AN EXPLORATORY STUDY OF PHYSICAL AND REGULATORY TRADE FACILITATION TO EXPORT PERFORMACE OF MALAYSIAN'S SME IN MANUFACTURING SECTOR

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Abstract- The expansion of manufacturing industry all over the globe gives beautiful colors to the economic growth of many countries in the world. SME manufacturers which covered majority percentage of business in developed and developing countries are considered as backbone to the GDP of those countries. This good economic inclination has generated active export activities, including our country Malaysia. Despite all that goodness, export performance seems has an issue over cost and duration of export. This issue normally hit developing and less developed countries. Unfortunately, Malaysia is one of them. According to the literature, trade facilities like physical infrastructures and custom procedures contribute to the time delay and cost increment of export. Therefore, this paper aims to explore the influence of physical infrastructures and custom procedures on the export performance in Klang Valley, Malaysia. By using qualitative method, 200 sets of usable questionnaire are returnable. The data are then analyzed by using SPSS. The findings discuss descriptive statistics of the data, including demographic of respondents, reliability and frequency answers of each item in the questionnaire. The results are expected to give brief view of the export performance in Malaysia in the perspective of physical infrastructure and custom procedures. The policy makers should benefit these findings for a better policy to suit the dynamic of international demand in future.

Keywords; Physical, Regulatory, Export Performance,

1. Introduction

Manufacturing is like an engine to the modern world. But, it did not just start yesterday. It actually started a long time ago with big countries manipulating this sector. Historically, Britain seems the engine which started the Industrial Revolution by introducing textile industry. In not much time later, Germany and the United States took over Britain industrialization as both countries offered variety of industries rather than textile. This transformation is called Second Industrial Revolution (Schmenner, 2001).

Inside those countries which were involved actively with the industrialization, Small and Medium Enterprise (SME) manufacturers play a very vital role in doing the business. SMEs are

recognized globally as a machine for economic growth since 80 per cent of business activities are coming from SMEs, while in Europe and North America, 99 per cent of their total businesses are SMEs (Jutla, Bodorik, & Dhaliwal, 2002). The same phenomenon goes to our country, Malaysia. A total of 548,267 enterprises are from SMEs, representing 99.2 per cent of the total business in Malaysia. From this, SMEs are found to contribute about 32 per cent of Gross Domestic Product (GDP), 59 per cent of employment and 19 per cent of total exports (SMECorp., 2012) and specifically, the highest proportion of exporters are coming from manufacturing industry. Most countries also agreed that exporters are more active in production compared to non-exporters firms (Kotnik, Hagsten, & Sweden, 2013).

When discussing about export activities, history had shown that since early 1970s, export-oriented industrialization was seen as a light for future business growth and development in East and South East Asia. It was proved by the steady inclination of their GDP during that period and by 2005, the export shares started to deviate from developing countries to average world countries and fortunately it became 1.5 to 2 times higher (Jongwanich, 2010). Realizing this matter, exporting becomes a main strategy for manufacturing firms to survive and keep growing in order to hit competitive advantage globally (Navarro, Losada, Ruzo, & Díez, 2010) and they currently pay more attention to expose and export their products to the international market (Lages & Lages, 2003; Moghaddam, Hamid, Rasid, & Darestani, 2011; Navarro et al., 2010; O'Cass & Julian, 2003).

As regads with the trade facilitation, in order to maintain and develop more economic expansion through smooth export activities, trade facilitation provided must be good. What is trade facilitation? Trade facilitation is defined as "reducing the transaction costs associated with the enforcement, regulation and administration of trade policies". Its main discussion is on policy measures to reduce the production costs for export in developing countries (Iwanow & Kirkpatrick, 2009; Portugal-Perez & Wilson, 2012). In a broader view, trade facilitation also involves with business environment, domestic regulations, infrastructures' quality and transparency. To conclude, the trade facilitation can be measured through two dimensions; "hard" and "soft". The "hard" dimension is about physical infrastructures (roads, rails, ports, airports and telecommunications), while "soft" dimension indicates environment of the business, management of customs and other institutional aspects (Akinkugbe, 2009; Portugal-Perez & Wilson, 2012).

1.1 Problem Statement

As mentioned by the authors above, the trade facilitation is a logistics movement, including physical movement by the usage of physical infrastructure and the movement of documentation which associates with regulations. Then, these movements are related to time and cost. How does trade, time and cost relate? According to Nordas, Pinali, and Grosso (2006), time is a trade cost. A Doing Business Survey estimates that a 10 per cent increase in time can reduce bilateral trade volumes in the range of 5 to 8 per cent (Djankov, Freund, & Pham, 2006; Hausman, Lee, & Subramaniam, 2005).

The export activities generate their 'sources' from the manufacturing industry, which is seen as a backbone for the GDP of any countries nowadays especially for developed and developing countries in the world. From record, global manufacturing industry is flooded by the SMEs and

the SMEs comprises of 80 per cent from the total business in the world (Jutla et al., 2002). Specifically almost 100% of total business in developed and developing countries in the world are from SMEs, such as Europe, North America, and Malaysia itself (Jutla et al., 2002; SMECorp., 2012). As an evidence, the trade value in Malaysia increased by 6.5 per cent from MYR 139.7 billion last year (King, 2013). This scenario luckily has boosted up the export activities of the countries, thus increase their GDP and income.

Despite the surge expansion of manufacturing industry and export activities, the period of export activities has been a central issue among exporters. From a report by the World Bank, OECD high income countries win the shortest period of exports, with the average 11 days of export goods to reach the destinations. Contradictory, Sub-Saharan Africa and South Asia fall into the longest period of exports, with the average of 30 to 35 days (T. W. Bank, 2014a), probably due to the poor trade facilitations provided by the respective countries including physical infrastructures, communication systems and related regulatory factors (Iwanow & Kirkpatrick, 2007, 2009; Nordas et al., 2006). Based on the data above, the South East Asia countries also being categorised as a longest period for export activities which is simillar with the third countries from sub sahara. As part of South East Asia, this report gives a significant impact to the Malaysian export activities. This particular data has also raise queries as to whether Malaysian trade facilitations is still not efficent enough to facilitate exporting activities particularly from SME in manufacturing industry. This study could be considered as a recent report for Malaysian government about the current environment of SME manufacturers, physical infrastructures and regulatory factors, in Malaysia. Therefore, the government might amend any unwanted situations to improve the trade performance of our country.

2. Small and Medium Enterprise (SME) in Malaysia

Boosting up the economic growth is a mission for most of the countries in the world. Among many ways executed, one of them is through the SMEs, as almost three-quarters of the global business are coming from SME sector (Jutla et al., 2002). In Malaysia, SME business is registered in Registration of Businesses Act 1956 (Act 197) or Companies Act 1965. According to SMECorp (2013), SMEs are defined by two characteristics; annual sales turnover and number of full-time employees of a certain business and these criteria differ based on the sector. As for manufacturing and manufacturing-related sector for instance, enterprises with "sales turnover not exceeding MYR50 million or full-time employees not exceeding 200 workers" (pp.10) are considered as SMEs. On the other hand, for other sectors including service sector, SMEs are enterprises with "sales turnover not exceeding MYR25 million or full-time employees not exceeding 75 workers". However, these criteria may differ for other countries.

Again, according to the latest report from SME Corporation Malaysia, most of SMEs are concentrated in the area of Klang Valley where 35.7% of them are in the area of Selangor and Federal Territory, followed by 10.3% in Johor, 8% in Perak and 6.8%. Out of these SMEs, manufacturing sector is seen to be manipulating the higher proportion of large enterprises (SMECorp, 2013).

The next session will be briefly discussed on the two dimession of trade facilitations; hard and soft and their relationship with the export performance.

2.1 Physical Infrastructures in Trade Facilitation

As mentioned before, the trade facilitation can be measured by two dimensions; "soft" and "hard". The "soft" dimension indicates environment of the business, management of customs and other institutional aspects, while the "hard" dimension specifically refers to the physical infrastructures like roads, rails, ports, airports and telecommunications (Akinkugbe, 2009; Portugal-Perez & Wilson, 2012). It means that the physical infrastructures focus on the routes and facilities used by transports in order to deliver goods to the desired destinations.

These domestic infrastructures have a significant impact on bilateral flows, thus giving direct impact for time-sensitive sectors like clothing and automobiles for example. In addition, the quality of physical infrastructures also influence the transaction cost (Nordås & Piermartini, 2004). Other than the transaction cost, it also accounts for 40% of transport costs of owned infrastructure in coastal countries and contribute about 60% of transport costs for owned and transit country infrastructure in landlocked countries (Limao & Venables, 2001).

Again, trade facilitation and costs are two matters that are related to each other. Same goes to the quality of physical infrastructures and trade costs, which had driven Limao and Venables (2001) to study the linkage. Therefore, their empirical study found that there is a relationship between quality of infrastructure and trade costs. As evidenced, port efficiency is considered as a significant determinant for ocean freight cost. For instance, ocean transport costs in Brazil and India would fall by 15% if their port efficiency is as the same level of ports in France or Sweeden. Other than costs of transportation, the quality of infrastructure also affects the timeliness of the goods delivery.

2.2 Physical Infrastructures and Export Performance

Historically, John S Wilson, Catherine L Mann, and Tsunehiro Otsuki (2003) were the first to measure the impact of trade facilitation on trade performance by using a gravity model. They were concerned with four dimensions of trade facilitation; port infrastructure, customs environment, regulatory environment and e-business infrastructure. This model was applied to Asia Pasific Economic Cooperation (APEC) for a year to observe the results. As a result, they found that intra-APEC could increase \$254 billion or 21% intra-APEC trade flows, if APEC members with below average indicators improve capacity halfway to the average level and about half of the increase was derived from improved port efficiency. This shows that the improvement of physical infrastructures may increase the export performance of many countries.

2.3 Regulatory Factors in Trade Facilitation

If physical infrastructure is known as "hard" dimension, custom procedures is then called as "soft" dimension of trade facilitation. "Soft" dimension indicates environment of the business,

management of customs, transparency and other institutional aspects (Akinkugbe, 2009; Portugal-Perez & Wilson, 2012).

Specifically, "soft" infrastructure includes two main matters. Firstly, it is border and transport efficiency, which "aims at quantifying the level of efficiency of customs and domestic transport that is reflected in the time, cost, and number of documents necessary for export and import procedures". Secondly, it is business and regulatory environment which "measures the level of development of regulations and transparency. It is built on indicators of irregular payments, favouritism, government transparency, and measures to combat corruption". These customrelated process is complementary steps for the trade facilitation reforms (Portugal-Perez & Wilson, 2012). When discussing about custom-related procedures, cost and time summarized all of their effects of process. Each exporter wishes to have low tariff and fast custom process without any corruption. It is widely recognised that high foreign tariffs and non-tariff restrictions reduce trade for a country below its potential levels. Due the globalization era nowadays, World Trade Organization (WTO) and their membership blocs guide to gradual disassembling of tariff and non-tariff barriers to trade and remove of other form of constraints and technical barriers in the way of free flow of goods and services, thus encouraging trade through the right trade facilitation. This will result in the inclination of export productivity and income betterment, with the policies which promote exports or eliminating biases that discourage exports. Consequently, many countries are interested to identify constraint factors in order to fully engage in trade and observing policy options in order to increase to such capacity and compete in global market (Akinkugbe, 2009).

Although several studies showed that the improvement in physical infrastructures is slightly more important than the custom procedures, much evidence available supports trade facilitation that concentrates on the improvements in procedures leads to the improvement of trade performance (Iwanow & Kirkpatrick, 2009). One of the ways to modernize the custom administration in order to make some improvements is by raising revenue and enhancing service to trade community (Walsh, 2006). World Bank recently has done a survey on freight time and costs from the factory gate until the cargo is loaded, including administrative procedures such as custom clearance, export license, inspection of goods and some other indicators for 140 countries. The results showed that in certain developing countries, time-costs alone account for a lead time beyond the requirement of customers in developed countries (Nordas et al., 2006).

2.4 Regulatory Factors and Export Performance

As the international integration continues, the ability of developing countries to connect with global and regional markets is significantly affected by the costs charged by private sectors in trade transactions. Country characteristics like troublesome custom and port clearance procedures, lack of trade related infrastructures or cumbersome regulatory requirements give bad effect on private transaction, which can increase trade transaction costs and also give negative impact on trade and economic growth (Iwanow & Kirkpatrick, 2009).

According to the World Bank report 'Doing Business 2006', countries vary widely through their custom documents in trade facilitation and contract enforcement characteristics. In Sub-Saharan for example, it took average of 59 days and 18 signatures from regulatory agencies, while

Organisation for Economic Co-operation and Development (OECD) countries only require 18 days and 3 signatures in order to export standard container of goods (Iwanow & Kirkpatrick, 2009).

3. Research Methodology

This study had been conducted quantitatively which is the primary data gathered from interview session. The data had being collected from SME firms (manager or authorized officer) which were involved in manufacturing sector. These SME firms is located in Klang Valley. In doing sampling, the researcher were referred to Sekaran (2003) in terms of population whereby the population is defined as a group of people who relates with the research. Therefore, the target population of this research is SME firms in manufacturing sector, which are operating their business in Klang Valley. The list of the firms was provided by Ministry of International Trade and Industry (MITI). A formal letter from the Faculty of Entrepreneurship and Business had been forwarded to the headquarters of MITI, requesting the latest list of SME manufacturers in the respective area. Altogether, there are 8311 operating in the Klang Valley up to 2014. Pertaining to a few possible constraints, this study is used census for small population (Tabachnick, Fidell, and Osterlind) .According to this rule, all population can be considered as the sample since this study has small population. It is also a play-safe method in achieving as much number of completed questionnaires to be analysed appropriately. Once the sample size had being recognized the sampling technique had took a place. In this study, the researcher is decided to use probability sampling According to Sekaran (2006), this technique deals with minimum bias and offers the maximum generalization.

As mentioned above, the study is focusing on SME firms those in manufacturing and involve in international trade. Therefore, the unit of analysis in this study is a manager or representative of the SME manufacturing firms.

This study was collecting the data through a survey and the intrsument had been used is a questionnaire. The questionnaire were used to get the primary data. In addition, this study is using self-constructed questionnaire in order to minimize the bias. The questionnaire had been developed according to the previous literature and in total I four independent variables had been used to measure the export performance (dependent variable).

 Constructs
 Dimensions

 Dependent
 Export performance
 1. Financial (export sales, export profit, export growth).

 2. Satisfaction (success of venture, degree to which the venture is meeting expectations).

 3. Overall evaluation (perceived success, satisfaction with export activities, confirmation of expectations).

 Independent
 Physical infrastructure
 1. Quality of roads.

Table 3.1: Measurement variables for this study

| | | 2. Quality of ports. |
|-------------|--------------------|--------------------------------|
| | | 3. Quality of airports. |
| | | 4. Quality of rails. |
| Independent | Regulatory Factors | 1. Time for custom procedures. |
| | | 2. Cost for custom procedures. |

The items in this study are measured by using 5-point Likert Scale. Point 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Totally agree. These scales measure the respondents' stand about the items in the questionnaire.

This study was conducting a pilot study. The pilot study is vital to test the reliability and validity of items used in the questionnaire (Edwin R. van Teijlingen & Hundley, 2001). The reliability was measured by Cronbach's Alpha. For this study, the test had shown all the items are reliable, Cronbach's Alpha more than 0.7. Once the questionnaire is ready the targeted number of respondent was approached. In this study, the researcher was ran a few analysis such descriptive whereas descriptive statistics are used to measure central tendency and dispersion of the data. It also simplifies the large data into mean, maximum, minimum, standard deviations and variance (Sekaran & Bougie, 2010; Trochim, 2006). Since this study is about to know the relationship between physical infrastructure, regulatory factor and export performance therefore scatterplot had been used. Pallant (2010) suggested to firstly plot scatterplot of the examined relationship since it will figure out an idea on the nature of that relationship. The scatterplot is used to indicate the linear (straight line) or non-linear (curve line) relationship. If it is a linear relationship, then correlation analysis will be done next. As for the scatterplot, the inclination straight line indicates a positive relationship (when one variable increases, another variable also increases) and the declination straight line shows a negative relationship (as one variable increases, another variable decreases). In addition, the strength of the relationship is showed by the patterns of point's distribution. A strong relationship is shown by vague cigar shape points. The points will distribute randomly all over the place when if the relationship is weak. However, to get the definite answers, the Pearson product-moment coefficients must be calculated through correlation analysis (Pallant, 2010). Instead of to see it there any relationship or not, this study want to know how strong and significant the existed relationship if any. Therefore, the researcher also used correlation, correlation analysis is done to indicate the strength, significance and direction of the bivariate relationships between all constructs. In this study, the result of correlation amongst the variables shown that significance value of p = 0.5. In conclusion 95 per cent out of 100 per cent is sure that the significant correlation exist between the constructs.

4. Results and discussion

This study is lucky to get back 200 set of questionnaire that had been distributed personally by our researchers to those selected firms in the area of Klang Valley in order to get maximum number of responses and usable questionnaires. According to Tabachnick and Fidell (2012) a rule for small populations, 200 data are sufficient for this study. The collected data initially gone through data screen. The process to ensure the uninteded data will be eliminated. To start with,

all data from 200 sets of questionnaires were keyed-in into SPSS sheet and went through the cleaning process in order to make sure the data was free from mistakes like typing error.

However, certain demographic parts are left unanswered by the respondents. These missing data were set as 99 in the data sheet. Besides that, no transformation process was needed since all the items in the questionnaires were presented in positive statements. After that, the researcher run a frequency analysis, the purpose of the analysis is to calculate the number of responses associated with different values of data set. This section presented related profile information of the firms and respondents involved in this study. The results are summarized in Table 4.1 and Table 4.2.

Table 4.1: Demographic of respondents

| Variables | Frequency (n=200) | Percentage (%) |
|--------------------------|-------------------|----------------|
| Highest education | | |
| SPM | 42 | 21.0 |
| STPM | 22 | 11.0 |
| Diploma | 42 | 21.0 |
| Bachelor Degree | 90 | 45.0 |
| Master Degree | 2 | 1.0 |
| PhD | 0 | 0.0 |
| Position in organization | | |
| Junior Executive | 82 | 41.0 |
| Senior Executive | 81 | 40.5 |
| Manager | 32 | 16.0 |
| Senior Manager | 2 | 1.0 |
| CEO | 2 | 1.0 |
| Years in current job | | |
| Less than 1 year | 61 | 31.5 |
| 2 to 5 years | 89 | 44.5 |
| 6 to 10 years | 34 | 17.0 |
| More than 10 years | 14 | 7.0 |
| Years in organization | | |
| Less than 1 year | 45 | 22.5 |
| 2 to 5 years | 96 | 48.0 |

| 6 to 10 years | 43 | 21.5 |
|--------------------|----|------|
| More than 10 years | 13 | 6.5 |

Table 4.1 shows the frequency distributions for the respondents themselves. Almost half (45%) of total respondents are Bachelor degree holders followed by Diploma and Malaysian Certificate of Education (SPM) which are 21% respectively, 11% of respondents had Malaysian Higher School Certificate (STPM) and only 1% had Masters degree. None of them had the highest education degree, Doctors of Philosophy (PhD). However, the results above has the total of 4% missing values as some of them left certain items unanswered. There are 2 (1%) missing values for 'highest education', 'years in current job' and 'years in current organization' respectively. Meanwhile, there is 1 (0.5%) missing value for 'current position', 'years of establishment' and 'number of full-time employees' respectively. The table also shows the respondents' positions in their organization. There were 41% of Junior Executive and Senior Executive respectively who were involved in this study, followed by Manager (16%), and 1% for Senior Manager and CEO. The Senior Manager and CEO were the least contributing to the study because they had a very busy schedule compared to lower positions like Junior Executive and Senior Executive. Though, each of their cooperation contributed very much to the study. Next, the percentage of respondents' working experience in their current job. Most of respondents have 2 to 5 years of experience working in their current job (45%) and 17% of 6 to 10 years of working experience. Only 7% respondents had more than 10 years of experience 3 and only 1% just entered the work field as they had less than 1 year of current job experience. After that, the percentage of respondents' working experience in their current organization. The table shows 49% of them had worked for 2 to 5 years in their current organization and 22% already worked for 6 to 10 years in the organization. 23% were new there as they just work in the organization for less than 1 year and as usual, only a minority worked more than 10 years in the organization, which presented by 6% of total respondents. From the observation, the results of 'position in organization', 'years in current job' and 'years in current organization' were linked with each other. To summarize, it can be said that the position of respondents were more likely depending on their working experience, compared to the highest qualification they owned. For example, the percentage of respondents with 10 years of experience was parallel with the position in organization. Therefore, this minority group filled the highest position in the organization, which is CEO. Same goes to other positions; they correspond with the period of working experience.

Firm's Profile

Table 4.2: Demographic of firms

| Variables | Frequency (n=200) | Percentage (%) | |
|----------------------------|-------------------|----------------|--|
| Years of establishment | | | |
| Less than 1 year | 22 | 11.0 | |
| 2 to 5 years | 96 | 48.0 | |
| 6 to 10 years | 43 | 21.5 | |
| More than 10 years | 13 | 6.5 | |
| No. of full-time employees | | | |
| Less than 5 employees | 11 | 5.5 | |
| 5 - 30 employees | 49 | 24.5 | |
| 31 - 74 employees | 52 | 26.0 | |
| 75 - 100 employees | 28 | 14.0 | |
| 101 - 199 employees | 59 | 29.5 | |

Moving to the firms' demographic, the table shows that 48% of firms were already established between 2 to 5 years, 21.5% were 6 to 10 years, 11% of firms involved were operating for less than 1 year and only 6.5% were established for more than 10 years. According to Ngehnevu and Nembo (2010), establishment years for a company reflects their business development stage; newly started (below 1 year), young but established (1-5 years), growing (5-10 years) and mature but needs renewal (10 years and above). Thus, from these findings, it shows that most of the firms involved are young but established, 21.5% are in growing years, 11% are at an early stage, while only 6.5% firms are matured, but need renewal in certain areas. The table also indicates the number of full-time employees in the respondent firms. The highest percentage is 30% which is represented by firms with 101-199 employees, followed by 26% of 31-74 employees, 25% of 5-30 employees, 14% of 75-100 employees and last but not least is firms with less than 5 employees which covered only 5% of the total respondent firms. As mentioned by theory, the number of employees reflects the size of firms. SMECorp (2013) divided firm size into several categories based on the number of full-time employees; micro (less than 5 employees), small (5 to less than 30 employees) medium (30 to not exceeding 75 employees), and more than these number, the firm is considered as a large firm. Therefore, from the results in Figure 4.6 above, it could be concluded that the firms involved in this study comprise of various sizes of firms. They are 5% micro firms, 25% small firms, 26% medium firms and the total of 44% large firms.

Table 4.3: Characteristics of firms

| Characteristics | Frequency (n=200) | Percentage (%) | Characteristics | Frequency (n=200) | Percentage (%) |
|--|-------------------|----------------|---|-------------------|----------------|
| Agriculture | 14 | 7.0 | Household products | 14 | 7.0 |
| Apparel, garments & accessories | 6 | 3.0 | Machinery & equipment | 12 | 6.0 |
| Automotive, parts & components | 11 | 5.5 | Medical products | 19 | 9.5 |
| Beverages | 10 | 5.0 | Packaging & containers | 0 | 0 |
| Building & construction material & hardware | 16 | 8.0 | Palm oil products | 3 | 1.5 |
| Chemicals, minerals & alloys | 18 | 9.0 | Pharmaceutical, toiletries & cosmetics | 26 | 13.0 |
| Computer hardware | 2 | 1.0 | Plastic products | 10 | 5.0 |
| Computer software | 0 | 0 | Prepared food | 10 | 5.0 |
| Consumer & industrial electric & electronic products | 3 | 1.5 | Rubber products | 2 | 1.0 |
| Defence product & equipment | 0 | 0 | Stationery | 0 | 0 |
| Electric & electronic parts & components | 8 | 4.0 | Telecommunication | 3 | 1.5 |
| Fashion accessories & textiles | 0 | 0 | Textiles, yarns & other related materials | 1 | 0.5 |
| Footwear | 3 | 1.5 | Toys & sport equipment | 0 | 0 |
| Furniture | 5 | 2.5 | Transport equipment & parts | 0 | 0 |
| Gift, souvenir & jewellery | 0 | 0 | Wood products | 4.0 | 2.0 |
| Gloves | 0 | 0 | | | |

In case of characteristics of firms, there are 31 groups altogether, including agriculture, beverages, telecommunication etc. as shown in Table 4.3. For this study, most of the firms involved are firms which produce pharmaceutical, toiletries and cosmetics products (13%) and the least firms come from group of textiles, yarns and other related materials (0.5%). Other firms fell into other groups such as medical products (9.5%), chemicals, minerals and alloys (9.0%),

building and construction material and hardware (8.0%), agriculture and household products (7%) respectively, machinery and equipment (6%), automotive parts and components (5.5%), beverages, plastics products and prepared food were 5.0% each, followed by electric and electronic parts and components (4.0%), apparel, garments and accessories (3%), furniture (2.5%), wood products (2%), while consumer and industrial electric and electronic products, palm oil products, telecommunication and footwear shared the same percentage of 1.5% each and last but not least is rubber products which is represented by 1% from the total firms.

Table 4.4: Frequency of each measurement

| Variables | | Percentage (%) | | | |
|---|-----|----------------|------|------|------|
| | SD | D | N | A | SA |
| Physical infrastructure Quality | | | | | |
| of roads is significant Quality of | 0 | 0.5 | 1.0 | 13.0 | 85.5 |
| airports is significant Quality of | 1.0 | 2.0 | 18.0 | 35.5 | 43.5 |
| ports is significant Quality of | 1.0 | 5.5 | 9.5 | 27.0 | 57.0 |
| railways is significant | 5.5 | 18.5 | 38.5 | 25.0 | 12.5 |
| Routes taken to deliver services are free from congestion | 1.0 | 19.0 | 10.5 | 60.0 | 9.5 |
| Regulatory factors | | | | | |
| There are appropriate number of documents required to export goods | 0 | 1.0 | 12.0 | 60.0 | 27.0 |
| Little time needed to complete all required documents to export goods | 0 | 14.0 | 48.0 | 33.5 | 4.5 |
| There are appropriate numbers of procedures to follow in exporting goods | 0 | 5.0 | 14.0 | 69.0 | 16.0 |
| Little time needed to fulfil all the procedures to export goods | 0 | 17.0 | 54.5 | 25.0 | 3.0 |
| Enjoy good time for custom procedures | 0 | 10.5 | 64.0 | 24.0 | 1.5 |
| Cost associated with all the procedures required to export goods are reasonable | 0 | 1.5 | 27.5 | 68.0 | 3.0 |
| Export Performance | | | | | |
| Since past three years, export sales increase year by year | 0 | 2.5 | 16.0 | 57.5 | 24.0 |
| Since past three years, export profit increase year by year | 0 | 2.5 | 19.5 | 67.5 | 10.5 |
| Since past three years, export growth is | 0 | 3.5 | 52.5 | 39.0 | 5.0 |

| constant throughout the years | | | | | |
|---|---|-----|------|------|------|
| Satisfy with current business ventures | 0 | 2.5 | 12.0 | 73.5 | 12.0 |
| Each business ventures is successful | 0 | 3.5 | 43.5 | 46.0 | 7.0 |
| Overall, satisfy with export activities | 0 | 3.0 | 22.5 | 62.0 | 12.5 |
| Overall, all export activities is a success | 0 | 2.5 | 25.0 | 65.5 | 7.0 |

Note: SD = strongly disagree, D = Disagree, N = neutral, A = Agree and SA = strongly disagree

From the conceptual framework, there are two independent variables; physical infrastructure and regulatory factors, dependent variable is export performance. Table 4.4 reveals the percentage of respondents' nominations for each item that represented their independent variables.

Firstly, there are five items measured the independent variable of physical infrastructure. None of the respondents strongly disagreed and only 0.5% disagreed that the 'quality of road is significant' in order to perform their business well. Meanwhile, the totals of 98.5% agreed and strongly agreed with the statement. For second item, 'quality of airports is significant', only a total of 3% strongly disagreed and disagreed, while 43.5% and 35.5% respective strongly agreed and agreed with it. Next, 6.5% of respondents strongly disagreed and disagreed that the 'quality of ports is significant', while the rest 57% strongly agreed, 27% agreed and 9.5% were neutral. Quite different with the 'quality of railways is significant', the percentage of strongly disagreed and disagreed was quite high, 5.5% and 18.5% respectively. While 38.5% was neutral with this statement, 25% agreed and 12.5% strongly agreed. This might show that they did not use railways as their main transportation to deliver their services. Last but not least is the 'routes taken for deliver services are free from congestion'. Almost 70% of respondents strongly agreed and agreed that their routes are not congested, while 19% disagreed, 1% strongly disagreed and 10.5% were neutral. This condition showed that their performance was not affected by the traffic congestion. For the case of second independent variable, there were six items used to measure the regulatory factors. Almost 90% of respondents agreed and strongly agreed that there are appropriate number of documents need to be filled in order to export goods, while none strongly disagreed and only 1% disagreed. However, only 38% strongly agreed and agreed that all the documents need a little time to be filled and 14% disagreed with it and 48% were neutral. In terms of procedures, 69% agreed and 16% strongly agreed that the number of procedures ruled by the regulation for export activities is appropriate, only 5% thought vice versa and 54.5% were neutral. For the item 'enjoy good time for custom procedures', 25.5% agreed and strongly agreed, 10.5% did not enjoy the good time taken for the custom procedures and 64% were neutral. The results reveals that the respondents were likely to choose to be more neutral when talking about time needed to fill the documents because they might also consider the working efficiency of their staff in doing the job. The more efficient they worked, the little time they took to complete the forms. Last but not least, for this variable, 68% strongly agreed that cost associated for export activities is reasonable, 3% strongly agreed, while 1.5% did not agree. Therefore, this percentage shows that the majority exporters felt happy with the associated cost that they need to pay in order to export their goods to overseas.

In the case of dependent variable, there were seven items listed in measuring the export performance. Firstly, 57.5% agreed and 24% strongly agreed that since the past three years, their

export sales increased year by year. Secondly, 67.5% agreed and 10.5% strongly agreed that since the past three years, their export profits increase year by year. Thirdly, 39% agreed and 5% strongly agreed that their export growth was constant throughout the years since three years ago, while 3.5% disagreed and 52.5% were neutral with this statement. Next, the total of 85.5% satisfied with their current business ventures, while only 2.5% disagreed. In the other hand, the sum of 53% believed that each of their business ventures was successful and 43.5% were in the neutral state. Overall, 62% agreed and 12.5% strongly agreed that they are satisfied with their export activities and 22.5% chose to only be neutral. Lastly, 65.5% agreed and 7% strongly agreed and 25% were neutral with the last item; 'overall, all export activities is a success'. Among all those items representing the dependent variable, none strongly disagreed, and less that 4% disagreed with each of the item.

Roughly, the results could be concluded several important things from this frequency analysis. The findings indicate that all the physical infrastructures are important for their export performance. The respondents are also quite satisfied with the documents, procedures and time given to meet all those requirements in order to export goods. All the variables above had lastly led to encouraging export performance as the results shows high percentage of respondents agreed with the positive items and none of the respondents strongly disagreed with the items. Descriptive statistics measures the values of maximum, minimum, mean and standard deviation of the data. The summary of mean and standard deviation of all independent variables and dependent variable are summarized in Table 4.5 below

| Variables | Mean | Standard Deviation |
|--------------------------|--------|--------------------|
| Physical infrastructures | 4.0280 | 0.48080 |
| Regulatory factors | 3.5750 | 0.41696 |
| Export performance | 3.8029 | 0.54733 |

Table 4.5: Mean and standard deviation

In descriptive statistics, a scale in the range between 1 to 2 is considered as low, 3 is regarded as moderate and 4 to 5 as high. Therefore, from the results of descriptive statistics in Table 4.5, physical infrastructures (4.0280) is higher compared to regulatory factors (3.5750). While, export performance is 3.8029.

For the case of standard deviation, generally, the standard deviation explained how far the individual responded to a question deviate from the mean. Since the values of standard deviation for these variables were less than 0.6, it thus indicates the dispersion for this study is less than 0.6. This study was test for reliability and the reliability test's result was shown as follow export performance is 0.864.

However, the physical infrastructure initially obtained 0.427 only with five items. From the results, the item 'routes to deliver services are free from congestion' needed to be removed in order to increase Cronbach's Alpha of physical infrastructure to 0.677 but the regulatory factors has no adjustment since its was obtained 0.718 as shown in table's below.

Table 4.6: Cronbach's Alpha for each variable

| Variables | Cronbach's Alpha | No. of Items |
|-------------------------|------------------|--------------|
| Physical infrastructure | 0.677 | 4 |
| Regulatory factors | 0.718 | 6 |

5. Conclusion

The involvement of SME in manufacturing sector is very significant as they are considered as a backbone to the economic growth. Their business has generated good trade to our country. Unfortunately, statistics reported that the process of export in Malaysia as bad as less developed countries. Literature found that physical infrastructures and custom procedures are two factors that contribute to this problem. This directly affects the export performance. Hence, this study aims to investigate the export performance in Malaysia in the light of the physical infrastructures and custom procedures. From the literature review, several items are recognized widely used by the previous authors to measure these constructs. There are five items related to quality of infrastructures and congestion are addressed to measure physical infrastructures, six items related to time and cost are representing custom procedures and seven items regard to financial and nonfinancial performance are used to measure export performance. The data collected from the respondents are then analyzed by using SPSS. The analyses are including descriptive statistics, reliability test and frequency analysis. The main findings show that most of respondents agree that quality of physical infrastructures is important for them in working out their export process. They also looked satisfy with the existing custom procedures and last but not least most of them are positive with their growth of export performance and business activities.

Hence, future researchers are invited to expand the analyses. It is good to analyze the correlation and regression between physical infrastructures, custom procedures and export performance. Moreover, the researcher should review more literature and add some other constructs that might influence the export performance. All of these findings are a good contribution to the body of knowledge and industry players as Malaysia still lack this kind of research.

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