

Competitive session

Track 2: Developments in IB theory

INTERNAL FINANCING AND THE PERFORMANCE OF MULTINATIONAL SUBSIDIARIES IN EMERGING ECONOMIES

ABSTRACT

We examine the effects of internal financing and the recombination capabilities of international financial management on the performance of multinational subsidiaries. We contribute to the theory of the multinational enterprise (MNE) by demonstrating the capability of internal capital markets in financing foreign subsidiaries. Internal financing is a type of firm-specific advantage (FSA), but one badly under-researched in the literature. We use original survey data from British multinational subsidiaries in six emerging South East Asian countries. There are three significant findings. First, the internal financing acts as an FSA to improve the subsidiary performance. Second, over 90 percent of financing sources (including capital investment by the parent firms) in the British subsidiaries come from internal financing. Third, the recombination capabilities of international financial management have a statistically significant positive impact on subsidiary performance. Our findings have important theoretical, empirical and managerial implications.

Key words: internalization theory; financing; firm-specific advantage (FSA); pecking order theory; subsidiary performance; South East Asia.

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INTRODUCTION

In recent years, scholars such as Bowe, Filatotchev & Marshall, (2010), Agmon (2006) have called for further integration of contemporary finance into international business (IB) research. They have also asked the IB community to incorporate *finance-specific factors* in understanding the MNE's international investment decisions (Oxelheim, Randoy & Stonehill, 2001). Indeed, investment, financing and dividends are three important and interrelated decisions for MNEs and their foreign subsidiaries. However, financing has been largely under-researched in the IB literature. The first research question of this study is 'what is the impact of internal financing on the performance of foreign subsidiaries?'

Rugman, Verbeke & Nguyen (2011) and Verbeke (2009) demonstrate that foreign subsidiaries are the engines to generate new *recombination capabilities*. These combine and recombine the internationally transferable firm-specific advantages (FSAs) developed by the parent firm in the home country with newly created FSAs by subsidiaries in the host countries in novel ways. The second research question is 'to what extent does the recombination capabilities of international financial management affect subsidiary performance?'

To conduct this research, we integrate *internalization theory* (Buckley & Casson, 1976; Rugman, 1981; Hennart, 1982) in IB literature with the *pecking order theory* on capital structure and financing (Myers & Majluf, 1984) in the finance literature. Specifically, we contribute to the theory of the MNE with our focus on the reality of the internal capital market

of the MNE in financing foreign subsidiaries (an aspect of internalization theory) and the impact of internal funds (an aspect of pecking order theory) on subsidiary performance.

The main theoretical contribution of this paper is to establish that internal financing of subsidiaries is a type of firm-specific advantage (FSA) which is under-explored in the current literature. Consistent with internalization theory, internal financing is conceptually just as valuable as traditional FSAs such as technological knowledge, research and development (R&D), marketing skills and the Penrose effect of the top management team's ability to grow the firm. The FSA of internal financing, although driven by the parent firm (and its costs of capital due to the advantages of consolidated accounting returns) is one of most benefit to the subsidiary. Indeed, the FSA in internal financing is a type of FSA. This FSA (like all others) arises due to recombinations with country-specific advantages (CSAs).

To establish the nature of the FSA in internal financing, it is necessary to recognize that the host country institutional factors are deficient in providing external financing opportunities for the subsidiary. This occurs in South East Asia (except Singapore) due to thin and inefficient financial markets, many of which lack regulatory integrity. In contrast, the financial markets of the UK parent firms are more efficient due to tighter regulations and they are more highly liquid and have deeper pockets. Thus, we introduce internal financing as a type of FSA.

Further, we advance the theoretical and empirical foundation underlying *recombinations* with home and host CSAs, and between parent and subsidiary in international financial management (Rugman, Verbeke & Nguyen, 2011; Verbeke, 2009). Thus, we examine the actual performance of subsidiaries due to the recombination of internal financing FSA and international financial management capabilities. Our study is also among the first to observe directly the *reverse effects of subsidiary profits on FSAs* (Verbeke & Brugman, 2009).

Our empirical approach is differentiated from previous studies. We carefully link international accounting standards to IB research to examine the finance function within the MNE. Specifically, we incorporate IFRS10 *Consolidated financial statements* and IAS21 *The effects of changes in foreign exchange rates* in our analysis. These standards are relevant to the reporting of subsidiaries, joint ventures and foreign transactions, such as whether the activities of foreign operations are carried out as an extension of the parent or with a significant degree of autonomy; whether the transactions with the parent are a high or low proportion of the foreign operation's activities; whether the activities are financed from the foreign operation's own financing or by borrowing from the parent.

The novel dataset employed in the empirical work is another important feature of the paper. The multiple host countries (Malaysia, Indonesia, the Philippines, Singapore, Thailand and Vietnam) and multiple industries enhance the generalizability of the findings. Much of the current literature on subsidiaries uses cases and anecdotes (Birkinshaw, 2000), and databases confined to subsidiaries operating in advanced economies (Holm & Pedersen, 2000). This is the first study to assemble original data on the performance of subsidiaries in six emerging economies of the ASEAN region.

As shown below, we make three new contributions. First, we use an original theoretical approach to integrate IB and finance theories by introducing the FSA of internal financing. Thus, we contribute to the theory of the MNE in the financing of foreign subsidiaries. Second, we integrate FSA internal financing with international financial management capabilities. We then conduct a fine grained analysis of the determinants of subsidiary performance. We adopt a managerial approach to focus on factors under the control of subsidiary managers (Oesterle & Wolf, 2011) rather than the institutional view (country-level factors) currently dominant in the

literature, which lacks managerial insights due to using public data. The focus on subsidiary performance is highly relevant as the parent firm's performance is the consolidated result of performance in the home country and the network of foreign subsidiaries. Third, we advance the concept of recombination capability in the context of emerging economies in the ASEAN region by examining its impact on subsidiary performance.

THEORETICAL SYNTHESIS AND HYPOTHESES DEVELOPMENT

'Classic' *internalization theory* (Buckley & Casson, 1976; Hennart, 1982; Rugman, 1981) explains the *efficiency* aspect and the strategic decision of the MNE. The essential argument of internalization theory is that firms aim at maximizing profit by internalizing the intermediate markets across national borders in the face of various market imperfections, such as public goods externality with pricing an intermediate product such as knowledge, the lack of future markets, information asymmetries between buyers and sellers, and government intervention in the form of trade barriers or the ineffective application of national patent system.

Buckley & Casson (1976) primarily focuses on the FSAs of marketing and R&D. They do not analyze the finance function directly (Aulakh & Mudambi, 2005). Financial FSAs (capital as well as access to equity and loan capital) are essentially as important as other intangible knowledge-based FSAs affecting firm strategy and performance (Rugman, 1980; Verbeke, 2009). However, IB literature mainly focuses on capital intensity and financial resources, i.e. the absolute amount of capital as a proxy for FSA (Vernon, 1971; Horst, 1972; Lecraw, 1984). Yet, largely under-researched is the *FSAs in financing and the recombination capabilities of international financial management*, i.e. the MNE's capabilities to access international capital markets, the managerial skills to operate an efficient internal capital market within the firm in substitution of imperfect external capital markets, and the use of internal financing sources.

Here we investigate the ability of the firm to leverage internal financing at the particular point where it is needed. In subsequent sections, we discuss the financing of foreign subsidiaries and the use of internal capital markets due to imperfect external capital markets and institutional voids in South East Asia.

Financing foreign subsidiaries of the MNE

To answer the first research question, “*what is the impact of internal financing on subsidiary performance?*” we survey literature on financing foreign subsidiaries. Key to financing is the decision on the debt-to-equity ratio, which is the amount of debt finance a firm uses relative to its equity finance. A higher ratio implies greater leverage and potentially greater risk. Bowe, Robert & Yamin (2013) emphasize that financing is different in the MNE context compared to a domestic firm. When firms have to select sources of finance, they can choose between using internal sources in the form of retained earnings or external sources in the form of bank debts, or issuing bonds, hybrid securities or equity in the capital markets. Firms can decide to use one of these sources of finance or a combination of any of these. In the case of a firm operating in a single country, usually, all these sources of finance would be available within that same country. Furthermore, firms which belong to a group of companies will have access to an additional source of financing in the form of internal capital markets, i.e. funds from other entities from the group. However, the choice of sources of finance is even larger when we deal with MNEs operating in several countries. Indeed, they will be able to source any of the funds already mentioned within each one of the countries in which they are operating (Bowe et al., 2013).

Shapiro (1975) argues that the financing MNE subsidiaries might be the result of cost-benefit analysis between using different sources of financing. Other factors affecting the financing

decision include different currencies, taxation, institutional, and legal regimes (La Porta, Lopez-de-Silanes, Schleifer, & Vishny, 1997, 1998; Desai, Foley, & Hines, 2004; Bianco, Jappelli & Pagano, 2005), creditor rights (Akbel & Schnitzer, 2011), securities law (Mishra & Tannous, 2010; Siegel, 2005); and bankruptcy codes (Acharya, Sudaram & John, 2011).

Early studies on the determinants of capital structure and financing sources of foreign subsidiaries mainly use surveys with MNE executives. They document the additional complexities involved in financing decisions in the multinational context and the factors which influence such decision-making (Stobaugh, 1970; Robbins & Stobaugh, 1972; Errunza, 1979). While previous studies do not examine the impact of internal financing on subsidiary performance, we will attempt to test this (see hypothesis 1). *We focus on internal funds from retained earnings generated by subsidiaries*, which are important internal financing sources for subsequent expansion and growth of foreign subsidiaries.

The internal capital markets within the MNE

Financing foreign subsidiaries requires the MNE and its subsidiaries to access debt and equity capital markets. If external capital markets are imperfect, the MNE creates an internal capital market within its own organizational structure, which effectively redistributes resources within the firm (Rugman, 1980; Mudambi, 1999).

Over thirty years ago, Rugman (1980) first applied internalization theory to corporate international finance. Rugman argued that the MNE can benefit from the development of an internal capital market in response to institutional failures in the country level capital markets. One of the applications is to the cost of capital of the MNE. Internalization theory explains why the appropriate cost of capital for the MNE is that of the MNE itself and not that of the individual subsidiaries. Rugman (1980) shows that the MNE creates an internal market for

information on project evaluation, after adjusting for risk considerations. The MNE is able to overcome segmented international capital markets, and within its own organizational structure it can operate an *efficient internal capital market*. If the MNE did not have an efficient internal market, each segment (subsidiary) of the MNE would have to generate an independent cost of capital. This implies that the cost of capital for foreign subsidiaries should not be determined independently, nor should specific project evaluations have their own required rate of return set without consideration being given to the effects of the project on the overall MNE. There is a common capital market within the MNE, and all projects and subsidiaries are integrated parts of the firm (Rugman, 1980).

Unfortunately, this work has been somewhat ignored. However, there is a rich literature on internal capital market (Shin & Stulz, 1998; Lamont, 1997; Stein, 1997; Mudambi, 1999; Scharfstein & Stein, 2000; Desai, Foley & Hines, 2004; Kolasinski, 2009). The primary objective of internal capital markets is to channel resources within the firm. Much of this research on internal capital markets is in the context of diversification in product markets within domestic operations (Lamont, 1997; Hoskisson & Turk, 1990; Stein, 1997). Empirical evidence documents that parent MNEs make use of their own internal capital markets (Mudambi, 1999; Aulakh & Mudambi, 2005; Desai et al., 2004; Aggarwal & Kyaw, 2008) when there are imperfections in home or host country capital markets.

Recently, there is a growing recognition that there are significant differences in the development of external capital markets across countries (Adam, 2002; Desai et al., 2004; Fauver, Houston & Naranjo, 2003; Aulakh & Mudambi, 2005).

We suggest that in the context of emerging economies of the South East Asian region, institutional voids could be a huge challenge for British MNEs in the strategic decision of

financing foreign subsidiaries. In Khanna & Palepu (2010) institutional voids are the gaps in market institutions found in the absence of intermediaries that facilitate a well-functioning market. Well-developed economy institutions serve to inform buyers and sellers and enforce transactions. In developed countries these institutional voids tend to be small, but the conspicuous absence of these intermediaries in emerging economies means the institutional voids tend to be large. Emerging economies often lack reliable sources of information, an uncertain regulatory environment, and inefficient judicial systems, all of which are considered market failures.

Due to information asymmetries, weak regulatory structures, and different types of institutional voids, factor market imperfections develop in capital markets in emerging economies. The financial institutions in the host countries in South East Asia, except Singapore, are deficient in credit availability, political risks, high inflation and offer poor creditor protection. Yet British parent MNEs are able to access international capital markets (the United Kingdom and the United States) usually at lower cost, because London is one of the world's largest financial centres. Indeed, the financial markets in the home country are more efficient due to stricter regulations. Parent firms use internationally acquired financial resources to finance foreign subsidiaries. The latter can overcome constraints with local capital markets, and this signals a finance-factor competitive advantage for the MNE (Oxelheim et al., 2001). In order to uncover the MNE's capabilities in substituting imperfect external capital markets with efficient internal capital markets within the firm, we explore more deeply subsidiary capital structure and financing sources.

Recombination capabilities of international financial management

To answer the second research question, “*To what extent does the recombination capabilities of international financial management affect subsidiary performance?*” we rely on ‘new’ *internalization theory*, which is built upon classic internalization theory. New internalization theory maintains that FSAs can be developed by both parent firms and foreign subsidiaries (Rugman & Verbeke, 1992, 2001). This point is reinforced in empirical work (Andersson, Forsgren & Holm, 2002; Frost, Birkinshaw & Ensign, 2002; Holm & Pedersen, 2000; Mudambi & Navarra, 2004; Birkinshaw, 1996, 1997). Subsidiary initiatives are instrumental to the development of FSAs (Birkinshaw & Hood, 1998). There are three types of FSAs: stand-alone, routine and recombination capability. The highest-order FSA is the *recombination capability*. This is not just to combine reliably the existing resources transferred from parent firms, but to recombine the resources in new ways, usually including newly developed resources and capabilities by subsidiaries and complementary resources of external actors in the host countries (Verbeke, 2009).

The recombination capabilities of international financial management arise by linking the financial managers of an MNE in the home and host countries. This is facilitated within the British MNE networks due to the deployment of entrepreneurial judgment and sound governance. The coordination skills allow for the establishment of efficient linkages between abundant financial resources in the UK with valuable high-growth business opportunities in South East Asia. The value of coordination and managerial services (in addition to the obvious value of substituting for imperfect capital markets) is even more apparent. This reflects the recombination capabilities to make effective and efficient utilization of location advantages of home and host countries (Rugman et al., 2011, Verbeke, 2009). International financial

management capabilities and deep insights are basis for sustainable competitive advantages and value creation for subsidiaries.

The measurement of subsidiary performance

Previous studies have selected subsidiary performance measures in a suboptimal way (Slangen & Hennart, 2008). Some studies use survival and exit (Li, 1995); however, they are poor indicators of subsidiary performance (Slangen & Hennart, 2008). A single measure of profitability on a three-point scale of loss, break-even and profit has been frequently used, especially in studies using the Japanese Toyo Keizai directory (Woodcock et al., 1994; Nitsch et al., 1996). There are very few studies which test the performance measures jointly to identify the strategic variables determining subsidiary performance (Pan & Chi 1999; Brouthers, 2002; Kim & Gray, 2008).

Empirical evidence in management accounting research show that *actual performance against budget* is often used to assess the performance of foreign subsidiaries (Czechowicz et al., 1982; Appleyard et al., 1990). To advance on this, we use multi-dimensional subsidiary performance measures, including both financial and non-financial measures to capture more fully subsidiary performance.

One frequent concern in assessing foreign subsidiary performance is the potential profit manipulation by parent firms. The common arguments are that parent firms generate returns through various mechanisms other than dividends, including intra-firm trade, management fees, technological licensing fees, royalties and transfer pricing (Geringer & Herbert, 1991). However, transfer pricing does not apply to the ASEAN subsidiaries of British MNEs, since these subsidiaries are mainly market seeking and engage in horizontal FDI and network relationships with local and regional key suppliers and key customers. Transfer pricing is more

prevalent in vertically integrated manufacturing firms (especially in petroleum and refining and in pharmaceuticals subsidiaries). The subsidiaries in our sample explicitly focus on sales to external customers where they generate 91 percent of their total sales, whereas intra-firm sales account for only nine percent (Nguyen, 2013).

Further, host country governments are becoming sophisticated in regulating these manipulation mechanisms of foreign subsidiaries. For example, corporate income tax law in Vietnam regulates that management fees charged by headquarters and/or regional offices are not considered as legitimate deductible expenses for corporate income tax declaration.

Hypotheses development

Financing sources: In this study, we examine the impact of financing decision on subsidiary performance, using the ‘pecking order theory’ on capital structure and financing (Myers & Majluf, 1984). This theory argues that under asymmetric information, equity may be mispriced by the market. If firms finance new projects by issuing equity, underpricing may be so severe that new investors gain more of the project net present value (NPV) to the detriment of existing shareholders. This may lead to an underinvestment problem since such projects will be rejected even if the NPV is positive. This underinvestment can be reduced by financing the project using a security that is less likely to be mispriced by the market. Internal funds from retained earnings involve no undervaluation and even debt that is not too risky will be preferred to equity. This is referred to the pecking order theory of capital structure and financing. The firm’s debt ratio reflects its cumulative requirement for external financing.

Shyam-Sunder & Myers (1999) have adjusted the pecking order theory to recognize that it does not work in a static sense, i.e. current external financing does not depend directly on current internal deficits. The recent theoretical research on the pecking order theory includes

Garlappi & Huang (2006), Guriev & Kvasov (2009), Hennessy, Livdan & Miranda (2010), Morellec & Shuerhoff (2011).

The literature has hypothesized two possible relationships between debt financing and profitability. On the one hand, Modigliani & Miller (1963) explain that profitable firms have higher level of debt in order to take advantage of tax shields. Jensen (1986) argues that firms issue more debt when they are not able to control the firms effectively. On the other hand, the pecking order theory (Myers & Majluf, 1984) predicts the opposite as issuing debt is costlier option compared to using retained earnings. Most empirical evidence in the corporate finance literature has found support for the pecking order theory using large publicly traded firms (Rajan & Zingales, 1995; Booth, Aivazian, Demircug-Kunt & Maksimovic, 2001; de Jong, Verbeek & Verwijmeren, 2011; Fan, Titman & Twite, 2012). However, the findings by Frank & Goyal (2003) casts doubt on this theory. Beattie, Goodacre & Thomson (2006) find support for both the pecking order theory and the static trade off theory in the corporate financing decision for UK firms using survey data.

We use classic pecking order theory (Myers & Majluf, 1984) to develop theoretically sound but practice-based questions for the survey, such that subsidiary managers might be willing to provide data. We also obtain managerial insights through intensive interactions with subsidiary managers during data collection. We find that the decision of ASEAN subsidiary managers to use internal financing sources is endogenous and self-selected rather than exogenous. Further, these subsidiary managers indicate that it should not be assumed that internal funds automatically lead to better performance. They have to convince their headquarters that they would exploit these financial resources efficiently. This is feasible if there are proven track records of successful operations. The internal competition for headquarters' attention and

resources (Birkinshaw, 2000; Ambos & Birkinshaw, 2010) is becoming intense as ASEAN subsidiaries have to compete with subsidiaries in large emerging markets such as China and India.

Thus, our argument is essentially similar to Myers & Majluf (1984). There are theoretical suggestions for a positive association of internal funds and subsidiary performance.

Hypothesis 1: subsidiary performance will be positively influenced by internal funds in a subsidiary.

Recombination capabilities of international financial management: Verbeke (2009) demonstrates that capabilities in functional areas such as international financial management have important implications for the strategy of MNEs and their subsidiaries beyond the functional areas itself. According to Rugman (1980), MNEs come into existence when their FSAs can be exploited through foreign direct investment (FDI) rather through licensing agreements (as a result of imperfections in intermediate product markets) or through exports (in case of government-imposed trade barriers). He describes the MNE as a governance mechanism allowing international diversification, and with that the promise of more stable sales and returns over time. Hen then reinterprets various MNE financial management instruments, such as transfer pricing, as efficient responses to imperfections in external markets. Here, he distinguishes between natural market imperfections, such as ‘public goods’ nature of valuable knowledge, which may invalidate the option of foreign market penetration through licensing, and government-imposed market imperfections, such as an ineffective property-rights regime to protect technological knowledge, tax rate differentials, etc. Internal MNE markets can overcome such imperfections, since senior managers set the transfer prices themselves, in the best interest of the firm as a whole, through administrative fiat. The internal

MNE market also lets all domestic and foreign investment projects be evaluated using a single cost of capital, and this internal capital market, run by a centralized financial management function, acts as a 'proxy' external international capital market.

Importantly, Rugman (1980) argues against the suggestions of some finance scholars that economic exposure, i.e. fluctuations in foreign exchange rates create the risk of net present value reduction of the firms' future income streams, should drive strategic decisions such as plant location. Financial transactions should not dominate 'real world' transactions "The exposure of MNEs foreign exchange risk is not a problem in itself. Instead the MNE should determine its long-run profit maximization strategy by producing and selling in optimal locations. Its economic decisions should include exchange risk as only one element in location decision".

Verbeke (2009) also maintains that the risks of unexpected exchange rate fluctuations affecting future cash flows should be considered in any configuration of location advantages, whether in inputs or outputs markets. In response, MNEs should aim to develop, *as an FSA, a central routine* which integrates economic exposure information into the capital budgeting evaluation of large investment projects. This is especially relevant in the context of large-scale foreign expansion. However, it may be useful to combine this internationally transferable knowledge with local capabilities in particular subsidiaries. In the absence of central economic exposure policy, individual subsidiaries learn how to protect themselves against the hazards of economic exposure in the host countries. The nature of the MNE's FSAs, its internal organization and its historical trajectory of location decisions will largely determine the content and process of international financial management decisions (Verbeke, 2009).

According to Bowe et al. (2010), in practice, MNEs and their subsidiaries use a variety of internal and external risk management techniques. The former procedures internalize exposure management within the parent–subsidiary nexus. Short-term techniques include balance sheet hedging, leading and lagging, netting of cash flows, choice of invoicing currency and pass-through pricing policy (Bowe & Saltvedt, 2004; Floden & Wilander, 2006; Marshall, 2000). The benefits of real options conferred through internationally diversified sales, distribution and manufacturing can generate medium and long-horizon operational hedges (Allen & Pantzalis, 1996; Buckley & Casson, 1998; Kogut & Kulatilaka, 1994). External hedging uses contractual arrangements with outside institutions for risk management purposes, customarily involving taking positions in foreign exchange derivatives.

For example, during the Asian financial crisis in 1997, sharp devaluations of currencies, such as the baht (Thailand), rupiah (Indonesia), and ringgit (Malaysia) hit British subsidiaries. Such volatile exchange rates force these subsidiaries to introduce effective tools to reduce the risks of losses resulting from changes in exchange rates. When viable, they try to source materials from local suppliers, so as to reduce the negative impact of having to pay for inputs in strong foreign currencies. Such experiential learning was valuable in helping these subsidiaries to weather smoothly the world financial crisis in 2007.

Kim, Margetis & Pantzalis (2009) include a measure of financial expertise in their analysis of financial performance. They find a positive relationship to corporate valuation. Financial expertise enhances the ability to lower financial constraints and takes advantage of investment and financing opportunities which in turn can have a significant impact on performance. These scholars suggests that MNEs with financial expertise can be viewed as possessing an additional

intangible asset, which is essentially equivalent to the traditionally examined intangible assets, such as technological know-how, goodwill, and managerial expertise. Thus, we predict that

Hypothesis 2: Subsidiary performance will be positively influenced by recombination capabilities of international financial management.

METHODOLOGY

Research context

We test the hypotheses using an original primary dataset of 101 British multinational subsidiaries in six South East Asian countries. The broad coverage of six out of ten ASEAN countries enhances the generalizability of the findings. We selected the period 2003-2007 for the study because subsidiary managers were more willing to provide recent data rather than current data due to confidential reasons.

British MNEs have a long international business history. They were the first to internationalize in a number of industries, following the ‘British Empire’. They have achieved significant success around the world (Yip, Rugman & Kudina, 2006). British MNEs have been doing business in Asia (Iran, India, Thailand, Malaysia, China, Russian Asia and Japan) since 1860 (Davenport-Hines & Jones, 1989). They are among the largest and the most active investors in the ASEAN region.

Data sources, questionnaire survey and samples

We identified 504 British MNE subsidiaries from various sources, such as OneSource database by Thomson Reuters, the Financial Times UK annual ranking of the top 500 UK firms and the parent firms' websites and annual reports, British, American and European chamber of

commerce websites in the host countries. They belong to 78 public and 13 private parent MNEs.

We employed a 40-question survey which was based on modern theories of international business and finance, and international accounting standards. The instrument was translated into managerial concepts as well as uniquely developed for the context of emerging economies. We had the questionnaire reviewed by two expert scholars in the field of international business and strategy. We pre-tested the questionnaire with five experienced subsidiary managers and we also sought their suggestions for improvements. The first author obtained permissions to observe these subsidiaries' daily operations for data triangulation (endnote 1). Further, we asked participants to answer the survey with the perspectives of a group of subsidiary managers. This aims to minimize the risk of social desirability bias.

We spent eight months for data collection by e-mails. Surveys of MNE executives typically result in a low response rate (Harzing, 2000). Our survey achieved a response rate of 20%. This compares favourably with previous studies using surveys with subsidiary managers (Harzing, 2002: 20 percent; Slangen & Hennart, 2008: 19.20 percent; Kim & Gray: 17 percent).

We received usable responses from a total of 101 private subsidiaries. Of the total survey, 90 percent of the questionnaires were answered by the top management team of the subsidiary and less than 10 percent by the middle management. The subsidiary managers have an average of 7.8 years working in the South East Asian region. Additionally, missing values were not a problem.

The participating subsidiaries belong to 57 parent MNEs (44 public and 13 private MNEs). As at 2008, the public parent MNEs had average revenues of GBP 23,906.32 million, and average

assets of GBP 167,101.35 million. Information for 13 private MNEs were not available due to non disclosure requirements.

The average invested capital of the participating subsidiaries was US\$78 million as of the end of the financial year 2007. The average age at the time of survey was 26 years. The sample includes WOFs through greenfield investment (54 percent), WOFs through mergers and acquisitions (25 percent), and joint ventures (21 percent).

Subsidiaries were grouped under the broad service sector (56 percent) and manufacturing/processing (44 percent, including energy, petroleum and refining). Service industries include: banks, other financial services (e.g. insurance); media and advertising; publishing; software development; general office support services; real estate investment and services; engineering, procurement and construction services; and other specialized services. Manufacturing industries include: chemicals; pharmaceuticals and biotechnology (biopharmaceutical); food, drug and tobacco; computer, office and electronic parts; fixed line telecommunications; energy, petroleum and refining; construction, building materials and glass; motor vehicles parts; health care and medical equipments; other manufacturing (e.g. alcoholic beverage).

The results of a non response bias test suggested that there were no significant differences across key attributes (sales, assets and employees, data as at 2008) between the public parent MNEs of the respondent and non respondent subsidiaries, at a 5 percent significant level (2-tailed test).

We followed suggestions by Reeb, Sakakibara & Mahmood (2012) to address endogeneity. We adopted a theory-driven and managerial approach to identify the main theoretical rationale for

the dependent variables. We obtained insights from subsidiary managers about the nature of causality.

Common method variance

We carefully took actions to minimize potential common method variance (Chang, van Witteloostuijn & Eden, 2010; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We used multi-item constructs and varying scale formats and in order to minimize potential consistency. We spread questions relating to the same constructs throughout the questionnaire.

We conducted Harman's one-factor test, exploratory factor analysis (EFA), which is post hoc statistical tests, to test the presence of common method effect. The unrotated principal component factor analysis with varimax rotation reveals the presence of eight distinct factors with eigenvalue greater than 1.0, rather than a single factor. The eight factors together account for 69.377 percent of the total variance; the first (largest) factor does not account for a majority of the variance (19.094 percent). Thus, this analysis did not yield one overarching factor, but eight separate ones, suggesting the absence of common method variance.

Dependent, independent and control variables

Dependent variables:

(i) Subsidiary financial performance: subsidiary managers assess *actual performance against budget* on return on capital employed (ROCE), sales growth and profit growth (Czechowicz et al., 1982; Appleyard et al., 1990). By using multi-dimensional financial performance measures, we examine the sustainability and viability of subsidiary strategy and performance.

(ii) Subsidiary non-financial performance: subsidiary managers assess market share growth compared to competitors.

All financial and non-financial performance indicators are measured on a Likert 7-point scale from 1=very unsatisfactory to 7=very satisfactory. They can be treated as interval data and the standard regression technique can be applied (Nunnally & Bernstein, 1994). We follow Grant, Jammie & Thomas (1988) to average the perceptual performance over the five-year period in order to neutralize the variation over the year.

Previous studies find there is a high correlation between objective and subjective measures of performance (Dess & Robinson, 1984; Geringer & Herbert, 1991; Venkatraman & Ramanujam, 1987). We use multiple performance measures to avoid the problems associated with depending on narrowly defined criteria, such as profitability. This also addresses the inherent limitation of survey method. Although the Likert 7-point scale has limitations in addressing the complexities of performance, it has been commonly used in previous studies (Kim & Gray, 2008; Brouthers, 2002).

We test the performance construct validity using confirmatory factor analysis (CFA) with AMOS and maximum likelihood estimation. The hypothesized CFA model provides a good fit to the data (Chi square=6.614/df=2; n=101; CMIN/DF=3.307; NFI=0.981; CFI=0.987; RMSEA=0.152; $p>0.037$), with a 95% confidence interval of 0.00-0.095. The results show that subsidiary performance measures are a multi-dimensional construct.

Independent variables

Financing sources: respondents self-report the sources of capital. Internal financing sources include retained earnings (Myers & Majluf, 1984), excluding the capital investment from

parent firms. External financing sources include borrowing from bank(s), venture capital(s) within the host country, and borrowing from international bank(s) outside the host country. The internal financing sources take the value of 1, otherwise 0.

Recombination capability of international financial management: Respondents self-rate their subsidiaries' financial management capabilities on a 7-point scale (1=very weak, 7=very strong) in investment, financing and dividend; financial accounting and reporting; financial planning and analysis; budgeting and forecasting; controlling; treasury; liquidity, working capital and foreign exchange management. The scale reliability is tested with Cronbach alpha of 0.761.

Control variables

Based on the institution-based view (Peng, Wang & Jiang, 2008), the resource based-view of the firm (Barney, 1991) and industry-based view (Porter, 1980; McGahan & Porter, 1997), extant research decomposing the variance in firm profits show that country effects, corporate parent and subsidiary characteristics, and industry are all influential in explaining the variation in the performance of firms and their foreign subsidiaries (Christmann, Day & Yip, 1999; Makino, Isobe & Chan, 2004; Chan, Isobe, & Makino, 2008; McGahan & Porter, 1997; Ma, Tong & Fitza, 2012). Thus, we include a comprehensive four set of control variables based on previous literature in testing subsidiary performance.

- (i) Host country institutions
- (ii) Subsidiary characteristics
- (iii) Parent firm characteristics
- (iv) Industrial sectors

Host country institutional environment: Institutional context is a critical factor (Bowe et al, 2010). Two principal strains of institutional theory include the political science and economic history (North, 1990) and the sociology and organizational theory (Scott, 2002). Institutions of a country, both formal and informal, can be construed as part of a country's location advantages (or disadvantages) (Dunning, 1998). Institutional diversity increases the risks in the decision-making process and raises transaction costs (Kostova & Zaheer, 1999). Different institutions increase the complexity of learning how to operate in these local contexts. We aim to capture the potential impact of different host country institutions on subsidiary performance (Christmann et al., 1999; Makino et al., 2004; Ma et al., 2012).

However, unlike prior research that has analyzed institutional effects using public data, we use multi items covering a wide range of North-type institutional factors assessed by subsidiary managers on a 7-point scale in their initial location choice and subsequent expansion and growth (1=not important, 7=very important). These include stable economic, social and political environment; ease of doing business, legal regulations and law enforcement; availability of grants and incentives; taxes; and access to finance. As an alternative for robustness check, we use a summated scale of multi-item construct on host country institutional environment. The scale reliability is tested with Cronbach alpha of 0.792.

Subsidiary characteristics

Relatedness to parent MNEs' activities: we control for the extent to which the activities of the subsidiary are related to those of its parents. The less related these activities are, the less subsidiaries can draw upon the product-specific knowledge of their parents, and hence the poorer their performance become (Li, 1985; Shaver, 1998). We followed Slangen & Hennart (2008) to measure the relatedness of the subsidiary's activities to those of its parent. We asked

respondents to describe the subsidiary's main products and services and compared with Onesource (Thomson Reuters) description of the parent's main and secondary activities. The first dummy takes a value of 1 when the subsidiary's main products and services are the same as its parent's secondary products/ services, while the second takes the value of 1 when the subsidiary's activities/ services differ from both its parent's main and secondary products/ services. When both dummy variables have a value of 0, the main products and services of the subsidiary are the same as those of its parent.

Subsidiary autonomy: Subsidiary autonomy is defined as the decision-making rights relative to parent firm. High autonomy occurs when decisions are primarily made by the subsidiary. Low autonomy arises when such decisions are largely made by parent firms. Previous studies document that the level of autonomy by subsidiaries is a critical parameter to determine the subsidiary's position in the MNE network (Taggart, 1997; Birkinshaw & Morrison, 1995; Martinez & Jarillo, 1989).

Because the level of autonomy in the decision making process is hard to measure from secondary sources, we follow Birkinshaw & Hood (1998), Roth & Morrison (1992), Slangen & Hennart (2008), among others, to assess it by questionnaire. Respondents self-assess their subsidiaries' level of freedom to make a range of decisions without reference from headquarters (HQ)/ regional offices in supply chains (key suppliers, production/ service delivery process); sales, marketing and distribution (product/ service offerings, key customers, advertising, promotion and brands); human resources management (selection, recruitment, remuneration, training and development of employees); international financial management and non business infrastructure relations. A Likert 5-point scale is used, from 1=decisions exclusively made by HQ; 2=decisions largely made by HQ; 3=shared decision; 4=decisions

largely made by subsidiary; 5=decisions exclusively made by subsidiary. The scale reliability test shows Cronbach alpha of 0.870.

Subsidiary size Previous studies show that subsidiary size is a critical control variable. Parent firms generally depend on larger subsidiaries than on smaller ones (Prahalad & Doz, 1987) and may hence pay more attention (Bouquet et al., 2009) and offer more support to large subsidiaries, thereby increasing the performance of such subsidiaries (Slangen & Hennart, 2008). Subsidiary size is the number of employees and is coded as 1=below 500 employees, 7=2,000 employees or more.

Subsidiary age This variable serves as a measure of host country experience and accumulated knowledge (Dewaelheyns & Van Hulle, 2010; Autio, Sapienza & Almeida, 2000). The longer the subsidiary operates in the host country, the more experienced it becomes with the business environment and thus the better it performs than those of younger age and with little experience. Subsidiary age is the number of years in operation since establishment date and is coded as 7=established since 1880; 1=established in the 2000s onward.

Parent firm characteristics

Parent firm size: prior research recognizes the significant effect of the corporate parent on foreign subsidiary performance. A foreign subsidiary can be considered an integrated part of its parent firm, because its core resources are often transferred from the parent firm (Makino et al., 2004). Larger parent firms may have resource advantages which allow them to increase performance by economies of scale and scope (Ma et al., 2012; Makino et al., 2004). This variable is measured by the number of employees and is coded as 1=10,000 employees and 7=70,000 employees or more.

Sectors: industries tend to have different performance dynamics (Caves, 1989; McGahan & Porter, 1997). Industries can be broadly categorized into manufacturing and service sectors. We control for sector effects, using dummy variables 0=service and 1=manufacturing.

RESULTS AND DISCUSSIONS

Econometric model

We test the hypotheses using a multiple regression. The equation is as follows:

Subsidiary-level performance = f [internal financing sources, recombination capabilities of international financial management; control variables] + error terms

Table 1 here

Table 1 reports key descriptive statistics and correlations for all variables. There is sufficient variance of independent variables and low correlation of the zero order correlation matrix ($r < 0.4$), except among performance measures. Hair et al. (2010) suggest that the correlation should be below the usual threshold of 0.50.

We carefully examine data with respect to linearity, equality of variance and normality. There are no serious deviations. We examine the tolerance for individual variables in the model which all exceed 0.7. The variance inflation factor (VIF) values for individual variables in the model do not exceed the value of 2 and they are below the commonly specified cut off values of 10 (Hair et al., 2010). It confirms that multicollinearity is not a problem.

Table 2 here

Table 2 reports the results. Our findings present a compelling theoretical explanation for the determinants of subsidiary performance. Our theoretical propositions are empirically supported in that internal financing sources and recombination capabilities in international financial management have statistically significant positive impacts on subsidiary performance. This opens a major avenue for further research. Furthermore, we find that the relationships of these variables are so overwhelmingly strong that virtually none of the control variables show any relationships with the dependent variables.

In terms of hypothesis tests, the following picture has emerged. Specifically, hypothesis 1 predicts a positive impact of internal financing sources on a subsidiary's performance. The coefficients in the models are statistically significant across all subsidiary performance indicators, confirming this prediction. So, hypothesis 1 is fully supported.

We explore more deeply the capital structure and financing sources of British subsidiaries. We find that these subsidiaries rely heavily on internal financing and depend less on external debt financing. Retained earnings are at 29 percent and intra-firm borrowing at 8 percent. Capital investment by the parents is the chief financing source at 56 percent. In short, 93 percent of financing sources in the British subsidiaries in South East Asia come from internal financing (including the capital investment by the parent firms). Only 7 percent of financing sources come from external debt financing. This finding is fully consistent with the "pecking order theory" of financing hierarchy (Myers & Majluf, 1984). Our empirical evidence on the actual hierarchical financing of British subsidiaries is similar to previous study using survey data of US-controlled subsidiaries (Shao, 1997), which also supports the pecking order theory. We find support for internalization theory with the significant importance of internal capital

markets (Rugman, 1980; Aulakh & Mudambi, 2005).

The FSA in financing involves a high degree of complexity. The financing sources of parent firms to finance foreign subsidiaries through internal capital markets are the internationally transferable FSA and these financial resources are important for the subsidiary's initial establishment and up-and-running. Over time the profits generated by foreign subsidiaries which have been reinvested in the form of retained earnings are equivalently important for subsidiaries' subsequent expansion and growth. The management of these combined financial resources requires highly disciplined execution skills and excellent insights of subsidiary managers to ensure that these FSAs are efficiently utilized and profitably exploited. By adopting a very careful approach to combine internalization theory in IB and the pecking order theory in finance literature to account properly for our model, we discover internal financing as an FSA and its critical importance to subsidiary performance. This is a new finding as the FSA in financing has been largely neglected in the IB literature.

Hypothesis 2 predicts that recombination capabilities of international financial management are important determinants of a subsidiary's performance. The coefficients in the model confirm statistically significant positive impacts of this variable on subsidiary performance. So, hypothesis 2 is fully supported. Our empirical evidence supports internalization theory (Buckley and Casson, 1976; Rugman, 1981; Hennart, 1982; Rugman & Verbeke, 2008; Verbeke & Brugman, 2009; Morck & Yeung, 1991). Rugman & Verbeke (2002) demonstrate that FSAs are fully consistent with the concepts of unique resources and capabilities in the resource-based view of the firm (Barney, 1991; Peteraf, 1993; Teece et al., 1997). In essence, a subsidiary's performance is determined by the basic FSAs. A subsidiary's strong performance

comes from its effective creation, deployment, recombination, utilization, and profitable exploitation of its FSA bundles (Rugman et al., 2011).

Because the direction of causality is hard to assess with certainty, we examine directly the *reverse effects of subsidiary profit on financial management FSA* as theoretically suggested by Verbeke & Brugman, (2009). We find a statistically significant positive relationship on the reverse effects at a 5 percent significant level. Of the total sample, we find that 84 percent of subsidiaries are profitable, as we asked subsidiaries to self report actual financial results: loss, break-even or profit in the survey. These subsidiaries have reinvested part of the profits into the business in the form of retained earnings. They use these financial resources to continuously enhance their existing FSAs and develop new FSAs for long-term sustainable expansion and growth. Our study is among the first which directly tests such a reverse effect due to our original and innovative approach to apply accounting to international business.

In contrast to previous studies (Christmann et al., 1999; Makino et al., 2004; Ma et al., 2012), we find that the control variables of host country institutional factors show no relationships to subsidiary performance, whether we include all these items one-after-another into a series of regressions or we use a multi-item construct. The institutional perspective which has been utilized in the current literature suffers from certain weaknesses. One reason may be that prior studies adopt either macro or micro-level institutional views which often lead to mixed findings. In general, scholars place too heavy emphasis on institutional factors and miss other important factors (Jormanainen & Koveshnikov, 2012). Thus, they overlook the possibility that macro-level economic and institutional theories may have limited explanatory power to explain the performance of foreign subsidiary. Specifically, the MNE competes in foreign markets by internalizing FSAs and transferring them within the MNE networks of foreign subsidiaries

rather than in market exchange (Rugman, 1981). Prior studies perhaps understate the importance of competitive advantages developed within the MNE networks and diffused throughout, regardless of the type of institutional environments the firm faces.

The findings of control variables of subsidiary characteristics (relatedness to parent firm activities, subsidiary size and subsidiary age) having no association with subsidiary performance are largely consistent with previous research (Slangen & Hennart, 2009). There is a statistically significant positive impact of the control variable of subsidiary autonomy on ROCE, but there is no effect on market share growth, sales and profit growth. This is consistent with McDonald et al. (2008) who find limited evidence for positive relationships between different forms of autonomy and subsidiary performance. Autonomy can lead to the subsidiary taking a peripheral position in the MNE network, leading to lower level of parent support. Autonomy can be used by subsidiaries to engage in rent seeking behaviour (Mudambi & Navvarra, 2004; Scharfstein & Stein, 2000). Thus, the subsidiary autonomy level tends to be reduced in a more dynamic and integrated MNEs. While subsidiary autonomy is important, it should not be seen as an end in itself (Taggart & Hood, 1999).

Further, we posit that the heavy use of internal financing sources acts as control mechanisms by the parent firms upon rent-seeking behaviour of subsidiary managers in the context of emerging economies. This ensures subsidiaries being constrained, so that the ‘negative’ power they acquire from their initiatives and autonomy is not used to maximize their benefits at the expense of the MNEs as a whole (Dorrenbacher & Gammelgaard, 2011). Our findings show that British MNE subsidiaries focus on *efficiency, value creation and performance delivery* rather than rent-seeking and value appropriation.

In contrast to previous studies (Makino et al., 2004; Ma et al., 2012), we find that parent firm characteristics show no relationship to subsidiary performance. This reinforces the critical importance of recombination capability. It is important that the MNE not only transfers abroad its existing set of FSAs developed in the home country, but also creates new knowledge by foreign subsidiaries in host countries, integrates it with the existing knowledge base and exploits the resulting new knowledge bundles. This requires the capability of its foreign subsidiaries to adapt to new circumstances in host countries (Verbeke, 2009).

Finally, sector effects do not explain much the performance variance of foreign subsidiaries. Unlike the institutional transition in a large emerging economy like China which provides local protectionism of specific industries, sectors and regionalism (Cannon & Zhang, 1996), the institutional environment in the ASEAN region are more liberal, free market-oriented and FDI friendly (CIA World Factbook on ASEAN country members, 2013). As a result, the competitive intensity which may shape the structure of these industries and sectors does not affect the performance of foreign subsidiaries. They have developed industry-specific knowledge and SSAs to operate successfully in local environments.

Robustness tests

We perform additional robustness tests on all models to rule out possible alternative explanations. We cross check our models given the nature of different performance measures and we find full support for all hypotheses. We also cross check the variable of ‘internal financing sources’ which include retained earnings and intra-firm borrowings. We find a consistent result of a statistically significant positive effect on subsidiary performance.

Further, we conduct robustness test on the direct effects of the two traditional FSAs in general management and marketing on the performance of foreign subsidiaries, besides the international financial management capabilities. We find statistically significant positive effects. The results are not reported here due to space constraints but they are available upon request. We also test the reverse effects of subsidiary profits on these two SSAs, which reveal a positive relationship. We do not test the SSA in R&D as we find that less than five cent of British subsidiaries performs this function and they are all geographically located in Thailand.

Managerial and public policy implications

Our study provides important implications for managers and policy makers. The findings suggest that the determinants of subsidiary performance are internal financing sources, basic general management and marketing skills, and the offerings of regional/ local customized products and services. In other words, foreign subsidiaries need to develop new LB FSAs to overcome the liability of foreignness and effectively (re)combine with the resources provided by parent firms. The most important contribution is that the capability of the parent firm to access international capital markets and to operate an efficient internal capital market within its own organizational structure is an important competitive advantage. Internal financing are the main financing sources for foreign subsidiaries. These findings provide important insights to managers of MNE subsidiaries.

The public implications for host countries are also clear. Our findings address the widely debated issues about the role of the MNE to host country economic development. We find that British MNEs bring in capital which host countries are looking for. MNEs use internal funds to finance their foreign subsidiaries, and they depend less on host countries' credit funds (i.e. external funds through debt financing raised in the host countries). We also find that MNEs

reinvest part of their profits to expand and grow the business of their foreign subsidiaries through retained earnings. In other words, our findings provide evidence that British MNEs act as development agencies in financing economic development through their foreign subsidiaries.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

We highlight a few limitations, some of which also provide directions for further research. First, the ultimate parents of foreign subsidiaries in this study are among the largest British MNEs. The analysis and interpretation of the findings reflect the views of such subsidiaries. We suggest future research to incorporate subsidiaries with MNE parents headquartered from all parts of the Triad (North America, Europe and Asia Pacific) to extend our research further. Second, another potential limitation of our study is that we use data and information provided by subsidiary managers. We recommend that future research focus on a homogenous set of subsidiaries where researchers might be able to access objective data or use multiple sources of data.

CONCLUSIONS

We integrate internalization theory in IB literature with the pecking order theory on capital structure and financing in finance literature to investigate the effects of internal financing and recombination capabilities of international financial management on subsidiary performance. We develop a theory-driven explanation of determinants of subsidiary performance and empirically validated with an original survey dataset of British MNE subsidiaries in six emerging economies of the ASEAN region. The most important finding of this study is that internal financing sources act as a critically important FSA to enhance subsidiary performance. Over 90 percent of sources of capital and financing in the British subsidiaries come from

internal funds. In short, what really matters to subsidiary performance are internal financing and international financial management capabilities. We have also observed directly the *reverse effects of subsidiary profit on financial management FSA* where we find a positive relationship. We suggest that future research examines further the reverse relationship.

Our findings make useful and clear theoretical and empirical contributions to the subsidiary strategy and performance literature. Our study reinforces the need for theory-based conceptualization in research design. By incorporating finance-specific factors, our study is one of the first to examine the issue of how financing, expansion and growth of foreign subsidiaries interact and the effects on subsidiary performance. By adopting internalization theory, we demonstrate that subsidiary performance depends on recombinations of internal financing and international financial management capabilities.

Finally, the main theoretical contribution of this paper is to establish that internal financing is a type of FSA, which is equally important as other intangible knowledge-based FSAs in R&D, technology, brands and managerial skills. We also contribute to the theory of the MNE by demonstrating the importance of internal capital markets in financing foreign subsidiaries and the positive impact of internal funds on subsidiary performance.

Endnotes

Data triangulation

During the pilot test, the first author obtained subsidiary managers' permissions to observe their subsidiaries' daily operations. As she has had 13-year professional and managerial experience in accounting, finance and business administration before joining academia, she was strongly interested in the functioning of accounting and finance department. She observed the work performed by the accounting team. This is to ensure that (i) the information and data we planned to collect through questionnaire were reported in accounting systems, and (ii) subsidiaries installed internal control systems to assure data integrity, i.e. there was no 'creative accounting'. In other words, we not only relied on subsidiary managers' perceptions, and insights, but also looked for hard facts and data to substantiate their views. We made effort to triangulate our data for the reliability and validity when viable, by observation, access to subsidiary documents and reports. Overall, we found that British MNE subsidiaries are strongly controlled by external auditing firms, as delegated monitors and enforcers of control rights of the parent firms (Bowe et al., 2010). Foreign subsidiaries are strongly performance-driven and their performance delivery is evaluated by actual performance against budget.

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Table 1: Descriptive statistics and Pearson correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Average market share growth 2003-2007	4.633	1.161	1														
2. Average ROCE 2003-2007	4.998	1.258	.514**	1													
3. Average sales growth 2003-2007	5.039	1.053	.694**	.728**	1												
4. Average profit growth 2003-2007	4.912	1.225	.675**	.804**	.921**	1											
5. Internal funds	0.370	0.300	.158*	.223**	.228**	.275***	1										
6. Int'l financial management capabilities	5.584	0.874	.295**	.316**	.339**	.365**	.108*	1									
7. Stable economic, political and social environment	5.356	1.188	.104	-.081	.034	-.037	-.012	.172	1								
8. Ease of doing business, legal regulations and law enforcement	5.198	1.296	.135	.078	.196*	.120	.076	.206*	.603**	1							
9. Availability of incentives and grants	3.396	1.844	.076	.026	.089	.137	.107	.065	.291**	.402**	1						
10. Taxes	4.306	1.534	.042	.012	.048	.046	-.150	-.082	.493**	.517**	.472**	1					
11. Access to finance	3.524	1.910	.121	-.091	-.030	-.040	.004	-.065	.366**	.248*	.471**	.456**	1				
12. Relatedness to parent activities	0.029	0.170	-.035	.114	.0267	.041	.057	.083	.095	-.026	.280**	.117	.0437	1			
13. Subsidiary autonomy	3.366	0.796	.098	.206*	.108	.129	-.055	.048	-.181	-.119	-.126	-.141	-.015	-.080	1		
14. Subsidiary size (employees)	1.623	1.147	-.053	.037	.045	.101	.123	.081	-.209*	-.124	.071	-.081	-.064	-.044	.075	1	
15. Subsidiary age	2.623	1.263	.154	.195	.196*	.234*	.006	.255*	-.082	.039	.086	.060	-.049	-.040	.009	.260**	1
16. Parent firm size (employees)	3.297	2.567	.072	.156	.206*	.212*	.129	.220*	-.182	-.077	.040	.027	-.050	-.020	-.014	.378**	.33
17. Sectors	0.435	0.498	.053	-.008	.142	.131	-.176	-.062	.005	-.011	.202*	.176	.093	-.036	.022	.097	.08

Note: n = 101, p* < 0.1, p** < 0.05, p*** < 0.01, 2-tail test.

Table 2: Multiple regression analysis

Variables	Market share growth	ROCE	Sales growth	Profit growth
(Constant)	0.976 (1.095)	0.908 (1.125)	1.259* (0.943)	0.307 (1.063)
<i>Independent variables</i>	0.672*	0.992***	0.821***	1.186***
Internal funds	(0.410)	(0.421)	(0.353)	(0.398)
International financial management capabilities	0.359*** (0.150)	0.401*** (0.154)	0.320*** (0.129)	0.462*** (0.146)
<i>Control variables</i>				
<i>Host country institutions</i>	0.001	-0.207	-0.090	-0.166
Stable economic, political and social environment	(0.136)	(0.139)	(0.117)	(0.132)
Ease of doing business, legal regulations and law enforcement	0.023 (0.127)	0.076 (0.131)	0.156 (0.110)	0.052 (0.124)
Availability of incentives & grants	-0.020 (0.084)	-0.034 (0.086)	-0.027 (0.072)	0.031 (0.081)
Taxes	0.015 (0.108)	0.156 (0.110)	0.044 (0.093)	0.129 (0.104)
Access to finance	0.079 (0.074)	-0.057 (0.076)	-0.025 (0.064)	-0.051 (0.072)
<i>Subsidiary characteristics</i>	-0.382	0.675	0.196	0.031
Relatedness to parent activities	(0.730)	(0.750)	(0.629)	(0.709)
Subsidiary autonomy	0.148 (0.148)	0.327** (0.152)	0.159 (0.127)	0.206 (0.143)
Subsidiary size (employees)	-0.130 (0.111)	-0.090 (0.114)	-0.071 (0.095)	-0.049 (0.108)
Subsidiary age	0.105 (0.100)	0.104 (0.103)	0.068 (0.086)	0.098 (0.097)
<i>Parent firm characteristics</i>	-0.001	0.010	0.036	0.013
Parent firm size (employees)	(0.052)	(0.053)	(0.045)	(0.050)
<i>Sectors</i>	0.211 (0.245)	0.081 (0.252)	0.404** (0.211)	0.400* (0.238)
R square	0.409	0.494	0.500	0.543

Notes: n = 101. Variables are shown with unstandardized coefficients followed by standard errors in brackets. *p<0.1; **p<0.05; ***p<0.01.