Review of Credit Guarantee Corporation Malaysia (CGCM) Initiatives to Enhance Small and Medium Enterprises Performance

Rasiah Devinaga1 & Teck Ming Tan2

1 Faculty of Business and Law, Multimedia University, Melaka, Malaysia
2 Centre for Diploma Programme, Multimedia University, Melaka, Malaysia

Correspondence: Rasiah Devinaga, Faculty of Business and Law, Multimedia University, Melaka, Malaysia. Tel: 60-6-252-3346. E-mail: devinaga.rasiah@mmu.edu.my

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Abstract

The prime focus of this study is to review the initiatives by CGC to enhance Small and Medium Size Enterprise (SMEs) which will benefit both the government and the SMEs traders. A review of the literature shows that small firms experience difficulties in accessing the credit market due to informational asymmetries. In this paper, we establish that even small firms may improve their access to finance with the help of government agencies such as the Credit Guarantee Corporation (CGC). CGC works closely with Bank Negara Malaysia (BNM) in terms of its operations and progress. Hence, the government can develop more packages of service which enables SMEs to have more options to access financing, financial restructuring, advisory services, information, training and marketing coordination. Moreover with the availability of such services, the SMEs have the advantage as the Credit Guarantee Corporation (CGC) will facilitate their business growth. This article explores the variables affecting the performance of the entrepreneurs and to ascertain how SME businesses can achieve high growth. It further provides evidence on how Credit Guarantee Corporation (CGC) has helped SMEs in Malaysia.

Keywords: small and medium sized entrepreneurs, credit guarantee corporation, traders, performance, efficiency

1. Introduction

Credit Guarantee Corporation Malaysia is a private Limited Company which functions in the formulation and management of credit guarantee schemes to SMEs in Malaysia. Thus, it has enabled small and medium-sized enterprises, facilitated through the network of the commercial banks and finance companies, by providing assured coverage for partly secured and unsecured credit facilities for manufacturing, areas of priority, and other sectors. This company was established in 1972 in Kuala Lumpur, Malaysia and operates as an ancillary to Bank Negara Malaysia. Credit Guarantee Corporation (CGC) Malaysia is a business venture that provides a one-stop web services to small and medium sized enterprises, allowing the SMEs to apply for business loans without or lack of adequate collateral to access credit facilities from financial institutions. It was also recognised to create employment opportunities for those SMEs to have the capacity in the trading, manufacturing and service industry sectors. CGC thus operates at “best practice” levels with good risk management strategies; hence the entrepreneur had managed to continue its operation without risking control costs.

In addition, the SMEs have ensured improved performance and sustainability with good market research, to continue to have a wide client base and to thus expand their market size. SME’s “best practice” method relates to the fact that credit risk would be shared with all partner commercial banks ensuring transparent operating policies and procedures. According to Aldrich (1986), it is harder to sustain growth without performance; therefore, the relationship between growth and performance is very important. CGC loans can facilitate SMEs to control the performance wisely. In small firms, an important measure of prosperity was growth (Hu, Ming-Wen (2010).
Table 1. SME growth rate (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>3.8</td>
<td>2.1</td>
<td>3.4</td>
<td>8.5</td>
<td>3.6</td>
<td>7.4</td>
<td>-1.4</td>
<td>7.3</td>
<td>2.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>-0.3</td>
<td>4.1</td>
<td>1.1</td>
<td>-3.6</td>
<td>7.4</td>
<td>0.9</td>
<td>9.5</td>
<td>1.4</td>
<td>6.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Construction</td>
<td>4.6</td>
<td>5.9</td>
<td>5.2</td>
<td>1.0</td>
<td>4.7</td>
<td>3.2</td>
<td>13.2</td>
<td>3.7</td>
<td>7.2</td>
<td>8.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-6.4</td>
<td>3.1</td>
<td>9.9</td>
<td>10.3</td>
<td>5.7</td>
<td>8.3</td>
<td>6.3</td>
<td>0.5</td>
<td>-6.6</td>
<td>11.8</td>
</tr>
<tr>
<td>Services</td>
<td>2.2</td>
<td>5.1</td>
<td>2.9</td>
<td>6.8</td>
<td>8.0</td>
<td>7.8</td>
<td>12.8</td>
<td>8.8</td>
<td>2.5</td>
<td>7.1</td>
</tr>
<tr>
<td>Total Value Added</td>
<td>-0.4</td>
<td>4.6</td>
<td>5.2</td>
<td>8.3</td>
<td>6.9</td>
<td>7.4</td>
<td>10.0</td>
<td>6.4</td>
<td>0.4</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Source: Dept of Statistics, Malaysia

Table 2. CGC coverage

<table>
<thead>
<tr>
<th>Maximum coverage</th>
<th>30% to 90% based on the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Unsecured Portion: Up to 80% or maximum RM3.0 million</td>
</tr>
<tr>
<td></td>
<td>• Secured Portion: Up to 90%</td>
</tr>
<tr>
<td>Maximum Guarantee</td>
<td>RM10.0 million</td>
</tr>
<tr>
<td>Participating Financial Institution</td>
<td>All participating financial institutions</td>
</tr>
</tbody>
</table>

Source: SME/CGC (2012)

1.1 Background of Study

The Small and Medium Enterprise Corporation Malaysia (SME Corp. Malaysia) was previously acknowledged as Small and Medium Industries Development Corporation (SMIDEC), and it was an agency under the supervision of the Ministry of International Trade and Industry (MITI). Kian Seong L, The Star-April 2, (2011) highlighted that there has been a new financial arrangement was formulated for small and medium enterprises. This financial scheme initially raised some concerns indicating that the scheme was well developed but had room for improvement. Credit Guarantee Corp Malaysia Ltd (CGC) had allocated RM100mil, a guaranteed scheme identified as the Enhancer Express. This scheme promoted growth and development of SMEs for wholesale and retail sectors. The loan ranged from a sum of RM50,000 to RM100,000 to small businesses in operation for a minimum of three years or more. A fixed assured fee of 4.5% per annum, with a maximum fee of 5.75% for other CGC schemes looking at individual risk profiles and the maximum rate would be base lending rate plus 1.75%, on top of the fixed assured fee of 4.5% per annum. 70% of the coverage for the scheme will be entirely borne by CGC.

CGC’s operations would then relieve other financial institutions to encourage further development of the small business community as it works closely with Bank Negara Malaysia (BNM) in terms of its operations and progress. It has cumulatively assurance of about RM47 billions to more than 400,000 SMEs in the country. Nevertheless, this has given a facilitating hand to about 45% of the SMEs in the country. To speed up the approval, the application process had been standardised to improve the application process thus facilitating quick approval procedure.

In a national census conducted in 2005 in various enterprises sectors such as agriculture, manufacturing and services sectors based on the 523,132 business establishments that responded to the census was approximately 99.2% or 518,996 of the business establishments were SMEs, of which a total number of 411,849 are micro enterprises (SMEs) as indicated in its Annual Report, 2005. A total of 86.5 percent or 449,004 of the SMEs are in the services sectors, engaged in small and medium sized enterprises. Of this 37,866 or 7.3% of the SMEs are in the manufacturing of textile, apparel, metal and mineral products, and food and beverages industries. Another, 32,126 or 6.2% of SMEs were engaged in the agriculture sector, food crops etc.

In another survey conducted in 2005 confirmed the results that SMEs are a major source of employment and over 3 million workers or 65.1% employment in Small and Medium Enterprise (SME). Out of the 2.2 million workers employed by SMEs sector, about 740,000 and 131,000 workers were employed in the manufacturing and agriculture sectors correspondingly.

In terms of contribution to the economic development in 2005 indicated that SMEs had generated RM154 billion
value added or 47.3% and RM405 billion or 43.5% of output in 2003. The survey showed that 4,257 SMEs exported internationally and the service industry totalled to RM38 billion in 2003. In terms of SMEs productivity levels were said to be lesser than large enterprises, surmounting to RM0.3 million in comparison to RM4.1 million for large enterprises. The census (2005) also identified that only 2,747 businesses had placed a large amount in Research and Development amounting to 2,355. Some other SMEs had invested RM2 billion in Research and Development out of the RM4.3 billion as indicated in the census. Less than 10% engaged in marketing activities, 84% managed on their own, and domestic financing. Where else others had sourced from friends and family members, while 16% from financial institutions. The survey indicated that only about 50% of the large SMEs depended on the Malaysian financial institutions. Out of the 523,132 organisations, 54,011 SMEs had been seen as having trouble getting finance from the financial institutions, most importantly due to short of collateral or security.

The Credit Enhancer Scheme is a new scheme to assist SMEs who have viable projects but lack the collateral to obtain the required financing amount from Financing Institutions. The guarantee fee on the secured portion is between 2.1% to 3.2% per annum while unsecured portion is from 2.4% to 4.0% per annum based on the risk profile of the SME for further details to contact the Credit Guarantee Corporation Malaysia Berhad.

The formation of the National SME Development Council (NSDC) in 2004 heralded the start of another era in SME development in Malaysia. It was then the premier in policy-making and to formulate strategies for SME development for all economic sectors and ensure effective implementation of the overall SME expansion programmes in Malaysia. Their function was to provide access to financing, financial restructuring where necessary, providing advisory services, access to information, continuous education and maintaining market coordination, and management of SMEs database to observe the progress of SMEs. Eventually in 2007 SMIDEC role was to revolutionize all the Small and Medium Enterprise Corporation Malaysia (SME Corp. Malaysia) which commenced on 2 October 2009. SME Corp. Malaysia is currently the focal point of references providing consultative services for all SMEs in Malaysia.

1.2 Problem Statement

Empirical researches had been carried out on small business enterprises where there has always been some failure to get loans due to lack of security or to setup any business because of the lack of capital. In Malaysia a lot of small business owners had difficulty in obtaining loans from commercial banks. These small business owners had experienced moments where commercial banks were not responding to their business needs as indicated by Chee P L. (1986). According to Berger and Ulrich (1986), small businesses were always depended on commercial banks financing.

For instance, studies carried out by Green (2003) have shown that the Colombian financial institution incurs administrative costs about 11% to 13% of the value of the small loans portfolio. Due to high cost, many new or small business lenders had rejected the loan applications. There was still however another factor which was an economy of scales which was supported by Green (2003). He indicated that servicing the small entrepreneurs did not give the bank the advantage in term of economies of scale. Taking into consideration where the cost of servicing the small entrepreneurs would be the same as servicing the corporate organizations. The difference was that the profit gains from transactions were lower for the small firms when compared to the large companies. This had influenced the inefficiency of per unit cost.

Usually, the bank had a biased perception of the SME which had been explained by several factors. For instance, the smaller size of the firm and survival time of the SME usually was very short, due to lack of experience in management, inefficiency in the financial record system and lack of collateral. Furthermore, the banks had also figured out that a small firm had high risk weaknesses towards external business risks such as market fluctuations and exchange rate. Therefore, their financial track records did not comply with the criteria of the bank and thus had harder access to funds. This was because banks were selective and sometimes not able to grant loans to the entrepreneurs in need of funds (Green, 2003).

1.3 Objectives of Study

The main objective of this research was to review Credit Guarantee Corporation Malaysia’s initiatives to enhance small and medium enterprises performance. As such a selected SMEs were examined for their efficiency.

Credit Guarantee Corporation Malaysia Berhad (CGC) is an important component as a guarantor to SMEs in Malaysia. Entrepreneurs who were given credit assurance have developed and expanded into many different types of businesses. The assured value of funds given to SMEs has been increasing from time to time, leading to
favorable outcomes in their performance. Different kinds of small and medium size enterprise need different kinds of information that can improve and reinforce the existing weakness to achieve good performance. Therefore, CGC and small and medium size entrepreneurs could use this study as a reference to improve and reinforce their business performance.

2. Literature Review

As SMEs are an important sector in the Malaysian economy, they account for 99.2 percent of total business institutions, giving employment to about 5.6 million workers and providing approximately 32 percent of the Malaysian gross domestic product (BNM, 2008). Most SMEs are required to support the government initiative to be competitive in the global business environment. According to the Small and Medium Industries Development Corporation (SMIDEC), SME’s represents the annual sales turnover or the total number of full time employees as highlighted by Bank Negara Malaysia statement (Central Bank of Malaysia, 2003). The key success factors of SMEs are commitment to their management capability, reliability and integrity, sound business ethics and care for its consumers, Cautious in managing their money, good quality products and customer services, effective human resource development, strong support by financial institutions in terms of consultation and financing, strong marketing strategies and continuously looking for expansion prospects.

Various studies have been conducted on SME’s by Glancey, K. (1998); Ritchie & Brindley (2000); Wang (2003); Geeta Batra & Hong Tan (2003); Harvie (2004); Stuti (2005); Aris (2006); Saleh & Ndubisi (2006); Abu Bakar et al. (2006); Foon (2006); Samad (2007); Teoh & Chong (2008) and Grace T. O. & Tomolo M. O. (2008).

Geeta Batra and Hong Tan (2003) in a World Bank working paper had indicated that technological capabilities, workforce capabilities and workforce factors are also important for efficiency of the SMEs. Acquiring technological capabilities can lead to higher efficiency levels in several ways such as know-how licensing agreements, making contacts on import and exports and having increased experience in production. Their findings highlighted that workforce capabilities was also imperative to a firm’s efficiency because it was dependent upon the production know-how and experience of the human capital which would reflect on the education of their employees of both skilled and unskilled workers.

As for the globalized environment, SMEs too encounter several difficulties such as recession, hindrance from international sourcing, low yield, short of capabilities at the management level, lack of money, difficulty in accessing technology and regulations

Next the study looks at the literature relevant to the outputs and inputs variables. The output consists of independent variables such as reserves, loan, leverage, supervision and regulation, and market share. However the input which is the dependent variable is based on the return on assets (ROA). The return on assets indicates the performance of the SMEs’ management. This can be done by comparing net income and average total assets, the return on asset ratio reveals how the SMEs income management is well utilized and worth of the SMEs’s assets.

In another study conducted by Powell and Dent-Micalelf (1997) had indicated that calculating ROA might be a tiring exercise for SMEs, this often would stop business s’ day to day activities. Besides, it would be difficult for SMEs to conclude as to how much they should invest and how much of good performance will yield from that investment decision. In order for SMEs to do this, they would need to know how to calculate ROA.

Beck, Thorsten, Demirgüç-Kunt, Asli and Martinez Peria, Maria Soledad, (2008) indicated that SMEs performance also improved with the efficiency of bank loans and sales. This implies that the bank loan was imminent to entrepreneur’s performance and that the SMEs performance tended to increase with the amount of loans. According to McMahon et al (1993), this was the result of an agreement with the simple economic theory which suggests that access to credit leads to higher performance. Keasey and Watson (1991) agreed that the financial decision had influenced the performance of an entrepreneur. Besides that, higher business performance was correlated with the use of banks financing by SMEs.

According to Huang and Song (2006), they had determined that leverage efficiency corresponded with performance. The static trade-off theory showed that leverage efficiency improved entrepreneur size for larger firms to lower the costs of bankruptcy. For the performance, the higher performance of the entrepreneur, the greater the profits needed to be secured from taxation and to lower the cost of financial complexities. Where else, the pecking order theory had indicated that, higher the performance of the firm, the greater the internal financing available. There are performance efficiencies in terms of the return on assets (ROA) and its leverage (Myers, 1984).

Cassar, G. and Holmes, S. (2003) highlighted that capital structure and use of financing for small and medium
sized enterprises can be very challenging. Klapper et al. (2006) had indicated that there was efficiency between both long-term leverage and short-term leverage. In a study by Nguyen and Ramachandran (2006) showed that there were no strong testimonies to indicate a link between performance and leverage in SMEs. According to Joshua Abor and Nicholas Biekpe (2005), higher performance was able to increase the level of internal financing. On the other hand, SME should produce more internal funds in order to avoid debt.

De Soto, 1990; Djankov et al., 2002; World Bank, 2004 had indicated that regulations can stand in the way of economic growth even though regulation was one of the means of protecting and assisting SMEs and that an increase in supervision and government regulations could sometimes have controlled practices impeding the setting up of businesses. Furthermore, regulation does increase the transaction costs of SMEs which will influence performance, income and economic growth.

According to Berger (1995), he argued that the efficiency between capital requirements and performance depended on specific situation at that particular time period. When the financial situations are realized as risky, it meant that the capital requirements also had affected performance levels in the firm. On the other hand, alternative cost of capital in normal situations could have negative effects on performance.

In a previous study, it was confirmed that capital adequacy related to efficiency on return-on-assets (ROA) (Athanasaglu, Delis and Staikouras 2006). The power of capital structure had enhanced the confidence of the entrepreneurs in the sector to increase their performance with lower cost of financing. Capital adequacy seems to have a positive effect on performance in broad terms and negative effects on off-balance sheet assets.

Market share is an important character which can signify the entrepreneur’s current business operations, based on the assets size and to plan for future performance. In addition, the acquisition of key patents could influence the expectation for future performance. There are large number examples of SMEs that have seen their market share increase since they had obtained important patents in key technologies. (Tran Viet Hung, July 2007). Subsequently, it will raise the entrepreneurs’ current value of their products and services that could attract more consumers by a good trademark along with a good reputation among their consumers. Investments in good intellectual property can facilitate as a protection against potential competitors. Alternatively, this should improve future profitability and increase entrepreneur market value. (Tran Viet Hung, July 2007). According to Adina Negrusa and Gheorghe Ionescu, (2009) had mentioned that entrepreneurs had a substantial market share in the domestic markets, and are always looking forward for enhancing new opportunities.

According to Wu and Cui (2002), they have indicated that the effect of ownership structure on entrepreneur fitness has a direct influence on performance efficiency and the measurement of how well the organization uses assets to generate returns by using return on assets (ROA). Researchers such as Xu and Wang (1997) had reported that ownership, concentration and entrepreneur performance had efficiency among each other. However in other studies, the entrepreneur performance had a negative correlation with a little part of state owner shares. On the other hand, there was inefficiency between the ownership structure and performance as determined by Leech and Leahy (1991). Performance was a measure that had lead to ownership structure which had affected SMEs performance through strategic structure as mentioned by Hill and Snell, (1988).

The Definition of Technical Efficiency (TE), Pure Technical Efficiency (PTE) and Scale Efficiency (SE)

Technical efficiency in business dictionary prescriptive indicated that technical efficiency was impossible for a enterprise to produce with the given know how, the same output with less one or more input without increasing the amount of other inputs or a larger output from a same inputs. Based on an article from Singapore, the survey of financial institution efficiency using non-parametric frontier models had been noticed and acknowledged significantly. But, Leong, Coelli and Dollery (1997) mentioned that the literature on the relevance of DEA to the area of enterprise survey was burgeoning, as research on the efficiency scores used was comparatively rare. Furthermore, Killgo, Siems, Barr and Zimmel (1999), had tried to research the properties of DEA efficiency scores by considering the relationship involving these scores and traditional measure of enterprise performance. Other researchers such as Berger, Humphrey, Bauer and Ferrier (1997) had specified a formal set of condition was required. They went on to mention that efficiency rankings were resulted from various frontier methods and that it should facilitate in strategy management. Sunil Kumar and Rachita Gulati (2008) indicated that pure technical efficiency was taken as the optimal use of resources. According to Malak (2004), he stated that pure technical efficiency can be defined as managerial inefficiency as it lacked scale effects. According to Berger et al (1993), had conducted several studies on enterprise efficiency. They concluded that the average mean efficiency scores ought to be in the scale of 50% to more than 90% for the studies that analyzed using DEA models. By using econometric models, the mean efficiency scores must be 75% to 80% (Sufian, Fadzlan 2004). Our results show that pure technical efficiency had changed year by year.
3. Methodology

Data Envelopment analysis (DEA) is a non-parametric mathematical programming approach initially used for the estimation of production. As many studies had been carried out even by using the extended the DEA methodology. A model which has an input orientation and assumed constant return to scale (CRS) as suggested by Charnes, Cooper and Rhodes (1978). The following discussion of DEA begins with a description of the input-oriented CRS model as this model was the first to be widely applied in efficiency studies. A second option was to consider the extension of these models in order to account for allocation efficiencies and cost. The DEAP application was the last option that was used to calculate index of total factor productivity change, technical efficiency change, scale efficiency change and technological change.

3.1 DEA Formula

DEA is a multi-factor productivity analysis model used to measure efficiencies using a set of decision making units (DMUs). The efficiency score in the existence of multiple inputs and output factors:

\[
\text{efficiency} = \frac{\text{weighted sum of outputs}}{\text{weighted sum of inputs}}
\]


Presumptuously, that there are \(n\) DMUs, each with \(m\) inputs and \(s\) outputs, the relative efficiency score of a test DMU \(p\) is obtained by solving the following model proposed by Charnes et al. (1978):

\[
\begin{align*}
\text{Max} & \quad \frac{\sum_{k=1}^{s} v_k y_{kp}}{\sum_{j=1}^{m} u_j x_{jp}} \\
\text{s.t} & \quad \frac{\sum_{k=1}^{s} v_k y_{ki}}{\sum_{j=1}^{m} u_j x_{ji}} \leq 1 \\
& \quad v_k u_j \geq 0 \quad \forall k, j,
\end{align*}
\]

Where

\( k = 1 \) to \( s \),
\( j = 1 \) to \( m \),
\( i = 1 \) to \( n \),

\( y_{ki} = \) amount of output \( k \) produced by DMU \( i \),
\( x_{ji} = \) amount of input \( j \) utilized by DMU \( i \),
\( v_k = \) weight given to output \( k \),
\( u_j = \) weight given to input \( j \).


Talluri S. (2000) had indicated that “if the above problem is run \(n\) times in identify the relative efficiency scores of all the DMUs”. “Each DMU selects input and output weights that maximize its efficiency score”. He further stressed that in general, a DMU is believed to be efficient if it acquires a score of 1 and a score of less than 1 entails that it is inefficient.

3.2 The Constant Returns to Scale Model (CRS)

The objective of using DEA was to construct a non-parametric envelopment frontier over the data points in order to observe points which lie on or below the production frontier. For example, if an entrepreneur had to just produce one output or using two inputs, this can be visualised as a number of interesting planes forming a tight fitting cover over a scatter of points in three-dimensional space. It was thus important to create a model that had an input orientation and assumed constant return to scale (CRS) as suggested by Charnes, Cooper and Rhodes (1978). Constant return to scale was the first model to be widely applied. Each decision making unit (DMU) had obtain a measure of the ratio of all output over all inputs.

In this study the DEA based approach to efficiency and performance was carried out on five small and medium sized enterprises based on the classification of Bank Negara Malaysia (2012) (Appendix A). The secondary data was from various financial reports. The Data Envelopment Analysis Program (DEAP) software was used for the purpose of analysis.
3.3 Decision Making Unit (DMU)

DMU in a DEA study is carried out by applying the varying amounts of the same inputs to produce varying amounts of same outputs. The input and output values specified should be non-negative. Nonetheless, there must be one input and one output value of every DMU which should be specified to be non-zero. If there were one output and one input, the DMU efficiency score would easily be the ratio of its output to its input. In the event there are multiple inputs and outputs, then the DEA score would be the ratio of a DMU virtual output to its virtual input. Both are determined for each DMU by the weighted sum of its inputs and outputs.

This research was developed by considering the following factors such as investment in subsidiaries, bank loan and sales and capital leverage as independent variables. The dependant variable is the Return on Assets (ROA).

In this study the use of Data Envelopment Analysis Program (DEAP) method was used to calculate DEA based approach to analyze the efficiency and performance in small and medium sized entrepreneurs.

4. Findings and Discussion

Based on Figure 1, 2 and 3 below, show that the technical efficiency, pure technical efficiency and scale efficiency under the categories of mean, maximum, minimum, standard deviation and number of efficient DMUs. Mean was calculated by using data envelopment analysis program. The table shows the maximum as the highest index for each year and the minimum, the lowest index for each year. Number of efficient DMUs as indicated by the index was equal or more than one each year. Based on the table, the mean of technical efficiency in year 2005 was 0.355. In addition there was an increase in the index in the year 2006 which was 0.433 but a decrease to 0.259 in year 2007. Subsequently, in year 2008 it was 0.501 and in 2009 it had increased to 0.791. For the standard deviation, from year 2005 to 2007 showed an index which was quite constant, there was a slight increase in the year 2008 which was 0.469 but decreased to 0.349 in the subsequent year. The mean result from pure technical efficiency was 0.705 in year 2005. For the year 2006 the mean was 0.691 and 2007 indicated a decrease to 0.491 and in 2008 increased to 0.593. This was however followed by an increase to 0.831 in the year 2009.

On the other hand, the standard deviation for the pure technical efficiency was better when compared with the standard deviation of technical efficiency. In the year 2005 until 2008 the index are constant but in year 2009 the standard deviation index had decreased to 0.325. The mean result from scale efficiency was better when compared with technical efficiency and pure technical efficiency due to the index was maintained at 0.499 until 0.912 during the period of year 2005 until year 2009. However, the standard deviation was worst when compared with technical efficiency and pure technical efficiency, because the index had decreased for the year 2007 for both which was 0.381 to 0.441 respectively. This could be due to the world financial crisis in the year 2007. The Global financial crisis in 2007 had spread to all parts of the world in view that the financial markets are integrated (Emir and Eyüboğlu, 2010). The SMEs had been affected due to inherent financing problems (Ay, 2008, Ma and Gui, 2010).

Although, some SMEs showed lower mean pure technical efficiency compared to the mean scale efficiency during year 2005 to year 2009, in the year 2009, the Scale efficiency index was lowest when compared with other years which was 0.127. The reasons being, that the rest of the SMEs were still recovering from the financial crisis. Although it was recognized that the majority of SMEs operated with limited resources, SME were encouraged by CGC to take steps to systematically collect information to better monitor their enterprise performance.

![Image](SE-Scale Efficiency)

**Figure 1. Scale efficiency of SMEs**
5. Conclusion

According to SMEs Annual Report (2005), Malaysian government had taken numerous strategies and initiatives to support the business growth and skill development of SMEs and entrepreneurs, such as the enhancement of information management and physical infrastructure, and the enforcement of regulations and operating requirements among SMEs. In order to archive the milestone, on-line portals and business directories such as the SME info portal, Agri bazaar, FamaXchange and HRD Portal (a training portal) are recognised to ensure the outreach of information distribution among Malaysian SMEs. SME info portal (www.smeinfo.com.my) is a one-stop resources centre that launched in January 2006, provides the information which related to financing, infrastructure, market share, technology, advisory services, government and training programmes. On the other hand, Agri Bazaar (agribazaar.moa.gov.my) is an online marketplace that enhances the online interaction and business trading between the farmers, producers, retailers and exporters. The main objectives are to enable the SMEs to discover the best prices for their products and market gained greater access to the market. The features of Agri Bazaar include new product introduction, supply feedback, price quotation, market projection, and inventory and payment management. These benefits are substantial for SMEs which were impacted directly on the bottom line. According to Dorman (2000), he showed that the level of expertise was lower in SMEs and that intermediaries could facilitate in achieving better performance to SMEs. As such, CGC should earnestly consider changing its existing inputs to increase the amount of credit guarantees granted to SMEs in order to achieve a reasonable level of efficiency.
References


### Appendix

#### Appendix A. SME criteria

<table>
<thead>
<tr>
<th>Micro-enterprise</th>
<th>Small enterprise</th>
<th>Medium enterprise</th>
<th>Larger enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing, Manufacturing-Related Services and Agro-based industries</td>
<td>Sales turnover of less than RM250,000 OR full time employees less than 5</td>
<td>Sales turnover between RM250,000 and less than RM10 million OR full time employees between 5 and 50</td>
<td>Sales turnover between RM10 million and RM25 million OR full time employees between 51 and 150</td>
</tr>
<tr>
<td>Services, Primary Agriculture and Information &amp; Communication Technology (ICT)</td>
<td>Sales turnover of less than RM200,000 OR full time employees less than 5</td>
<td>Sales turnover between RM200,000 and less than RM1 million OR full time employees between 5 and 19</td>
<td>Sales turnover between RM1 million and RM5 million OR full time employees between 20 and 5</td>
</tr>
</tbody>
</table>

Source: Bank Negara Malaysia (2012)