FORMULATING A HOLISTIC MODEL TO DESCRIBE INTERNATIONAL DIVERSIFICATION OF CONSTRUCTION COMPANIES

A.-R. Abdul-Aziz, Universiti Sains Malaysia  
email: abdulrashid.abdulaziz@gmail.com

S. S. Wong, Universiti Sains Malaysia  
email: sing828@yahoo.com

A.-U. Awil, Iskandar Investment Berhad  
email: awil7@yahoo.com

Abstract

Several scholars have analysed the internationalization of construction companies by using various available models. These models are the Eclectic Paradigm, Stage Growth Theory, and Diamond Framework. Each model has its respective strengths and weaknesses. This paper proposes that a holistic approach combining the various models, not only the ones mentioned above but others as well (International Entrepreneurship, Network Approach, etc.), is a more appropriate portrayal of the complexities and realities of international diversification of construction companies. For example, the Eclectic Paradigm, which is primarily focused on foreign direct investment, excludes other forms of international involvement such as strategic alliance but is compensated by the network theory which illuminates how a variety of network relationships can influence internationalization. The disregard of the decision-maker or top management by most of the models is compensated by the international entrepreneurship school of thought. By unifying the various models, the shortcomings of one is compensated by the merits of another. In this paper, the extant internationalization models are presented individually before the holistic model, which combines all of them, is presented. The scholastic community should be prompted to examine construction companies in a holistic, rather than uni-model, manner.

Keywords: Holistic Model; Internationalisation; Construction Companies.

Introduction

Each of the models has its own set of strengths and weaknesses. A few scholars have expressed the need to look at internationalisation of the firm holistically (Ricart et al., 2004) and to consider their multidimensional aspects (Coveillo and McCauley, 1999). Responding to this call, this paper presents a holistic approach by combining the various extant models so as to combine their strengths and to mitigate their individual weaknesses with the aim of examining Malaysian contractors that have gone overseas.

The paper begins by presenting the various extant models which explain the internationalisation of businesses. It then presents the adopted model for the research which amalgamates these models.

**Literature Review**

A literature search was conducted for articles in mainstream business and management journals which focus on international business and international construction. The purpose of this exercise was to determine the models used by scholars when examining the internationalization of businesses. For this, databases such as Ebscohost and Proquest were, mainly but not exclusively, used. Articles published over the last ten years were covered. However reading the relevant articles required referring to articles preceding the set time-frame.

**Dunning’s Eclectic Paradigm**

By using Hymer’s (1976) Ownership Advantages (O), Vernon’s (1966) Locational Characteristics (L) and Buckley and Casson’s (1976) Internalisation Advantages (I) as foundation, Dunning (1977, 1988) developed the Eclectic Paradigm to explain the inclination of firms (i.e. multinational firms and potential multinational firms) to engage in foreign direct investment (FDI) or foreign value-added activities. According to the Eclectic Paradigm, there are three important decisive factors that determine the firm’s FDI:

1) Ownership Advantage: this advantage refers to the firm-specific and country-specific competitive advantage and of Multinational Enterprise (MNE). It explains the ‘why’ question of FDI. Ownership advantage emphasises the extent to which MNE possesses internal transferable advantages over its local and foreign competitors in the host country.
2) Locational Advantage: this advantage refers to the degree of attractiveness of certain locations where an MNE has the intention to invest. It explains the ‘where’ question of FDI. Locational advantage is influenced by political, economic, and social factors.
3) Internalization Advantage: This advantage refers to the benefit that a firm obtains from direct internal control instead of other market entry modes (e.g. licensing). It explains the ‘how’ question of FDI. Internalization advantage emphasises the extent to which the firm is able to manipulate its internal competitive assets (i.e. ownership advantages) and integrates its ownership advantages with locational advantages in the host country.

**Stage Growth Theory**

Stage Growth Theory explains the internationalisation of a firm as an incremental, step-by-step process. Initially, a firm is a low commitment exporter. After gaining sufficient international knowledge and experience, and overcoming the psychic distance phenomenon, it becomes a committed exporter. The psychic distance concept explains the movement of a firm initially from the nearest region, which has a culture and a language similarity, to later moving towards outer regions. The theory identifies four main stages: (1) irregular export activities, (2) indirect exporting through agents, (3) direct exporting, and (4) overseas production/manufacturing (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977; 1990). Cavusgil (1980) proposes another Stage Model by referring to the export/sales ratio of a firm. He divides a firm’s internationalisation process into five stages: (1) domestic marketing with an export/sales ratio of 0; (2) pre-export with an export/sales ratio of at or near 0; (3) experimental involvement with an export/sales ratio of
from 0 – 9%; (4) active involvement with an export/sales ratio of from 10 – 39%; and (5) committed involvement with an export/sales ratio of or more than 40%.

Diamond Framework
Porter (1990) came up with the Diamond Framework to explain the major determinants of competitive advantages and their interactions. Under the framework there are four competitive advantages: (1) demand conditions, (2) factor conditions, (3) related and supporting industries, and (4) context for firm strategy and rivalry. Additionally, there are two exogenous factors: (1) role of government, and (2) chance events; which play an important role in influencing those four competitive advantages. Porter (1990) argues that the role of government is only a partial determinant towards enhancing competitive advantage. It is indirect and the results can only be observed after a period of time. The government’s role includes policy setting for capital market, providing educational support, establishing standards, and demands and service procurement. Chance events are those phenomena that are normally outside the powers of the firm and government. These events (e.g. changes in production factors, changes in exchange rates, new inventions, surges in demand, and wars) can alter the conditions of competitive advantage.

Network Approach
Johanson and Mattson (1988) have applied the Network Approach to explain the internationalization of firms. They argue that firms establish and develop their foreign markets by using their foreign network partners through international extension, penetration, and international integration. They use the term “net” to categorize certain networks, such as national net (networks in other countries) and production net (relationships in a specific product area). Johanson and Mattsson categorize firms into four types: (1) Early Starter; (2) Lonely International; (3) Late Starter; and (4) International Among Others.

The firm’s network can act as catalyst for international business expansion (Merrilees et al., 1998; Coviello and McAuley, 1999) by overcoming internal resource deficiencies (Westhead et al., 2001), gaining access to knowledge and experience which the firm lacks internally (Vida et al., 2000), minimizing disadvantages of smallness, and overcoming unknown markets and psychic distance issues (Rutahoby and Jaensson, 2004). Therefore, the Network Approach explains the internationalisation of firm from the behavioural perspective (Jones and Coviello, 2005).

International Entrepreneurship Model
As early as in 1969, Perlmutter mentioned a firm’s management team’s role in the internationalisation process. Johanson and Wiedersheim-Paul (1975), in their psychic distance concept, also emphasise the same aspect. Dichtl et al. (1983) propose four indicators of management’s international orientation: (1) psychic distance, (2) management objective characteristics, (3) management subjective characteristics, and (4) managerial attitude about export. Furthermore, McDougall (1989) has grouped ‘International new ventures’ as entrepreneurial firms. Uncertainty is positively related to entrepreneurship (Balabanis and Katsikea, 2003; Miller, 1983). Entrepreneurship moves firms from certain conditions in the home country to international activities (Oviatt and McDougall, 1994) and helps them to encounter contingency effects of uncertainty in the foreign/host country, where the main terrain of a firm’s internationalization activities is located (Dimitratos et al., 2003). This happens particularly in SMEs, as decision-making is concentrated in the hands of one or a few persons and the entrepreneur has a unique and crucial role in the organization (Bloodgood et al., 1996; Westhead et al., 2001). Hence, we cannot deny that entrepreneurship plays an important role in firm’s internationalisation.

Liability of Foreignness
Arguably, the attraction of foreign location is normally confined to one of two factors, regardless of whether the multinationals are resource-seeking, market-seeking, efficiency-seeking, or asset-seeking (Narula and Dunning, 1998). For resource-seeking multinationals, the attraction of the
host country is the availability of otherwise scarce resources (mineral, cheap labour, etc.). For market-seeking multinationals, the untapped demand of the products or services in the host country is what draws them to enter its market. For efficiency-seeking or asset-seeking multinationals (which are quite similar), sub-national clusters and agglomeration of related activities are the attraction of the host country. All other host country factors conspire against foreign multinationals which, at best, can only be attenuated. Hence, it has been argued that due to the challenges of operating on foreign soil, it is more appropriate to reverse the concept to ‘locational disadvantages’ that host countries are endowed with (Abdul-Aziz, 1991). Zaheer’s (1995) liability of foreignness (LOF) concept presents the same argument, but much more eloquently. It has found favour by a number of scholars (e.g. Miller and Parkhe 2002, Chen et al. 2006, Daamen et al. 2007).

Firms going into particular overseas markets, especially for the first time, suffer from a broad range of deterring factors, from spatial distance between home and host countries, unfamiliarity with host country environments, economic nationalism and a lack of legitimacy in the host country to sales restriction impositions by the home country, which can all come under the scope of LOF (Zaheer, 1995; Zaheer and Mosakowski, 1997). Basically, LOF has been defined as “all additional costs, a firm operating in a market overseas, incurs that a local firm would not incur (Zaheer 1995, p. 343). Other scholars have added to the list of sources of LOF (Eden and Miller 2001). ‘Cost’ here is the generic term meaning not only various costs but also ‘foreignness”; induced hazards and uncertainties that obstruct the generation of earnings (Luo et al., 2002).

**Coming Up With A Holistic Model**

Coviello and McAuley (1999) argue that it is difficult to capture internationalisation of firms through the use of any single theoretical framework and it is beneficial for researchers to adopt a combination of theoretical frameworks to best capture both the dynamic process and broad concept of internationalisation. Jones (2001) argues that achieving a better understanding of internationalisation depends on accommodating a wide range of theories in the research framework and generating richer data by focusing on a homogeneous set of firms. Dunning (2001) himself asserts that there is no single theory of internationalisation that can encompass all kinds of industries, for the simple reason that motivations to internationalise vary a great deal. Ricart et al. (2004) recommend that to better understand internationalisation, it is advisable to use an integrative framework and pay implicit attention to industry contexts. In the same vein, Ofori (2003) has also argued for the application of an integrative framework to analyse international contractors.

Axinn and MatthysSENS (2002) argue that it is important to take note that the internationalisation theories were based on specific environmental contexts, to explain a specific industry. Therefore the ability of these theories to explain and predict internationalisation by firms in different environments and periods of time, and in different industries has diminished: British firms in the case of the Eclectic Paradigm (Dunning, 1977; 1988), Swedish firms for the Stage Growth Theory (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977, 1990), Scandinavian firms for the Network Approach (Johanson and Mattson, 1988) and computer software industry for International Entrepreneurship (Oviatt and McDougall, 1994).

**Research methods**

The study adopted both the qualitative and quantitative methods, ensuring that the conclusions are strong by triangulating the data. Yeung (1995) argued that research in international business requires researchers to consider contextual factors in method selection. The adoption of a mixed method was therefore based on pragmatism in order to best meet the research objectives of uncovering as much as possible about the internationalisation of Malaysian housing developers
(Johnson and Onwuegbuzie 2004). The mixed method involves the collection and analysis of both quantitative and/or qualitative data in a single study in which data are: collected concurrently or sequentially, are given priority, and involve the integration of data at one or more stages in the process of research. The advantages of using multiple methods include guarding against the inherent methodological bias (Brewer and Hunter, 1989) and providing opportunity for presenting greater diversity of divergent views (Teddie and Tashakkori, 2003). Even if mixed methods have been criticised for their lack of rigour compared to single method approaches (Tashakkor and Teddlie, 2003). However triangulation, whereby several sources of data are relied upon, helps overcome this weakness (Jicks 1979). The present research not only adopted a mixed approach but also the triangulation strategy.

From the outset, it was decided that getting the cooperation of the Malaysian Construction Industry Development Board (CIDB) was a necessity. CIDB is assigned, by a statute, to ensure the proper development of the construction industry. Among its responsibility is the promotion of Malaysian contractors overseas through market-opening initiatives such as trade delegations and match-making with local contractors. The results of the study will be forwarded to CIDB for their own internal use. Thus the study promises to bear academic, as well as pragmatic, value.

Research results

The data, which has been collected thus far from postal questionnaire surveys (14 out of the 74 contractors known to have gone overseas returned the completed questionnaires) and follow-up interviews (six companies which returned the questionnaires agreed to be interviewed), tentatively validates the holistic approach presented above. The Eclectic Paradigm, Diamond Framework, Stage Theory, International Entrepreneurship Model, Network Approach and the Liability of Foreignness concept, when combined into a holistic model, mutually overcome each other’s limitations while capitalising on strengths.

Discussion and Conclusions

Based on the arguments presented above, the present research opted for a theoretical framework that combines the extant models of internationalisation so that their respective strengths are utilised and drawbacks are compensated. In terms of their strengths, for example, the Eclectic Paradigm (Dunning, 1977; 1988) creates awareness of a firm’s need to build and maintain sustainable competitive advantages if it is to succeed in foreign market exploitation (Porter, 1990; Prahalad and Hamel, 1990), the Stage Growth Theory draws attention to how firms internationalization incrementally by accumulating experiential knowledge (Whitelock, 2002; Bell et al., 2004; Mtigwe, 2006), and Porter’s (1990) Diamond Framework brings to the fore the competitive strategy analysis, thereby enhancing the dynamic context of the framework (Grant, 1991).

In terms of drawbacks, the Diamond Framework is static (Narula, 1993) which the Stage Growth Theory can help overcome. The location aspects are ignored by the Diamond Framework, which the locational advantage (Dunning, 1993) and by extension the liability of foreignness concept can help compensate. The International Entrepreneurship theory prevails over the Eclectic Paradigm’s limited predictive power (Lundgren, 1977; Jones, 1996) and its focus on the equilibrium state (Johanson and Vahlne, 1990) overcomes the weakness of Stage Growth Theory’s explanation for the internationalization process, which is too deterministic (Buckley and Pearce, 1979; Reid, 1986; Bell, 1995) and must follow specific stages (Buckley and Chapman, 1997). It has been argued that the Eclectic Paradigm is less applicable for today’s ‘alliance capitalism’ (Li, 1998; Madhock, 1997: Matthews, 2002) or network economy (Axinn and MatthysSENS, 2002).
The Stage Growth Theory also ignores the importance of social interaction and relational exchange (Vahlne and Nordstrom, 1988,) and the role for networks (Rutashoby and Jaensson, 2004). It fails to explain the networks and relationships between firms as well (Hutchinson et al., 2006). However, the Network Approach can complement the Eclectic Paradigm and Stage Growth Theory as it is able to illuminate how the resources, activities and actors within the networks affect various dimensions (Håkansson and Snethota, 1995; Kundu and Katz, 2003). By incorporating the Network Approach, the holistic model recognises that firm internationalization is never a “solo” effort but that is a product of network relationships that are both formal and informal (Mtigwe, 2006). However, the Network Approach does not acknowledge the importance of the decision-maker and the firm’s characteristics in taking advantage of the international opportunities which emerge from the networks (Chetty and Holm, 2000). In this sense, the International Entrepreneurship model complements the Network Approach, as it does with the others.

**Fig. 1. Holistic model to explain internationalisation of Malaysian contractors**

This approach promises to yield interesting results which cannot possibly be obtained from single model approaches. While data collection for international Malaysian contractors using a postal questionnaire survey and follow-up interviews have yet to be concluded, the tentative findings are promising. The more apparent contribution of this paper lie in presenting the theoretical framework which combines the extant literature on internationalisation of businesses. This holistic approach promises to generate rich data which better represent the complexities and realities of international diversification of construction companies. Other scholars are encouraged to adopt this approach when examining international construction companies in other countries.
Key Lessons Learned:

- Every model on internationalization of businesses has its own inherent shortcomings and strengths.
- By combining the various models into a holistic approach, the shortcomings of the various models can be compensated for by the merits of the others.

References


Process Of Behaviour In Time” *Journal of International Business Studies*, Vol. 36, No 3, 
pp.284-303.


Lundgren, N. (1977) “Comment in Ohlin B”, in P. O. Hesselborn and P. M. Wijkman (eds.), *The 


Press; New York, NY.


Entrepreneurial Internationalization” *Small Enterprise Research*, Vol. 6, No 2, pp.3-11.


empirical test of banks’ x-efficiency” Vol. 23, No. 1, pp.55-75.


Enterprise (Developing Host Country Interaction)”. Revised version, 14th September, 
University of Oslo.


Oz, O. (2001) “Sources Of Competitive Advantage Of Turkish Construction Companies In 
International Markets” *Construction Management and Economics*, Vol. 19, No 2, pp.135- 
144.


Author’s Biography

Professor A.-R. Abdul-Aziz teaches at the School of Housing Building and Planning, Penang, Universiti Sains Malaysia. He has published articles in various international journals. His research interests focus on international construction.

S.-S. Wong is a research officer attached to the School of Housing Building and Planning.

A.-U. Awil completed his PhD in 2005 under the supervision of Prof A.-R. Abdul-Aziz. He is now attached with a semi-private organisation in charge of developing one of the largest development in South-East Asia.