How Network Capital Influences Degree of Internationalization? Case: Small Medium Industries in Indonesia

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Abstract

Trade liberalization and market globalization become a good momentum for the Small Medium Industries (SMIs) to engage in international business through exports. Within a decade, the number of SMIs that export shows an increasing trend along with the development of ICT (Information Communication Technology). However, for SMIs businesses in international market poses significant challenges because they still have a low competitiveness. Therefore, strategy to increase competitiveness becomes an important agenda for SMIs with optimum facilities of stakeholders.

This research aims to investigate the influence of network capitals and the internationalization degree of SMIs. Measurements on research variables were made to determine the relationship and influence of variables. Methods of analysis used isverificative. Hypothesis testing uses multivariate statistics-Partial Least Square. The population of this research is owners/managers of SMIs in Indonesia who do international businesses (export oriented). The election of sampling used is stratified random sampling. The total sample is 186 SMIs in 3 provinces in Indonesia (DKI Jakarta, Banten and West Java).

The study shows that degree of internationalization is determined by the network capital. This means the higher the network capital, the bigger the impact to the increasing of the degree of internationalization.

Keywords: SMIs, network capital, degree of internationalization

Introduction

SMIs in Indonesia play important roles in encouraging the growth of the national economy and employment in the grass root level. The number of SMIs in Indonesia is estimated at 16.1% (641,143 companies) from the total of Small Medium Enterprises (Kuncoro 2010). Labor that can be absorbed until 2011 were large enough 8,268,588 people (small industries) and 247,610 people (medium industries), compared to large industries which absorbed approximately 6,156,057 people. In terms of its contribution to the economic, growth by SMIs contributed 33% in 2011(Rp. 489.81 trillion) compared to the large industries, Rp.973,53 Trillion(Ministry of Industry "Strategic Plan: 2010-2014 (2010:18).

Within the last decade, the trend of market globalization and trade liberalization had opened up business opportunities for entrepreneurs to conduct international activities (Daft 2010). For small medium companies, export is a common method to enter international market because it has lower risk, less capital, easier to do than other methods such as licensing, joint venture, and contract manufacture. The decision of small medium industries to conduct an international business is partly driven by the desire to improve performance and expand market. Doing international business, especially export does not only provide earning

returnbecause the value of foreign currency is more valuable, but also enables small medium business entrepreneurs to develop market. Expanding market to the area which psychograpichally, demographically and socioculturally to SMIs is the first step to be easily recognized in international markets (Verdin and Heck 2001; WengelandRodriguez2006; AbdulahandZain 2011).

Doing business in international market for small medium enterprises is a formidable challenge. It is because they have to prepare themselves in facing tight competition with other business entrepreneurs in international market. There are two major important issues faced by small medium industries in Indonesia nowadays, namely: 1. whether they can become important players in international or global markets which do not only serve domestic or local markets, and 2. whether they can compete with large industries (Tambunan2007). Small medium industries are reported to face several major constraints, such as: the lack of working capital to finance the exports, limited resources, and limited access to infrastructure key(OECD 2009). The amount of non-oil exports of SMIs from year 2009 to 2011 was 17-18.9% (Ministry of Industry: "Strategic Plan: 2010-2014" 2010:57). The difficulties of SMIs in Indonesia to take part in international market can notbe separated from the structural economic gap as a consequences of economy globalization and trade liberalization which in the end will create higher competition (Tambunan 2011).

Growth in the global knowledge economy associated with the emergence of intensive needs of SMIs to capitally and intellectually compete on international market would require business entrepreneurs who able to optimize network resource by developing and utilizing relationships with business partners in the network. Limitation in utilizing network resources may cause difficulties in: accessing knowledge, resources, and entering international market (Cerrato and Piva 2008). However, for SMIs, building a network is not easy. In their study, Abdulah and Zain (2011) showed the reasons why SMIs did not conduct international business,it is due to the difficulty in building network. Several issues which still become obstacles for SMIs in building network are: reluctance of entrepreneurs in building network, even to make relationship with the owner or manager; lack of confidence in the ability of employees; and lack of competence(Gilmore et.al. 2008).

In addition to the various obstacles, the practices of building network still rely on the social network. This network building is more emphasizedon social aspects, based on friendship, personal, informal, trust without specific agreement or contract(Johansonand Vahlne, 2003). These practices of network building were not optimal, because can't calculative the network capital which are "economic, rational, calculative, investment and logic" (Huggins, 2009). According to Tang (inJones et.al. 2009), SMIs require the application of professional practice to support business activities in international market. Capital formation in SMIs is a new business practice in utilizing network resources however, SMIs rely more on social capital all this time (Huggins 2009).

Literature Review

Network Capital

Network capital is a concept that evolves from the concept of inter-firm network of Gulati (1999). The company enters a new form of alliance, namely inter-organizational strategic alliance: dependence and strong connection. Acevedo (2007) stated that network capital is a form of social capital in the community and of significant value to the progress of human resource development. Kramer et.al (2009) defined network capital as the capacity of

enterprises for sharing knowledge and information with other innovators to socialize group learning with other innovators such as companies and research institutes.

Furthermore, Huggins (2010) described the concept of network capital as a form of network resource. Network resource is an umbrella concept to understand the resources and capital generated through inter-firm networks (Gulati on Huggins, 2009). Huggins (2009) definedthat network capital consists of investments by the company in calculative relation which then give access to knowledge in order to increase the expected economic returns. In addition, Sik(2010) stated that network capital comes from social capital, but the concept of "social" in defining social capital is a misleading metaphor. Network capital is a form of capital. According to Sik (2010), network capital depends on three aspects which influence each other, namely network inertia, culture which means the use of network capital appropriately and how network capital can be applied in the context of local or global institutions.

Based on the literature review, the concept of network capital developed by experts in the study is included in the organization network of school of thought, namely network which is built on the basis of resource dependence perspective(Gulati 2000). The result of literature review of network capital concept stated by the experts can be viewed from two different perspectives, social and economic. The concept of network capital basically states network capital as social capital concept which is another concept proposed by NahapietandGhoshal (in Tsai and Ghoshal 1998)that said 'social capital is an actual and potential resource which can be mutually owned by individual or organizations through network relationship'. However, the concept of network capital from economy perspective is based on the inter-firm networkand it does not have to be the same with the beliefs and obligations associated with social capital. Broadly speaking, the main difference of both concepts is that "social capital consists of the social relations and networks held by individuals", while "network capital consists of the strategic and calculative relations and network held by firms" (Huggins 2009:348). Huggins (2009) argued that network capital was used to explain resources between inter-firm networks and did not need to be the same with the beliefs and obligations associated with social capital. Network capital can be managed strategically, particularly to influence the flow of knowledge, and naturally social capital is very difficult to manage. Huggins (2009)describes network capital from a broader perspective and not in the form of social capital because he takes into account network as the investment in calculative relations to access knowledge and resources. The concept of network capital can be used to access resources owned mutually by inter-firms which are based on the logical, professional, strategic and calculative principles. On the other hand, social capital is based more on social networking.

Based on those various opinions, the concept of network capital in this research refers to economic perspective under the assumption that network capital is a form of network which is built so that inter-firms can mutually access resources and knowledge on the basis of: interaction of mutual benefit, cooperation, economic and calculative considerations, relationship as investment, as well as being professional and dynamic. In this study, the constructs of network capital are relational capability and collaborative capability. Relational capabilityshows the ability to create, to build relationship with business partners. SMIs need to increase their ability to build relationship in order to be more effective in conducting activities in network (O'Toole and McGrath 2008). Besides the ability to utilize relationship, other ability which becomes the basis of network capital is to build and maintain relationships in network. Therefore, collaborative capabilityneeds to be utilized to show the abilities of SMIs in building relationship in relational perspective (Blomqvistand Levy 2006).

Degree of Internationalization

Degree of internationalization is a concept which evolves along with the trend of market globalization and trade liberalization as the driving forces for entrepreneurs to enter foreign market. Today, a growing number of companies, including SMIs, conduct international activities even though they have to face various challenges (Chelliah et.al. 2010). According to Sullivan (1994), the degree of internationalization is done when a company do internationalization matters, relating to internationalization being done and the character of experienced managers in doing internationalization activities. Stewart (1997) argued that degree of internationalization refers to the willingness of company to be more involved in international activities, particularly in exports. In addition, Thoumrongrojeand Tansuhaj (2005) stated that degree of internationalization can be associated with instruments of international diversification where a company performs diversification into various kinds of businesses, products and markets, including international expansion in a wider scale.

Next, Melia et.al.(2007)stated that the degree of internationalization is a representative variable in international activities of a company. Degree of internationalization refers to the percentage of the turnover of the company which has to be distinguished from the scope of geographical internationalization which reflects dimension. Moreover, (2005)describesdegree of internationalizationas a concept of "multifaceted" and, therefore, there is no appropriate unique index and this is interesting to study further. In the context of medium industries, Kuivalainen et.al.(2010)stated that small internationalization of a company can be described as a portrait of company's situation in a given time. By studying the degree of internationalization of a company in a given time, we can learn the international behavior of a company, or in the other hand the processes and strategies of internationalization.

According to the literature review of degree of internationalization, experts are based on two groups of school of thoughtwhich relate to the theory of internationalization, namely economic and behavioristic. Economic school of thoughtis built from economic theories, namely on rational, strategic, efficient and transactional theories. Behavioristics chool of thought is built from theories which use behavioristic approach in an organization. However, there are several experts who use the combination of both schools of thought, namely included in the integrated school of thought: economic and behavioristic. This study use integrated school of thoughtas reference because it can describe comprehensively the internationalization activities conducted by companies.

This study applies the constructs of Gillies (2005), who describe degree of internationalization from two aspects, intensity and extensity. Aspect of intensity emphasized on the performance of internationalization, which uses FPTP (Foreign Profits as Percentage of Total Profit) and FSTS (Foreign Sales as a Percentage of Total Sales). Aspect of extensity bases on "the number of foreign countries in which activities take place" reflects "geographic scope" which shows the number of countries whose companies perform international activities.

Methodology

Method used in this study is verificative (Cooper and Schindler 2011). Verificative method is used by applying explanatory research, which is used to describe the nature of causal relationship through hypotheses testing. This study applies survey method with SMIs that conduct international business (export oriented) as the units of analysis. In addition, the units

of observation are owners, directors, vice directors, and managers in five sectors of industries, namely crafts, furniture, garment-fashion, agro (food and beverage), and leather/footwear, operating in the area of Jakarta, West Java and Banten, Indonesia.

Variable of network capital is measured by using 11 questions, and degree of internationalization is measured by using 3 items of question, with Likert scale. In this study, analysis technic used is structural equation modeling (SEM) based on variance structure, known as Partial Least Square (PLS-PM). Sampling of this study is conducted by applying the technic of stratification random samplingand the method of sample selection is done by proportional-random sampling (Sekaran 2009, Cooper and Schindler 2011).

Findings

In the analysis of the structural model, casualty testing between network capital to the degree of internationalization is conducted, as described below:

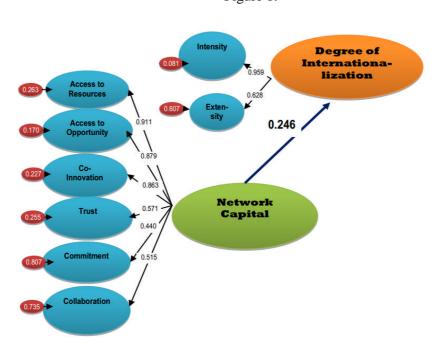


Figure 1:

Formulations of statistical hypotheses can be written as follows:

 $H_0: \gamma_{1,1}=0$ Degree of internationalization is not influenced by network capital

 $H_1: \gamma_{1,1} \neq 0$ Degree of internationalization is influenced by network capital

To test these hypotheses, statistical test of t student is conducted with the results as follows:

Table 1: Hypotheses Testing Result Effect of Network Capital to the Degree of Internationalization

Latent Variable	Path Coefficient	R ² (%)	t	\mathbf{f}^2	t-table	Description
Network Capital	0.246	6.052	2.680	0.039	1. 974	Ho is Rejected (Significant)

Source: Data Processing Result (2013)

Table 1 shows the information of network capital on the degree of internationalization of 0.246 or coefficient of determination is R 6.052%. In other words, the changes that occur in degree of internationalization are influenced by the changes made in network capital. So, degree of internationalization will be determined by network capital. Through hypotheses testing with t-student statistic, there was an effect of network capital to the degree of internationalization, it can be concluded that null hypothesis is rejected with t-value greater than the value of t-table. These results indicate that network capital influences positively and significantly to the degree of internationalization.

Discussion

Based on the description above, network capital plays an important role in supporting SMIs to do international activities. Building network can become a foundation for SMIs to be able to access resources (capital, raw materials, technology, and exhibition). Building network with business partners can improve access to information of international market opportunities such as market trends, consumer tastes, export regulations and business management. In addition, through network capital, SMI entrepreneurs can utilize business partners to support innovations through co-innovation(design improvement and product quality). Degree of internationalization shows the company intensity in international activities related to the financial return (profit and sales) as well as the coverage of international business operation. Thus, the ability to build network capital can support SMI entrepreneurs access to resources and knowledge as well as access to market that has low influence the intensity of doing international activities.

Evidences to suggested that network which is built by SMI entrepreneurs with buyers, suppliers, agents and associations play a role in supporting the access of resources and knowledge. The forms of supports given by partners among others are the use of exhibition facilities, supply of raw materials, quality improvement and product designs. Then, network built by SMI entrepreneurs with buyers, agents, suppliers and association is important to improve the access to market opportunities, namely in marketing and promoting products, offering competitive prices, and acquiring information about competitors. These findings are in line with the statement of O'Toole and McGrath (2008:5), that "building network with supplier and buyer is a method to access market opportunities offer products in a flexible way and to respond to prices and quality wanted by markets". One of example is that associations and government facilitate SMI entrepreneurs to participate in exhibition abroad. This support has a positive impact for SMI entrepreneurs because they have a chance to meet potential buyers.

Networks with partners thatare useful in supporting international business can be optimized through various efforts to maintain relationship. Maintaining mutual trust and always keeping promises and assurance of usefulness are considered by SMI entrepreneurs as important matters so that cooperation can be improved on the basis of mutual principles. This condition is in accordance with what is stated by Carson et.al.(2004) about relational dimension, namely trust, commitment and cooperation are important components in improving network linkageas the company power. One of the example the principle of maintaining mutual trust as well as building business cooperation on the basis of the principle of mutual benefit has been applied by SMI entrepreneurs by considering three important matters, namely quality, product design and continuity of the order fulfillment. Repeatitiveorderfrom buyers are important in order to keep the business running by maintaining a good relationship with buyers. Some SMI entrepreneurs reveal that they can maintain a relationship with buyers for more than 10 years because they always maintain a good relationship.

In summary, the result of this study proved that there is an effect between network capital and the degree of internationalization. This study supports the previous study conducted by Zimmerman (2010) which can prove that the stronger the relationship ties of small medium entrepreneurs and partner in network can influence the degree of internationalization. Other finding that strengthens this hypothesis is the study conducted by Tang(2011) which stated that optimal commitment and openness in network influence positively to the speed of internationalization. The result of this study also supports the findings of empirical study conducted by Javalgy et.al.(2012) stated that relational capital(creating a close relationship with consumers, suppliers, distributors) built through network has positive effect on the degree of internationalization.

Conclusion and Further Research

This study proved that network capitalinfluences significantly to the degree of internationalization, where the changes happen in the degree of internationalization is influenced the changes in network capital. Network can become a capital for SMIs to be able to support the intensity of activities in accessing resources and knowledge, access to market opportunities and to conduct co-innovation. The ability to build collaboration with business partners based on trust, cooperation and a high commitment will provide advantages in maintaining relationship. To support the impact of network capital on the degree of internationalization, then further research can be conducted using other exogenous variables which are not included in this study which is closely related to the concept of the degree of internationalization such as international knowledge, limited capital, and technological capability

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