



Chapter 3

The Proposed Model and Research Hypotheses

3.1 The Proposed Model

The genuine suggestion of the resource-based theory is that strategic resources bringing to the firm the sustainable competitive advantage which, in turn, enhance the firm's performance. Strategic resources, as discussed earlier, must possess the four strategic conditions: heterogeneity, imperfect imitability, imperfect substitutability, and imperfect mobility. The literature of the resource-based theory categorizes strategic resources in numerous ways: physical, human, and capital (Barney 1991); financial, technological, and reputational resources (Grant 1991); property-based and knowledge-based (Miller and Shamsie 1996). In this study, owner's social network is argued to be one of the firm's strategic resources missing from the literature and to possess the four strategic conditions.

Social networks attach to the firm as an internal resource that brings to the firm necessary and useful information, resources, and support from outside actors. The number of outside actors providing such information, resources, and support, whom the firm's owner know, can be observed by counting the relationship the owner establishes with outside actors who have high degree of centrality. These outside actors with high centrality degree imply that they are contacted by a great number of firms in the industry and that they possess useful information and support.

Quality of the relationship, however, can be observed by the other social network components: proximity and type. Proximity of the relationship is mainly the frequency of the contact between the firm's owner and the outside actors. With a high frequency of contact, more useful information, resources, and support is transferred from those outside actors to contribute to the firm's performance. In addition, type or mean of contact is also meaningful to the transmission of resource, information and support from outside to the firm. Social network theory suggests that different type of contact: instrumental versus expressive, makes different the level of resources, support and information conveyed from outside to the firm, thus having an impact on the firm's performance.

Beside social networks, the literature of export performance suggests that there are many other factors determining export performance, of which impact should not be neglected.

One of the earliest frameworks developed to explain firm's performance is the Industrial Organization framework by Rumelt (1974). The Industrial Organization model suggests that firm's performance is determined by behavior of the firm, called firm's strategy. Firm strategy is, in turn, determined by industry structure and other external environment. In the SSP framework, firm's strategy represents all factors internal to the firm. The model is commonly called the Structure-Strategy-Performance (SSP) framework.

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Aaby and Slater (1989) try to give a clearer picture of the internal components of those internal factors and the way they work to determine firm's export performance. Aaby and Salter's model distinguishes the internal factors influencing export performance into three components: firm's characteristics, firm's competence, and firm's strategy. Firm characteristics include firm size, management commitment, and management attitudes to export-related dimensions. Firm competence consists of technology, market knowledge, planning, export policy, management control and communication. Whereas firm's strategy means export marketing strategy of the firm which include product, promotion, pricing, and distribution strategy. While accepting the direct effect of external factors on firm's export performance, Aaby and Slater did not give much emphasis on the external factor on the ground that managers of the firms have only a minor influence on this aspect (Bijmolt, and Zwart 1994).

As the focus of this study is placed upon the impact of social networks on the firm's export performance, other internal factors not be included in the hypothesis testing.

3.2 Hypothesis Development

3.2.1 Social Network as a Strategic Resource of SMEs' Owner

The purpose of this section is to hypothesize that social networks meet the condition of a strategic resource of the firm as specified by the resource-based theory.

Resource-based theory and its categorization of resources seem to signal to scholars and practitioner to focus on internal component of firms to secure the firms survival and success. This is no surprise as the original purpose of the theory is to shift the emphasis of competitive strategy theories from external environment (as suggested by the Industrial Organization theory) to internal resources (Maijoor and van Wittelestuijn, 1996). In the resource-based theory, the impact of external environment on the operations of firms is not clearly distinguished. However, the path directed by the resource-based theory could mostly be denied by such contemporary scholar as Porter (1980, 1985, 1990) whose models, i.e. five forces and diamond of competitiveness, always recognize the importance of both internal and external dimensions of the firms. First, in order to introduce a conceptual model for firms to competitively excel in business world, the model must give a complete picture of all related factors. Otherwise, the theory can only be used to explain merely some phenomena, but can hardly be implemented to obtain a fruitful outcome. Second, firms do not operate in a vacuum. They are surrounded by external actors. As a consequence, there is no reason for a theory, especially the one claiming to give a means to establish a sustainable competitiveness, to ignore external environment of the firm and its impact.

In short, what the resource-based theory needs in order to be a more complete concept is a bridge connecting external environment of a firm to its internal resources. The main purpose of this paper is to argue that social networks function to fill that gap.

Social network is a structure, or pattern of relationship between an actor and others (Scott, 1991). Actor can be an individual person (Pastor and Mayo, 1995; Ibarra and Andrews, 1993) or an organization (Rowley, 1997). As discussed earliler, social network has been analyzed in both interpersonal level and interorganization level (Wholey and Huonker, 1993). However, one may suspect if social network meets the necessary conditions suggested by the resource-based theory. Yet one may also argue that resource-based theory has suggested that social networks inhibit resources that can generate sustainable competitive advantage must be in the condition of heterogeneity, ex post limits to competition, imperfect mobility, and ex ante limits to competition, all of which are also characteristics of social networks.

Heterogeneity mainly implies that strategic resources must be those that heterogeneous across firms and cannot be expanded freely or imitated by other firms. As social networks are personally attached to an individual and the course of the development of the networks in a person is temporal they are hardly identical. While it is true that two different people may be acquainted with the same other persons, their social networks are developed through personal channels, and are influenced by the personal attributes, which will be different. As a result of the social networks, the relationships between two different individuals and the same other third person are

most likely different. Thus, social network cannot be similar across individuals, let alone firms.

H1: SME owner's social network has a positive correlation with heterogeneity characteristic.

Although heterogeneity is an important source of strategic value of resources, their rents, in the long run, may dissipate unless *ex post limits to competition*, i.e. *imperfect imitability* and *imperfect substitutability*, are ensured. Imperfect imitability and imperfect substitutability are two important mechanisms preventing rent dissipation. The previous discussion of imitability and substitutability demonstrates that these two qualities of resource erode monopoly rents in the same fashion—by making individual demand curves more elastic. Imitability of social networks can be understood through job switch. It is not only personal skills and knowledge that new employers expect from the new employees, but also their networks (Baucus and Human, 1994; Friedman, Kane, and Cornfield, 1998). However, that case is true only if the network is attached to the firms' employees. In that case, social network will move from the old to the new workplace, representing another form of resource imitation. If the network belongs to the SMEs owner in this case, it never leaves the firm for there is no such job switch for the owner.

H2: SME owner's social network has a positive correlation with imperfect imitability characteristic.

What happen when the firm has multiple partners, when partners change, join another competing firm, or bring to the new partner his/her network? Even so, it cannot be said the network that is brought along with the owner (to the new firm) will work exactly in the same fashion as in the old place. Social network is completely different from tangible technology, which tends to work exactly every where after plugging in. The changes of internal and external context, the new surrounding (both human and non-human) all help explains the differences impact of social network when it moves from one place to another. As a consequence, it is hereby concluded that social networks incorporate both the qualities of imperfect imitability and imperfect mobility.

Imperfect substitutability of social network can also be similarly explained by the delineation of imperfect imitability and imperfect mobility. The complexity of social network in light of the development, application and impact of social network themselves makes it impossible to find or create a perfect substitute, especially in the face of imperfect markets.

H3: SME owner's social network has a positive correlation with imperfect substitutability characteristic.

The literature of resource-based theory has never mentioned, or even implied, social network as an important strategic resource despite its possession of these necessary conditions suggested by the resource-based theory. The conceptual explanation in this section not only adds social network into strategic resource categorization, but also extends the resource-based.

Although the main purpose of this study is the investigation of social network as a strategic resource, highlight of the study is the application of such concept to exporting SMEs. Move aside the importance of contributions from exporting SMEs to the country as described in the introduction, choosing exporting SMEs as the research context has a vital and theoretical meaning. Social networks do not emerge from organizational reality but actually from those who reside within them. Social network in large organizations may come from executives and employees at various levels. Therefore, the lines of relationship from the whole organization members to those actors outside can be very complex. Gathering all sources of social network of large organizations therefore requires a comprehensive investigation on owner, and almost every level of managers and employees. In addition, the nature of social network of employees (as opposed to owner) may violate the necessary condition of imperfect imitability. Social network of employees can be imitated if the employees move from one firm to another (as described in details in the previous section). Therefore, the ideal organization to be tested, that can ensure a reliable finding using the most parsimonious methodology, are small- and medium-sized organizations. This type of organization is normally an independent business entity where operational and administrative management are in the hands of one or two persons—usually the owner(s)/manager(s)—who are also responsible for making the major decisions of the firms (Tolentino, 1995). Next to the owner level are clerical positions and workers who do not have strategic relationship outside the firm. As a result, **the strategic social networks of SMEs basically derive from their owners, so that the social networks of the owner and the firms can be argued as being the same.**

H4: SME owner's social network has a positive correlation with imperfect mobility characteristic.

3.3.2 Impact of Social Networks on Firm's Export Performance

As the main purpose of this study is to argue that social network is a strategic resource providing firms a sustainable competitive advantage, firm's performance is a good indicator of whether the resources in question matters. In this particular study, the emphasis is on firm's export performance. The result of the study is aimed to deliver important messages to exporting SMEs and make them aware of social network configuration and its impact of export performance.

While social network analysis at the interpersonal level tends to focus on attitudinal confluence of individuals as the effect of their social interaction (Scott, 1991), at the interorganizational level, social network analysis articulates resources and information transfer across organizations (Wholey and Huonker, 1993). Mitchel (1969) mentions two important ingredients of social network, communication and instrumental actions. Regarding communication, he explains that social network is a sphere where information is transferred between individuals and social norms are established. As for instrumental or purposive action, he adds that material goods and services are transferred. Scott (1991), therefore, conclude that the combination of these two natures make social network a mean of information flow and resource transfer.

The relationship between the position in the network of each actor and the transfer of information and resources within the network is suggested by a study of Ibarra and Andrews (1993). According to the theory, actors located at the center of the network (those who are, to a great degree, referred by other actors) have greater control over relevant resources and enjoy a broad array of benefits and opportunities unavailable to those on the periphery of the network (Burt, 1982; Brass, 1992; Ibarra, 1993). Although the degree of information and resource transfer is different between similar and dissimilar organizations, it is in an agreement that interconnected organization in the networks does acquire needed resources from each other (Cook, 1977; Emerson, 1962; Galaskiewicz & Marsden, 1978; Levine & White, 1961). Actors who are located at the central of the network (having high degree centrality) tend to have more resources and valuable information than those on periphery of the network. Therefore, those who have connection with these high-degree-centrality actors should have an access to valuable information and resources, thus having a superior performance to those who do not.

H5: Social networking with central individuals and/or organizations is positively related to export performance.

Network proximity primarily concerns the frequency of interactions between individuals in the network (Scott, 1991). Traditionally, most research on network proximity relates to attitudinal influence of an individual on others. Basic assumption holds that behavior and attitude of individuals tend to be similar if the network proximity of the individuals (frequency of interactions) is of a high degree (Krackhardt and Porter, 1985; Tichy, Tushman, and Fombrun; 1987). This is because similar information, similar interpretations of the information tend to more efficiently spread within the network, and feeling of unity is established (Pastor and Mayo, 1995). If each actor in the network possesses different amount of valuable information and resources, and those who are at the central position of the network have most valuable information and resources, actors who more frequently interact with these central actors tend to receive relevant and valuable information and resources, resulting in a superior performance.

H6: Frequency of contact interacts with centrality in a positive relationship with export performance.

As suggested by the literature of social network, instrumental network links, which arise out of work-role performance, tend to be weaker links than those that emerge from relations based on friendship, which provide social support (Meyer, 1994). These two types of network affect the level of resources and information transmitted differently (Ibarra & Andrews, 1993). Frequency of contact, degree of trust and loyalty are greater in the expressive network, thus making social support, relevant information and valuable resources be transmitted more than in the instrumental one (Kanter, 1977). It is, therefore, can be expected that:

H7: Expressiveness interacts with network centrality in a positive relationship with export performance.

Diagram 3.1 shows the conceptual of the model derived from the literature review in this study. The model comprises 6 constructs, i.e. centrality, proximity,

expressiveness, export performance, control variables, and strategic resource characteristics. These 6 constructs will be used as the framework testing 7 hypotheses.

Methodology of the hypotheses testing is presented in chapter 4.

Diagram 3.1: The Conceptual Model

