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Perceptions of business challenges facing Malaysian SMEs: some preliminary results

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Keywords

Perceptions, business, challenges, facing, Malaysian, SMEs, some, preliminary, results

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**PERCEPTIONS OF BUSINESS CHALLENGES FACING MALAYSIAN SMES:
SOME PRELIMINARY RESULTS**

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JEL classification: M10, M13

Keywords: SME, Malaysia, business competition, innovation, human capital, government policies

PERCEPTIONS OF BUSINESS CHALLENGES FACING MALAYSIAN SMES: SOME PRELIMINARY RESULTS

1. Introduction

The ever changing business environment requires firms to adapt quickly to associated new challenges and competition, and presents particular problems for small businesses given their small size and limited resources. Small businesses increasingly face competition not only from their peers but also from large corporations participating in niche markets once regarded the preserve of smaller businesses. In fact, reliance on domestic markets for business growth is a thing of the past for many small and medium sized businesses (SMEs). Consequently, they need to identify, prioritize and effectively tackle these challenges in order to be more competitive and relevant in the business world. This scenario is also applicable to SMEs in Malaysia, where their contribution to economic growth and development has been important for some time (BNM, 2005). Despite this, little research has been conducted into identifying the key challenges and barriers facing SMEs in the conduct of their business in Malaysia. A clearer recognition and identification of such challenges may assist both government and industry players in taking appropriate actions to mitigate these problems, and thereby facilitate further strong growth of this sector.

The primary objective of this study is to develop an instrument with which to measure the perception of business challenges faced by Malaysian SMEs. To this end the sample of SMEs surveyed were asked to identify the most critical challenges which they faced out of five major pre-determined challenges presented to them (i.e. access to finance, lack of skilled human capital, business competition, access to technology

and innovation infrastructure and non-conducive government policies. Data was obtained by means of a survey questionnaire distributed to the CEO/managing director of 500 randomly selected SMEs in Malaysia. The response rate was around 27 per cent (138 SMEs). The selection of the sample SMEs was not limited to companies undertaking any particular type of business, but it was restricted to those operating in the state of Selangor which has the largest number of SME establishments in Malaysia (SMIDEC, 2006).

The paper is structured as follows. Section 2 provides an overview of recent SME developments in Malaysia. This is followed by a review of the relevant literature in Section 3. Section 4 presents the research methodology followed by an interpretation of the results in Section 5. Section 6 provides a brief summary of the key findings from the paper and relevant recommendations.

An Overview of SME Development in Malaysia

There are various definitions of what constitutes an SME. Audrestch (1999), for example, defined an SME as an enterprise comprising less than 500 employees, while the European Union (2003) defines an SME to be an enterprise with a maximum of 250 employees and an annual turnover not exceeding €50 million. In Malaysia the National SME Development Council provides a formal definition of an SME (refer to Table 1). SMEs are classified into two categories. First, manufacturing, manufacturing related services and agro based industries. SMEs in this category are defined as enterprises with full time employees not exceeding 150, or an annual sales turnover not exceeding RM25 million. Second, SMEs involved in services, primary

agriculture and information and communications technology (ICT). SMEs in this category are defined as being enterprises with full time employees not exceeding 50, or an annual sales turnover not exceeding RM5 million (BNM, 2005).

In early 2005 the National SME Development Council conducted a comprehensive survey of business enterprises in Malaysia. This survey found that out of the 523,132 business firms surveyed, 99.2 per cent (or 518,996 firms) were SMEs. Hence they constitute the vast majority of business establishments and are of considerable significance to the economy. The Malaysian survey also found that SMEs formed the bulk of business establishments in the three major economic sectors – agriculture, manufacturing and services. A total of 37,866 SMEs were in the manufacturing sector, engaged primarily in textile and apparel, metal and mineral products, and food and beverage production. Some 32,126 SMEs were involved in the agriculture sector, mostly in food crops and market produce, horticulture and livestock (BNM, 2005). By far and away the most important sector of activity, however, was in the services sector where some 449,004 SMEs operated mainly in retail, restaurants, wholesale, transportation and professional services.

Table 2 highlights the significant contribution of SMEs to employment, output, value added and output growth in key segments of the manufacturing sector in 2003. For example, SMEs in the food and beverage sector made the highest segment contribution to output (30.6%) followed by Metal and Metal products (13.6%) and then Chemical and Chemical products (11.9%). While the Electrical and Electronics

sector contributed 23.1 percent to total manufacturing output only 5.2 percent of this segment's output was produced by SMEs, reflecting the dominance of MNCs in this segment.

In 2005 SMEs were the major employers in the Malaysian labour market, with over three million employees in total. This constituted 65.1 percent of total employment (see Table 3), of which 2.2 million were employed in the services sector, 740,000 in manufacturing and 131,000 in the agriculture sector.

In terms of their overall contribution to national output, SMEs are one of the major contributors. For instance, in 2003, SMEs in Malaysia generated a total of RM154 billion of value-added and RM405 billion in total output. SMEs in the services sector contributed 54.7 per cent of total value-added, followed by the agriculture sector (39.7 per cent) and the manufacturing sector (37.1 per cent). In 2005, as shown in Table 3, SMEs in Malaysia contributed 47.3 per cent of GDP/total value-added. This contribution was comparable to other developed Asian countries such as in Japan (55.3 per cent), Korea (50 per cent in 2002) and Singapore (34.7 per cent) (BNM, 2005). Furthermore, SMEs play a vital role and contribute significantly to GDP as well as to the total workforce in these countries. For example in Korea, 99.8 per cent of total establishments are SMEs, contributing 86.7 per cent of the total workforce.

In terms of geographical location the majority of manufacturing companies in Malaysia are located on the west coast, a highly industrialised area. SMEs in Selangor

are predominant in the transport equipment and electrical sectors, arising from the availability of appropriate infrastructure in this state. However, in Johor the textiles and apparel and wood-based industries are dominated by SMEs, due to the availability of cheap labour and logging activities in the area. Food and food related manufactures are concentrated in the states of Perak and Johor.

Literature Review

While the contribution of SMEs to the economic development, growth, employment and exports of Malaysia has been important, recent debate in the literature has focused upon the challenges that they face, and must overcome, if they are to maintain this important role. Some of the earlier studies on Malaysian SMEs in regard to these challenges have provided a somewhat broad understanding of the issues (see for example studies by APEC, 1994; BNM, 2005; SMIDEC, 2002; Ting, 2004; UPS, 2005; and Saleh and Ndubisi, 2006). APEC (1994), for example, highlighted key challenges relating to obtaining loans, a lack of proper coordination amongst the country's SME development agencies, an inability of SMEs to participate in the mainstream of industrial development, underutilization of available technical assistance and other incentives and a lack of skilled and talented workers. SMIDP in its 2001-2005 report (SMIDEC, 2002) identified many new challenges facing Malaysian SMEs both at the domestic and international levels. These challenges can be summarized as follows:

- Intensified global competition.
- Competition from other producers (e.g. China, India)
- Limited capability to meet the challenges of market liberalisation and globalisation
- Limited capacity for technology management and knowledge acquisition
- Low productivity and quality output
- Shortage of skills for the new business environment
- Limited access to finance and capital, and the infancy of venture funds in initial or mezzanine financing
- High cost of infrastructure
- General lack of knowledge and information

In addition, Ting (2004) argued that key challenges facing Malaysian SMEs also include: human resource constraints; lack of access to finance; inability to adopt technology; and lack of information on potential markets. The author also argued that Malaysian SMEs could be wiped out if they did not improve their competitiveness in the near future. UPS (2005) conducted a pilot study of 100 Malaysian SMEs and found that high labour cost, a lack of innovation and access to funding and working capital are the main challenges that they face. In addition, Saleh and Ndubisi (2006) identified a number of key challenges facing Malaysian SMEs:

- High levels of bureaucracy in government agencies hindering efficient business development.
- Difficulty in obtaining funds from financial institutions as well as from the government.

- Lack, and cost, of professional and skilled workers.
- High levels of international competition due to globalization; including competition from AFTA member countries, from MNCs or rapidly developing new competitors (e.g. enterprises from China and India).
- Limited access to better technology and ICT.

In a similar vein, Vicziany, et al. (2001) classified business constraints into five categories: (1) factors related to infrastructure availability; (2) factors related to information; (3) factors related to human resources; (4) factors related to government policies; (5) factors related to cultural issues, to determine “constraints to doing business with/in Malaysia”. Finally, the World Bank (2005, p.43) identified a number of constraints affecting the business performance of SMEs more generally in East Asia, including access to finance, shortages of labour skills and education, policy uncertainty, infrastructure deficiencies, macroeconomic instability and many other internal and external factors, but did not classify these into groups.

In sum, while past studies have provided a broad understanding of the challenges facing SMEs in Malaysia and East Asia more generally, these have been conducted without solid empirical foundations. This study fills this gap by conducting a robust empirical analysis of the major challenges affecting SMEs and their business performance in Malaysia.

Methodology

The Survey Instrument and Establishment of the Empirical Framework

Based upon the literature review we believe that the key business challenges facing Malaysian SMEs can be usefully classified into five major factors: (1) inaccessibility to finance, (2) lack of skilled human capital, (3) business competition, (4) inaccessibility to technology and innovation infrastructure, (5) non-conducive government policies. Consequently, in the following section a factor analysis is conducted to examine the factor structure of the questionnaire emphasising these five factors. An item analysis and internal consistency of the derived factors is then assessed using SPSS version 15.

Data and Sample Characteristics

The results from this study were derived by means of a survey instrument distributed to a total of 500 randomly selected SMEs in Malaysia. The selection of the sample SMEs was not limited to companies undertaking any particular type of business. However, due to resource constraints, the sample was restricted to SMEs operating in the state of Selangor, which has the largest number of SME establishments in Malaysia (SMIDEC, 2006). Details of the SMEs were obtained from the Federation of Malaysian Manufacturers (FMM) Directory 2005.

A total of 138 companies responded to the questionnaire (a response rate of 27.6 per cent). This response rate is slightly over the usual response rate in Malaysian based

surveys (ranging from 15-25 percent) (see, for example, Sarachek and Aziz, 1983; Rozhan, 1991; and Kanapathy and Jabnoun, 1998).

A questionnaire was sent to the CEO/managing director of the sample SMEs. This is justifiable on the basis that the perception of the challenges that hinder business performance is best understood by the person heading the top management team. The CEOs, however, had the discretion of appointing a proxy to answer the questionnaire. The questionnaire was accompanied by a stamped self-addressed return envelope in which the respondents were invited to return the completed questionnaire.

The cover page of the questionnaire contained information on the survey, its objectives as well as the issue of confidentiality and anonymity relating to the respondents. The questionnaire was then divided into two sections - Section A and Section B. Section A sought general information (demographic profile) of the sample SMEs, such as the core business area, year of establishment, ownership structure, position of the person answering the question, annual sales turnover, employment size, whether the SME exported its products and the financing options utilised by the SME. Section B is divided into six sub-components consisting of perception questions relating to the financial, human capital, business competitiveness and infrastructure availability circumstances of the SMEs and government policies and incentives that impact upon them.

A frequency distribution analysis was conducted for the items in Section A (demographics of the respondents) of the questionnaire. As shown in Table 4 the majority of the sample of SMEs are in the food and beverages (28.5 per cent) and

wholesale and retail trade (15.2 per cent) industries. Further, Table 5 shows that most of the sample SMEs were established during the 1990s (63 per cent) and 1980s (34.8 per cent) and only 2.2 per cent of them were established in the 1970s. In terms of ownership structure 92.1 per cent of the sample SMEs (127 companies) are wholly Malaysian owned firms, while 7.2 per cent (10 companies) of the SMEs are wholly foreign owned firms. Only one SME (0.7 per cent) has a joint venture ownership structure. Most of the sample SMEs are exporters (86 companies or 62.3 per cent of the total).

Some 75.4 per cent of the questionnaires were answered by the general manager of the SMEs while 16.7 per cent were answered by the CEO/Director of the SMEs. The bulk of the sample SMEs (57.2 per cent) generated an annual sales turnover ranging between RM1 – RM5 million, another 21 percent had annual sales ranging between RM5 - RM10 million, while 18.1 percent had annual sales of RM200,000 – RM1 million. Only 2.9 percent, or 4 SMEs, experienced annual sales of RM10 – RM25 million. Lastly, one SME (0.7 per cent) generated sales turnover of less than RM200,000 per annum.

In terms of number of employees, 43.5 per cent of the SMEs employed between 20 – 50 workers, 37 percent employed between 5 – 20 workers and 17.4 percent employed between 50 – 150 employees. Only three SMEs (2.2 per cent) employed less than 5 workers.

Finally, questions relating to financing options revealed that most of the sample SMEs selected more than one source of financing. The results (see Table 6) show that most SMEs obtained their financing from commercial banks (92 per cent or 127 companies). Nearly 72 per cent of the SMEs (99 companies) used their own funds to finance their business while 42.8 per cent (59 companies) obtained funding from microfinance institutions (MFIs) in Malaysia. Only a small percentage (5.1 per cent or 7 companies) of the SMEs obtained funding from Islamic based financial institutions.

Empirical Results

Reliability of the Instrument

Generally, a Cronbach's alpha reliability test should be above 0.70 is deemed acceptable (Othman *et al.*, 2000). For the overall instrument used in this study a Cronbach alpha of 0.724 was obtained, indicating that the instruments were reliable measures to identify the perception of the SME challenges.

Typology of the Challenges Perception

In this section results from a factor and reliability analysis are presented. Table 7 provides the means and standard deviations of the scores relating to each of the variables used in the factor analysis. A total of 20 variables show mean scores ranging from 3.00 – 3.80 points. The balance variables show mean scores ranging from 2.70 – 2.99 points. For example, variables related to SME difficulty in obtaining financial aid, certain policies reducing business opportunities, high level of competition from MNCs, insufficient government support and problems with legal protection related to property rights, obtained mean scores of 3.72, 3.59, 3.57, 3.52 and 3.49, respectively. The variable related to government support for product innovation, not shown here, gives the lowest mean score of 2.77 of the 138 variables tested.

The Bartlett test of sphericity was used to test the null hypothesis that the variables used are uncorrelated with the population. The test shows a value of 2822, denoting that the null hypothesis can be rejected. Thus, the variables used are correlated with the population. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was also computed and the results show a value of 0.623, indicating that usage of factor analysis is highly appropriate.

Factor Analysis and Discussion

An initial exploratory factor analysis of the items was conducted using principal components extraction and varimax rotation. Given that a five factor solution was anticipated the analysis forced the solution to extract this number of factors. This solution accounted for 62.9% of the variance. The item factor loadings are presented in Table 8. Loadings less than .5 were not reported in the solution.

The results of this initial analysis provide only partial support for the predicted factor structure. Factors 2 and 5 were extracted as anticipated. Item 11 loaded on factor 4. Given that this item is theoretically inconsistent with factor 4, it was decided that this item should be omitted from further analysis. Two items from factor 1 loaded as a separate factor along with item 15. Item 15 was considered inconsistent with items 4 and 5 and consequently was omitted from further analysis. Two items (2 and 3) from factor 1 loaded on Factor 3. It was deemed that these items were theoretically consistent with factor 3. Item 1 did not load on any factor and was omitted from further analysis.

The factor structure of the reduced items was re-analysed using different extraction methods. Using this approach one can determine whether the derived factor structure was consistent across version extraction methods. The results of this analysis demonstrated that the structure was robust across various methods of extraction. Table 9 shows the factor loadings for reduced items using principal axis factoring and varimax rotation. This solution accounted for 55.3% of the variance. Given item content, the factors were labelled “Perception of Government Policies”, “Perceptions of Human Capital”, “Perceptions of availability of infrastructure”, “Perceptions of Business Competition” and “Financial Issues”, respectively.

The internal consistency and corrected item-total correlations of the derived factors were also assessed and are presented in Table 10. The findings in Table 10 indicate a satisfactory level of internal consistency for the factors. The alpha level for factor 5 is low but acceptable given that it consists of just two items. The corrected item-total coefficients suggest that items in each factor display satisfactory discriminatory power.

Table 10 also presents descriptive statistics for each factor. Perceptions of Government Policies and of the availability of infrastructure have the highest mean scores, suggesting that these factors are key perceived barriers. Perceptions of human capital and of business competition have mean scores higher than 3 suggesting that these two factors are perceived as challenges as well. On the other hand, respondents did not see financial issues as a perceived barrier.

Results and Policy Implications

This study has found that perceptions of government policies and availability of infrastructure are factors perceived to be major barriers (based on highest mean scores) faced by Malaysian SMEs. The perceptions of business competition and perceptions of availability of infrastructure are perceived as barriers given their mean scores of 3.19 and 3.12 respectively. Interestingly, on the other hand, respondents did not see financial issues as a perceived barrier.

However, by analysing the mean scores and standard deviations related to each variable/item in this study, we find that a total of 20 variables show mean scores ranging from 3.00 – 3.80 points. For example, variables related to SME difficulty in obtaining financial aid from the government, the Bumiputra policy, competition from MNCs, inadequate government support, problems with property rights, expense of employing a competent employee, lack of access to information, lack of access to ICT, unskilled workforce and competition from better quality products obtain mean scores of 3.72, 3.59, 3.57, 3.51, 3.49, 3.45, 3.4, 3.36, 3.29 and 3.26, respectively. The variables related to managerial skills and labour productivity give the lowest mean scores of 2.92 and 2.88 respectively (see Table 7 for more detail about the rest of the variables).

These findings have important policy implications. As indicated previously the factor related to the perception of government policies (labelled as factor 1, Table 9) has the highest mean score of 3.34 (Table 10). Hence, government policies represent major challenging factors for SMEs. Factor analysis yields five items under this factor as shown in Table 9. Each of the items underlying this factor has scored a mean above three (refer to Table 7). However, the Bumiputra policy and inadequate government support score the highest means of 3.59 and 3.51 respectively, indicating that these two variables are perceived as major barriers for the sample of Malaysian SMEs. The other three items of: high bureaucracy level in government, handling of incentives/grants by a multitude of agencies and unpredictable policy changes by the Malaysian government scored means of 3.23, 3.2 and 3.17 respectively (refer to Table 7). Hence, the government should (1) provide more incentives for non Bumiputra

entrepreneurs, (2) dismantle bureaucracy in the conduct of government operations, (3) the government should dismantle the bureaucratic procedures that cause inefficiency in government initiatives and projects, (4) government should also avoid delivering incentives through numerous diverse agencies, (5) reduce bureaucracy and rationalise the number of agencies providing incentives/grants for small business development,

The factor related to availability of infrastructure (labelled as factor 3) has the second highest mean score of 3.32 (Table 10), indicating that this factor is also perceived as being one of the major barriers faced by Malaysian SMEs. Each of the items underlying this factor scored a mean value above three (refer to Table 7). Specifically, items referring to problems with property rights; lack of access to information; and lack of access to ICT scored the highest means within this factor of 3.49, 3.4 and 3.29 respectively. The remaining two items - lack of access to raw materials and capital, and R&D infrastructure - scored means of 3.22 and 3.17 respectively (Table 7). Hence, the government should (1) offer more targeted policies and incentives to enhance ICT readiness, facilitate more widespread use of ICT applications and e-business uptake by small firms, (2) educate SMEs on the incentives available to them and how to access these incentives, (3) improve basic ICT skills and develop a framework that encourages higher level ICT and e-business skills for education institutions, businesses and individuals (4) encourage the rollout of affordable quality broadband networks to underpin the competitiveness and growth of SMEs, liberalise network infrastructure and services that promotes a competitive telecommunication sector and complement private investment with public financial assistance to expand coverage for under-served groups and remote areas, (5) government should enhance SME awareness and knowledge of all elements of the intellectual property system,

including that relating to patents, trademarks, industrial designs, utility models, trade secrets, copyright and related rights, plant varieties and non original databases. There should be concentrated efforts to strengthen the teaching of intellectual property rights at universities and training institutions for entrepreneurs, engineers, scientists, designers and business managers. Government can also facilitate the use of the intellectual property system by promoting the development of cost-effective mechanisms for application and for the resolution of intellectual property disputes. These include opposition procedures, arbitration and mediation. Further, the Malaysian government can consider developing a niche market for intellectual property insurance as a tool for reducing the costs of litigation for SMEs, identify existing barriers to this development and determine the scope and form of government intervention to remove them.

The factor related to perceptions of business competition (labelled as factor 4, Table 9) has the third highest mean score of 3.19 (Table 10), again indicating that this factor is perceived as one of the major barriers faced by Malaysian SMEs. Each of the items underlying this factor scored a mean above three (refer to Table 7). The items referred to as competition from better quality products, high operational costs and high interest rates on loans scored the highest means within this factor of 3.28, 3.26 and 3.23 respectively. The other two items - global issues and complicated loans process - scored means of 3.17 and 3.17 respectively (Table 7). Hence, the government should (1) offer more targeted policies and incentives for SMEs to enhance product quality and apply international certification standards in order to compete at the international level, (2) government and its agencies should provide advise to SMEs on what are the best business strategies to achieve low operational costs in their businesses, (3)

government should enhance financial and other support for small business development, (4) government should offer more incentives and grants for SMEs so as to put them in a better position to face the business challenges arising from globalization.

The factor related to perceptions of human capital (labelled as factor 2, Table 9) has the fourth highest mean score of 3.12 (Table 10), indicating that this factor is also perceived as one of the major barriers faced by Malaysian SMEs. The items: expensive to employ a competent employee; unskilled workforce; and lack of innovation among the workforce, scored the highest mean values within this factor of 3.45, 3.29 and 3.05 respectively (Table 7). The other two items - lack of managerial skills and labour productivity - scored means lower than three (Table 7), indicating that SMEs did not perceive these 2 items as a major barrier. The government should act here by increasing the number of centres across the country that offer training, consultancy and expert services to SMEs, with then objective of upgrading manpower especially in regard to ICT usage. Establishing an SMEs special unit at Bank Negara Malaysia (BNM) (Central Bank) and an SME bank (October 2005) have been good steps in this regard.

The last factor related to financial issues (labelled as factor 5) scored a mean lower than 3, indicating that SMEs did not see financial issues as a perceived barrier. Factor analysis yields only two items underlining this factor for the reasons discussed earlier. Specifically, items related to financial products not being in place and not enough effort for the promotion of products by financial institutions scored mean values lower than 3 (Table 7), indicating that SMEs did not see these two items as major barriers.

However, by analysing the mean scores and standard deviations related to each variable/item in this study the variable related to SME difficulty in getting financial aid from the government obtains the highest mean of 3.72. But, as indicated earlier, the descriptive statistics for the mean of the financial issues factor (Table 10) suggests that this factor was not perceived as a major barrier. Nevertheless, the government should enhance its financial support to SMEs and make it easier for SMEs to obtain financing either from the government or from financial institutions. Again establishing the SME special unit at Bank Negara Malaysia (BNM) (Central Bank) and an SME bank (October 2005) have been good steps.

Conclusions and Recommendations

Previous studies of Malaysian SMEs have provided only a broad understanding of the business challenges they face and generally lack a robust empirical foundation. This study has provided such a foundation and in doing so presented evidence to support the classification of such challenges under five factors, namely: accessibility to finance, lack of skilled human capital, business competition, accessibility to technology and innovation infrastructure, and non-conducive government policies. In addition, this explanatory study identified an instrument to measure the developed classified business challenges. Reliability and items analysis provided support for the internal consistency of the factors and the discriminatory power of items that constitute the five factors. Finally, the study found that perceptions of government policies and availability of infrastructure have the highest mean scores indicating that these factors are perceived as the major barriers faced by Malaysian SMEs. While being of lesser importance, perceptions of business competition and availability of

infrastructure are also perceived as barriers given their scores of 3.19 and 3.12 respectively. Interestingly, on the other hand, respondents did not see financial issues as a perceived barrier.

These findings have important policy implications. In particular the government should: provide more incentives for non Bumiputra entrepreneurs; dismantle the high bureaucracy levels in government operations; dismantle bureaucratic procedures that cause inefficiency in government initiatives and projects; avoid delivering incentives through many agencies; reduce bureaucracy and rationalise the number of agencies providing incentives/grants for small business development; offer more targeted policies and incentives to enhance ICT readiness; facilitate more widespread use of ICT applications and e-business uptake by small firms; educate SMEs on the incentives available to them and how to access them; improve basic ICT skills and develop a framework that encourages higher level ICT and e-business skills for education institutions, businesses and individuals; enhance SME awareness and knowledge of all elements of the intellectual property system, including that relating to patents, trademarks, industrial designs, utility models, trade secrets, copyright and related rights, plant varieties and non original databases; offer more targeted policies and incentives for SMEs to enhance product quality in order to compete at the international level; directly or through government agencies advise SMEs on what are the best business strategies to achieve low operational costs in their businesses; increase financial and other support for small business development; and offer more incentives and grants for SMEs in order to face the business challenges arising from globalization.

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Table 1: SME Definitions in terms of Annual Sales Turnover & Full time Employees

Size	Primary Agriculture	Manufacturing (including Agro- Based) & Manufacturing-Related Services	Service Sector (including ICT)
Annual Sales Turnover	Not exceeding RM5 million	Not exceeding RM25 million	Not exceeding RM5 million
Full Time Employees	Not exceeding 50 employees	Not exceeding 150 employees	Not exceeding 50 employees

Source: BNM (2005)

Table 2 Contribution of SMEs to Employment, Output and value-added (%) in the Malaysian Manufacturing Sector in 2003

Segment	No. of Establishments	No. of SMEs	Contribution to Output (%)	Growth in Output (%)	Contribution to Value-added (%)	Growth in Value-added (%)	Employment (%)
Food & Beverages	2,949	2,749	30.6	9.1	19.8	16.3	16.6%
Wood & Wood Products	2,776	2,582	8.3	11.5	9.6	16.3	16.2%
Rubber & Plastic Products	482	366	10.8	8.8	12.2	13.3	13.1%
Machinery & Equipments	1,249	1,135	2.9	8.9	4.2	11.3	4.1%
Transportation	507	433	2.5	-2.3	3.3	-0.5	2.8%
Textile & Apparels	3,419	3,319	2.2	1.2	3.2	4.7	7.2%
Chemical & Chemical Products	712	526	11.9	10.6	12.6	16.3	5.3%
Metal & Metal Products	2,918	2,709	13.6	-	13.9	-	12.9%
Electrical & Electronics (E&E)	907	543	5.2	-	5.1	-	5.8%
Non Metallic Mineral Products	893	803	4.8	10.5	6.6	13.7	-

Source: SMIDEC, NPC, Saleh and Ndubisi (2006)

Table 3 SMEs profile – Selected countries*

Countries	% of total establishments	% of total Work force	Contribution to GDP/total value added
Japan	99.7	70.2	55.3
Singapore	91.5	51.8	34.7
Germany	99.7	79.0	57.0
Korea	99.8	86.7	50
Malaysia	99.2	65.1	47.3

Source: BNM (2005)

Note: * The data was derived from the following sources: For Malaysia, Malaysia Census (2005); for Japan, JASME Annual Report (2004-2005), (<http://www.jasme.go.jp>); for Korea, Korean SMEs (2002), (<http://www.smba.go.kr>); for Singapore, APEC - SME Profile (<http://www.actetsme.org>); for Germany, SMEs in Germany - Facts and Figures (2004), (<http://www.ifm-bonn.org>).

Table 4: Sample SMEs - type of business

Type of Business	Percentage
Textiles and wearing Apparel	10.9
Food and beverages	28.5
Furniture and related products	8.7
Footwear and leather products	10.1
Transportation	10.9
Wholesale and retail trade	15.2
Gift ware and jewelry	3.6
Household products and appliances	8.7
Others	3.6

Table 5: Sample SMEs - year of establishment

Year of Establishment	Percentage
1970s	2.2
1980s	34.8
1990s	63

Table 6: Sample SMEs - ownership structure

Ownership structure	Percentage
100% Malaysian owned	92.1
100% foreign owned	7.2
Joint local/foreign owned	0.7

Table 7: Ranked Mean Scores and Standard Deviations of the Variables

No	Variables	Mean	Std. Deviation
1	Difficulty in obtaining financial aid	3.72	0.639
2	The Bumiputra policy	3.59	1.086
3	Competition from MNCs	3.57	0.827
4	Inadequate government support	3.51	0.953
5	Problems with property rights	3.49	0.766
6	Expensive to employ a competent employee	3.45	0.736
7	Lack of access to information	3.4	0.859
8	Lack of access to ICT	3.36	0.861
9	Unskilled Workforce	3.29	0.873
10	Competition from better quality products	3.28	0.863
11	High operational costs	3.26	0.738
12	High Interest rates on loans	3.23	0.676
13	High bureaucracy level in government	3.23	0.969
14	Lack of access to raw materials & capital	3.22	0.98
15	Handling of incentives/grants by a multitude of agencies	3.2	0.968
16	Global issues	3.17	0.828
17	Not much focus on R&D infrastructure	3.17	0.933
18	Unpredictable policy changes	3.17	0.971
19	Not many avenues for accessing international markets	3.14	1.022
20	Lack of innovation among workforce	3.05	0.931
21	Complicated loans process	2.99	0.745
22	Not enough effort for promotion of products	2.96	0.883
23	Financial products not in place	2.94	0.817
24	Lack of managerial skills	2.92	0.802
25	Labour productivity is low	2.88	0.778

Table 8: Factor loadings based on initial exploratory factor analysis

item	Factor				
	1	2	3	4	5
17 Lack of access to ICT	.760				
18 Not much focus on R&D infrastructure	.720				
19 Lack of access to raw materials & capital	.717				
20 Problems with property rights	.647				
16 Lack of access to information	.636				
11 Competition from MNCs	.624				
22 High bureaucracy level		.801			
25 Handling of incentives/grants by a multitude of agencies creates confusion		.737			
21 Inadequate government support		.736			
24 Unpredictable policy changes		.693			
23 The Bumiputra policy		.619			
9 Lack of innovation			.793		
7 Lack of managerial skills			.780		
10 Unskilled workforce			.748		
6 Expensive to employ a competent employee			.679		
8 Labour productivity is low			.601		
1 Difficulty in obtaining financial aid				---	¹
13 High operational costs				.676	
12 Competition from better quality products				.670	
14 Global issues				.664	
3 Complicated loans process				.635	
2 High interest rates on loans				.543	
4 Financial products not in place					.775
5 Not enough effort for promotion of products					.673
15 Not many avenues for accessing international markets					.614

¹ Only values greater than or equal to .5 reported.

Table 9: Factor loadings based on reduced item set

Item	Factor				
	1	2	3	4	5
22 High bureaucracy level	.829				
25 Handling of incentives/grants by a multitude of agencies creates confusion	.703				
24 Unpredictable policy changes	.632				
23 The Bumiputra policy	.605				
21 Inadequate government support	.605				
9 Lack of innovation		.764			
7 Lack of managerial skills		.724			
10 Unskilled workforce		.717			
6 Expensive to employ a competent employee		.613			
8 Labour productivity is low		.583			
17 Lack of access to ICT			.719		
16 Lack of access to information			.684		
19 Lack of access to raw materials & capital			.671		
18 Not much focus on R&D infrastructure			.648		
20 Problems with property rights			.502		
12 Competition from better quality products				.620	
14 Global issues				.606	
3 Complicated loans process				.604	
2 High interest rates on loans				.561	
13 High operational costs				.551	
4 Financial products not in place					.658
5 Not enough effort for promotion of products					.629

Table 10: Internal consistency and corrected item total correlations

Factor	Alpha Coefficient	Corrected item total correlations	Mean	SD
Perception of Government Policies	.802	.53 - .59	3.34	0.74
Perceptions of Human Capital	.816	.51 - .72	3.12	0.63
Perceptions of availability of infrastructure	.795	.45 - .65	3.32	0.65
Perceptions of Business Competition	.761	.51 - .59	3.19	0.55
Financial Issues	.668	.50	2.95	0.74