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GLOBALIZATION: A STUDY OF DOMESTIC FIRMS READINESS IN INDUSTRIALISING COUNTRIES

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ABSTRACT

It's a forgone conclusion, that the continued existence of firms today largely is influenced by the ability to compete globally. Multinational corporations (MNCs) based in developed countries has longed profited from their ability to compete globally. Despite the seemingly lopsided advantages to MNCs in globalization, local firms in industrializing host countries are also able to reap the benefits if they are ready or prepared for globalization. This paper studies the 'readiness' of local firms in facing globalization. Specifically, this initial study looked at local firms operating in the Malacca industrial estates. This paper employs an unpublished data set of locally-owned firms in various industries operating in Malacca industrial estates. The list of the firms was drawn from a listing provided by the state's Economic Development Corporations – a development arm of the Malacca state government. The data, among others, covers profile, production, resources, marketing practices, procurement from other firms and exporting behavior.

Keywords: *Local firms capability, Linkages, Globalization*

INTRODUCTION

Globalization is a an important phenomena that has put countries and societies across the world to undergo a huge transformation process (Robertson, 1992; Waters, 1995; Mittelman, 1996). This process refers to the development and advancement of technology, economy, telecommunication, transportation etc. In other words, globalization is believed to be able to enhance business practices and facilitate economic growth of nations. However, important factors such as foreign direct investment (FDI), linkages with local suppliers, effective marketing strategies, information communication technologies (ICT) and product innovation should be addressed in order to support globalization.

This paper would like to look at an important aspect of globalization, that is how 'ready' are local firm in facing the challenges of this phenomena. Sppecifically the objective of this paper is to :

- i. determine the level of readiness of local owned firms in facing globalization
- ii. identify important factors that contribute to firms readiness.
- iii. provide some inputs and ideas for future research in enhancing the level of readiness of local owned firms.

The next section of this paper introduces a brief background of the study. The following ection discusses key elements of firms readiness in industrializing countries, followed by a section on data collection procedures. The final two sections will present the findings and conclusion of the paper .

BACKGROUND OF STUDY

A key element of globalization is FDI which plays an important role in providing domestic firms with advanced technologies through subcontracting, creation of spin-off firms, OEM and training activities (Abd Halim, 2000). These elements are essential in order to support economic interdependence of countries through the increasing volume and variety of cross – border transactions in goods and services and of international capital flows and also through the more rapid and widespread diffusion of technology. It is widely believed that these elements are vital to support the key forces driving globalization today namely falling trade barriers, removing of restrictions on foreign capital, temporary movements of labour and greater integration of economic policies, legislation and institutions.

The importance of FDI to the economic growth of a nation has been highlighted by a number of studies. One such study was done by Balasubramayam (1996) using cross sectional data on 46 developing countries. The countries were divided into 2 groups, one promoting export orientation while the other was countries focusing on import substitution. It was found out that FDI has greater impact to the economic growth process on the former. This study acknowledges the importance of FDI on nations such as Malaysia which emphasis export orientation policies. Another study by Siew Yean (1999) pointed out that in the case of Malaysia, government policies and external factors were the key factors in attracting FDI. It was shown that FDI helped creating job opportunities, developing workers skill and knowledge and boosting the manufacturing sector.

READINESS

Bulk of global FDI originates and invested in industrialized countries notably USA, Japan and Western Europe. FDI in industrializing countries though are increasing and significant lower vis-à-vis the advanced economies. Incentives given by a country will similarly match rivaling neighbor countries for FDI. Advent of globalization renders such incentives obsolete, the opportunities to be more competitive and increase efficiency has been the main factor in foreign firms in their decisions to invest in a particular country. Rather than internalizing, foreign firms will prefer the existence of capable local suppliers. This can only happen if transaction cost involve is at the absolute minimum. Globalization warrants global best practice. It is now apparent that multinational firms will prefer a country where the domestic firms are ready to be competent partners or suppliers should the MNCs decides to invest.

From the perspective of developing host country, the concept of readiness is important in assessing the capability of local firms in meeting the needs of foreign firms. Readiness can be determined from several aspects. Export activity, relationship with foreign firms, technological activity and competition, etc.

The presence of a competitive environment has been observed to lead to more rigorous cost-reducing measures by firms (Katz, 1984: 147). Several indicators have been used as proxies for competition. Among them are industry concentration, profits, market share, firm's output and changes in capital stock. A study on firms operating in the U.S. telecommunications sector found that competitive pressure impelled firms to undertake readiness measures (Majumdar, 1995: 153-165). Threat of entry by competitors led firms in the study to invest in new technology. Competition in acquiring a bigger slice of the market also influenced firms to undertake readiness measures.

The ability to export indicates capability of firms to operate at global standard which faced stiff competition. Exporting requires firm to be well prepared but to be able to anticipate changes in the global market. If a firm performs successfully in export, this augurs well for its readiness in facing globalization.

A study using Mexican data found that local competition stimulated R&D activities that can be proxied as firm's readiness (Blomstrom et al., 1995). Competition induced firms to be prepared. Kokko and Blomstrom (1995) in their studies of 33 host countries of US-based MNCs reported that competition was significant in influencing MNCs to undertake more technological activities. The study reported that local competition, proxied by intensity of investment, led to a reduced technology gap between MNCs and local firms. This, in turn, forced MNCs to import newer technology in order to maintain technological superiority. This contributed to firm's readiness.

In the same note, Kumar and Saqib (1996) in their study of the Indian manufacturing industry found that a reduction in competition likely retarded readiness measures undertaken by firms. The study reported that the absence of competitive pressure due to government restrictions on new entrants to the market, reduced the incentive for existing firms to undertake technological activities, in this case R&D. A later study by Narayanan (1998) in the Indian automobile industry also arrived at similar conclusions. He concluded that in a liberal regime firms become more competitive and better prepared in facing the influx of foreign firms.

DATA AND METHODS

The data was obtained using questionnaire from a survey of locally-owned manufacturing firms operating in Malacca industrial estates undertaken in September 1999. The sampling frame was drawn from Malacca State Development Corporations directory of firms operating in the industrial estates. The questionnaire solicits the following information:

- i. firm's profile such as location, industry type and size of the firm

- ii. output and input information including sales value, cost incurred, raw materials and main suppliers
- iii. technology used
- iv. R&D activities
- v. horizontal and vertical linkages
- vi. human resource and training.

The questionnaires were mailed or faxed in advance before visits were made to each of the respondents.

In the statistical models, the study utilizes simple regression analysis using OLS to estimate the coefficients. Firm's R&D staff and percentage of export to total sales were used as proxy for firm's readiness. Table 1 lists the variables used in the analysis. The data are for 1998. In MECHA, firms were asked to categorize their production process into the following categories: simple hand tools, portable electric tools, semi mechanized or fully mechanized. While in SPEC, firms were asked to rate the ability of their suppliers to meet given specification. The rate is 1 for unsatisfactory, 2 okay and 3 satisfactory.

Table 1: List of variables used in the statistical model

Dependent Variables	
R&D	Firm's R&D staff
EXPORT	Percentage of export over total sales
Independent Variables	
MECHA	Level of mechanization
SALES	Sales turnover (in RM '000)
ASSET	Total asset (in RM '000)
PRDNCOST	Production Cost
VA	Value added per worker (in RM '000)
SPEC	Supplier's ability to meet specification

DESCRIPTIVE STATISTICS

The firms in this study consist of seven different industries, namely resource (31%), non-resource (25.4%), agriculture (22.5%), chemical (9.9%), machine and equipment (5.6%), electrical and electronics (2.8%) and textile and clothing (2.8%). In total, firms in the sample employed 7885 workers, averaging 112 workers per firm. 44.1% of the firms employed less than 50 workers, thus classified as small firms while 36.6% employed 50 to 199 workers meaning that 82.9% of the firms were small and medium sized enterprises (SMEs). Firms on average have been in operation for 10 years. 40% of the firms have been operating for five years or less while 36.6 percent operated more than 10 years. This exemplifies that the firms in this study have substantial learning experience which is important to be noted because it is generally accepted that firms with more learning experiences would be able to improve the efficiency of their organization as SMEs represent the most platforms through which they could upgrade their investment and management skills (Moha Asri, 2000) including the productivity of workers through technological improvement.

In this study the worker per unit capital is about 0.2 (worker/billion RM) indicating that the firms in this study employ a substantial worker per unit capital which is similar to a finding by Moha Asri who highlights that small and medium firms employ more workers per unit capital due to the fact that more than 80% of the firms in this study are SMEs. This point is similar to the general argument in favour of SMEs which is that they create more jobs compared to large firms due to the labor intensive production techniques. This is evidence in this study where only 29% of the firms were fully mechanized while 48% were semi mechanized. In addition to the average worker is 112 workers per firm. This implies that this study supports the general argument that SMEs contribute to a more equal income distribution. However, the value added performance of the firms are quite low. Nearly half of the firms reported value added of less than RM 1 million annually. While 93% of the firms reported value added of RM10 million or less which is a main concern in this study. Nearly one third of the firms reported value added per worker of less than RM10,000 annually while the value added per worker mean is RM31,000 annually which can be explained by the fact the workers are not highly trained or skilled. Other relevant information obtained can be summarized as the following: cumulative assets of all firms was RM 5.3 billion, export mean 42.35%, sales mean RM23.65 million., R & D staff mean 3.14 for firm that are involved in R & D activities and 17 firms obtained ISO

series accreditation . From these details, one important fact that should be highlighted is that almost half of the sales are exported. In other words, most of these firms are export oriented and are quite closely involved with the issues pertaining to globalization. Another important issue is R & D, the average workers involved in R & D is only 3 per firm and even worse than that a few firms do not even have any R & D staff, giving indication that the R & D effort of these firms are quite low and a lot of effort has to be made to motivate them. As explained earlier, stiff competition can be expected in the this globalization era and one vital factor that would be able to enhance a firm's competitiveness is R & D, Table 2 below details means and standard deviation of the variables.

Table 2: Means and standard deviations of variables

	Mean	Standard Deviation
R&D	3.14	2.17
EXPORT	42.3592	36
MECHA	3.01	0.81
SALES	23.6573	59.16
ASSET	96.5349	494.90
PRDNCOST	23.8974	49.54
VA	0.03	43.35
SPEC	2.65	.48

FINDINGS AND ANALYSIS

Overall, the models significantly explained the changes of the dependent variables. Level of mechanization which implicitly indicates the usage of technologically embedded machines is significant in explaining R&D undertaken by firms, this is expectedly so. In the export model however, the finding suggests that firms that export are more likely to be involved in activities with lower levels of mechanization. This is a cause for concern since activities with lower level of mechanization usually are of low value-added. Apparently, this finding concurs with the notion that exported goods were of low value-added. (For example, electrical and electronics industry are still heavily involved in assemblies and export of raw materials such as crude petroleum, palm oil and rubber are very much products with low value added). Negative relationship between production cost and export also seems to support that firm that export, export products which requires lower level of production cost – implying not much of production process took place. Table 3 below details the estimates of the regression.

Table 3: Regression estimates

	R&D	Export
Constant	-3.647** (-3.062)	196.853* (2.635)
MECHA	2.301*** (5.738)	-41.379** (-3.450)
SALES	-	1.829** (3.846)
ASSET	-.119** (-3.585)	-
PRDNCOST	-	-42.483* (-2.486)
VA	-2.671 (-.231)	-.248 (-.830)
SPEC	-	11.449 (.656)
R ²	.856	.867
F	11.898	5.209
N	71	71

Values in parentheses are t-statistics. ***,**,* denote significant at 1%, 5% and 10% respectively.

In determining whether the size of firm plays a role in firm's readiness, two proxy variables were used. Size was found significant in influencing export activities. Large firms are financially better equip to venture into global market. Involvement in exporting signifies that firms are able to compete globally. SMEs which made up more than 80% of local firms faced a major handicap in venturing the global market. Other than financial capability, operating in the global market also warrant different sets of requirement that will be markedly different from the local arena that SMEs are used to.

The R&D model however indicates that smaller firms are better bet for undertaking R&D. This probably could be contributed to the type of industry that firms operate. Smaller firms with minimal bureaucracy are more receptive to changes in the business environment.

In both of the models, value-added per worker were not statistically significant and negatively signed. The negative signs are disturbing. It provided evidence, albeit weakly, that firms that are ready for globalization are most likely those that involve in activities with low value added.

The ability of firms to meet the required specification by suppliers although is positively signed does not reached the statistical significance required to provide support for firm's readiness.

To participate globally, local firms or any firms for that matter, must be able to compete and perform at global standard. This initial study highlights the readiness of local firms in the state of Malacca. The ability to export and undertake R&D signified firm's readiness to participate globally. Being able to export implies producing at world standard, however the findings also indicates that most of the export involve product which require low level of mechanization and consequently low value added goods. Meaning that most of the exports are raw materials or that requires assembly type production processes.

CONCLUSIONS

This paper has demonstrated local firms' readiness. There is evidence of local firm readiness, however much of the readiness occurs among firms in low value added industry. The results show that export goods mostly require low level of production and consequently of low value-added. Export with higher value-added has yet to materialize. Firms that undertake R&D tend to be relatively smaller firms but have higher level of mechanization. But again, failed to give evidence of increasing value added of their employees. From a government policy perspective, specific measures or incentives to enhance value added of activities should be one of the main priorities if local firms are to be successful in the face of globalization.

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