFP) as a true measure of competitiveness. TFP refers to the residual after accounting for the contributions of incremental capital and labor inputs.

During the period 1997-1998, Malaysian economy experienced a loss of competitiveness due to the crisis confronting the East Asian exports. There was a close correlation between export competitiveness and TFP growth. During the periods 1994 to 1998 and 2001, Malaysia’s TFP growth was shrinking to a negative growth rate. Since 2001 and onward, Malaysian SMEs had shown encouraging trends in productivity on a wide range of activities. This trend was attributed to the country’s efforts to improve productivity and quality across industries, both in manufacturing and in the services sectors. Based on the distribution of SMEs’ output in the manufacturing sector, food products and beverages accounted for 32.3% of the total output of the manufacturing sector (Annual Survey of Manufacturers, Department of Statistics, Malaysia 2007).

In 2007, the growth in productivity of SMEs as a whole stood at 5.3%, with a value of RM 46.6 million in 2007, up from RM 44.2 million in the past year (Annual Survey of Manufacturers, Department of Statistics, Malaysia 2007). Productivity gain was traced to higher value added creation and capacity utilization in selected sub-sectors.
During the period 2011-2014, labor productivity in the Malaysian economy registered a growth rate of 2.1%. In 2014, labor productivity as measured by real added value per employee improved by 3.5%, from RM 59,622 in 2013 to RM 61,708 (Malaysia Productivity Corporation 2014-2015). On real added value per hour worked, labor productivity improved from RM 27.59 in 2013 to RM 28.55 in 2014. Based on labor productivity by Malaysia’s economic sector, the construction sector registered the strongest productivity performance with productivity growth of 13.2%, followed by mining (6.5%), agriculture (3.9%), manufacturing (3.8%) and services (2.2%) (Table 6).

Table 6. Labor productivity of Malaysia’s economic sectors, 2014

<table>
<thead>
<tr>
<th>Sector</th>
<th>RM in Thousand</th>
<th>Productivity Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>34.66</td>
<td>3.93</td>
</tr>
<tr>
<td>Mining</td>
<td>778.77</td>
<td>6.52</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>90.56</td>
<td>3.79</td>
</tr>
<tr>
<td>Construction</td>
<td>26.90</td>
<td>13.22</td>
</tr>
<tr>
<td>Services</td>
<td>63.90</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Malaysia

During the period 2011-2014, Malaysia registered an average of 1.1% TFP growth, with highest growth rate of 1.9% gained in 2014 (Malaysia Productivity Corporation, 2014-2015). All of the economic sectors exhibited slower growth than what was recorded in the Ninth Malaysian Plan (9MP), except for the construction and agriculture sectors (Table 7). The agriculture sector attained TFP growth of 1.3% from a negative growth rate of 0.3% recorded in the Ninth Malaysia Plan (9MP).

Table 7. Malaysia’s TFP growth from 1996 to 2014

<table>
<thead>
<tr>
<th>Item</th>
<th>Period Covered</th>
<th>TFP Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>2011-2014</td>
<td>1.1</td>
</tr>
<tr>
<td>9MP</td>
<td>2006-2010</td>
<td>1.5</td>
</tr>
<tr>
<td>8MP</td>
<td>2001-2005</td>
<td>1.4</td>
</tr>
<tr>
<td>7MP</td>
<td>1996-2000</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Malaysia

Currently, the growth in productivity and improvement in labor efficiency contributed to a higher GDP growth rate of 6.0%. Malaysia’s labor productivity growth target is placed at an average annual rate of 3.7%, with the aim of attaining a high income economy status by 2020.

SMEs Manufacturing Sector

The positive TFP growth in agriculture is consistent with the Malaysian government’s move to modernize and transform the sector, taking advantage of the commencement of the ASEAN Economic Community (AEC) in the near future.

SMEs in the manufacturing sector in Malaysia are involved in a diverse range of industries: processing and production of raw materials such as textiles and apparel (18.2%); food and beverages (15.2%); metals/metal products (14.8%); wood/wood product sectors (14.1%); and petroleum, rubber and assembling and manufacturing of electrical and electronics appliances and components; among others (Small and Medium Industries Development Corporation 2004).
According to the Companies Commission of Malaysia (CCM), in 2003, about 40,655 SMEs accounted for 29.1% of the country’s manufacturing output, 26.1% of manufacturing value added products and 32.5% of manufacturing employment. SMEs directly exported 26.5% of their output in the same year.

Based on capital intensity, SMEs fell short of the manufacturing sector average of RM 49,117 with fixed assets per worker standing at RM 35,792 in 2003 (Saleh and Ndubisi 2006). Despite this dilemma, Malaysian SMEs still registered double digit growth in value added in a variety of industries. There is a desired shift for Malaysia to move away from low value-added, labor-intensive manufactures to high value-added skill-intensive and technology-intensive manufacturing. Hence, the need for increased science and technology (S&T) related investment in human capital and research and development (R&D) activities. These include biotechnology, photonics and nanotechnology, among others.

In 2014, labor productivity in the Malaysian manufacturing sector increased from RM 87,248 in the previous year to RM 90,556, with double digit productivity growth in the basic pharmaceutical products, wood and wood products and electrical and electronics sub-sectors (Malaysia Productivity Corporation 2014-2015). In addition, other sub-sectors such as palm oil products, refined petroleum products and chemical products registered productivity above the industry average. In contrast, labor productivity in food and beverages processing sub-sectors are way below the double digit productivity growth of emerging industries such as pharmaceuticals and palm oil sub-sectors.

It also important to note that TFP growth was rather minimal at 0.1%. Sub-sectors such as automotive, electronics and foods must continue enhancing productivity in the manufacturing sector by leveraging the ASEAN Economic Community’s (AEC) impact to achieve economies of scale and optimize costs of labor and input sourcing, inventory, logistics and transactions.

The Malaysian Food Processing Industry

Shamsudin et al. (2011) evaluates the market competitiveness of SMEs in the Malaysian Food Processing Industry (MFPI) in terms of technical efficiency and productivity growth. In 2000-2006, the sub-sector’s technical efficiency (TE) was 0.756, an evidence that Malaysian SMEs in the food industry was able to expand their output by 24.4% while using the same level of inputs (Shamsudin et al. 2011). For technical efficiency, public infrastructure, investment and foreign ownership were identified as the major determinants. On the other hand, TFP growth was negative 1.3%, with processed/preserved poultry and poultry products having the highest productivity growth and manufacturing of tea had the lowest growth. R&D, training and public infrastructure were determinants with positive effect on TFP growth.

Improved productivity is a major driver of competitiveness. In addition, Malaysian SMEs need to establish strong joint ventures, partnerships and strategic alliances within and outside the region in order to compete globally. Innovations and technology transfer, economies of scale and sharing of expertise can help support SMEs achieve overall productivity and competitiveness. Simultaneously, the Malaysian government must increasingly strive to create and maintain a business environment conducive to the growth of SMEs. This effort would enable SMEs to move up the value chain, sustain its growth and cope well with the challenges of the ASEAN economic integration and bilateral free trade agreements.
In 2008, Malaysia’s R&D expenditure was considered low – 0.79% of Malaysia’s GDP – compared to Japan’s 3.1%. In 2012, the share of R&D in GDP was 1.13%, an increment of 43% compared to 0.79% in 2008 (National Research and Development Survey 2000-2012). Simultaneously, the number of researchers per 10,000 labor force stood at 18 which is way below Japan’s 113 during the early 2002. Since then, enhancing the country’s R&D capabilities was given top priority by the Malaysian government. To help sustain the development and growth of the Malaysian halal food industry, there is a need to invest heavily on R&D activities, particularly on products and processes that will meet or satisfy Islamic law or syariah.

**SME Development, Challenges and Prospects in the Malaysian Economy**

The Malaysian SMEs are confronted with many domestic and global challenges in their effort to attain desired economies of scale and compete in the world market. Some of these broad challenges included: a) low level of technological capabilities and low-skilled human capital resources, b) low level of technology and ICT penetration, c) low level of research and development with a substantial orientation towards domestic markets, d) high level of competition from China and India, e) high level of bureaucracy in government agencies and f) internal sourcing of funds (Saleh and Ndubisi 2006). According to the Research Online survey in 2005, particular challenges have been identified as follows: a) lack of access to loans, b) limited adoption of technology, c) lack of human resources, d) competition from multinational companies and e) globalization (Saleh, Caputi and Harvie 2015).

There is a strong link between productivity and competitiveness – an increase in productivity could enhance overall competitiveness. Equipped with desired knowledge and skills, employees and workers could become more productive and efficient, which in turn could lead to a higher household and national income level and return on investment (ROI). The government adopted productivity and competitiveness as an effective approach to address relevant problems and issues being confronted by Malaysian SMEs.

There are many factors contributing to the productivity and competitiveness of Malaysian SMEs as evidenced by the various global awards obtained by the Malaysian government (Table 8). In general, the performance of SMEs reflects the economy’s resilience and competitiveness, encouraging the growth and development SMEs. This is an offshoot of continuing fiscal reforms, initiatives to control the rising cost of living and diversification of the economy. Other relevant measures include up skilling of capabilities and expertise, review of the education system and reforming and modernizing the tax system. Under the government’s Economic Transformation Program and the current global economic environment, Malaysia has effectively implemented policies with particular emphasis on increasing productivity, encouraging innovation and increasing the ease of doing business.

In terms of prospects, there is a growing demand for functional/healthy minimally processed fresh food, organic food and natural food flavors from plants and seafood due to the increasing consumer awareness on nutrition value and food fortification for health care (Euromonitor 2012). Functional/health food produced in Malaysia is mainly in the form of food products that are enriched. Food ingredients such as customized formulations required by food manufacturers, natural food additives and flavors have great potential for growth in the local and export markets.
World’s halal market is currently valued at US$ 2.3 trillion annually. Food and primary meat account for the 63% of the market (Euromonitor 2012). Within Malaysia, total annual demand for halal food is RM 1.7 billion a year. This provides immense opportunities for Malaysian food manufacturers. The concept of “halal” indicates high quality food products, in terms of sanitation and compliance with religious requirements. Hence, Malaysia has identified halal food industry as a priority sector, aiming to become a leading supplier of halal products. Malaysia also introduced schemes such as grants and tax incentives for the development and production of halal products and aimed to increase the market share to 5% by the year 2020.

Table 8. Various awards obtained by the Malaysian government

<table>
<thead>
<tr>
<th>Category</th>
<th>Ranking</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Competitiveness Report</td>
<td>25th position</td>
<td>Made efforts to move up the value chain and upgraded Malaysia’s stage of development from “efficiency-driven” to transition towards “innovation-driven” (that is, stronger in the area of Science and Technology). Competitive markets; a supportive financial sector and business friendly institutional framework (e.g., transparency and cutting of red tape). Focus on productivity, quality, competitiveness, innovations and best practices through research of value-added information, training and partnership programs.</td>
</tr>
<tr>
<td>2012-2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Bank’s Doing Business</td>
<td>12th position</td>
<td>Aggressively pursued improvements in ease of obtaining permits, property registration, taxation processes and cross-border trading, ease of obtaining credit (ranked first) and protection offered to investors (ranked fourth).</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. T. Kearney’s 2012 FDI Confidence Index</td>
<td>10th position from previous</td>
<td>Foreign direct investment (FDI) inflows reached US$ 9 billion, an increase of 537% from the previous year (2013).</td>
</tr>
<tr>
<td>World Competitiveness Yearbook</td>
<td>14th position from previous</td>
<td>Based on 4 competitiveness factors: economic performance, government efficiency, business efficiency and infrastructure</td>
</tr>
<tr>
<td>(WYC) 2015</td>
<td>12th position</td>
<td>Most Asian economies suffered a decline due to a deterioration of their domestic economies and a weakening/aging infrastructure</td>
</tr>
</tbody>
</table>

Source: Malaysia Productivity Corporation (MPC) and World Economic Forum (WEF).

During the period 2004-2014, the GDP growth of SMEs was higher than 5.0% average GDP growth of the overall economy and this performance was attributed to the effectiveness of the policy, particularly from the statistics, guidelines, products, human capital development, market access and outreach, information dissemination and strengthening of financial infrastructure. On the other hand, Malaysian SMEs continued to face challenges largely due to the increasing cost of doing business which arose from the implementation of the minimum wage policy, subsidy rationalization and expectations of higher prices due to the impeding Goods and Services Tax GST (MITI 2014).
Key Success Variables

Based on the study entitled “Malaysia Food Processing Industry: Strategies for Growth” (Ayupp and Tudin 2013), key research variables used generally employed a multidimensional view. Using 2010 as a base year, three (3) sets of determinants of enterprise performance were identified: a) the management approach, b) attributes of the enterprise and c) sales performance. This study covered some 15 food processing SMEs in Kuching, the capital city of Sarawak, Malaysia. Kuching contributes substantially to Malaysian’s economy and serves as important source of employment.

Malaysia’s processed foods are exported to more than 200 countries, producing an annual export value of more than RM 13 billion (Malaysian Investment Development Authority 2012). Selecting the best strategy is crucial for the success of the SMEs, particularly for the small enterprises. The strategy adopted by most SMEs within the food processing industry in the Malaysian economy to achieve business growth is the market penetration strategy due to its perceived low risks and ease of implementation (less strain on organizational resources). SMEs in Malaysia have limited resources to invest in elaborate marketing strategy or new distribution channel to attract new type of customers. They also avoid competing head-on with major food firms in big segments.

The niche strategy adopted by Malaysian food processing industry seems to be an effective strategy for SMEs that sustain competitive advantage (e.g., brand equity, customer goodwill and relationships, distribution networks and business contacts). In developing new products, most SMEs still decide to sell at existing markets. The same study notes that the most crucial success factors include the ability to respond to market signals, personal networking and systematic operational management of the enterprise.

Market Orientation (MO) and Entrepreneurial Attitude toward MO

Market orientation has significant impact on organizational performance (Ramayah et al. 2011). Malaysian managers and entrepreneurs with high entrepreneurial attitude toward MO and high MO are found to be more active in market scanning and better in identifying and analyzing key strengths and weaknesses of their enterprises (Mohsin, A. M. et al. 2012). They are able to recognize the tangible and intangible assets useful in selecting the best business strategy and develop market-oriented culture that creates effective and efficient behaviors and improves overall organizational performance. In the new global economy, Malaysian managers and entrepreneurs exhibit strong needs for achievements, locus of control, self-esteem and innovation to gain competitive advantage in the global markets.

Ability to Respond Quickly to Market Signals

The unique characteristics of the SMEs and the dynamics of the key factors of its external environment would determine the best strategy that would help ensure business growth. In order to attain success in the food processing industry, the enterprise needs to rely on localized and tacit knowledge that could assist SMEs in quickly responding to market signals such as changing customers’ preferences (e.g., diverse tastes, price issues, cost inequities, legislative compliance and competitive conditions).

Systematic Production and Operational Management

In the Malaysian food processing industry, new products and product development involve introduction of new flavors, expansion of existing product lines, and change in the product’s packaging for better appeal to the current customer base.
As explained by Littunen and Tohmo (2003), business growth could not be explained by any single type of strategy. The most successful enterprises have the ability to make changes in their production process to complement an active market development strategy.

**Personal Networking**

In start-up enterprises, entrepreneurs maintain a hands-on approach in establishing and managing the SMEs where in most decisions are firmly controlled by the owner-entrepreneurs. The owner-entrepreneurs of the SMEs focus on building personal networks (e.g., customers, suppliers and creditors, among others). Specifically, they focus their attention on the following matters: personal relationships with customers, identifying key opportunities in the external environment, key customers and their location, key strengths and key weaknesses of the SMEs, assessing how products can meet or satisfy customers’ needs, monitoring the competitors’ behavior and decisions (e.g., pricing decisions), developing promotional materials and gathering vital information that would enable the enterprise to “strategize” over the long-run.

**Other Key Success Factors**

Malaysian SMEs have adopted distinct and unique approaches to achieving product and/or service quality which covered effective top management commitment, an effective steering committee engaged in policy and planning management, real employee involvement, employee rewards and skills development (Rahman & Tannock 2005).

Key factors such as leadership and management, intellectual capital, organizational innovation, entrepreneurial competence, entrepreneurial characteristics, human resources and motivation, among others, are deemed essential for sustained business success (Ng and Kee 2012). On top of these, SMEs must build resources, develop leadership style, pursue good image and reputation and cultivate organizational culture.

External support such as a business environment conducive to growth (e.g., ease of doing business, facilitating permits, taxation processes, rise in innovations and ease of obtaining credit), strong institutional support, government and business efficiency, foreign direct investments and investments in infrastructures favor or support SMEs growth and development. These are discussed extensively under section entitled “SME Development, Challenges and Prospects in the Malaysian Economy.”

**Intervention Strategies**

To attain Vision 2020, the development of SMEs is deemed crucial for the country’s transformation from agricultural-based to an industrialized-based economy by year 2020. The Malaysian economy has greatly depended on the export of electrical and electronic products which comprise more than 50% of Malaysian exports since the mid-1990s (a key strength). However, these are mature and relatively low value added products which rely on cheap labor (a key weakness). Currently, cheaper labor is provided by competitors from China and Vietnam. Now, the Malaysian economy is shifting from industry-based to a knowledge-based economy with a view of becoming a developed economy (Khalique et al. 2011).

The government realized that relying on cheap currency to maintain the country’s export competitiveness was not sustainable as undervalued exchange rate meant increased import costs and higher domestic prices, which could translate into inflation. On the other hand, sudden currency appreciation will definitely cut Malaysian exports but this is deemed temporary.
To attain the desired competitiveness, the Malaysian government is strongly supporting innovations, cost reductions, productivity improvements, new processes and new products.

The Malaysian government adopted key programs to bolster SMEs performance, namely, Industrial Linkage Program, Global Supplier Program and Skills Upgrading Program. Recently, the government created the National SME Development Council to devise new strategies and strategic directions for SMEs, with a newly established SME Development Bank to cater to the financial needs of the SMEs.

Simultaneously, the Malaysian government also modernized the agricultural sector through innovations derived from S&T applications that would raise productivity, efficiency and profitability of the sector. Despite rising costs of land and labor, agricultural food sector in Malaysia has remained competitive through the use of modern technologies. The country also focuses on high value added downstream processing rather than on primary production, and is willing to import raw materials from regional sources at lower costs. Malaysia is also developing its fishery, herbal medicine and palm oil based fuel, among others, shifting from the so-called traditional agriculture to a more technology driven, value adding strategies.

For example, production and processing of “halal” food can cater to the Muslims in Malaysia and abroad (Ariff, no date). The country can source inputs from productive and efficient local farms and from other regions, teaming up with Australia and New Zealand in establishing and managing economically viable livestock farms and processing these into meat-based “halal” food products. Export potentials for “halal” food products are tremendous and these can serve as a growth engine of the Malaysian economy.

**Innovation and Technology Business Incubation in Malaysia**

Innovation is the major driving factor of the development of SMEs in Malaysia. For over two decades, the government of Malaysia was very successful in creating an enabling innovation ecosystem that support locally developed technologies, the development of technopreneurship, and the establishment of technology based businesses.

The government of Malaysia actively promotes the technological development of the local SMEs which represent the largest portion of the manufacturing sector. Instead of relying heavily on technology imports, indigenous technology development needs to be aggressively pursued. The government has already funded a large number of R&D projects being undertaken by local universities and research institutions, mainly focusing on the commercialization of indigenous technologies. The R&D efforts of about 33 local public sector R&D organizations (including statutory research institutions and 8 universities) focused mainly on the agro-processing and medical sectors. Currently, many local R&D institutions have promoted the commercialization of their technology through consultation services, collaborative and contract research projects. Current innovations in the food processing sub-sector include functionally/healthy minimally processed fresh food, organic food and natural food flavors from plants and seafood as well as development and production of halal products.

Malaysia was able to institutionalize innovation and entrepreneurship by formulating national frameworks and policies for national development. Strong support from top-level leadership of the government led to the creation of a Technology Development Program (TDP) which was established in the 7th Malaysia Plan and continues up to the present 10th Malaysia Plan.
As part of the national policy to create and nurture an innovation ecosystem, Malaysia has invested heavily in innovation hubs such as Technology Business Incubation (TBI) facilities and Technoparks. These facilities managed by private entities, serve as venues for the creation of an effective ecosystem that commercialize technologies developed by the universities as well as by other local private entities. TBIs and Technoparks also nurture the new generation of technopreneurs through comprehensive and SME-friendly services that provide end-to-end support from concept to commercialization. This allowed Malaysian-owned companies to gain competitive edge over other countries—a full government backing with in-country and out-country structural and service support to ensure success locally and globally.

**TBI Facilities in Malaysia Serving as Launching Pad for Globally Competitive SMEs**

**Technology Park Malaysia (TPM)**

Technology Park Malaysia Corporation (TPM) was established in 1996 with the vision of becoming a world-class Technology Park that drives the national innovation and knowledge-based economy for wealth creation and societal well-being. Since its establishment, there emerged more than 3,000 technology-based companies that started and grew in TPM—both local and multinational in various industries. As of today, TPM houses around 103 incubation centers and most of these are government owned.

One of the key features of the Technology Park Malaysia, aside from providing rental of incubator premises, is the development of the virtual incubation program called Advanced Virtual Incubation Services or ADVISE. It is a business model for strategic collaboration on virtual support. It allows technopreneurs to avail of the benefits and services of an incubator without actually being located physically at the incubator’s premise. Unlike most of TBI’s rental-based service offerings, TPM is a fourth generation TBI that provides end-to-end support structure enabling established Malaysian companies to expand offshore through its co-incubation and internationalization program. Figure 1 shows the evolution of TPM.

**Universiti Putra Malaysia-Malaysian Technology Development Corporation (UPM-MTDC)**

Malaysian Technology Development Corporation (MTDC) was set up by the government of Malaysia in 1992 to spearhead the development of technology-based businesses in Malaysia. Initially, MTDC’s role was to promote and commercialize local research and invest in ventures that can bring in new technologies from abroad; but later on, it evolved.

MTDC manages two grants on behalf of the Ministry of Science, Technology and Innovation (MOSTI), namely, the Commercialisation of R&D Fund (CRDF) and the Technical Acquisition Fund (TAF). On the other hand, the central government entrusted MTDC with the management of two grants, namely, Technology Acquisition Fund (TAF) and Commercialization of R&D Fund (CRDF). These grants mainly provide support to local companies by helping them enhance technology content and increase capacity, capability and competitiveness. The former provides the right mix of support to Malaysian companies by enhancing their technological resource and improve production processes with the acquisition of new technologies. This stimulated the innovation culture among Malaysian-owned companies, especially in the commercialization of home-grown R&D notably developed by local universities/research institutions or the private sector.
MTDC operates four incubation centers with standard program offering called SYMBIOSIS. MTDC’s Graduate Entrepreneurship Program, or SYMBIOSIS as appropriately dubbed, aims to train selected graduates that could become technopreneurs. SYMBIOSIS is a comprehensive program that covers aspects of commercialization as well as entrepreneurship. At the end of the program, selected candidates will lead start-up companies that would commercialize technologies from the Universities/Research Institutes (Uni/RI) that have been carefully chosen by MTDC. SYMBIOSIS start-up companies will then be able to apply for MTDC’s fund to operate from any of the Technology Centers and receive nurturing and other value added services just like any other companies within MTDC’s ecosystem. Figure 2 shows the MTDC commercialization pathway.

**Figure 1. Evolution of TPM incubation program (1996-present)**

**Figure 2. MTDC commercialization pathway**
**Human Capital Development**

Prime Minister Abdullah Badawi, the father of human capital development in Malaysia puts emphasis on the human factor as playing a pivotal role in the country’s development and consequently, the quality of the workforce will make the real difference. Hence, the government is investing in human resource development through education, training and skill development. This would enable Malaysia to effectively adjust competitive strategies with the changing times.

With high productivity target, the government is undertaking concrete measures that enhance human capital such as: a) leveraging women’s talent, b) providing comprehensive labor market data and c) strengthening the skills of Malaysia’s labor force (The Human Capital Development Strategic Reform Initiative under the New Economic Model). These measures are complemented by workplace transformation initiative focusing on two main areas: a) modernization of Malaysian labor laws (e.g., increasing the standard of living and enhancing the labor safety net) consistent with the needs of a high-income economy and b) strengthening the human resource management (HRM) of Malaysian SMEs.

**Investments in the Malaysia’s Food Industry**

Livestock, fisheries, fruits and vegetables are major sub-sectors in the agricultural sector with significant linkages to the Malaysian food processing industry. Recognized as the 7th National Key Result Area (NKRA), the processed food sub-sector addresses rising living costs and food safety and security. The processed food sub-sector encompasses all value-adding activities which utilize agricultural or horticultural products. In 2014, a total of 68 projects with investments amounting to RM 2.2 billion were approved with breakdown as follows: Domestic investments of RM 1.1 billion (47.1%) and Foreign investments of RM 1.2 billion (52.9%) (Malaysian Investment Performance Report 2014). For example, a new project worth RM 12.2 million by a wholly Malaysian-owned company produce food flavors and food ingredients.

**Research and Development Allocation**

According to the Budget 2015 Malaysia, prepared by the Ministry of Finance, about RM 1.3 billion was allocated to the Ministry of Science, Technology and Innovation to implement various programs such as: a) high-impact innovative products to be commercialized within the next five years, b) various high impact R&D programs which amounted to RM 290 million, c) public research network (RM 50 million) and d) strengthening of technology commercialization platform program (RM 50 million).

**Some Lessons Learned from Malaysian SMEs**

The research findings reveal that development issues and challenges include limited adoption of technology, lack of human resources, competition from multinational companies, and globalization. In addition, key factors of success were identified: ability to respond quickly to market signals, systematic production and operations management and personal networking. The Malaysian SMEs benefited from the economy’s resilience and competitiveness which were attributed to the continuing fiscal reforms, diversification of the economy and up skilling of capabilities and expertise, among others. The country focuses on SMEs strategies such as innovation and technology adoption, human capital development, access to financing, market access and infrastructures.
There are some important lessons learned from the experiences of the Malaysian SMEs that the Philippine government, relevant implementing agencies and local SMEs can adopt based on the country’s “own” needs as a growing economy.

The Philippines can learn from the experiences of Malaysia by linking SME development efforts with its industrial development goals. Malaysia successfully set up effective mechanisms to coordinate and integrate various efforts: assisting SMEs, particularly those programs that are intended to improve productivity, product and/or service quality, encouraging innovation and technological upgrading among local SMEs, encouraging SMEs linkages and networking and developing and growing human capital. The country also motivated local SMEs to be proactive in establishing joint ventures and partnerships or strategic alliances with medium-scale enterprises, large corporations and public universities in aggressive pursuit of productivity, quality, competitiveness, innovation and best practices.

Major lessons learned from the two Technology Business Incubators (TBI) of Malaysia, TPM and MTDC, that the Philippines can use to improve the TBI facilities include comprehensive and integrated technology commercialization program that encompasses an enterprise’s life cycle: from start-up, growth and maturity to exit strategy. The Philippines can also identify and appoint innovation “champions” at the top-level management of the government to ensure buy-in, continuity of strategic plans and progressive funding support to increase the number of successful innovative MSMEs. Inter- and intra-agency collaboration and resource complementation among government agencies such as Department of Trade and Industry (DTI), Department of Science and Technology (DOST), Department of Budget and Management (DBM) and Department of Agriculture (DA), in terms of developmental and investment initiatives and orientation, can also be encouraged. In addition, well-defined policy direction regarding agribusiness and agricultural innovation and documentation, publication and promotion of TBI success stories must be pursued actively.

Given the high investments in R&D and lag time between successful innovation and commercialization, SMEs must pursue a collaborative effort with public institutions (e.g., educational and R&D institutions, government units involved with trade and industry, science and technology, credit and finance and manpower development, among others) to enhance overall productivity and competitiveness.

The number of start-ups in Malaysian SMEs has also been rising due to an environment conducive to business growth (e.g., trimming red tape and enabling private sector) and the perception that entrepreneurship is embraced as a good career choice.

References


