Greek and Dutch SMEs Entry Mode Choice and Performance:
A Transaction Cost Perspective

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Although small and medium sized enterprises (SMEs) account for a significant portion of international trade, little is know about how they make international entry mode decisions. In this paper we start to investigate this issue by (1) examining the applicability of transaction cost theory to the SME international entry mode decision and (2) exploring the normative implications of using transaction cost based mode choices. We found that transaction cost theory did a good job of explaining SME mode choice and that SMEs that used transaction cost predicted mode choices performed better than firms using other mode choices.

Key words: SMEs, Transaction cost, Entry mode choice, Mode performance, Greek firms, Dutch firms, Central and Eastern Europe.

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International entry mode choice is considered a critical strategic decision (Lu, 2002). In an attempt to understand this choice, scholars have primarily focused on transaction cost theory (Brouthers & Brouthers, forthcoming; Delios & Beamish, 1999; Erramilli & Rao, 1993; Hennart, 1991; Gatignon & Anderson, 1988; Anderson & Gatignon, 1986). Yet as Zacharakis (1997, p. 26) suggests, although these "studies demonstrate the robustness of the [Transaction Cost] model, they fail to examine how the model applies to smaller entrepreneurial firms". In fact, the international entry mode literature has virtually ignored the entry mode choice activities of small and medium sized enterprises (Burgel & Murray, 2000; Jones, 1999; Zacharakis, 1997).

Overall, the international activities of small and medium sized enterprises (SMEs) have received far less attention from international and strategic business scholars than large firm activities (Lu & Beamish, 2001; Coviello & McAuley, 1999). However, the importance of SMEs in international trade has increased tremendously in recent years (Bonaccorsi, 1992; Oviatt & McDougall, 1997). A comprehensive study of internationalizing SMEs estimated that their exports account for approximately 35 percent of world manufacturing trade in certain industrial sectors (OECD, 1997).

International studies of SMEs tend to concentrate on the internationalization process (Wolff & Pett, 2000; Oviatt & McDougall, 1997; Barringer & Greening, 1998). These studies examine the characteristics, either firm or managerial, of SMEs that have decided to expand abroad, motivation for international expansion, differences between international and non-international firms, the countries SMEs have entered and the modes

of entry they have used, but not the reason for selecting a particular mode (Coviello & McAuley, 1999; McDougall & Oviatt, 1997). A common characteristic of these studies is that they tend to perceive international involvement as a desirable behavior for SMEs and do not examine whether this activity has contributed to the overall performance of the firm (Lu & Beamish, 2001).

Few studies (including large firm studies) have examined the relationship between entry mode choice and performance (Brouthers, 2002; Brouthers, Brouthers & Werner, 1999). Woodcock, Beamish and Makino (1994) suggest that the main reason for this lack of entry mode-performance related research tends to be the difficulty in obtaining reliable performance measures. Reliable performance measures are difficult to obtain internationally because (1) accounting standards tend to differ from country to country thus creating non-comparable figures, and (2) companies are reluctant to disclose performance data especially at the subsidiary level. A second explanation proposed by Nitsch, Beamish and Makino (1996) is that researchers treat performance as a secondary issue to entry mode choice. This line of reasoning contends that multinational companies evaluate their available entry mode options and select the one that will provide them with the highest economic payoff, hence the mode they choose is "assumed" to be the best performing one, by definition.

In this paper we contribute to the SME internationalization literature by (1) examining the generalizability of transaction cost theory to SMEs by applying transaction cost theory to the SME international entry mode selection decision, and (2) exploring the normative consequences of making SME international entry mode choices using the transaction cost model.

TRANSACTION COSTS AND MODE CHOICE

Transaction cost (TC) theory has been widely used in entry mode research to explain why large companies utilize different modes in expanding abroad (Brouthers & Brouthers, forthcoming; Delios & Beamish, 1999; Erramilli & Rao, 1993; Hennart, 1991; Gatignon & Anderson, 1988; Anderson & Gatignon, 1986). Williamson (1985) suggests that companies adopt a certain organizational structure -- markets (non-equity modes) versus hierarchies (equity modes) -- when expanding abroad based on how efficient one structure is compared with the alternative structure.

The two main costs that TC theory examines are *market transaction costs* and *control costs* (Williamson, 1985; Hennart, 1989; Williamson & Ouchi, 1981). Williamson (1985; Williamson & Ouchi, 1981) also suggests that frequency of interaction is an important determinant of transaction costs, however in entry mode studies transactions are considered continuous thus precluding the need for a separate measure of frequency (e.g. Brouthers & Brouthers, forthcoming; Erramilli & Rao, 1993).

While a company can protect its proprietary know-how and minimize its market transaction costs by integrating its foreign operations, it also has to balance the need for integration with the costs of controlling the hierarchical structure (Erramilli & Rao, 1993; Hennart, 1989). According to Hennart (1989, p. 215) "a shift to hierarchy means that one of the parties to the exchange becomes an employer [subsidiary] to the other." As a result the party (the new subsidiary) is not rewarded for market performance, but for following internal managerial orders. This increases the internal control costs of the organization because the firm may incur significant bureaucratic costs in controlling the new operation. Because of these increased control costs, hierarchical equity modes of

organization structure are not always superior to market-based non-equity forms. Only when internal organizational costs are lower than market transaction costs will it be efficient for a company to organize itself as a hierarchy (Hennart, 1989). Consequently, firms tend to select entry modes that balance the advantages of integration with the additional costs of control.

Market Transaction Costs

Market transaction costs are related to the *asset specificity* of the investment required when making a new foreign entry. Asset specificity refers to the physical and human resources that a company uses to complete a specific task that may lose value in another use (Williamson, 1985; Williamson & Ouchi, 1981). A firm that possesses unique technology and know-how has to take extra precautions in order to protect its differentiated assets from falling into the hands of competitors. Williamson (1985) suggests that a transaction that requires more asset specific investment will be structured through hierarchies in order to reduce the transaction costs associated with opportunism.

Opportunism is the natural seeking of self-interest by individuals (Williamson, 1985). According to Williamson (1993; Williamson & Ouchi, 1981), if opportunism did not exist markets could handle most transactions and the need for hierarchical organizations and complex contracting disappears. It is because of market failure to operate efficiently and to discourage opportunistic behavior that forces companies to internalize their transactions in order to avoid costs of finding, negotiating and monitoring the activities of an external party (Hennart, 1989; Klein, 1989). Hence, previous MNE research tends to show that firms prefer equity modes of entry when

making high asset specific investments (Delios & Beamish, 1999; Erramilli & Rao, 1993; Gatignon & Anderson, 1988).

Contrary to this, when asset specificity is low, firms tend to prefer non-equity, market based modes of entry. As Anderson and Gatignon (1986, p. 13) state "because the requisite knowledge is well codified and widely available for hire, the entrant does not need to supplement the control offered by the market mechanism." When the specificity of the investment is low, firms face lower market transaction costs because the chance of opportunistic behavior is low (Williamson & Ouchi, 1981). Where in a high specificity investment the loss of a foreign intermediary can prove to be very costly, in the case of a low specificity investment the replacement of a foreign agent can be a fairly simple task. Previous transaction cost based scholarship has found that when asset-specificity is low firms tend to use market-based non-equity modes of entry (Delios & Beamish, 1999; Erramilli & Rao, 1993; Gatignon & Anderson, 1988).

It is presently unclear whether asset specificity plays an important role for SMEs. Some scholars (e.g., Pavitt, Robson & Townsend, 1987; Acs & Audretsch, 1990) have suggested that SMEs tend to rely on highly innovative products and services. Other scholars (e.g., Symeonidis 1996; Tether, Smith & Thwaites, 1997) tend to find that SME technology is less advanced than MNEs.

Despite this uncertainty, several studies have shown that SMEs with greater technological advantages use different modes of entry than SMEs without such advantages. For example, Burgel and Murray (2000) found a positive relationship between R&D intensity and the use of equity modes of entry for their sample of U.K. start-up companies in high technology industries. Similarly, Osborne (1996) found that

New Zealand SMEs that possessed a higher ability to develop complex technically differentiated products tended to use equity entry modes, while companies selling undifferentiated commodities used non-equity modes. Hence, although the extent of SME innovativeness is unclear, we expect that SMEs will react to asset specificity in a manner similar to large firms:

Hypothesis 1.   SMEs will tend to prefer non-equity modes of entry when asset specificity is low but tend to prefer equity modes of entry when asset specificity is high.

Control Costs

Transaction cost theory suggests firms face two types of control costs: internal and external (Gatignon & Anderson, 1988; Williamson, 1985).   Internal control costs are associated with an organization's ability to efficiently internalize and integrate a hierarchical structure (Klein, Frazier, & Roth, 1990). Inability to manage efficiently a hierarchical bureaucratic structure of a foreign subsidiary will leave an organization open to potential employee free-riding or shirking which may inhibit goal attainment. In these situations, firms incur costs to control foreign operations, establishing systems to monitor and manage the activities of subsidiary units (Gatignon & Anderson, 1988).

Gatignon and Anderson (1988) suggest that through experience, firms develop systems and processes for managing geographically disperse units. Through these systems and processes managers can control the actions of employees in distant operations, reducing the threat of free-riding, shirking and dissemination. Firms that have developed these systems and processes for controlling geographically disperse sub-

units find that internal control costs are relatively low and prefer to expand internationally through equity based hierarchical modes of entry.

Conversely, firms that lack international experience may not have developed these systems and processes for managing distant units, and as a consequence, may incur high costs in trying to control foreign sub-units. In this situation, non-equity, market based modes may be preferred because market based modes mean that local firms take responsibility for managerial control of the local operation (Anderson & Gatignon, 1986).

Internal control costs may be an especially important influencing factor for SMEs, because SMEs tend to rely on the managerial abilities of one or two entrepreneurs, and have less well-developed management teams (Oviatt & McDougall, 1997). SMEs may not have the ability or willingness to establish a competent managerial structure in another country. In addition, SMEs are generally less experienced internationally and so may not have well developed systems and processes for managing these foreign operations. Therefore, internal control costs may inhibit SMEs from organizing foreign operations in a hierarchical form. Recent SME research tends to provide support for the importance of experience. Shrader, Oviatt and McDougall (2000) found that SMEs with management teams having greater international experience tended to prefer equity entry modes while those SMEs with management teams having less experience in the international arena tended to prefer non-equity modes. This tends to suggest that:

Hypothesis 2. SMEs will tend to prefer non-equity modes of entry when they have little international experience but tend to prefer equity modes of entry when their international experience is high.

The second type of control cost that firms need to consider when making an international entry mode decision are external control costs. External control costs refer to the risks associated with a host country; for example ability to enforce contracts and control other types of political and legal risk (Williamson, 1985; Gatignon & Anderson, 1988). If a company desires increased control it has to commit additional resources. However, by committing additional resources a firm increases its exposure to external environmental risks (Anderson & Gatignon, 1986). In countries with high external uncertainty, companies may be better off selecting non-equity, low investment entry modes. This strategy "not only avoids resource commitment but frees entrants to change partners or renegotiate contract terms and working arrangements relatively easily as circumstances develop and change" (Anderson & Gatignon, 1986, p. 15). By following a low resource commitment strategy in an uncertain market a company can retain flexibility and, if the need arises, switch partner organizations or exit the market entirely if the situation so dictates.

Past research on the behavior of MNEs has provided empirical support for the relationship between external uncertainty and the selection of entry modes. Gatignon and Anderson (1988) found that US based multinational companies tended to use equity entry modes when external uncertainty was low, but tended to prefer non-equity modes in more uncertain parts of the world. Erramilli and Rao (1993) also found that US service firms perceiving high country risk opted for less equity-intensive entry modes.

SME research examining external uncertainty and entry mode choice is less clear. Burgel and Murray (2000), in their study of the market entry choices of start-up companies in high technology industries, found no significant relationship between

country risk and entry mode choice. McNaughton and Bell (2001) also found no significant relationship between environmental uncertainty and entry mode in their study of small knowledge-intensive companies. Shrader, Oviatt and McDougall (2000), on the other hand, found a significant negative relationship between country risk and entry mode choice for their sample of U.S. high-technology start-ups. Firms entering countries characterized by high country risk tended to select non-equity modes of entry while firms entering low risk countries tended to opt for equity modes of entry. Based on both the theoretical and limited SME empirical evidence we suggest that:

Hypothesis 3. SMEs will tend to prefer equity modes of entry when external control costs are low but tend to prefer non-equity modes of entry when external control costs are high.

MODE CHOICE AND PERFORMANCE

In studying the relationship between internationalization strategy and SME performance, Lu and Beamish (2001) discovered a strong connection between entry mode type and performance. They found that non-equity exporting and equity based foreign direct investment (FDI) modes of entry had different impacts on performance. Exporting companies tended to experience a negative impact on profits as their level of internationalization increased, while firms engaging in FDI experienced a non-linear relationship. Companies with low levels of FDI showed a decline in performance, but as FDI increased the degree of internationalization exerted a positive impact on performance. This tends to indicate that, at least for SMEs, entry mode type may be an important determinant of international performance.

Other scholars have made similar observations for large firms. For example, Woodcock et al (1994) found that firms using wholly owned greenfield ventures outperform firms using joint ventures, and firms using joint ventures outperform firms using wholly owned acquisitions. Nitsch et al (1996) found that firms using wholly owned greenfield ventures and joint ventures tended to have higher performance compared to firm using wholly owned acquisitions. Finally, Pan, Li and Tse (1999) found that firms using equity joint ventures had higher profitability in comparison to both wholly owned operations and contractual joint ventures.

While these studies contribute to our understanding of entry mode performance differences Brouthers et al (1999) and Brouthers (2002) suggest that future research take a different approach to examining the relationship between mode choice and performance. These scholars suggest that instead of examining performance differences for different entry mode types, research should focus on how contingency model (for example transaction cost) based mode of entry choices may differ in performance from non-contingency model based mode choices. This additional step is important because managers using contingency models to determine mode choice will be more satisfied with the model if it provides the best performing mode choice.

Scholars have suggested that the transaction cost based contingency model of mode choice can successfully predict better performing entry modes because transaction cost theory addresses the question of why companies organize internally those activities that in other cases would be pursued through markets (Roberts & Greenwood, 1997; Williamson, 1985). The basic premise of TC theory is that organizations exist because "they are able to economize on the costs of exchanging goods and services in the market"

(Roberts & Greenwood, 1997, p. 348). As Roberts and Greenwood (1997) note, the transaction cost explanation is a comparative-efficiency one. According to Hennart (1989, p. 214) "because each [entry] mode differs in the method it uses to organize activities, each will be more efficient in organizing a particular type of transaction." However, previous scholarship has tended to ignore the efficiency aspect of mode choice (Brouthers, 2002; Woodcock et al, 1994).

Transaction cost theory suggests that when structuring an exchange (or in our case multiple exchanges) a firm must compare the costs of negotiated contracts using the market with the costs of internalizing the transaction within the firm. Profit-seeking companies will try to adopt organizational structures that will minimize these transaction costs (Masten, 1993; Williamson, 1985). It is important to note that transaction cost theory does not suggest that equity modes of entry are always superior to markets (Hennart, 1989). In some cases equity modes may be appropriate, while under other circumstances contractual agreements negotiated through markets can be more efficient. If a company, due to erroneous managerial decision processes or because of home and host country pressures, adopted an inappropriate entry mode it would be expected to have lower performance in comparison to a company that made its entry mode choice based on transaction cost criteria (Shrader, 2001; Masten, 1993). Hence, we suggest that:

Hypothesis 4. SMEs that utilize transaction cost predicted modes of entry will perform better than SMEs that utilize other modes of entry.

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METHODOLOGY

Data for this study were collected with a questionnaire sent to a sample of small and medium sized Dutch and Greek companies involved in Central and Eastern Europe (CEE). Dutch and Greek firms were selected because the majority of firms in these countries are SMEs, they have a long history of international investment, and Dutch and Greek firms are among the most active investors in CEE (Meyer, 1995). CEE target markets were examined because scholars like McDougall and Oviatt (1997) suggest that SME research needs to be extended to the markets of CEE. In addition, Uhlenbruck and De Castro (2000) suggest that Central and Eastern Europe offers an exciting location in which existing management theories can be tested.

Reports in the Greek and international press suggest that more than one thousand Greek companies have invested in the markets of CEE. However, no complete listing of these firms exists. We developed a list of 450 Greek firms doing business in CEE by examining a variety of sources (Greek newspaper articles, magazine articles, exporter associations, as well as various government sources).

The sample of Dutch companies investing in CEE countries was developed through two main sources. The first source was the REACH CD-ROM database through which 122 Dutch companies with CEE operations were identified. The second source was a seminar for 297 Dutch companies showing an interest in investing in CEE countries. Because it was impossible to identify which companies were large or small and which were doing business in CEE and which were not, the questionnaire was mailed to all 419 Dutch companies. In the subsequent data analysis only information from

companies that did business in CEE and had less than 500 employees, the prevailing cut off point of a SME, was used.

Questionnaire Development

The questionnaire used in this study was originally composed in English. All Dutch companies were sent the English version of the questionnaire. For the Greek sample, the questionnaire was translated into Greek. The instrument then was back-translated to ensure its reliability. The final instrument was tested with a group of seven Greek businessmen to see whether it was easy for them to understand and to ensure that the operational measures devised in previous large-firm research studies were applicable in the context of small and medium-sized companies. No significant changes to the original questionnaire were necessary.

Dependent Variables

Two dependent variables were used in this study. First, to test the generalizability of transaction cost mode choice theory to SMEs (hypotheses H1-H3), the dependent variable was entry mode choice. Based on past research (Pan & Tse, 2000; Erramilli & D'Souza, 1993; Kwon & Konopa, 1993; Contractor, 1984) we examined two mode types (1) market based non-equity modes, such as licensing, franchising, and exporting, and (2) hierarchical based equity modes, such as wholly owned foreign subsidiaries and joint ventures. Pan and Tse (2000) found that when the dichotomous entry mode variable (equity versus non-equity) was used many determinants impacting entry mode choice that otherwise failed to register as significant within more differentiated classification

schemes were found to be significant predictors of entry mode choice. The dependent variable was coded zero (0) for equity modes (wholly owned subsidiaries and joint ventures) and one (1) for non-equity modes (export ventures, franchising, and licensing agreements).

Our second dependent variable was performance. As others have observed, obtaining objective performance data about international subsidiary operations is fraught with difficulties (Brouthers, 2002; Brouthers et al, 1999; Nitsch et al, 1996). The main impediments are the reluctance to disclose financial data, especially from SMEs, and the incompatibility of the various accounting standards between countries. Performance measurement is even a greater problem in Greece, where many companies are privately owned and are reluctant to disclose sensitive financial information to outsiders (Hope, 1997).

As in pervious international entry mode studies we used subjective measures of performance (Brouthers, 2002, Brouthers et al, 1999). Subjective measures of performance have been found to be highly correlated with objective performance measures (Dess & Robinson 1984; Glaister & Buckley 1998). Hence, utilizing subjective measures may provide valuable insights on performance not attainable though objective financial measures.

Respondents were asked to rate performance on a 10-point scale (1 very dissatisfied to 10 very satisfied) for the entry mode they used in their most recent CEE venture. Eight performance criteria were included: sales growth of the venture, sales level, profitability, market share, marketing, distribution, reputation, and market access. Subsequently, factor analysis identified two distinct performance factors: financial and

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non-financial. The financial performance factor was composed of the summated scores of sales growth, sales level, and profitability (Cronbach alpha = .89). The non-financial performance factor was composed of the summated scores of market share, marketing, distribution, reputation, and market access (Cronbach alpha = .90).

Independent and Control Variables

The independent variables examined in this study stemmed from Williamson's (1985) conceptualization of transaction cost theory and have been included in previous transaction cost studies that examined large-firm entry mode behavior. Transaction cost measures included asset specificity and two types of control costs, internal and external.

As in Brouthers and Brouthers (forthcoming), asset specificity was measured using three seven-point Likert-type questions that examined the specificity of firm-specific training programs, ability of the organization to create new products or services, and the extent of resources available for international expansion (alpha = .75).

Gatignon and Anderson (1988) suggest that internal control requirements tend to be a function of the international experience of the firm. Firms with greater international experience may have developed systems for controlling international operations. These systems allow the firm to internalize international operations at a lower cost than when such systems do not exist. For firms with less international experience, these systems of control may not be fully developed. In these circumstances firms may prefer to transfer control to the local partner organization. We measured the level of these internal control costs using a set of three questions. We asked respondents to disclose the number of years experience in CEE; the number of CEE countries in which the firm has sold

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products; and the percentage of the firm's sales that come from the CEE region (alpha = .67).

Control requirements may also vary based on the external uncertainty in the target market. In markets with high uncertainty, greater control may be desirable, but the cost of direct control may be high. In more stable target markets control may be easier to obtain and cost less to operate, because of the predictability of the environmental conditions. External control was measured using a set of three seven-point Likert-type questions taken from Brouthers and Brouthers (forthcoming). These questions asked about the stability of the target market political, social and economic conditions, the risk of converting and repatriating income, and the risk of adverse governmental actions such as nationalization (alpha = .79).

We included four control variables in the transaction cost mode choice model. First, we included a control for firm size, since large-firm entry mode studies have found that firms with greater resources (larger firms) tend to prefer equity modes of entry, while firms with fewer resources (smaller firms) tend to prefer non-equity modes (Contractor, 1984). Because of inter-country differences in accounting standards, firm size was measured using the number of employees (Brouthers, 2002; Gatignon & Anderson, 1988).

Our second control variable was the level of legal restrictions in the target markets. Scholars like Brouthers and Brouthers (forthcoming) and Gatignon and Anderson (1988) suggest that firm mode choice may vary simply because of legal restrictions on the mode of operation in a specific country. Legal restrictions were

measured using the single Likert type question developed in Brouthers and Brouthers (forthcoming).

Third, because of industry differences identified by scholars such as Brouthers and Brouthers (forthcoming) and Erramilli and Rao (1993), we needed to control for potential entry mode decision differences between manufacturing and service firms. We controlled for Industry Type using a dichotomous variable that was given the value of zero (0) if the organization was establishing a manufacturing operation and given a value of one (1) if the organization was establishing a service operation in the CEE target market (Brouthers, 2002).

Fourth, we included a dichotomous variable (Nationality) to control for potential home country differences. This Nationality variable was given the value of zero (0) if the home country was Greece and assigned a value of one (1) if the home country was the Netherlands.

Data Collection

The questionnaires were mailed to all 450 Greek and 419 Dutch companies that were identified in our sample. Thirty-two of the questionnaires were returned undeliverable to the address that we had for these companies. Following three mailings to the 837 companies with reliable address, 293 completed questionnaires were collected, of which 209 were from SMEs. The response rate of 35 percent is acceptable in comparison to similar entry mode mail surveys (e.g., Brouthers, 2002). As a test of response bias, the completed questionnaires that were returned following the first, second

and third mailing were statistically compared to discover whether a significant difference existed among the three mailings. No significant statistical differences were observed

RESULTS

As in pervious large firm studies examining mode choice and performance (Brouthers, 2002; Brouthers et al, 1999) we used a two stage analytical method. In stage one we used logistic regression to test the transaction cost model for the international mode choice of SMEs. In stage two we used the logistic regression analysis to separate respondent firms into two distinct groups. We placed all the firms whose entry modes were correctly predicted by the transaction cost model (the "Fit" group) into group one. Group two contained all the firms whose entry modes were not correctly predicted by the transaction cost model (the "Non-Fit" group). We then created a dummy variable "Entry mode fit" and assigned the value of zero (0) to those firms from the "Fit" group and assigned a value of one (1) to those firms from the "Non-fit" group. Ordinary least square regression was then used to examine the impact of the dummy variable "Entry mode fit", and several control variables, on the two mode performance measures.

We began the analysis by examining the correlation between the independent, control and dependent variables (Table 1). While we found substantial variability between the measures included in this study, none of the correlations appeared to be large enough to warrant concern over multicollinearity (Hair, Anderson, Tatham & Black, 1995).

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Entry Mode Choice

Table 2 shows the results of our stage-one analysis of the transaction cost model of SME international entry mode choice. The logistic regression was significant ($p<.0001$) with a moderate chi-square (51.13) and correctly classified almost 77 percent of the entry modes. All three transaction cost variables were significantly (at $p<.05$ or better) related to entry mode choice, in the predicted direction. One of the control variables, nationality ($p<.01$), was also significantly related to mode choice. Hence, the regression analysis provided support for: (1) hypothesis 1; SMEs making greater asset specific investments tended to prefer equity modes of entry, (2) hypothesis 2; SMEs with greater international experience tended to prefer equity modes of entry, and (3) hypothesis 3; SMEs entering countries characterized by high external uncertainty tended to prefer non-equity modes of entry.

Mode Choice and Performance

Table 3 shows the results of the second stage of our analysis. Regression Model 1 shows the impact of the dummy variable "Entry mode fit" and four control variables (nationality, firm size, mode type, and legal restrictions) on the perceived financial performance of the subsidiary unit. Model 1 was significant ($p<.01$) and had an R^2 value of .182. The "Entry mode fit" variable was significantly ($p<.01$) related to financial performance, with Fit firms reporting significantly higher financial performance than Non-fit firms. Nationality ($p<.01$), firm size ($p<.05$) and legal restrictions ($p<.01$) were also significantly related to financial performance evaluations.

Model 2, Table 3, shows the impact of the dummy variable "Entry mode fit" and the control variables on non-financial performance evaluations of the target market operation. This model was also significant (p<.01) and had an R^2 value of .228, indicating that the variables included in the performance analyses explained a significant portion of the non-financial performance evaluation variance. The "Entry mode fit" variable was significantly (p<.01) related to non-financial performance. Fit firms tended to report greater non-financial performance than did Non-fit firms. In addition, control variables nationality (p<.01), firm size (p<.01) and legal restrictions (p<.01) were significantly related to non-financial performance evaluations of the target market operation.

These two regression models provided strong support for hypothesis 4; SMEs whose entry mode choice could be predicted by the transaction cost model, tended to perform better (both in terms of financial and non-financial performance) than firms whose entry mode choice could not be predicted by the model.

DISCUSSION AND LIMITATIONS

SMEs now play an important role in international business, yet previous SME international research and international mode of entry research tends to ignore the international mode choice determinants of SMEs (Jones, 1999; Burgel & Murray, 2000; Zacharakis, 1997). Furthermore, few studies have examined the performance implications of using a theoretically predicted international mode of entry (Brouthers et al, 1999). In this study we addressed both of these issues. First, we set out to test transaction cost theory for SME international entry mode choice, hoping to increase the

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generalizability of transaction cost theory. Second, we tested the normative value of using transaction cost derived mode choices, increasing our understanding of the relationship between transaction cost based decisions and organizational performance.

In general, our findings provided strong support for applying the transaction cost model to SME international entry mode choice. All three transaction cost variables were found to be significantly related to SME international mode choice. First, as in previous large firm studies, we found that SMEs making greater asset specific investments tended to prefer equity modes of entry, while SMEs making less asset specific investments tended to prefer non-equity modes. Transaction cost theory suggests that the reason firms tend to internalize asset specific investments is to reduce the chances of shirking, free-riding and/or dissemination of proprietary know-how.

Second, we found that SMEs entering markets where external uncertainties were perceived to be high, tended to prefer non-equity modes of entry, presumably to reduce or shift risks to target market organizations. When target market uncertainties were perceived to be low, equity (hierarchical based) mechanisms were normally employed.

Third, we found that SMEs with greater international experience preferred equity modes of entry while those with less experience preferred non-equity modes. This may be the case because through experience firms develop and improve systems for controlling international operations. Hence, firms with greater experience may use equity modes of entry because they have created systems that allow them to control geographically disperse sub-units at a low cost. However, firms without this experience may not have developed these systems of control and thus tend to rely, to a greater extent, on market based non-equity modes of entry.

The only control variable that was significantly related to mode choice was Nationality. We found that Dutch firms tended to prefer more non-equity modes of entry, compared to Greek firms.

In examining the normative value of applying transaction cost theory to the international entry mode decision for SMEs, we found that SMEs using transaction cost predicted entry modes tended to perceive better performance (both financial and non-financial) than SMEs using entry modes that could not be predicted by the transaction cost variables. This suggests that mode performance and mode choice may be closely related. Firms may be able to create better performing international operations by selecting modes of entry based on transaction cost related criteria.

Finally, we found that SME subsidiary performance (both financial and non-financial) evaluations were also influenced by nationality, firm size, and legal restrictions. Dutch firms tended to perceive their subsidiary performance greater than Greek firms. Larger SMEs tended to rate their subsidiary performance greater than did smaller SMEs. SMEs entering markets in which they perceived legal barriers to entry mode choice to be high, tended to report lower performance than SMEs entering markets where the perceived legal restrictions on mode choice were low. Hence, factors in addition to theoretically predicted mode choice, also tend to influence subsidiary performance.

Limitations

This study suffers from a number of limitations. First, because we examined SMEs from the Netherlands and Greece, our findings may not be generalizable to SMEs

from other home countries. Further, because we examined mode choices in CEE

markets, these findings may not be the same for entry into more or less developed

nations. Future studies can go a long way in improving our understanding of SME

transaction cost based entry mode choice by examining SMEs from other home countries

(both more and less developed countries) and by examining entry into other target

markets.

While our normative test of the transaction cost based entry mode model provided

interesting results, we could only explain about 20 percent of the variance in our

performance measures. This tends to indicate that there are other variables, not included

in this study, that impact SME international subsidiary performance. Future studies may

wish to develop and test models of SME international performance that consider some of

these other variables.

In summary, we found that transaction cost theory appears to be applicable to the

entry mode choice of SMEs. Transaction cost relationships identified in previous large

firm studies tend to apply to SMEs as well. In addition, SMEs that used transaction cost

predicted international entry modes tended to report higher performance than did SMEs

using other modes of entry. This tends to indicate the transaction cost theory can be used

to help SMEs make better entry mode decisions.

REFERENCES

Acs, Z. & D. Audretsch. 1990. *Innovation and Small Firms.* Cambridge, MA: MIT Press.

Anderson, E. & H. Gatignon. 1986. Modes of Foreign Entry: A Transaction Cost Analysis and Propositions. *Journal of International Business Studies*, 17(3): 1-26.

Barringer, B.R. & D.W. Greening. 1998. Small Business Growth Through Geographic Expansion: A Comparative Case Study. *Journal of Business Venturing*, 13(6): 467-492.

Bonaccorsi, A. 1992. On the Relationship Between Firm Size and Export Intensity. *Journal of International Business Studies*, 23(4): 605-636.

Brouthers, K.D. 2002. Institutional, Cultural and Transaction Cost Influences on Entry Mode Choice and Performance. *Journal of International Business Studies,* 33 (2): 203-222.

Brouthers, K.D. & L.E. Brouthers. Forthcoming. Why Service and Manufacturing Entry Mode Choices Differ: The Influence of Transaction Cost Factors, Risk and Trust. *Journal of Management Studies.*

Brouthers, L.E., K.D. Brouthers & S. Werner. 1999. Is Dunning's Eclectic Framework Descriptive or Normative? *Journal of International Business Studies*, 30, 831-844.

Burgel, O. & G.C. Murray. 2000. The International Market Entry Choices of Start-up Companies in High-Technology Industries. *Journal of International Marketing*, 8, 33-62.

Contractor, F. J. 1984. Choosing Between Direct Investment and Licenses: Theoretical Considerations and Empirical Tests. *Journal of International Business Studies*, Winter, 167-188.

Coviello, N.E. & A. McAuley. 1999. Internationalization and the Smaller Firm: A Review of Contemporary Empirical Research. *Management International Review*, 39(3): 223-256.

Delios, A. & P.W. Beamish. 1999. Ownership Strategy of Japanese Firms: Transactional, Institutional and Experience Influences. *Strategic Management Journal*, 20, 915-933.

Dess, G.G. & R.R. Robinson, Jr. 1984. Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately Held Firm and Conglomerate Business Unit. *Strategic Management Journal*, 5: 265-273.

Erramilli, M.K., & D.E. D'Souza. 1993. Venturing Into Foreign Markets: The Case of Small Service Firms. *Entrepreneurship Theory and Practice*, summer, 29-41.

Erramilli, M.K. & C.P. Rao. 1993. Service Firms' International Entry-Mode Choice: A Modified Transaction-Cost Analysis Approach. *Journal of Marketing*, 57(3): 19-38.

Gatignon, H. & E. Anderson. 1988. The Multinational Corporation's Degree of Control Over Foreign Subsidiaries: An Empirical Test of a Transaction Cost Explanation. *Journal of Law, Economics and Organization*, 4(Fall): 305-336.

Glaister, K.W. & P.J. Buckley. 1998. Measures of Performance in UK International Alliances. *Organization Studies*, 19(1): 89-118.

Hair, J.F. Jr., R.E. Anderson, R.L. Tatham & W.C. Black. 1995. *Multivariate Data Analysis: With Readings*, Fourth Edition, New Jersey: Prentice Hall.

Hennart, J.F. 1989. Can the 'New Forms of Investment' Substitute for the Old Forms?' A Transaction Costs Perspective. *Journal of International Business Studies*, 20(Summer): 211-234.

Hennart, J.F. 1991. The Transaction Costs Theory of Joint Ventures: An Empirical Study of Japanese Subsidiaries in the United States. *Management Science*, 37(4): 483-497.

Hope, K. 1997. Athens. *Europe*, no. 365: 44-45.

Jones, M. 1999. The Internationalization of Small High-Technology Firms. *Journal of International Marketing*, 7: 15-41.

Klein, S. 1989. A Transaction Cost Explanation of Vertical Control in International Markets. *Academy of Marketing Science*, 17(3): 253-262.

Klein, S., G.L. Frazier & V.J. Roth. 1990. A Transaction Cost Analysis Model of Channel Integration in International Markets. *Journal of Marketing Research*, 27(May):196-208.

Kwon, Y.C. & L.J. Konopa. 1993. Impact of Host Country Market Characteristics on the Choice of Foreign Market Entry Mode. *International Marketing Review*. 10: 60-76.

Lu, J.W. 2002 Intra- and Inter-Organizational Imitative Behavior: Institutional Influences on Japanese Firms' Entry Mode Choice. *Journal of International Business Studies*, 33(1): 19-37.

Lu, J.W. & P. Beamish. 2001. The Internationalization and Performance of SMEs. *Strategic Management Journal*. 22: 565-586.

Masten, S.E. 1993. Transaction Costs, Mistakes, and Performance: Assessing the Importance of Governance. *Managerial and Decision Economics*, 14: 119-129.

McDougall, P.P. & B.M. Oviatt. 1997. International Entrepreneurship Literature in the 1990s and Directions for Future Research. In Sexton, D.L. and Smilor, R.W. (eds.) *Entrepreneurship 2000*, Chicago: Upstart Publishing Company, 291-320.

McNaughton, R.B. & J. Bell. 2001. Channel Switching Between Domestic and Foreign Markets. *Journal of International Marketing*, 9(1): 24-39.

Meyer, K.E. 1995. Foreign Direct Investment in the Early Years of Economic Transition: A Survey. *Economics of Transition*, 3(3): 301-320.

Nitsch, D., P. Beamish & S. Makino. 1996. Entry Mode and Performance of Japanese FDI in Western Europe. *Management International Review*, 36(1): 27-43.

OECD 1997.*Globalisation and Small and Medium Enterprises*, Vols. 1 and 2. Paris: OECD.

Osborne, K. 1996. The Channel Integration Decision for Small- to –Medium –Sized Manufacturing Exporters. *International Small Business Journal*, 14: 40-49.

Oviatt, B & P. McDougall. 1997. Challenges for Internationalization Process Theory: The Case of International New Ventures. *Management International Review,* 37(2): 85-99.

Pan, Y. & D. Tse. 2000. The Hierarchical Model of Market Entry Modes. *Journal of International Business Studies*, 31: 535-554.

Pan, Y., S. Li & D. Tse. 1999. The Impact of Order and Mode of Market Entry on Profitability and Market Share. *Journal of International Business Studies*, 30(1): 81-104.

Pavitt, K., M. Robson &. J. Townsend. 1987. The Size Distribution of Innovative Firms in the UK: 1945-1983. *Journal of Industrial Economics*, 35:297-316.

Roberts, P. & R. Greenwood. 1997. Integrating Transaction Cost and Institutional Theories: Toward a Constrained-Efficiency Framework for Understanding Organizational Design Adoption. *Academy of Management Review*, 22(2): 346-373.

Shrader, R. 2001. Collaboration and Performance in Foreign Markets: The Case of Young High-Technology Manufacturing Firms. *Academy of Management Journal,* 44(1): 45-60

Shrader, R., B. Oviatt & P. McDougall. 2000. How New Ventures Exploit Trade-offs Among International Risk Factors: Lessons for the Accelerated Internationalization of the 21st Century. *Academy of Management Journal,* 43(6): 1227-1247.

Symeonidis, G. (1996). Innovation, Firm Size and Market Structure: Schumpeterian Hypotheses and Some New Themes, *OECD Working Papers*, No. 161. Paris, France.

Tether, B.S., I.J. Smith & A.T. Thwaites. 1997. Smaller Enterprises and Innovation in the UK: The SPRU Innovations Database Revisited, *Research Policy*, 26(1): 19-32.

Uhlenbruck, K. & J. De Castro. 2000. Foreign Acquisitions in Central and Eastern Europe: Outcomes of Privatization in Transitional Economies. *Academy of Management Journal*, 43: 381-402

Williamson, O.E. 1985. *The Economic Institutions of Capitalism*. New York: The Free Press.

Williamson, O.E. 1993. Opportunism and its Critics. *Managerial and Decision Economics*, 14: 97-107.

Williamson, O.E. & W.G. Ouchi. 1981. The Markets and Hierarchies and Visible Hand Perspectives. In A. Van de Ven & W. Joyce (Editors) *Perspectives on Organization Design and Behavior*, NY: Wiley.

Wolff, J. & T. Pett. 2000. Internationalization of Small Firms: An Examination of Export Competitive Patterns, Firm Size, and Export Performance. *Journal of Small Business Management*, 38: 34-47.

Woodcock, P., P. Beamish & S. Makino. 1994. Ownership-Based Entry Mode Strategies and International Performance. *Journal of International Business Studies*, 25(2): 253-272.

Zacharakis, A. 1997. Entrepreneurial Entry Into Foreign Markets: A Transaction Cost Perspective. *Entrepreneurship Theory and Practice*, 21(3): 23-39.

FIGURE 1
Correlation Matrix

Variable	1	2	3	4	5	6	7	8
Mean	179	0.01	4.92	4.07	0.36	4.81	0.37	0.36
SD	178	.77	1.20	1.36	.48	1.74	.49	.48
1. Firm size	1							
2. International Experience	.097	1						
3. Asset Specificity	.376*	.037	1					
4. External Uncertainty	.150	.055	.335*	1				
5 Nationality (0 – Greek, 1 - Dutch)	.030	.451*	.141	.280*	1			
6. Perception of Legal Environment	.053	-.266*	.084	.259*	-.317*	1		
7. Industry Type (Manufacturer=0, Service=1)	-.277*	.255*	.042	-.062	.194*	-.136	1	
8. Mode of entry (non-equity - 1, equity - 0)	-.205*	-.137	-.348*	-.328*	.049	-.037	-.014	1

* $p<0.01$

FIGURE 2
Logistic Regression Results

	Parameter Estimates	Standard Errors
Transaction Cost Variables		
Asset Specificity	-0.498**	.180
External Uncertainty (low value high risk)	-0.746**	.170
International Experience	-0.749*	.313
Control Variables		
Size of Firm	-0.001	.001
Industry Type	-0.102	.399
(0 - manufacturer, 1 - service)		
Nationality	1.787**	.507
(0 - Greek, 1 - Dutch)		
Legal Restrictions	0.196	.115
Constant	3.327**	.968
N	185	
Chi-Square	51.13	
Significance	.0001	
Correct Classification Rate	76.80%	

Note: ** $p<.01$ * $p<.05$ (two-tail tests), equity modes = 0

FIGURE 3
OLS Regression Results

Variables (n=165)	Model 1 Financial Performance (Standard Error)	Model 2 Non-financial Performance (Standard Error)
Entry mode fit	0.884 (.288)**	0.859 (.280)**
Nationality	0.867 (.275)**	0.804 (.268)**
Firm size	0.001 (.001)*	0.003 (.001)**
Entry mode type	-0.146 (.258)	-0.032 (.250)
Legal restrictions	0.291 (.071)**	0.183 (.069)**
R Square	0.182	0.228
Adjusted R Square	0.156	0.204
F-statistic	7.008**	9.467**

Two-tailed significance values indicate: **$p<0.01$ *$p<0.05$