



# Internal equity financing and the performance of multinational subsidiaries in emerging economies

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**Abstract**

We examine the internal equity financing of the multinational subsidiary which retains and reinvests its own earnings. Internal equity financing is a type of firm-specific advantage (FSA) along with other traditional FSAs in innovation, research and development, brands and management skills. It also reflects subsidiary-level financial management decision-making. Here we test the contributions of internal equity financing and subsidiary-level financial management decision-making to subsidiary performance, using original survey data from British multinational subsidiaries in six emerging countries in the South East Asia region. Our first finding is that internal equity financing acts as an FSA to improve subsidiary performance. Our second finding is that over 90% of financing sources (including capital investment by the parent firms) in the British subsidiaries come from internal funding. Our third finding is that subsidiary-level financial management decision-making has a statistically significant positive impact on subsidiary performance. Our findings advance the theoretical, empirical and managerial analysis of subsidiary performance in emerging economies.

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**Keywords:** internalization theory; internal equity financing; subsidiary-level financial management decision-making; pecking order theory; subsidiary performance; South East Asia/ASEAN

## INTRODUCTION

In this article we demonstrate that internal equity financing by managers of multinational subsidiaries is an important firm-specific advantage (FSA). Internal equity financing refers to subsidiaries retaining and reinvesting their own earnings to finance continuing expansion and growth. Simply put, we examine the use by foreign subsidiaries of their retained earnings. Internal equity financing is particularly beneficial to foreign subsidiaries of multinational enterprises (MNEs) from developed countries internationalizing into emerging economies, where the financial infrastructure in the host countries is generally not as developed as it is in their home countries. The key research question of this study is “what is the impact of internal equity financing on the performance of foreign subsidiaries?”

The main theoretical contribution of this article is to establish that internal equity financing is a type of FSA. Consistent with

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internalization theory, internal equity financing is conceptually valuable, along with 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.<sup>1</sup> The FSA of internal equity financing, although driven by the parent firm (and its costs of capital due to the advantages of consolidated accounting returns), is of great benefit to the subsidiary.

To establish the nature of the FSA in internal equity financing, it is necessary to recognize that the host-country institutional factors are deficient in providing external financing opportunities for the subsidiary. Due to information asymmetries, weak regulatory structures and different types of institutional voids, there exist imperfections in external capital markets in emerging economies. The financial markets are thin and inefficient, and lack regulatory integrity. Financial institutions in emerging economies in general and in South East Asia in particular, excepting Singapore, are deficient in credit availability, and the price of loanable funds (the interest rates and the costs) are high. Consequently, internal equity financing may be cheaper than external debt financing. To overcome the challenges of imperfect capital markets in the host countries, subsidiary managers make a strategic decision to use their own retained earnings to maximize sales growth and overall performance. This is the focus of our study.

We show here that the strategic decisions and capabilities in the efficient use of retained earnings and highly disciplined execution skills in financial management of managers in foreign subsidiaries enhance subsidiary performance. Subsidiary managers have deep insights into the idiosyncratic nature of imperfect financial markets present in host emerging economies and they develop new capabilities in managing financial resources effectively and efficiently in the face of these idiosyncrasies. This is a type of location-bound (LB) FSA, which is developed and embedded in foreign subsidiaries (Rugman & Verbeke, 1992). Thus our second research question is "to what extent does subsidiary-level financial management decision-making improve subsidiary performance?"

To conduct this research, we integrate internalization theory (Buckley & Casson, 1976; Hennart, 1982; Rugman, 1981) from the international business (IB) literature with the pecking order theory on capital structure and financing (Myers & Majluf, 1984) in the finance literature. Our research is

a response to the call by scholars, such as Agmon (2006), Bowe (2009) and Bowe, Filatotchev, and Marshall (2010) for further integration of contemporary finance into IB research. Oxelheim, Randoy, and Stonehill (2001, 2012) have asked the IB research community to incorporate finance-specific factors in understanding the international investment decisions of MNEs. We agree that analysis using the tools of international finance can add insights to the international strategies of MNEs and their subsidiaries.

Our empirical approach differs from previous studies. To examine the finance function within the MNE, we carefully incorporate international accounting standards with IB research, which are largely ignored in IB studies. Specifically, our questionnaire design includes considerations of IFRS10 (*Consolidated financial statements*) and IAS21 (*The effects of changes in foreign exchange rates*), and our subsequent analysis explores their relationships to MNE subsidiary performance. These standards are relevant to the reporting of subsidiaries, joint ventures and foreign transactions. In particular, these standards govern financial reporting based on 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 data set employed in the empirical work is another important contribution of the article. 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). We assemble original data on the performance of British subsidiaries in six emerging economies in the ASEAN region (Malaysia, Indonesia, the Philippines, Singapore, Thailand and Vietnam).

### THEORETICAL SYNTHESIS AND HYPOTHESES DEVELOPMENT

The essential insight of "classic" internalization theory (Buckley & Casson, 1976; Hennart, 1982; Rugman, 1981) is that MNEs develop FSAs by operating across national borders in the face of various market imperfections, such as the public goods externality of 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 systems.

Buckley and Casson (1976) primarily focus 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 important, along with 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, that is, the absolute amount of capital as the proxy for an FSA (Horst, 1972; Lecraw, 1984; Vernon, 1971). Yet largely under-researched are the access to financing sources and the firm-specific capabilities in financial management. These are: the MNE's capabilities in accessing international capital markets; its managerial skills in operating an efficient internal capital market to substitute for imperfect external capital markets; and the use by subsidiary managers of internal equity financing sources in the form of retained earnings. Here we investigate the ability of the subsidiary to leverage internal equity financing to sustain its expansion and growth.

"New" internalization theory (Rugman & Verbeke, 1992) is an extension of classic internalization theory, which links IB theory to the framework of economic integration and national responsiveness of Bartlett and Ghoshal (1989). Rugman and Verbeke (1992) identify the element of the location-boundedness of FSAs, postulating that FSAs can be non-location-bound (NLB) or location-bound (LB). The former is internationally transferrable across borders with low cost and little adaptation and confers the benefits of economy of scale, scope and exploitation of national differences. The latter is tied to a particular country or a set of countries or regions and brings the benefits of national responsiveness. Furthermore, Rugman and Verbeke (2001) maintain that FSAs can be developed by both parent firms and by foreign subsidiaries. Previous studies have provided convincing empirical evidence of subsidiaries creating new competences and capabilities in innovation and organizational management (Andersson, Forsgren, & Holm, 2002; Cantwell & Mudambi, 2005; Frost, Birkinshaw, & Ensign, 2002; Holm & Pedersen, 2000). Subsidiary initiatives are instrumental to the development of FSAs (Birkinshaw, 1996, 1997, 2000; Birkinshaw & Hood, 1998).

Verbeke (2009) provides an in-depth explanation of the three types of FSAs in new internalization theory. These are: stand-alone (strengths of the firm in interface with home country-specific advantages

(CSAs)), routines (the way the company does business) and recombination capability (Verbeke, 2009). The highest-order FSA is the recombination capability. The concept of "recombination capability" is similar to the "bundling" concept by Hennart (2009) in IB literature, and the "dynamic capability" by Teece, Pisano, and Shuen (1997) in strategic management literature. Verbeke (2009: 40) maintains that "the recombination capability 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."

In the subsequent sections, we discuss financing foreign subsidiaries in the context of the MNE, the internal capital market, the challenges of imperfect financial infrastructure in emerging economies and the development of subsidiary-level financial management capabilities. The theoretical synthesis helps us to develop our hypotheses.

### Financing Foreign Subsidiaries of the MNE

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, and Yamin (2013) emphasize that financing is different in the MNE context compared with a domestic firm. These scholars suggest that when firms in general have to make strategic decisions in sources of finance, they can select using either internal sources in the form of retained earnings or external sources in the form of bank debts, bonds, hybrid securities or equity. These financing sources are available within the same country in the case of a domestic firm. Furthermore, Bowe et al. (2013) maintain that the pool of sources for financing is even larger in the case of MNEs due to their international operations in multiple countries. These MNEs are able to source any of the funds already mentioned within each one of the countries in which they are operating (Bowe et al., 2013). Finally, Bowe et al. (2013) observe that firms which belong to a group of companies have access to an additional source of financing through internal capital markets, that is, funds from other entities within the group. Shapiro (1975) argues that financing subsidiaries might result from a cost-benefit analysis of using different sources of financing. Other factors affecting the financing decision include: different currencies; taxation; institutional and legal regimes (Bianco, Jappelli, & Pagano, 2005; La Porta, Lopez-de-Silanes,



Schleifer, & Vishny, 1997, 1998); creditor rights (Akbel & Schnitzer, 2011); securities law (Mishra & Tannous, 2010; Siegel, 2005); and bankruptcy codes (Acharya, Sundaram, & John, 2011).

Early studies draw upon insights of MNE executives by using surveys. Bowe et al. (2013) observe that this literature documents the complexities in financing foreign subsidiaries (Errunza, 1979; Robbins & Stobaugh, 1972; Stobaugh, 1970). While previous studies do not examine the impact of internal equity financing on subsidiary performance, we will attempt to test this (see Hypothesis 1). We focus on retained earnings generated by subsidiaries, which are hypothesized to be important internal financing sources for foreign subsidiaries to expand and to sustain their growth.

### The Internal Capital Markets of the MNE

Because external capital markets are imperfect, the MNE creates an internal capital market within its own organizational structure, which effectively redistributes financial resources within the firm (Mudambi, 1999; Rugman, 1980). Over 30 years ago, Rugman (1980) first applied internalization theory to corporate international finance. Rugman (1980) argues that the parent firm MNE can benefit from the development of an internal capital market in response to institutional failures in country level capital markets. One of the applications of this insight is in relation to the cost of capital of the MNE. Rugman (1980) explains why the appropriate cost of capital for the MNE is that of the MNE itself and not that of the individual subsidiaries using the insights of internalization theory. 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. Rugman (1980) maintains that 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 (Rugman, 1980). There is a common internal capital market within the MNE, and all projects and subsidiaries are integrated parts of the firm (Rugman, 1980).

Unfortunately, this work on the MNE has been somewhat ignored. However, there is a rich literature

on internal capital markets (Desai, Foley, & Hines, 2004; Dewaelheyns & Van Hulle, 2010; Kolasinski, 2009; Lamont, 1997; Mudambi, 1999; Scharfstein & Stein, 2000; Shin & Stulz, 1998; Stein, 1997). Earlier research on internal capital markets is in the context of diversification in product markets within domestic operations (Hoskisson & Turk, 1990; Lamont, 1997; Stein, 1997). Empirical evidence indicates that parent MNEs make use of their own internal capital markets (Aggarwal & Kyaw, 2008; Aulakh & Mudambi, 2005; Desai et al., 2004; Mudambi, 1999) when there are imperfections in home or host country capital markets. Desai (2008) argues that MNEs exploit their internal capital markets in order to gain a competitive advantage in countries when financing for local firms becomes very expensive. For example, Desai (2008) observes that when there was a currency crisis in Asia in the 1990s, and companies in the region were struggling to raise capital, a number of US and European MNEs increased financing to their local subsidiaries. Desai (2008) suggests that this strategy allowed these MNEs to gain both market share and political capital with local governments as the host countries interpreted the increased financing as a gesture of solidarity.

### Institutional Voids in Emerging Economies and the Development of Financial Management Capabilities by Foreign Subsidiaries

In the context of emerging economies, institutional voids (Khanna & Palepu, 2010) may present a significant challenge for the strategic decision of financing foreign subsidiaries. Institutional voids refer to the gaps in market institutions found in the absence of intermediaries that facilitate a well-functioning market. Emerging economies often lack reliable sources of information, an uncertain regulatory environment, and inefficient judicial systems, all of which are considered market failures. There are deficiencies in external financing opportunities, and the costs and interest rates of borrowing are high.

We suggest that subsidiary managers need to develop LB FSAs to overcome these institutional challenges. We examine the conceptual logic underpinning the manner in which subsidiary managers develop LB FSAs (Rugman & Verbeke, 1992). We do this by looking at the financial management in the parent firm, and in parent–subsidiary relationships.

First, Western parent firm MNEs utilize well-developed financial infrastructure in their home countries to raise financial resources. For example, British parent MNEs in our sample can access to deep and well-developed financial market in London (UK).



They are able to borrow at competitive interest rates and to issue stocks in equity markets in the home country. In other words, the parent MNEs engage in recombinations with home CSAs.

Parent firms use financial resources to make initial capital investments in each of their foreign subsidiaries. This shows that the parent MNEs develop within its own organization structure an efficient internal capital market to overcome imperfections in external capital markets (Rugman, 1980). Essentially, having an efficient internal capital market managed and controlled by the parent firm (Rugman, 1980) is an FSA and one which also is a benefit of multinationality. As such, foreign subsidiaries can overcome constraints of local capital markets, and this signals a finance-factor competitive advantage for the MNE (Oxelheim et al., 2001). Furthermore, Oxelheim et al. (2012) suggest that financial markets are not fully integrated. This provides firms a reason to invest more in financial strategies and investor relations than their peers in other markets in order to escape a mispriced and/or illiquid domestic stock market (Oxelheim et al., 2012). Indeed, there are significant differences in the development of external capital markets across countries (Adam, 2002; Aulakh & Mudambi, 2005; Desai et al., 2004; Fauver, Houston, & Naranjo, 2003).

Second, we hypothesize that subsidiary managers rely on their own retained earnings for the subsequent process of expansion and growth. This is due to deficiency in external financing opportunities and high borrowing costs in emerging economies. A part of subsidiary profits which are generated from the utilization and exploitation of the capital investments from the parent firms are reinvested into the business for continuing growth. This capability of subsidiary managers in the efficient use of retained earnings is a type of LB FSA. We suggest that only local subsidiary managers have insightful knowledge of the imperfect external capital markets in emerging economies, and they develop sustainable financing strategies in order to operate successfully in host countries. We note that parent firms do not have such in-depth knowledge about host country institutions. In other words, subsidiary managers have developed financial management capabilities, which are the basis for sustainable competitive advantages and value creation for subsidiaries. This also reflects subsidiary-level financial management decision-making.

Third, we note that foreign subsidiaries may not have access to other financing sources within the MNE network in the form of intra-firm borrowing,

that is, loans from sister affiliates and/or parent firms. The intra-firm borrowing is likely determined and managed by the corporate treasury in the headquarters (HQ). This is due to the nature of the MNE internal capital markets where the control of the financial resources is the main function of the HQ (Rugman, 1980).

On the other hand, we observe that host country governments often perceive intra-firm borrowing as one of the mechanisms by parent firms to manipulate profits in their foreign subsidiaries other than dividends, that is, by transferring profits outside host countries. Parent firms may charge high interest rates to subsidiaries on intra-firm borrowing. For example, the case of Starbucks Coffee Company UK Ltd<sup>2</sup> illustrates that the US-based parent firm is seen as charging an excessively high interest rate on an intra-firm loan to its UK subsidiary, leading to serious concerns from the UK tax authorities.

In a related manner, host country governments in emerging economies have become more sophisticated in legal regulations to prevent MNEs manipulating profits through intra-firm loans. For example, the corporate income tax law in Vietnam stipulates that the interest rate of intra-firm borrowing should not be higher than the prevailing interest rates of similar commercial loans by local banks in the market.

Finally, we suggest that it is important to conduct an empirical study to explore the major financing sources of foreign subsidiaries in emerging economies. This will deepen our understanding of this complex phenomenon in business reality and it will also enrich the literature. When we engage in empirical work, asking subsidiary managers how they organize their actual financial arrangements, we find that on average, the ASEAN subsidiaries rely on capital investments transferred from the parent firm for 56% of their total funding; on retained earnings for 29%; and on intra-firm borrowing (including from the parent firms) for only 8%. Only 7% of their funding comes from host country financial institutions or other foreign financial institutions outside the host countries (see Table 1).

In summary, our main contribution in this article is to focus upon the manner in which subsidiary managers may develop a LB FSA. There are several steps in this logic. First, we incorporate literature that demonstrates that parent firm MNEs can engage in recombinations with the home CSAs. For example, in the United Kingdom, parent firm MNEs benefit from deep and well-developed financial markets in London. Second, we examine parent firm and

**Table 1** Major financing sources of multinational subsidiaries in the ASEAN region

Major financing sources	Percent	Percent
Subsidiary retained earnings (1)	29	—
<i>Subsidiary internal equity financing (1)</i>	—	29
Capital investments from the parent firms (2)	56	—
Intra-firm borrowing, that is, loans from sister affiliates and/or parent firms (3)	8	—
<i>Total internal financing (1)+(2)+(3)</i>	—	93
Borrowing from banks in the host country (4)	4	—
Borrowing from venture capital in the host country (5)	1	—
Borrowing from international banks outside the host country (6)	2	—
<i>Total external financing (4)+(5)+(6)</i>	—	7

*n* = 101.

subsidiary relationships, in particular the abilities of parent firms to make capital investments in each of their foreign subsidiaries, according to some monitoring of host CSAs. However, this is not a recombination activity, since such host CSAs interface with subsidiaries, not the parent firm. In the context of the ASEAN countries, we note that there are relatively weak financial institutions, except in Singapore. This is a type of institutional void. Third, to overcome this market imperfection, we hypothesize that subsidiary managers build upon the parent internal financial resources transferred to them by reinvesting their retained earnings in order to maximize sales growth. This managerial capability in the efficient use of retained earnings is a type of LB FSA.

We contribute to the existing literature on MNE financing by noting that the parent MNE cannot develop such a LB FSA, since parent firms lack sufficient knowledge about host country institutions to engage in efficient recombinations. Only the local managers can explore and operate successfully within the idiosyncratic nature of financial markets in ASEAN countries. Thus, when financing theory is applied to MNEs, it is important to modify analysis relevant to the parent firm, as each subsidiary will engage in individual LB FSAs. Finally, it is obvious that each individual subsidiary may not have access to the network for intra-firm borrowing; instead any intra-firm borrowing is likely determined by the parent firm. Our empirical evidence on the major financing sources of subsidiaries provides new insights into the financing of multinational subsidiaries.

### Assessing and Measuring Foreign Subsidiary Performance

Assessing and measuring foreign subsidiary performance is an important research topic in

management accounting and multinational business finance (Appleyard, Strong, & Walton, 1990; Czechowicz, Choi, & Bavishi, 1982). Empirical evidence in management accounting research show that actual performance against budget is often used to assess the performance of foreign subsidiaries (Appleyard et al., 1990; Czechowicz et al., 1982).

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 using transfer pricing, intra-firm loans, management fees, technological licensing fees and royalties (Geringer & Herbert, 1991). However, transfer pricing does not apply to the subsidiaries of British MNEs. These subsidiaries are mainly market seeking engaging in horizontal foreign direct investment (FDI) and network relationships with local and regional key suppliers and key customers (Nguyen, 2014). Transfer pricing is more prevalent in vertically integrated manufacturing firms (especially in petroleum and refining and in pharmaceuticals subsidiaries). These subsidiaries explicitly focus on sales to external customers where they generate 91% of their total sales, whereas intra-firm sales account for only 9% (Nguyen, 2014; Nguyen & Rugman, 2015).

Furthermore, host country governments in emerging economies have become stricter in regulating the potential profit manipulation mechanisms of foreign subsidiaries (see PricewaterhouseCoopers (PwC), 2014). For example, they can force foreign firms to alter the intra-firm prices in related party transactions to those which are set in arm's length transactions. Another example is management fees charged to foreign subsidiaries by the HQ or regional offices, which are not considered as reasonable and legitimate deductible expenses for corporate income tax declaration in certain local tax jurisdictions.

## Hypothesis Development

### *Subsidiary retained earnings as internal equity financing sources*

In this study, we examine the impact of financing decisions on subsidiary performance, using the pecking order theory on capital structure and financing (Myers & Majluf, 1984). This theory argues that under information asymmetry, 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. 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 as the pecking order theory of capital structure and financing (Myers & Majluf, 1984). The firm's debt ratio reflects its cumulative requirement for external financing.

Shyam-Sunder and Myers (1999) have adjusted the pecking order theory to recognize that it does not work in a static sense, that is, current external financing does not depend directly on current internal deficits. The recent theoretical research on the pecking order theory includes Guriev and Kvasov (2009), Hennessy, Livdan, and Miranda (2010), Morellec and Schuerhoff (2011).

The literature has hypothesized two possible relationships between debt financing and profitability. On the one hand, Modigliani and Miller (1963) explain that profitable firms have higher levels of debt in order to take advantage of tax shields of interest expense. On the other hand, the pecking order theory (Myers & Majluf, 1984) predicts the opposite as issuing debt is a costlier option compared with using retained earnings. Most empirical evidence in the corporate finance literature has found support for the pecking order theory using data sets of large publicly traded firms (Booth, Aivazian, Demircug-Kunt, & Maksimovic, 2001; de Jong, Verbeek, & Verwijmeren, 2011; Fan, Titman, & Twite, 2012; Rajan & Zingales, 1995). However, the findings by Frank and Goyal (2003) casts doubt on this theory. On the other hand, Beattie, Goodacre, and 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 insights from subsidiary managers through interactions during data collection. We find that ASEAN subsidiary managers make strategic decisions to use their own retained earnings. With such internal equity financing sources, they do not have to worry about finding external debt financing sources to fund their expansion and growth. The external financing opportunities might be limited due to deficiency in credit availability, and the costs of debts are high.

Subsidiary managers indicate that they have made efforts to convince their HQ that they are capable of exploiting their own retained earnings efficiently. The track record of the ASEAN subsidiary managers, especially their consistency in delivering excellent performance results, is critically important. Subsidiary managers must balance the requirements of dividend payments from subsidiaries to parent firms with their needs of financial resources for continuing expansion and growth.

We also note that ASEAN member countries have implemented friendly public policies to attract FDI and there are no significant restrictions on profit repatriations (Ernst & Young, 2014). Thus this excludes alternative arguments that subsidiaries retain and reinvest their own earnings in the host countries due to legal regulations.

On the other hand, the internal competition for HQs' resources and attention (Ambos & Birkinshaw, 2010; Birkinshaw, 2000) is intensifying for the subsidiaries at issue in this study. These ASEAN subsidiaries have to compete in the annual budgeting exercises for investment and financing with sister affiliates in larger emerging markets such as China and India. Parent firms tend to direct their attention, resource allocation and financing towards subsidiaries in those larger markets. Consequently, the possibilities of additional capital infusion and intra-firm loans from the parent firms and/or sister affiliates into ASEAN subsidiaries might be limited. Thus, the ASEAN subsidiaries rely on their own retained earnings.

Verbeke (2009) maintains that the nature of the MNE's FSAs and its internal organization largely determine the content and process of international financial management decisions. Therefore the budgeting strategy of an MNE for its foreign subsidiaries may not be as flexible as in smaller domestic firms (Rugman & Verbeke, 1990). In fact, we do not find any major change in the financing strategy of subsidiaries in our sample. Thus, we predict:

**Hypothesis 1:** There is a positive association between subsidiary internal equity financing and subsidiary performance.



### **Subsidiary-level financial management decision-making**

Verbeke (2009) demonstrates that international financial management decision-making and capabilities have important implications for the strategy of MNEs and their subsidiaries beyond the functional areas themselves. Kim, Margetis, and Pantzalis (2009) include a measure of financial expertise in their analysis of financial performance. These scholars find a positive relationship to corporate valuation. They show that 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. They suggest that MNEs with financial expertise possess an additional intangible asset, which is essentially equivalent to the traditionally examined intangible assets, such as technological know-how, goodwill and managerial expertise (see Kim et al., 2009).

Rugman (1980) draws upon insights of internalization theory to explain financial management in the MNE. Rugman (1980) argues that MNEs come into existence when their FSAs can be exploited through FDI rather through licensing agreements or through exports. He describes the MNE as a governance mechanism allowing international diversification, and with that the promise of more stable sales and returns over time. He then reinterprets various MNE financial management instruments, such as transfer pricing, as efficient responses to imperfections in external markets. He explains that 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. He suggests that the internal MNE market also allows all domestic and foreign investment projects to be evaluated using a single cost of capital. Finally, he maintains that the internal capital market, run by a centralized financial management function, acts as a “proxy” for the external international capital market.

Rugman (1980: 78) argues against the suggestions of some finance scholars that economic exposure, that is, fluctuations in foreign exchange rates which create the risk of NPV reduction of the firms’ future income streams, should drive strategic decisions such as plant location. He emphasizes that 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 (78).”

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. Verbeke (2009) emphasizes that 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. Verbeke (2009) suggests that it may be useful to combine the internationally transferable knowledge of parent firms with local capabilities in particular subsidiaries. Verbeke (2009) argues that in the absence of a central economic exposure policy, individual subsidiaries learn how to protect themselves against the hazards of economic exposure in the host countries.

According to Bowe et al. (2010), Bowe (2009) and Marshall (2000), MNEs and their subsidiaries use a variety of foreign exchange risk management techniques. For example, subsidiary managers in the ASEAN region have learned from the hard reality of the Asian currency crisis in 1997 and they have developed necessary skills in managing foreign exchange risks. In 1997, sharp devaluations of currencies, such as the baht (Thailand), rupiah (Indonesia) and ringgit (Malaysia) negatively affected these subsidiaries. Such volatile exchange rates forced them to introduce effective tools to reduce the risk of losses resulting from changes in exchange rates. When viable, they sourced materials from local suppliers, to reduce the negative impact of having to pay for inputs in strong foreign currencies (Verbeke, 2009). Such experiential learning has been valuable in helping these subsidiaries to weather smoothly the world financial crisis in 2007.

As we discussed earlier, the strategic decision to use internal equity financing, managerial capabilities of efficient use of these financial resources for continuing expansion and growth, and the highly disciplined skills in financial management by foreign subsidiaries are LB FSAs. They are important for the successful operations of foreign subsidiaries in emerging economies despite the institutional voids they face. Thus, we predict that:

**Hypothesis 2:** There is a positive association between the subsidiary-level financial management decision-making and subsidiary performance.





## METHODOLOGY

### Data Sources, Questionnaire Survey and Samples

We use an original unique primary data set of 101 British multinational subsidiaries in six ASEAN countries for the period 2003–2007. British MNEs followed the footprint of the British Empire and today they are among the largest and most active investors in the ASEAN region (Nguyen, 2013, 2014). From published sources, in particular, OneSource database by Thomson Reuters (Reuters Research Inc.), we identified the largest British firms, based on total revenues (Yip, Rugman, & Kudina, 2006). We also consulted the websites of these firms and their annual reports. Based on this, we identified 78 public and 13 private parent British MNEs with operations in South East Asia. From these 91 parent firms and based on the websites of British, US and European Chambers of Commerce in South East Asia, we identified 504 British MNE subsidiaries.

A 40-question survey was developed to collect data for a number of research projects about the strategy and performance of British multinational subsidiaries. The questions were based on theories of IB and finance, and international accounting standards. The survey instrument was translated into managerial concepts and language, as well as uniquely developed for the context of emerging economies. It was pre-tested with five experienced subsidiary managers. The specific questions which are directly used in this study will be made available upon request.

Data was collected by an email survey, which gave us opportunities for interaction and exchanges with subsidiary managers where we could obtain further insights, posed follow-up questions, and gathered additional information and data beyond the questionnaire instrument itself. However, it was a challenging and time-consuming process.

Typically, surveys with MNE executives have a low response rate (Harzing, 2000). However, we achieved a good response rate of 20%, with no missing values, for a total of 101 replies from private subsidiaries (i.e., their shares are not listed on the local stock exchanges in the host countries). Top management teams answered 90% of the returned questionnaires and these respondents have nearly 8 years of experience working in South East Asia.

The participating subsidiaries belong to 57 parent MNEs (44 public and 13 private MNEs) with an average age of 26 years at time of data collection. Information for 13 private MNEs was not available due to non-disclosure requirements. We compiled financial data of the public parent firms from their

annual reports and we found that as at 2008, they had average revenues of GBP 23,906 million, and average assets of GBP 167,101 million. On the other hand, we found that the average invested capital of the subsidiaries was US\$78 million in 2007 (we asked subsidiaries to report data in US\$ currency). Most subsidiaries are in the service sector (56%) and 44% are in manufacturing/processing (including energy, petroleum and refining).

We performed a non-response bias test. The results show that there are no significant differences across key attributes (sales, assets and employees, data for 2008) between the publicly listed parent MNEs of the respondent and non-respondent subsidiaries, at a 5% significance level (two-tailed test).

### Common Method Variance

To minimize potential common method variance (Chang, van Witteloostuijn, & Eden, 2010; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we used multi-item constructs. We varied scale formats in order to minimize potential consistency. We spread questions relating to the same constructs throughout the questionnaire. Furthermore, we used temporal and psychological separations in the survey (Podsakoff et al., 2003). Temporal separations were created by (1) including the items measuring the key concepts non-consecutively, thereby increasing the likelihood that managers responded to each set of key items without recalling their responses to prior sets of key items and (2) asking for their perceptions of past years' performance (2003–2007), forcing respondents to think of different time periods (see Slangen & Hennart, 2008). These separations reduced the risk of common method variance (Podsakoff et al., 2003).

We conducted Harman's one-factor test which is a *post hoc* statistical procedure to test the presence of common method effect. This analysis did not yield one overarching factor, suggesting the absence of common method variance. Further, we adopted triangulation by using archival sources. Specifically, we compared the information provided by subsidiary managers on the year of subsidiary establishment in order to calculate subsidiary age at the time of survey and relatedness to the parent firm's activities with the information provided by OneSource if available. We used complex models, performing both ordinary least square (OLS) and two-stage least square (2SLS) regressions. We also conducted robustness tests.

In short, in order to mitigate the risks of common method bias and to check whether they exist,

we conducted a number of *ex ante* and *ex post* approaches as suggested by Chang et al. (2010). These procedures confirmed that common method variance was not a serious problem in our data set.

## Dependent, Independent and Control Variables

### Dependent variables

We use multidimensional subsidiary performance measures, including both financial and non-financial measures to capture more fully subsidiary performance.

1. Subsidiary financial performance: Previous studies find there is a high correlation between objective and subjective measures of performance (Dess & Robinson, 1984; Geringer & Herbert, 1991).

We use multiple performance measures to avoid the problems associated with depending on narrowly defined criteria, such as profitability (Woodcock, Beamish, & Makino, 1994; Nitsch, Beamish, & Makino, 1996). This also addresses the inherent limitation of the survey method. The Likert scale has been commonly used in previous studies (Brouthers, 2002; Kim & Gray, 2008). Thus, we asked subsidiary managers to assess actual performance against budget of return on capital employed (ROCE), sales growth and profit growth. By using multidimensional financial performance measures, we examine the sustainability and viability of subsidiary strategy and performance.

Subsidiary managers indicated that the performance measures (actual against budget) for the entire subsidiary are tied to performance objectives of individual managers and staffs as well as their short-term incentives.

2. Subsidiary non-financial performance: Subsidiary managers assessed market share growth compared with 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, Jammine, and Thomas (1988) to average the perceptual performance over the 5-year period in order to neutralize the variation over the year.

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

( $\chi^2 = 6.614/\text{d.f.} = 2$ ;  $n = 101$ ;  $\text{CMIN}/\text{d.f.} = 3.307$ ;  $\text{NFI} = 0.981$ ;  $\text{CFI} = 0.987$ ;  $\text{RMSEA} = 0.152$ ;  $p > 0.037$ ), with a 95% confidence interval of 0.00–0.095. The results show that subsidiary performance measures are a multidimensional construct.

### Independent variables

*Subsidiary internal equity financing* We follow the pecking order theory (Myers & Majluf, 1984) to develop the construct of subsidiary internal equity financing sources. We asked respondents to self-report the sources of subsidiary capital. Internal equity financing sources include subsidiary retained earnings, excluding the capital investments from parent firms and intra-firm borrowing. External financing sources include borrowing/loans from bank(s), venture capital(s) within the host country and borrowing from international bank(s) outside the host country. The internal equity financing sources take the value of 1, otherwise 0.

The financing of foreign subsidiaries of the MNE is a complex phenomenon. Thus, we explore the major financing sources and the capital structure of our sampled subsidiaries. The findings are reported in Table 1.

*Subsidiary-level financial management decision-making* At subsidiary level, financial management concerns investment, financing and dividends. The investment decisions are concerned with identifying the investment opportunities for new products/services, market and operation expansion and growth in the host countries, such as investment for the existing manufacturing plant expansion, new plant construction or acquisitions, purchase of new machinery and equipment, business development to increase sales coverage and distribution reach. The financing decisions concern the financing arrangements for expansion and growth, and the level of retained earnings for subsidiaries. The dividend decisions address the dividend payments from subsidiaries to parent firms, which need to be balanced with retained earnings, taking into consideration the uses of financial resources. This requires highly disciplined skills in the routines of financial planning and analysis, forecasting, budgeting, financial reporting and management accounting.

We have tried to measure the extent to which subsidiary managers undertake financial management decisions in investment, financing and dividend. We recognize that subsidiary managers can



only accurately assess what they have done. We asked respondents to self-assess their financial management capabilities on a 7-point scale (1 = very weak, 7 = very strong) in identifying investment opportunities of product, market and operation expansion and growth; financing arrangements; retained earnings and dividend payments to parent firms; 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's  $\alpha$  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 shows 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 (Chan, Isobe, & Makino, 2008; Christmann, Day, & Yip, 1999; Ma, Tong, & Fitz, 2012; McGahan & Porter, 1997). Thus, we include a comprehensive set of control variables based on previous literature testing subsidiary performance.

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

### Host Country Institutional Environment

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 considered as part of a country's location advantages (or disadvantages) (Dunning, 1998). We aim to capture the potential impact of different host country institutions on subsidiary performance (Christmann et al., 1999; Ma et al., 2012; Makino, Isobe & Chan, 2004).

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 very influential at all, 7 = very influential). 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.

To test for robustness, we use a summated scale of a multi-item construct on host country institutional environment. The scale reliability is tested with Cronbach's  $\alpha$  of 0.792. Then we perform additional robustness test by replacing the survey data on the host country institutional environment with public data, using the average economic freedom of the world index published by Fraser Institute, Vancouver, Canada for the 5-year period 2003–2007.

### 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 knowledge of their parents, and hence the poorer their performance becomes (Shaver, 1998). We follow the procedures by Slangen and 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 the responses with the OneSource database 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 (see Slangen & Hennart, 2008).

#### *Subsidiary autonomy*

Subsidiary autonomy is defined as the decision-making rights relative to the parent firm (McDonald, Warhurst, & Allen, 2008). High autonomy occurs when decisions are primarily made by the subsidiary. Low autonomy arises when such decisions are largely made by the parent firm (McDonald et al., 2008). Previous studies find that the level of autonomy by subsidiaries is a critical parameter to determine the subsidiary's position in the MNE network (Birkinshaw & Morrison, 1995; Taggart & Hood, 1999).

Because the level of autonomy in the decision-making process is hard to measure from secondary sources, we follow Birkinshaw and Hood (1998), Roth and Morrison (1992), Slangen and Hennart

(2008) to assess it by questionnaire. Respondents self-assessed their subsidiaries' level of freedom to make a range of decisions without reference from HQ/regional offices on 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 (investment, financing and dividend); 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's  $\alpha$  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 (Pralhad & Doz, 1987) and may therefore pay more attention (Bouquet, Morrison, & Birkinshaw, 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 = 2000 employees or more.

### Subsidiary age

This variable serves as a measure of host country experience and accumulated knowledge (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 (Slangen & Hennart, 2008). 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. We compared the information provided by subsidiary managers with that in OneSource database.

## Parent Firm Characteristics

### Parent firm size

Prior research recognizes the significant effect of the corporate parent on foreign subsidiary performance. The core resources of a foreign subsidiary are often transferred from the parent firm. Larger parent firms may have resource advantages which allow them to

increase performance by economies of scale and scope (Chan et al., 2008; Ma et al., 2012; Makino et al., 2004). This variable is measured by the number of employees with data sourced from OneSource database 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.

### Econometric Model

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

#### Subsidiary – level performance

$$= f[\text{subsidiary internal equity financing, subsidiary level financial management decision} \\ - \text{making; control variables}] + \text{error terms}$$

## RESULTS AND DISCUSSIONS

Table 2 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, Black, Babin and Anderson (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 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). This confirms that multicollinearity is not a problem.

Table 3 reports the results. Our findings present a compelling theoretical explanation for the determinants of subsidiary performance. Our theoretical propositions are empirically supported in that subsidiary internal equity financing and subsidiary-level financial management decision-making have statistically significant positive impacts on subsidiary performance. Furthermore, we find that the relationships of these variables are so overwhelmingly strong that virtually none of the control variables



**Table 2** Descriptive statistics and Pearson correlations

Variables	Mean	s.d.	1	2	3	4	5	6	7	8
1. Average market share growth 2003–2007	4.633	1.161	1							
2. Average ROCE 2003–2007	4.998	1.258	0.514**	1						
3. Average sales growth 2003–2007	5.039	1.053	0.694**	0.728**	1					
4. Average profit growth 2003–2007	4.912	1.225	0.675**	0.804**	0.921**	1				
5. Subsidiary internal equity financing	0.290	0.300	0.158*	0.223**	0.228**	0.275***	1			
6. Subsidiary-level financial management decision-making	5.584	0.874	0.295**	0.316**	0.339**	0.365**	0.108*	1		
7. Stable economic, political and social environment	5.356	1.188	0.104	-0.081	0.034	-0.037	-0.012	0.172	1	
8. Ease of doing business, legal regulations and law enforcement	5.198	1.296	0.135	0.078	0.196*	0.120	0.076	0.206*	0.603**	1
9. Availability of incentives and grants	3.396	1.844	0.076	0.026	0.089	0.137	0.107	0.065	0.291**	0.402**
10. Taxes	4.306	1.534	0.042	0.012	0.048	0.046	-0.150	-0.082	0.493**	0.517**
11. Access to finance	3.524	1.910	0.121	-0.091	-0.030	-0.040	0.004	-0.065	0.366**	0.248*
12. Relatedness to parent activities	0.029	0.170	-0.035	0.114	0.0267	0.041	0.057	0.083	0.095	-0.026
13. Subsidiary autonomy	3.366	0.796	0.098	0.206*	0.108	0.129	-0.055	0.048	-0.181	-0.119
14. Subsidiary size (employees)	1.623	1.147	-0.053	0.037	0.045	0.101	0.123	0.081	-0.209*	-0.124
15. Subsidiary age	2.623	1.263	0.154	0.195	0.196*	0.234*	0.006	0.255*	-0.082	0.039
16. Parent firm size (employees)	3.297	2.567	0.072	0.156	0.206*	0.212*	0.129	0.220*	-0.182	-0.077
17. Sectors	0.435	0.498	0.053	-0.008	0.142	0.131	-0.176	-0.062	0.005	-0.011

  

Variables	Mean	s.d.	9	10	11	12	13	14	15	16	17
1. Average market share growth 2003–2007	4.633	1.161									
2. Average ROCE 2003–2007	4.998	1.258									
3. Average sales growth 2003–2007	5.039	1.053									
4. Average profit growth 2003–2007	4.912	1.225									
5. Subsidiary internal equity financing	0.290	0.300									
6. Subsidiary-level financial management decision-making	5.584	0.874									
7. Stable economic, political and social environment	5.356	1.188									
8. Ease of doing business, legal regulations and law enforcement	5.198	1.296									
9. Availability of incentives and grants	3.396	1.844	1								
10. Taxes	4.306	1.534	0.472**	1							
11. Access to finance	3.524	1.910	0.471**	0.456**	1						
12. Relatedness to parent activities	0.029	0.170	0.280**	0.117	0.0437	1					
13. Subsidiary autonomy	3.366	0.796	-0.126	-0.141	-0.015	-0.080	1				
14. Subsidiary size (employees)	1.623	1.147	0.071	-0.081	-0.064	-0.044	0.075	1			
15. Subsidiary age	2.623	1.263	0.086	0.060	-0.049	-0.040	0.009	0.260**	1		
16. Parent firm size (employees)	3.297	2.567	0.040	0.027	-0.050	-0.020	-0.014	0.378**	0.337**	1	
17. Sectors	0.435	0.498	0.202*	0.176	0.093	-0.036	0.022	0.097	0.088	0.140	1

$n = 101$ ,  $p^* < 0.1$ ,  $p^{**} < 0.05$ ,  $p^{***} < 0.01$ , two-tail test.

**Table 3** Multiple OLS regressions

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>				
Subsidiary internal equity financing	0.672* (0.410)	0.992*** (0.421)	0.821*** (0.353)	1.186*** (0.398)
Subsidiary-level financial management decision-making	0.359*** (0.150)	0.401*** (0.154)	0.320*** (0.129)	0.462*** (0.146)
<i>Control variables (Host country institutions)</i>				
Stable economic, political and social environment	0.001 (0.136)	-0.207 (0.139)	-0.090 (0.117)	-0.166 (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 and 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>				
Relatedness to parent activities	-0.382 (0.730)	0.675 (0.750)	0.196 (0.629)	0.031 (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>				
Parent firm size (employees)	-0.001 (0.052)	0.010 (0.053)	0.036 (0.045)	0.013 (0.050)
<i>Sectors</i>				
$R^2$	0.409	0.494	0.500	0.543

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

show any significant relationships with the dependent variables.

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

We ask subsidiary managers how they organize their actual financial arrangements. We find that these subsidiaries largely rely on internal financing which account for 93% of their total funding (Table 1). Of this, subsidiary retained earnings account for 29%, capital transferred from the parent for 56% and intra-firm borrowing for only 8%. External financing sources account for only 7%. These findings are elaborated in Nguyen (2013).

Subsidiary retained earnings are the major source of subsidiary internal financing, which have been built upon the capital investments by the parent firms. Intra-firm borrowing is not a major internal financing source through internal MNE capital market. This confirms our theoretical arguments that any intra-firm borrowing is likely determined and managed by the parent firms.

Borrowing from local and foreign financial institutions is not a major external financing source.

One plausible explanation might be limited credit availability and high interest rates in the host countries. Another alternative explanation might be that any use of external debt financing by foreign subsidiaries is consolidated in the parent firms' balance sheets and thus might affect the leverage level and the cost of capital for the MNE as a whole. Madura (2011) argues that any increased use of debt financing by foreign subsidiaries might result in a more debt-intensive capital structure for the entire MNE. Madura (2011) maintains that the use of a higher proportion of debt financing for the MNE overall would affect the cost of capital. The debt financing of foreign subsidiaries could also affect the MNE's overall exposure to exchange rate risks, and therefore influence the risk premium on capital and the cost of capital (Madura, 2011). More debt also increases a firm's liquidity risks (Mishra & Tannous, 2010).

Furthermore, Rugman and Collinson (2012) argue that the capital structure of the subsidiaries must not cause the target capital structure of the entire firm to deviate from acceptable standards in the home country. As a rule, the total capital structure of the parent firm follows the standards of the home country (Rugman & Collinson, 2012). Our empirical evidence shows that British subsidiaries have adopted a highly disciplined financing

approach as it appears that they take into consideration the implications of their financing sources on the capital structure for the MNEs as a whole.

Our findings on the actual hierarchical financing of British subsidiaries are fully consistent with the pecking order theory of financing hierarchy (Myers & Majluf, 1984). Our empirical evidence is similar to a previous study using survey data of US-controlled subsidiaries (Shao, 1997), which also provides support for the pecking order theory.

Our empirical evidence supports internalization theory, especially the significant importance of internal capital markets (Aulakh & Mudambi, 2005; Desai et al., 2004; Mudambi, 1999; Rugman, 1980) in financing the initial investments in foreign subsidiaries. In principle, our findings are consistent with Desai (2008). Our finding is that ASEAN subsidiaries use their own retained earnings rather the capital infusion from the parent firms to finance their continuing expansion.

Financing subsidiaries involves a high degree of complexity. The financing sources of parent firms are important for the subsidiary's initial establishment and operations. Over time, the profits generated by foreign subsidiaries which have been reinvested in the form of retained earnings are important for subsidiaries to finance their expansion and growth. The management of these financial resources requires highly disciplined execution skills and deep insights of subsidiary managers. This in turn ensures that these financial resources are efficiently utilized and profitably exploited. By adopting a very careful approach with the integration of IB and finance theories, we discover subsidiary internal equity financing is an FSA, and, furthermore, is critically important to subsidiary performance.

Hypothesis 2 predicts that subsidiary-level financial management decision-making is an important determinant of subsidiary performance. The coefficients in the model confirm statistically significant positive effects of this variable on subsidiary performance. Thus, Hypothesis 2 is fully supported. Our empirical evidence supports new internalization theory (Rugman & Verbeke, 1992, 2001; Verbeke, 2009). Rugman and 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 strong performance comes from its effective creation, deployment, recombination, utilization and profitable exploitation of its FSA bundles (Morck &

Yeung, 1991; Rugman, Verbeke, & Nguyen, 2011; Verbeke, 2009; Verbeke & Brugman, 2009).

Because the direction of causality is difficult to assess with certainty, we examine the reverse effects of subsidiary profit on subsidiary-level financial management, in accordance with theoretical suggestions by Verbeke and Brugman (2009). We find that there is a statistically significant positive relationship on the reverse effects at a 5% significance level. Of the total sample, we find that 84% of subsidiaries are profitable, as we asked subsidiaries to self-report actual financial results: measured as loss, break-even or profit in the survey. These subsidiaries use the financial resources in the form of retained earnings to continuously enhance their existing FSAs and develop new FSAs. Our study is among the first to directly test such a reverse effect, due to our original approach of applying accounting principles in IB research.

In contrast with previous studies (Christmann et al., 1999; Ma et al., 2012; Makino et al., 2004), we find that the control variables of host country institutional factors have no significant relationship to subsidiary performance, whether we include all these items one-after-another in a series of regressions or we use a multi-item construct. Jormanainen and Koveshnikov (2012) argue that the institutional perspective which has been utilized in the current literature suffers from certain weaknesses. These scholars suggest that prior studies adopt either macro- or micro-level institutional views which often lead to mixed findings. In general, previous studies emphasize institutional factors too heavily 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 for the performance of foreign subsidiaries. Specifically, prior studies perhaps understate the importance of competitive advantages developed by the MNEs and by their foreign subsidiaries, regardless of the type of institutional environments they face.

The findings that control variables of subsidiary characteristics have no association with subsidiary performance are consistent with previous research (Slangen & Hennart, 2008). There is a statistically significant positive impact of subsidiary autonomy on ROCE, but no effect on market share growth, sales growth 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 behavior (Mudambi & Navarra, 2004; Scharfstein & Stein, 2000). Thus, the subsidiary autonomy level tends to be reduced in a more dynamic and integrated MNEs (Taggart & Hood, 1999). While subsidiary autonomy is important, it should not be seen as an end in itself (Taggart & Hood, 1999). Overall, our findings suggest that the ASEAN subsidiaries of British MNEs focus on efficiency, value creation and performance delivery rather than rent-seeking and value appropriation.

In contrast to previous studies (Ma et al., 2012; Makino et al., 2004), we find that parent firm characteristics show no relationship to subsidiary performance. This reinforces the critical importance of subsidiary-specific capabilities. Verbeke (2009) emphasizes 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 the 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 the host countries (Verbeke, 2009).

Finally, sector effects do not explain the performance of foreign subsidiaries. The institutional transition in a large emerging economy, for example, China provides local protectionism of specific industries, sectors and regionalism (Cannon & Zhang, 1996). In contrast, the institutional environments in the ASEAN region are more liberal, free market-oriented and FDI-friendly (CIA, 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 to operate successfully in local environments.

### Endogeneity

We follow suggestions by Reeb, Sakakibara, and Mahmood (2012), Roberts & Whited (2011) and Wooldridge (2009) to address endogeneity. We adopt a theory-driven and managerial approach to identify the main theoretical rationale for the dependent variables (Reeb et al., 2012). We obtain insights from subsidiary managers about the nature of causality during our data collection. Because this approach relies on insights from the managers and employees of the firms to inform econometric analysis, it is sometimes known as “insider research”

(Ichniowski & Shaw, 2009). Siegel and Larson (2009) suggest that in such research, rich micro data collected through field research helps to identify the behavioral mechanisms that explain how the treatment affects firm performance including profitability and productivity (see Reeb et al., 2012, for a comprehensive discussion on endogeneity in IB research).

However, as is common with research in IB and in corporate finance, establishing causation between a phenomenon (internal equity financing and subsidiary-level financial management decision-making) and a specific outcome (subsidiary performance) is challenging. Oxelheim, Gregoric, Randoy, and Thomsen (2013) suggest that we are rarely given an ideal research setting with a random assignment of firms into treatment and control groups. If the internal equity financing and subsidiary-level financial management decision-making depend on unobservable factors which correlate with the error term, we will obtain biased and inconsistent OLS estimates of its effects on our outcome variables. Moreover, reverse causality can be a problem. Subsidiary performance might itself influence the internal equity financing and subsidiary-level financial management decision-making.

Several approaches have been proposed in the literature to address the endogeneity problem in IB (Reeb et al., 2012) and in corporate finance (Roberts & Whited, 2011). Oxelheim et al. (2013: 183) suggest that “the applicability of each of these approaches depends on the empirical setting, data availability, the extent to which the variables of interest vary over time and the possibility of identifying an exogenous proxy for the explanatory variables, among other elements.”

Here we address the issue of endogeneity by performing the following tests. We use 2SLS regressions where we estimate the use of internal equity financing in the first stage and use this to estimate the subsidiary performance in the second stage. We do the same for the subsidiary-level financial management decision-making. We use an instrumental variable (IV) approach for the main regression. The IV must satisfy the conditions of relevance and exogeneity (Reeb et al., 2012).

Following the guidelines by Roberts & Whited (2011), we search for potential IVs from the theory of capital structure and previous empirical literature. Unfortunately, the majority of the research focuses on the capital structure at the parent firm level and they tend to use publicly available data sets. This presents additional challenges for this study at



subsidiary level in the context of emerging economies where public data are not available. Further, the subsidiaries in our data set are not publicly listed and they are not subject to information disclosures.

After we examine data availability in our survey data set, we find that subsidiary size (employees) and subsidiary age are themselves exogenous. They reflect the cumulative impact of past decisions rather than the impact of any decision made during the period covered by the study. Subsidiary size is an appropriate IV for internal equity financing. Previous empirical studies (Dewaelheyns & Van Hulle, 2010; Mitto & Zhang, 2008; Rajan & Zingales, 1995) document the relationship between the capital structure and firm size. Subsidiary age is an appropriate IV for subsidiary-level financial management decision-making. Subsidiaries accumulate experiences in financial management in the host countries as they age (Slangen & Hennart, 2008).

In the first stage, we run the OLS regression for the explanatory variable against IVs and save the predictions. The variables in the first stage are significant, and this indicates instrument acceptability. Two new variables with the two predictions from the first-stage regressions have been saved as “internal equity financing (predicted value)” and “subsidiary-level financial management decision-making (predicted value)” for the regression in the second stage. The results of the first-stage regressions confirm that internal equity financing is positively related to subsidiary size and subsidiary-level financial management decision-making are positively related to subsidiary age.

In the second stage, we regress the subsidiary performance measures against the two new predicted variables (internal equity financing (predicted value) and subsidiary-level financial management decision-making (predicted value)). We include the control variables of host country institutional environment factors, and subsidiary characteristics (except subsidiary size and subsidiary age), parent firm characteristics and sectors. The second-stage regression shows that the predicted values are positively related to subsidiary performance. Overall, the results of the 2SLS regressions (Table 4) are consistent with those of the multiple OLS regressions (Table 3), in which internal equity financing and subsidiary-level financial management decision-making have statistically significant positive impacts on the performance of multinational subsidiaries. Similar to the model in Table 3, the control variables show no relationship to subsidiary performance in Table 4.

As we have only one IV for each endogenous explanatory variable, we have no over-identifying restrictions. This makes our models just have enough instruments; they are said to be just identified (Wooldridge, 2009).

### 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. Then we use public data for one set of our control variable as this minimizes the risks of common method variance and checks the robustness. Specifically, we replace the survey data of subsidiary managers' perceptions on host country institutional environments with the economic freedom of the world index published by Fraser Institute, Vancouver, Canada. This index has been used in a previous study (Banalieva & Dhanaraj, 2013). We use the average of the economic freedom index for the period 2003–2007 for the six countries where our subsidiary samples are located. Then, we run several models of OLS multiple regressions, including the interaction term of internal equity financing with the economic freedom index; the interaction term of subsidiary-level financial management decision-making with the economic freedom index and also 2SLS. This generates three tables which are available upon request. We do not report these findings as none of the results reported in Tables 3 and 4 are changed by replacing surveyed data with such objective public data. In other words, the economic freedom index scores of host country institutional environments do not have a statistically significant effect on subsidiary performance.

In addition, we conduct robustness tests on the direct effects of the two traditional FSAs in general management and marketing on the performance of foreign subsidiaries, and we find statistically significant positive effects. The results are not reported here due to space constraints. We do not test the FSA in R&D. We find that less than 5% of British subsidiaries performs R&D function in the ASEAN region and they are geographically located in Thailand.

### Managerial and Public Policy Implications

Our study provides important implications for managers and policymakers. These include the importance of a proactive financing strategy for subsidiary expansion and growth. Retained earnings can be used for reinvestment activities in the form of capital expenditures, such as either to acquire or to establish

Table 4 2SLS regressions

Variables	First stage Subsidiary internal equity financing	First stage Subsidiary-level financial management decision-making	Second stage Market share growth	Second stage ROCE	Second stage Sales growth	Second stage Profit growth
(Constant)	0.785 (0.174)	5.121*** (0.196)	1.252 (3.237)	0.621 (3.271)	0.428 (2.771)	1.057 (3.221)
<i>Independent variables</i>						
Subsidiary size	0.068** (0.032)					
Subsidiary age		0.177*** (0.067)				
Subsidiary internal equity financing (predicted value)			0.235 (1.229)	3.035*** (1.242)	1.911** (1.052)	2.438*** (1.223)
Subsidiary-level financial management decision-making (predicted value)			0.754* (0.574)	0.966** (0.580)	0.661** (0.491)	0.975** (0.571)
<i>Control variables (Host country institutions)</i>						
Stable economic, political and social environment			-0.087 (0.139)	-0.167 (0.141)	-0.050 (0.119)	-0.138 (0.137)
Ease of doing business, legal regulations and law enforcement			0.115 (0.130)	0.208 (0.131)	0.260** (0.111)	0.195 (0.129)
Availability of incentives and grants			-0.008 (0.087)	0.030 (0.088)	0.019 (0.075)	0.101 (0.187)
Taxes			-0.095 (0.107)	0.069 (0.108)	-0.036 (0.091)	0.006 (0.106)
Access to finance			0.080 (0.079)	-0.105 (0.080)	-0.055 (0.068)	-0.092 (0.079)
<i>Subsidiary characteristics</i>						
Relatedness to parent activities			-0.079 (0.753)	1.046 (0.761)	0.489 (0.644)	0.427 (0.749)
Subsidiary autonomy			0.162 (0.153)	0.348** (0.154)	0.175 (0.131)	0.233* (0.157)
<i>Parent firm characteristics</i>						
Parent firm size (employees)			0.026 (0.051)	0.034 (0.051)	0.059 (0.043)	0.056 (0.050)
Sectors			0.097 (0.251)	-0.028 (0.254)	0.308 (0.215)	0.256 (0.250)
R <sup>2</sup>	0.044	0.065	0.277	0.435	0.423	0.429

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



new subsidiaries, or to expand the existing subsidiaries. Additionally, they can be used to develop other supporting activities, such as to improve the capabilities of local suppliers, to widen distribution networks to maximize sales and profit growth (Nguyen, 2013), or to retain as cash holdings.

Further, our findings address the widely debated issues about the role of the MNE in host country economic development (Hood & Young, 1976). We find that British MNEs in the South East Asian region rely heavily on internal funding and depend less on host countries' creditor funds. In other words, British MNEs act as development agencies in financing economic development through their foreign subsidiaries. Therefore policymakers should develop and promote policies which encourage greater use of foreign subsidiaries' retained earnings for capital expenditures and other activities which support host country economies (UNCTAD, 2013). This is critically important in the context of emerging economies.

### CONCLUSIONS

In this article we find that internal equity financing in the form of retained earnings is used by British subsidiaries in South East Asia as a FSA. These subsidiary managers act strategically to use their own retained earnings (29%), capital investment by the parent firm (56%), and intra-firm borrowing (8%) to sustain expansion and growth of their business and to enhance subsidiary performance. We demonstrate that internal equity financing and subsidiary-level financial management decision-making are significant and robust across four metrics of subsidiary performance. In contrast, the control variables for host country institutional and country effects are always insignificant determinants of subsidiary performance. This requires caution in using the institution-based view in analysis of subsidiary performance since the resource-based view (in the form of FSAs) appear to be more relevant in explaining subsidiary performance in these emerging economies.

We explain the predominance of FSAs, rather than institutional factors by combining new internalization theory in the IB literature with the pecking order theory on capital structure and financing in the finance literature. By investigating the effects of subsidiary internal equity financing and subsidiary-level financial management decision-making, we have thrown new light on subsidiary performance.

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 relationships between financing, expansion and growth of foreign subsidiaries and the effects on subsidiary performance. By adopting new internalization theory and the pecking order theory, we demonstrate that subsidiary performance depends on internal equity financing and subsidiary-level financial management decision-making. We have also observed the reverse effects of subsidiary profit on the subsidiary-level financial management where we find a positive relationship.

The main theoretical contribution of this article is to establish that internal equity financing is an important FSA, along with intangible knowledge-based FSAs in R&D, technology, brands and managerial skills. Essentially, subsidiary internal equity financing has a positive impact on subsidiary performance. We also contribute to the theory of the MNE by demonstrating the importance of internal capital markets in financing foreign subsidiaries.

We highlight a few limitations, some of which also provide directions for further research. Our data set is confined to British subsidiaries in South East Asia. Obviously, the subsidiaries of MNEs from other countries could be considered. In particular, studies of MNEs from other countries in the Europe Union, North America and Asia Pacific active in South East Asia might be compared and contrasted with our findings. In addition, the context of subsidiaries in South East Asia could be expanded to incorporate other emerging economies.

The use of data and information provided by subsidiary managers can be enhanced by future research using objective data or multiple sources of data (Nguyen, 2013, 2014). One direction of future research is to examine a set of publicly listed foreign subsidiaries of MNEs, that is, their shares are listed on the stock exchanges in the host countries and they are subject to financial information disclosure requirements.

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### NOTES

<sup>1</sup> *Penrose effect*: Penrose (1959) theoretically develops the research proposition that the finite capacities of the firm's internally experienced managers limit the rate at which the firm can grow in a given period of time.

<sup>2</sup> The case of Starbucks Coffee UK Ltd, which is a foreign subsidiary of the Starbucks Corporation in the

United States, is an example to illustrate how parent firm uses intra-firm loans as a mechanism to manipulate profits in its foreign subsidiary. One of the key expenses contributing to Starbucks Coffee Company UK Ltd's lack of profits is the high level of interest payment it incurs. Starbucks Coffee Company UK Ltd is funded by debt, provided by the Starbucks Corporation in the United States. The interest rate is Libor plus 4% points. Starbucks Corporation bonds carry a coupon of Libor plus 1.3% in October 2012. The parent firm is charging the UK subsidiary significantly more than their own borrowing costs (Bergin, 2012). This leads to serious concerns from the UK tax authorities.

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