THE REGIONAL STRATEGIES OF BRITISH MULTINATIONAL SUBSIDIARIES IN SOUTH EAST ASIA

Q. Nguyen
University of Reading, UK

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John H. Dunning Centre for International Business

dunning@henley.ac.uk
www.henley.ac.uk/dunning
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Quyen T.K. Nguyen (Ph.D) (Corresponding author)
Lecturer in International Business and Strategy
Henley Business School
International Business and Strategy
University of Reading
Whiteknights Campus, Reading
England RG6 6AH
E-mail: t.k.q.nguyen@henley.ac.uk

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ABSTRACT

We compare the strategies of manufacturing and service multinational enterprise (MNE) subsidiaries in South East Asia to investigate whether they follow global versus regional strategy. We examine foreign direct investment (FDI) motives, types of FDI, product and service offerings, and sales strategies of these two groups. Using a unique primary dataset of 101 British MNE subsidiaries in six South East Asian countries over a five-year period (2003-2007), we find that manufacturing and service subsidiaries pursue regional strategies. Both groups have a strong regional focus in their sales. We explore the possible reasons for the relative lack of global strategy of these subsidiaries.

Key words: MNE subsidiary; regional strategy; FDI motives; subsidiary-level firm-specific advantages (FSAs); host country-specific advantages (CSAs); South East Asia.
INTRODUCTION

Emerging empirical evidence indicates that economic integration of national markets is more of a regional than a global phenomenon, both at country-level and firm-level. Most measures of market integration on country-level data have fallen far short of economic theory's ideal of perfect integration, Ghemawat (2003). He refers to this phenomenon as “semi-globalization”, which is defined as a condition of incomplete market integration across borders where neither the barriers nor the links among markets in different countries can be neglected. Using firm-level data, Rugman and Verbeke (2004) and Rugman (2005) provide the first empirical evidence that firms pursue regional rather than global strategy. The majority of the firm’s sales are generated within the home region of the Triad (broadly defined as North America, Europe and Asia-Pacific). Similarly, the majority of the firm’s assets are located within the home region (Rugman and Verbeke, 2008a; Rugman and Oh, 2012).

Rugman and Verbeke (2004) develop a theory to explain why firms’ international activities are principally concentrated in the home region. The inability of the MNEs to create, deploy, recombine, utilize and profitably exploit their firm-specific advantages (FSAs), even the non-location bound NLB FSAs across the world is due to their home-region boundedness of FSAs (Rugman and Sukpanich, 2006). The transferability of the firm’s FSAs is highly restricted beyond the home region (Rugman and Verbeke, 2004). This is explained by the significant difference in expansion costs, in which the liability of intra-regional expansion appears to be much lower than the liability of inter-regional expansion (Rugman and Verbeke, 2007). Most recently, Rugman et al. (2011) have demonstrated that the challenges become compounded as distance increases, whether economic, cultural, institutional or merely geographic. The need to manage various distance dimensions simultaneously really explains the regional nature of the firm.
We make an empirical contribution by investigating the degree of regionalization of British MNE manufacturing and service subsidiaries. This is the first study on global versus regional strategy at subsidiary level. To date, there has been no previous study on regional orientation of subsidiaries in other parts of the world. This study is the first in regional context - the Association of South East Asian Nations (the ASEAN). The decision of MNEs to transfer their resources by creating a proprietary network of foreign subsidiaries is one of the most intensively researched areas of international business (Dunning, 1980). Given this critical role of the subsidiary, the focus of this study is on MNE strategy at subsidiary level. By examining the new primary dataset of a sample of 101 British subsidiaries in six out of ten ASEAN countries, we determine the degree of regionalization of manufacturing and service subsidiaries of the two groups.

Second, we extend previous studies by Rugman and Verbeke (2004), Rugman (2005), and Rugman and Verbeke (2008a) on the regional strategy of the MNE in several new dimensions. We investigate FDI motives, types of FDI, product and service offerings, and sales strategies between manufacturing and service subsidiaries. We draw upon theories of international business, managerial insights and especially international accounting standards in our research design. We examine the links between FDI motives and types of FDI (horizontal, vertical and complex FDI) of the two sets of subsidiaries. We study the links between FDI motives and regional sales strategies of subsidiary by following the international accounting standards. We adopt this new approach and managerial insights (Oesterle and Wolf, 2011) to position our innovative survey data.

Third, we contribute to theorizing the regional nature of the MNE. While Rugman and Verbeke (2004) have developed a theory to explain the home region concentration of the MNE’s international activities at parent level, we have demonstrated the regional orientation at subsidiary level. Thus, our analysis provides new insights which should be integrated in the regional theory of the MNE.
The following section outlines the theoretical background, which is then specified in relations to the hypotheses in the subsequent section. This is followed by the empirical material in the data and method section. The results from the statistical analysis are presented. The paper discusses the result and ends with conclusions.

**THEORETICAL SYNTHESIS AND HYPOTHESES DEVELOPMENT**

**The regional strategy of the MNE at parent level**

The debates on the globalization and regionalization strategies emerge in the context of earlier attention to local-global distinctions, in which Prahalad and Doz (1987) and Bartlett and Ghoshal (1989) demonstrate the need for MNEs to combine global integration and national responsiveness. Global integration is defined as the production and distribution of products and services of a homogenous type and quality on a worldwide basis. National responsiveness is the ability of MNEs to understand different consumer tastes in segmented markets and to respond to the different national standards and regulations imposed by autonomous governments and agencies. The more recent evidence on the existence of incomplete cross-border integration, which Ghemawat (2003) refers to as ‘semi-globalization’, thus requires regionalization (Kolk, 2010).

Empirically, Rugman and Verbeke (2004, 2007, 2008,a,b,c); Rugman (2005); Rugman et al. (2009); Rugman and Sukpanich (2006); Collinson and Rugman (2008); Rugman and Oh (2008, 2010, 2012); Rugman and Li, (2007); also Hejazi (2007) Sethi (2009), Yin and Choi (2005), and Grosse (2005), Oh (2009, 2010), Almodovar (2011) among others, have demonstrated that MNEs are regional in their location by sales and by assets, not global, despite the fact that MNEs are the key drivers of the globalization process.
The seven-year data trend from 2000 to 2007 shows a high correlation between intra-regional sales and intra-regional assets (Rugman and Oh, 2012). The typical Fortune 500 averages 75.86 percent of its total sales in the home region of the triad and substantially less than 20 percent of its total sales in each of the two other regions. Its intra-regional assets are at 78.09 percent. Rugman and Verbeke (2004) find only nine global firms. Such discrepancy in sales and assets is reflected in regionally adapted strategies and structures (Rugman and Verbeke, 2008a). The home region orientation of most MNEs implies that the reality of globalization has been vastly exaggerated.

To explain the home-region orientation of the MNE, Rugman and Verbeke (2007) employ the liability of foreignness (LoF) concept, i.e. competitive disadvantages and additional costs of doing business abroad compared to domestic firms (Hymer, 1960; Zaheer, 1995). The LoF is smaller in the home region than outside it, which means that adaptation costs of intra-regional internationalization (regionalization) are lower than those in the case of inter-regional expansion. Within the home region, location-specific investments that are needed to exploit and develop non-location-bound firm-specific advantages (NLB FSAs) will be less substantial and/or can be deployed more efficiently than outside the region (Rugman and Verbeke, 2004, 2005, 2008c).

All this research has also led to some debates about the definition and conceptualization of home region classification and measurements of home region sales/ assets (Stevens and Bird, 2004; Westney, 2006; Aharoni, 2006; Dunning et al, 2007; Asmussen, 2009; Osegowitsch and Sammartino, 2008; Seno-Alday, 2009).

We clarify these two issues as they are related to our study at subsidiary level. We offer new perspectives from the requirements of international accounting standards, which have been largely neglected in the existing literature. Specifically, the US GAPP FAS No. 131 *Disclosures about
Segments of an Enterprise and Related Information, and IFRS8 Operating Segments require firms to adopt a managerial approach, i.e. ‘through the eyes of the managers’ to identifying segments. It provides guidance on how segments should be identified, what are the ‘quantitative thresholds’ of reportable segments, and what information should be disclosed. It also sets out requirements of related disclosures about geographic areas and major customers, products and services.

First, we discuss the concept of “home region” in the work by Rugman and Verbeke (2004) and Rugman (2005). A “home region” is defined as that of a triad region where the headquarters of an MNE is located. An MNE is home region oriented if it has at least 50 percent of its total sales and assets in the home region of the triad. A global firm is defined as a company with less than 50 percent of its total sales and assets in its home triad region and at least 20 percent of its total sales and assets in each of the two other triad region. Bi-regional firms have at least 20 percent of their total sales and assets in each of two regions, but less than 50 percent in any one of the region. Host-region oriented firms have more than 50 percent of their sales and assets in a triad market other than their home region.

Within the literature, Ohmae’s (1985) grouping of the ‘core triad’ (North America, Europe and Japan) has been the dominant typology. Yet in international business and international management literature, there is no uniform typology for grouping countries into broad regions. The broad triad regions are North America, Europe and Asia Pacific. The triad is relevant because it is the home of most large MNEs in the world, as well as the locus for the bulk of radical innovation in most industries (Rugman and Verbeke, 2008a). Alternatively, economic/income, socio-cultural/language, institutional proximity and the United Nation geographic schemes have been suggested for clustering criteria (Aguilera et al., 2008).
In practice, however, firms classify their markets according to broad geographic segments in compliance with international accounting standards. The classification is based on their management reporting and/or organizational structure. In this study, the home region is defined as the broad Asia Pacific region, of which the ASEAN is a part, where the British MNE subsidiaries are geographically located.

Second, there are differences in measurements of ‘home region’ of sales/ assets. Rugman and Verbeke (2004) measures home region sales/ assets as home country sales/assets plus rest of home region sales/assets. This reflects the way firms report in business realities. Firms are required by international accounting standards to report and disclose sales/assets by geographic segments, i.e. sales by geographic areas and major customers, and by business segments, i.e. sales by products and services.

Studies by Osegowitsch and Sammartino (2008), Asmussen (2009), and Banalieva and Eddleston (2011) exclude home country sales from home region sales. They neutralize substantial home country effects by comparing host regions with home region net of home country sales. The regionalization thresholds can be tweaked by normalizing the data (Osegowitsch and Sammartino, 2008). They argue that there is a need to disentangle home country and home region biases in the parent firm’s internationalization patterns, as it is necessary to conceptually distinguish between an inter-national and inter-regional liability of foreignness. Similarly, Stevens and Bird (2004) question the specification of the threshold value which demarcates the categories.

In practice, however, firms are required to follow international accounting standards which provide guidance on the threshold of reportable segments. Accounting principles and allocations of segments might be inherently arbitrary. Yet they are meaningful because they are used for management purposes. In this study, the home region sales are defined to be the sum of home-sales in the local
domestic markets plus rest of region sales in the Asia Pacific generated by the subsidiary. This approach is aligned with the findings by Appleyard et al. (1990) on the reporting techniques used by British MNEs to control their foreign subsidiaries. The latter are required to follow the group-wide uniform accounting system in their books at detailed level. The parent firms’ performance as documented in annual reports is the consolidated results from their home country and foreign subsidiaries worldwide.

**Application of the regional strategy to subsidiary level**

An MNE goes abroad to further exploit its FSA bundles through internalization strategy by establishing foreign subsidiaries rather than exporting or licensing (Buckley and Casson, 1976; Rugman, 1981; and Hennart, 1982). The FSAs are proprietary to the firm, and they can be technology based, knowledge based or they can reflect capital and capital access capability, managerial and or marketing skills. From the resource based view of the firm, the FSAs are unique resources and capabilities which are valuable, rare, non imitable and non substitutable (Barney, 1991; Teece et al., 1997; and Rugman and Verbeke, 2002).

Rugman et al. (2011) demonstrate that the subsidiary has emerged as a new unit of analysis due to the importance of network thinking in strategic management. Subsidiaries can develop subsidiary-specific advantages (SSAs) which is a type of location-bound LB FSAs (Birkinshaw, 1996; 1997; 2000; Birkinshaw and Hood, 1998; and Rugman and Verbeke, 2001). An SSA results from (a) recombining knowledge transferred from the MNE network with newly created knowledge; (b) autonomously assumed (extended) subsidiary roles; and (c) subsidiary knowledge embedded in idiosyncratic host country locations (Rugman et al., 2011).
LB FSAs are defined as FSAs which benefit a company only in a particular location (or a set of locations), and lead to benefits of national responsiveness. The SSAs must go beyond merely adapting FSAs from the parent firm to fit the host country’s environment as in the national responsiveness strategy of Bartlett and Ghoshal (1989). The SSA requires that the subsidiary initiative be transformed within the intra-firm network of the MNE, thereby becomes a non location bound NLB FSA (Verbeke, 2009, Rugman and Verbeke, 2001). NLB FSAs are defined as FSAs which can be exploited on a worldwide basis, and lead to the benefits of scale, scope and exploitation of national differences (Rugman and Verbeke, 1992).

Subsidiaries are the engines to recombine NLB FSAs transferred from the parents to subsidiaries with newly developed LB FSAs by the subsidiaries interacting with complementary resource bundles in the host country environment (Rugman et al., 2011). This results in subsidiary-level resources and capabilities (SSAs). This is consistent with the resource bundling perspective (Hennart, 2009). Ultimately, the highest-order FSA is the recombination capability, i.e., not just to combine reliably the parent firm’s existing resources, but to recombine its resources in novel ways, usually including newly accessed resources, whether in a limited foreign location or across international geographic space (Verbeke, 2009). The recombination capability leads to processes and products which embody “integrated bundles” of knowledge, meaning melded bundles of old and newly accessed knowledge (Verbeke, 2009). Birkinshaw (2000) emphasizes that the capabilities of the subsidiary are, to some extent, distinct from the capabilities of the headquarters and its sister affiliates. Consequently, there is a large literature on subsidiaries as regional hubs for distribution, regional mandates, regional headquarters, and regional effect of MNEs’ foreign subsidiary localization (Arregle, Beamish and Hebert, 2009)

**FDI motives and FDI types**
We examine the MNE’s four FDI motives (Dunning, 1998). Different FDI motives entail different subsidiary capabilities and with different levels of intangible assets critical to subsidiary performance (Verbeke et al., 2009). In practice, MNEs pursue multiple objectives and the same investment may combine several FDI motives.

The objective of market-seeking FDI is to sell products and services to new customers in the host markets or in neighbouring countries in the case of export-oriented platform. Efficiency-seeking FDI is to take advantage of different factor endowments to arbitrage costs and price differentials which improve global efficiency of the firm by concentrating production in a limited number of locations. This type of FDI reflects a rationalization of the MNE’s operations and normally is related to a specialization of various affiliates in its internal network. Natural resource-seeking FDI is to have access to specific natural resources in the host country (e.g. oil, gas, mining, etc.) at the lowest relative cost. Asset-seeking is to gain access to technology, brand, and managerial expertise and to create synergy with the existing FSAs. Makino et al. (2002) broadly refer market seeking, efficiency seeking and natural source seeking as ‘asset exploitation’ FDI motives versus strategic asset seeking.

A distinction needs to be made among types of FDI as they are related to FDI motives (Verbeke et al., 2009), and the potential intra-firm trade (Ivarsson and Johnsson, 2000). Horizontal FDI arises when a parent firm duplicates its home country-based activities at the same value chain stage in a host country through FDI. Foreign subsidiaries produce the same products or offer the same services in a host country as parent firms do at home (Buckley and Casson, 1976; Caves, 1982). This implies that a firm’s motive to adopt a horizontal FDI is mainly to facilitate market access as opposed to reducing production costs. Market-seeking FDI tends to be the main type of horizontal FDI (Verbeke et al., 2009), which often leads to trade creation (Lipsey and Weiss, 1984; Rugman, 1990). The subsidiary’s production is used not only to serve a host country market but also third country markets. There still
exists argument (Aldaba and Yap, 2009) that horizontal FDI (especially based on market-seeking motive) may also compensate trade, i.e., an MNE may choose to invest abroad to overcome trade barriers.

Vertical FDI arises when a parent firm fragments the production process internationally, thereby locating each stage of production in the country where it can be done at the least cost, in terms of labour, input supplies, and technology (Buckley and Casson, 1976; Caves, 1982). A subsidiary is the input supplier to the parent firm and/or sister affiliates. This implies that a firm’s motive to adopt vertical FDI is mainly to optimize upstream and downstream value chains by exploiting country endowment factors to reduce production costs. Natural resource-seeking and efficiency-seeking FDI motives tend to be the main types of vertical FDI pattern (Verbeke et al., 2009). There will be intra-firm trade, i.e. processed inputs and processed natural resources are shipped to parent firm or sister affiliates in the global production networks. Strategic asset seeking motives tend to be the main type of diversification (Verbeke et al., 2009).

Lanz and Miroudot (OECD, 2011) use firm-level data and find both vertical and horizontal links between parent firms and their foreign subsidiaries. They refer to this phenomenon as ‘complex FDI’. They suggest that the lines between horizontal and vertical FDI are blurred, and the structure of the global production networks is more complex than suggested by the horizontal and vertical dichotomy. Subsidiaries can have multiple activities, supplying inputs for their parent firms and sister affiliates while producing also the same goods as their parent firms.

The literature on global value chains (Beugelsdijk et al., 2009; Braconier et al., 2005; Grossman and Helpman, 2003; Lewin and Peeters, 2006; Lewin et al., 2009) focuses on efficiency-seeking FDI motives. However, they did not provide empirical evidence of MNEs’ actual FDI motive. They
concentrate on the premise of new international division of labour (Froebel et al., 1980; Zaheer and Manrakhan, 2001; Kotabe and Murray, 2004). The value chain activities of the MNE, instead of being replicated from country to country (dispersed), are concentrated (specialized) in one or a few locations (Porter, 1986; Beugelsdijk et al., 2009; Asmussen et al., 2007).

The conceptual work on the “global factory” (Buckley and Ghauri, 2004) discusses the increasingly sophisticated decision-making of managers in MNEs to slice more finely the value added activities of firms in terms of the changing location and ownership strategies of MNEs. In finding optimum locations of each closely defined activity, MNEs are deepening the international division of labour. Ownership strategies are also becoming increasingly complex, leading many MNEs to apply a control matrix, whereby operating strategies are decided upon location by location, and can range from wholly owned foreign subsidiary via FDI to market relationships.

In contrast, we predict that market-seeking will be a more predominant motive than either of the three other motives of British MNEs in South East Asia. In the recent international context, businesses in Western economies have been saturated. The slowdown of the BRIC (Brazil, Russia, India and China) economies is transforming the global economic landscape (CNBC, June 5, 2012). Companies and investors are looking the ASEAN region to expand and grow their current business and to develop new opportunities. The region has weathered the world financial crisis relatively smoothly. The broad Asia Pacific is particularly attractive, taking into account the ASEAN Free Trade Area (AFTA), ASEAN+4 (ASEAN plus Japan, Korea, China and India), ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA). Consequently, MNEs will organize their subsidiaries as horizontal FDI in order to achieve market-seeking FDI objectives.
Hypothesis 1: manufacturing subsidiaries in the South East Asian region will focus predominantly on market-seeking FDI as will service subsidiaries.

Hypothesis 2: manufacturing subsidiaries in the South East Asian region will be organized as horizontal FDI, leading to similar FDI motives, as will service subsidiaries.

Subsidiary product and service offerings

We test through questionnaire survey the extent to which global integration leads to standardization and the extent to which national responsiveness and regionalization leads to customization of subsidiary’s product and service offerings. The actual product and service characteristics which a subsidiary offers can vary at three levels: global, regional and local. Global ones are standardized for sales to all markets worldwide, whereas regional ones are customized for a specific region and local ones are tailored for local markets (D’Cruz, 1986). The extent to which products and services are standardized versus customized represents the revealed preferences of MNEs to institutionalize a particular approach at the world scale or to adapt to the requirements of regional and local markets.

Levitt (1983) optimistically expect globalization to accelerate the convergence of cultures, consumption patterns and thus of markets, due to advances in technology, communication and travel. Such convergence implies that MNEs should standardize their products and services worldwide in order to achieve economies of scale. MNEs can generate superior performance by implementing highly centralized and truly global strategies. A strategy of global products and brands across all markets rather than responding excessively to distinct customer preferences in host countries is the key to success in international markets. Customization is viewed as a sign of weakness which increases costs rather than as a sign of strength. Douglas and Wind (1987), however, question the global strategy. They critically examine the key assumptions underlying this philosophy and the conditions under
which it is likely to be effective. They highlight the barriers to its implementation. Global standardization is one of a number of strategies in international markets. Verbeke (2009) suggests that firms which implement product and service standardization risk overlooking the unique location advantages of various host markets. Such decisions curtail subsidiary initiatives, and the need for new LB FSAs as a precondition for value creation in the host markets. A balance between standardization and customization is necessary. Actually, customizing product offerings across geographic markets can stabilize sales volumes and profitability. In many sectors, technology has enabled the customization of products, which are demanded and highly valued by customers.

Lovelock and Yip (1996) advocate total global strategy for service business. However, services are distinct from products because their features are intangible, heterogeneous, simultaneous, and perishable, and there is no transfer of ownership. Intangibility relates to the lack of physical substance in a service. This could be a problem when measuring the outcomes of the service as there is no tangible evidence. Heterogeneity or consistency of output is a problem with services, although many service providers strive for it. Difficulties may arise with the quality of service if service staffs differ in their level of experience in service delivery. The service quality can vary across service provider, consumer experience, and time (Zeithaml et al., 1985). Service quality can also vary across geographic space. Simultaneity refers to the manner in which a service is consumed at the same time it is produced. Difficult to measure service provided might arise unless service standards were set in advance which could be monitored. Perishability refers to service not lasting in the sense that they cannot be stored. Consequently, Rugman and Verbeke (2008) question the globalization of services and they highlight the actual cost implications and additional complexities in host country environments.
Moreover, Miller and Eden (2006) suggest that the key characteristic of service is the need to be close to customers. The growing presence of service firms (banking, advertising, legal and accounting firms, among others) is an example of ‘to follow customers abroad’ (Knickerbocker, 1973). They set up their own subsidiaries, invest in facilities and staff in foreign locations both for credibility and for servicing their existing customers.

**Hypothesis 3a:** service subsidiaries will have a higher proportion of **local** service offerings due to the nature of service than will manufacturing subsidiaries in product offerings.

**Hypothesis 3b:** service subsidiaries will have a lower proportion of **global and regional** service offerings than will manufacturing subsidiaries in product offerings.

**Subsidiary sales strategies**

We examine subsidiary sales strategies by markets (domestic sales and export sales), by geographic areas (sales to the Asia Pacific region and sales to rest of the world), by customer types (sales to external customers and internal customers within the MNE networks) and geographic areas of customer types. We follow the international accounting standards of **Related Party Disclosure** (IAS24) and **Operating Segments** (IFRS8) to collect data through questionnaire survey. This new approach overcomes the limitations of previous studies using trade data of US MNE foreign subsidiaries. They did not provide the geographic direction of US MNE subsidiaries’ foreign sales (Wiersema and Bowen, 2011; Beugelsdijk et al., 2009).

Rugman and Verbeke (2008c) demonstrate that the EU and North America and increasingly Asia, intra-regional distance is decreasingly driven by a reduction of trade and investment barriers and other attempts towards institutional convergence. Thus, from subsidiary managers’ perspectives, further sales expansion within the ‘home region’, where subsidiaries are geographically located, will often
continue to be easier than equivalent sales growth elsewhere in the world. Revenue growth in domestic and export markets in the broader Asia Pacific region by leveraging the regional free trade agreements will be an important strategy for subsidiaries. Furthermore, revenue growth by focusing towards external customers will be a key driver when MNEs have clear objectives of market-seeking FDI through foreign subsidiary sales.

Hypothesis 4: manufacturing subsidiaries in the South East Asian region will focus on (i) intra-regional sales and (ii) external customer sales as will service subsidiaries.

METHODOLOGY

Sample and data sources

British MNEs have a long history of international investment. They were the first to internationalize in a number of industries, following the ‘Empire’ and they have achieved significant international success (Yip et al., 2006). British business has been in Asia (Iran, India, Thailand, Malaysia, China, Russian Asia and Japan) since 1860 (Davenport-Hines and Jones, 1989).

In this study, we examine the strategies of British manufacturing and service subsidiaries in Malaysia, Indonesia, the Philippines, Singapore, Thailand and Vietnam. The broad coverage of six out of ten ASEAN countries likely enhances the generalizability of the findings. The time period 2003-2007 was selected due to the confidentially and commercially sensitive nature of data collected. In the pilot test of the questionnaire, subsidiary managers were more cooperative in providing recent data rather than current ones.

In total, 504 British MNE subsidiaries in six ASEAN countries were identified from various sources, including OneSource database by Thomson Reuters, the Financial Times top 500 UK firms, the parent...
firms’ websites and their annual reports, British, American and European Chamber of Commerce websites in the host countries. These subsidiaries belong to 78 public and 13 private parent MNEs.

We collected data through a 40-question survey. We took actions to minimize potential common method variance (Chang et al., 2010; Podsakoff et al., 2003). To minimize potential consistency, we varied scale formats to measure the constructs and multiple-item constructs were used and questions pertaining to the same constructs were spread throughout the questionnaire. We pre-tested the questionnaire with five experienced managers. To minimize the risk of social desirability bias, we asked informants to answer survey questions to represent the perspectives of a group of subsidiary managers.

We conducted the survey between July 7, 2010 and February 28, 2011. Although surveys of MNE executives typically result in a low response rate (Harzing, 2000), a response rate of 20% was achieved. Fifty-eight subsidiaries declined to participate in the survey (decline rate 11%). Most stated that due to company policy, confidential reasons, non-disclosure requirements on financial information at subsidiary level, the head office review of the questionnaire (being forwarded by subsidiary managers), they have not taken part in any studies of this type. Similar findings are reported by Bouquet et al. (2009). The response rate and sample size of 101 subsidiaries compares favourably to that of past studies.

In our survey, 93 percent of the questionnaires were answered by the top management team of the subsidiary and 7 percent were answered by the middle management. Both local and expatriate managers participated in the survey. The subsidiary managers are highly experienced with an average of 7.8 years of working in the South East Asian region. The quality of the data was quite high. Subsidiary managers provided data and information in full and complete.
These subsidiaries belong to 57 parent MNEs (44 public and 13 private MNEs). As at 2008, the average revenues of the public parent MNEs were GBP 23,906.32 million, and average employees were 46,909 people. Data for the private MNEs were not available due to non disclosure requirements. The statistical profile of participating subsidiaries was that the average invested capital as at the end of the financial year 2007 was US$78 million. The average age as at the time of survey was 26 years.

The industries of the participating subsidiaries 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); bank, 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.

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

In analyzing the data, subsidiaries were categorized under the broad sector groupings of service (56%) and manufacturing/ processing (44%, including energy, petroleum and refining). Our focus is to compare the strategies of manufacturing and service subsidiaries. So, we use ANOVA to test any significant differences between the two groups (Hair et al., 2010).

**FDI motives**: The operationalization of this construct is to follow Dunning’s four FDI motives (1998). Respondents can select all FDI motives that apply. They indicate the major FDI objectives in the host country in the South East Asian region as presented in Table 1. Then, we follow Makino et al. (2002)
to broadly group market-seeking, efficiency-seeking, and natural resource seeking as asset exploitation
FDI versus strategic asset seeking.

**Types of FDI:** we use multiple data sources. First, through questionnaire, respondents indicate whether they operate in the same industry as the parent, and whether their subsidiary outputs are used in the next stage of the production and/or service provision process of the parent MNEs and/or sister affiliates.

Then we follow the Lanz and Miroudot (OECD, 2011) method to test three types of FDI. We use information of the 6-digit NAICS industry code from OneSource database. Horizontal FDI is defined as the activities of foreign subsidiary in the same industry as their parent. The foreign subsidiary and the parent firm shares at least one identical a 6-digit NAICS code. Vertical FDI is defined as the activities of foreign subsidiary in industries upstream from the parent firm. The foreign subsidiary has at least one 6-digit NAICS code which is an input for the industry of the parent MNE according to the input-output matrix. Additionally, there is no domestic ultimate owner with a vertical link (Alfaro and Charlton, 2009). Complex FDI includes both a horizontal and vertical link, at least one identical 6-digit NAICS code and one that corresponds to an upstream industry.

**Subsidiary’s product and service offerings:** Respondents select their subsidiaries’ product and service offerings, whether they are global, regional and local. Multiple answers are allowed (Rugman, 2005; D’Cruz, 1986).

**Subsidiary sales strategy:** We collect subsidiary sales data by geographic areas, by customer types and geographic areas of customer types. Respondents self-report the percentage (%) of domestic market sales contribution to total sales for the five-year period 2003–2007. If the subsidiary engages in exports, it reports the export sales contribution and the break-down by major destinations of export
shipments, by customer types (internal and external), and by geographical areas, such as intra-firm sales (i.e. sales to sister affiliates) in the Asia Pacific region/ total sales (%), sales to external customers in the Asia Pacific region/ total sales (%), intra-firm sales with the parents and other affiliates in rest of the world/ total sales (%), sales to external customers in rest of the world/ total sales (%).

RESULTS

Hypothesis 1 tests Dunning’s four FDI motives and Hypothesis 2 tests the links between FDI motives and types of FDI. We find full support for hypothesis 1 (table 1) and hypothesis 2 (table 2), at a 5 percent significant level.

Table 1 here

First, there is no significant difference in market-seeking FDI motives between manufacturing and service subsidiaries, at a 5 percent significant level. Market access in order to expand sales and profits, to follow corporate clients abroad and to sell products and services within the regional trading blocs (AFTA, ASEAN+4, AANZFTA) are the most frequently cited FDI motives for both old and young manufacturing and service subsidiaries.

Surprisingly, accessing to low cost labour and establishing a sourcing network in Asia (e.g. outsourcing, subcontractors, etc) are not the focused FDI motives for these subsidiaries. There is no significant difference between the two groups at a 5 percent significant level.

There are two notable differences between the two groups at a 5 percent significant level. Service subsidiaries indicate developing new products/ services for local/regional markets as the next frequently cited FDI motive. Subsidiaries in energy, petroleum and refining cite access to natural resources.
Overall, asset exploitation is the dominant FDI motive of British MNEs in the South East Asian region at 97 percent whereas strategic asset seeking FDI accounts for only three percent. Subsidiaries which engage in strategic asset seeking FDI are geographically located in Singapore. They operate in (i) computer, office and electronic parts, (ii) fixed line telecommunications, (iii) specialized software development.

Table 2

Second, among types of FDI, there is no significant difference in the horizontal FDI for market-seeking FDI motives between manufacturing and service subsidiaries, at a five percent significant level.

Of the total sampled manufacturing subsidiaries, only seven percent are engaged in vertical FDI. These subsidiaries operate in (i) biopharmaceutical, and (ii) energy, petroleum and refining industries (i.e. oil and gas). We find that the biopharmaceutical subsidiaries belonging to different parent firms are located in Singapore and Malaysia. According to World Bank classification, Singapore is a non-OECD high-income country and Malaysia is an upper middle-income country. The energy, petroleum and refining subsidiaries belonging to different parent firms are located in Vietnam.

Almost everything that the Singaporean biopharmaceutical subsidiary produces is for captive use in other factories. A closer analysis of the parent MNE’ annual reports and its manufacturing and supply show that there are 74 sites in 32 countries worldwide. The supply chain is divided into a primary chain and a secondary chain. The primary chain manufactures active ingredients for its products and then ships them to the secondary chain, which manufactures the end products. The primary chain manufacturing facilities are based in eight high-income industrialized countries, including the United Kingdom, Ireland, France, Italy, Spain, Canada, the United States, Singapore and one upper middle-
income country Brazil. This firm has unique manufacturing FSAs, especially its comprehensive anti-counterfeiting. It is an industry leader and its packaging features include holograms, security seals, and complex background patterns which are difficult to photocopy and scan.

At subsidiary-level, the manager in Singapore indicates that the strong legal infrastructure, especially intellectual property protection and preferential tax incentives from the Singaporean government, are the key considerations in their decision to build the manufacturing facility.

Finally, of the total sampled manufacturing subsidiaries, only four percent are engaged in complex FDI. These subsidiaries operate in energy, petroleum and refining industry (i.e. oil and gas) and they are located in Malaysia.

In short, there is a relative lack of evidence for the specialized vertical and complex FDI among British MNE subsidiaries in the South East Asian region. In contrast, there is strong empirical evidence of horizontal FDI with ‘local’ manufacturing and service subsidiaries for market-seeking FDI motives.

Our new findings contradict the ungrounded assumptions that MNEs mainly focus on (i) exploiting ‘new international division of labour’ in Asia because Asia has an abundance of cheap labour, and (ii) establishing a sourcing network (e.g. outsourcing, subcontractors, etc.) to exploit country factor differentials. However, these assumptions are not supported by this empirical work.

The literature on global value chains, global production networks, outsourcing, offshoring and ‘global factory’ focus mainly on the country-specific advantages (CSAs) rather than the firm-specific advantages (FSAs) or the recombination of CSAs and FSAs. In contrast, our unique primary dataset shows clearly that accessing to cheap labour, establishing a sourcing network and overall efficiency-seeking FDI are secondary to market-seeking FDI for both manufacturing and service MNE
subsidiaries. To achieve market-seeking FDI motives, the majority of manufacturing and all service subsidiaries are organized as horizontal FDI.

**Table 3 here**

Hypothesis 3 tests a subsidiary’s product and service offerings. We find support for hypothesis 3a. On average, service subsidiaries offer 41 percent local services in their offerings, whereas manufacturing subsidiaries offer 16 percent local products in their offerings. On the other hand, there is no significant difference in the proportion of global and regional product and service offerings between the two groups, at a five percent significant level. Our hypothesis 3b is not supported.

We find that publishing is the only industry offering 100 percent global products. There is a relative lack of evidence of globally standardized product and service offerings, but a strong evidence of regionally and locally customized product and service offerings.

**Table 4 here**

Hypothesis 4 tests a subsidiary’s sales strategies. We find support to hypothesis 4, at a 5 percent significant level. Table 4 presents the sales break down by markets and by geographic areas. On average, these manufacturing and service subsidiaries generate 68.9 percent and 76.6 percent respectively of their total sales from local domestic markets. Export sales account for 31.1 percent and 23.4 percent respectively. The Asia Pacific region is the major export destination, accounting for 24.2 percent and 18.7 percent respectively. Exports to rest of the world (ROW) account for 6.8 percent and 4.7 percent respectively. Overall, home region sales account for 93.2 percent and 95.3 percent accordingly.
Our findings confirm the ‘home region orientation’ of the world’s largest MNEs at 65.6 percent for manufacturing MNEs and 83.9 percent for service MNEs (Rugman and Verbeke, 2008). The British parent MNEs generate on average 64 percent of their total sales in the home region (Rugman et al., 2008). The British SME exporters have 76 percent of their total foreign sales in the home region (Beleska-Spasova and Glaister, 2009). British manufacturing and service subsidiaries show an even stronger orientation to the home region at 93.2 percent and 95.3 percent respectively of their total sales.

**Table 5**

The result in Table 5 reveals that the British manufacturing and service subsidiaries generate on average 89.3 percent and 91.7 percent respectively of their total sales from external customers. The detailed sales break-down show that sales to external customers on home domestic local market account for 68.9 percent and 76.6 percent respectively, sales to external customers in the Asia Pacific region at 18.2 percent and 12.7 percent respectively and to rest of the world are 2.2 percent and 2.3 percent respectively. Again, this is another empirical evidence of market-seeking FDI motives. In short, these subsidiaries have a strong focus to sell their products and services to external customers.

In contrast, intra-firm sales (sales to the parent firms and sister affiliates) of manufacturing and service subsidiaries account for only 10.6 percent and 8.3 percent respectively of their total sales. Intra-firm sales to sister affiliates in the Asia Pacific region of manufacturing and service subsidiaries account for 6.0 percent and 5.8 percent respectively of their total sales, and intra-firm sales to the parents and other affiliates in rest of the world are only at 4.6 percent and 2.3 percent respectively of their total sales. In short, intra-firm sales do not appear to be a focus for both manufacturing and service subsidiaries.

**DISCUSSION**
Implications for theoretical and empirical literature

First, we offer new empirical evidence that both manufacturing and service subsidiaries pursue regional strategies. The in-depth analysis shows that subsidiaries have a strong regional focus in their sales. This can be explained by the MNE’s ‘geographic sales territory’. Subsidiaries in South East Asia service the broad Asia Pacific markets. Products made in Asia are for sales in Asia. Services must be tailored to preferences of customers in the local markets.

Second, our study is the first to report the links between FDI motives and FDI types and the links between FDI motives and subsidiary sales of manufacturing and service sectors in the South East Asian region. Beugelsdijk et al. (2009) indicate that among US foreign subsidiaries in developing countries, the proportion of host-host, intra-firm trade has increased significantly during the observed period of time (1993-2003). Conversely, the proportion of host-home, inter-firm trade has diminished. The findings are interpreted as indication of both value chain vertical specialization and MNE’s systematic exploitation of factor cost differentials across countries. In contrast, our dataset shows that there is a relative lack of evidence of consistent increasing trend of intra-firm trade and vertical integration FDI among British subsidiaries. Foreign subsidiaries are organized as horizontal FDI in order to achieve market-seeking FDI motives. Additionally, they focus explicitly on external customer sales rather than internal customer sales within the MNE networks.

Third, we explore the possible reasons for a relative lack of evidence of global strategy at subsidiary level. The two main reasons are (i) the requirement of adapting separately upstream and downstream activities in distance host country environments, and (ii) the requirement of selecting activity locations as a function of supply side criteria. This is related to the problem with technical difficulties associated with international FSA transfer, and in challenges of effective deployment in a host environment and
appropriate recombination of the NLB FSAs with newly created or newly accessed LB FSAs and managerial effectiveness in profitably exploiting the newly created FSA bundles (Rugman and Verbeke, 2008a; Rugman et al., 2011). According to Rugman and Sukpanich (2006), knowledge-based FSAs such as R&D are home region bound and can be exploited more efficiently in the home region of the broad triad. The R&D activities depend on the host country and the regional regulations. Consequently, not all products developed through R&D process in the ASEAN region, for example, can be sold in all regions around the world.

**Implications for subsidiary managers**

In the context of largely home-region oriented sales, both manufacturing and service subsidiary managers adopt a regional strategy with strong focus on external customer sales. The home region sales, which account over 90 percent of the subsidiary’s total sale, are the main source of cash flows for business growth and expansion. Managerial effectiveness cannot tolerate a lack of focus on the subsidiary’s largest markets.

**LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

There are several limitations of this study. First, the survey dataset might have some inherent limitations, because the parent firms of these subsidiaries are among the largest British MNEs. Accordingly, the analysis and interpretation of the findings reflect the views of the British subsidiaries which responded to the survey. However, the themes which emerge in this research reflect the broader population of large Western MNEs operating in emerging markets. We suggest future research incorporate subsidiaries with MNE parents headquartered from all parts of the triad to further extend our research.
Second, the home region in this study is defined as the broad Asia Pacific region from the subsidiary manager’s perspectives. Future research may offer a more detailed analysis, for example, by adding another layer of analysis at the intra-ASEAN level and extra-ASEAN. Recently, intra-regional economic activities within the ASEAN region have become more notable. In 2010, intra-ASEAN trade is 25.4 percent of total trade and intra-ASEAN FDI net flows are 16.7 percent of total net inflow to ASEAN (ASEAN, 2012). We suggest future research using data from multiple sources or a case study method where researchers might be able to access to a subsidiary’s detailed sales data break-down.

**CONCLUSIONS**

The findings of this study contribute to the growing body of regionalization research in six areas (i) the debate on the global versus regional strategy of the MNE by new work at subsidiary level (ii) study in a largely under-researched regional context - the South East Asian region, (iii) clarification on home region classification and measurements of home region sales and assets from the international accounting standard requirements, (iv) the use of several matrices in assessing the degree of regionalization of manufacturing and service subsidiaries, (v) adding several new parameters to Rugman and Verbeke’s regional analysis. Specifically, we have clarified the links between market-seeking FDI motives of British MNEs and subsidiary sales strategies by markets (domestic sales and export sales), by geographic areas (sales to in the Asia Pacific region and sales to rest of the world), by customer types (external and internal customers) and geographic areas of customer types by following the definitions of international accounting standards, and (vi) a contribution to the theory of the regional nature of the MNE.

Our findings present strong corroborating evidence of regionalization at subsidiary level. Both manufacturing and service subsidiaries are home-region oriented in their sales within the Asia Pacific region. Their intra-regional sales account for over 90 percent of their total sales. Additionally, they
focus their sales predominantly on external customers, which contribute over 90 percent of their total sales. This is due to our finding that market-seeking and ultimately asset exploitation is the predominant FDI motives of British MNEs in South East Asia. Importantly, subsidiary managers view the South East Asian region as a high-growth market place rather than a place for cheap labour. This empirical finding on MNEs’ actual FDI motives contradict the ungrounded assumption that MNEs mainly focus on exploiting cheap labour as reflected in the premise of ‘new international division of labour’. However, these assumptions are not supported by this empirical study.

The analysis based on the R/T versus F/T sales ratios together with other sales matrices: domestic market sales (HOME), rest of the home region sales (ROR) and rest of the world (ROW) have presented the following observations. First, there is a clear empirical evidence of the predominant home region orientation across all the samples of the British parent firms (64 percent), British exporters (76 percent), British manufacturing subsidiaries (93 percent) and service subsidiaries (95 percent), the world’s largest manufacturing MNEs (65 percent) and service MNEs (84 percent). Second, British MNE subsidiaries show the strongest home region oriented. Third, the analysis shows that the regional concentration at subsidiary level is driven by the home domestic sales, i.e. the home sales are considerably higher than the rest of region sales. The degree of home domestic sales and home region sales concentration indicates the importance of regional strategy for subsidiary managers.


Table 1: Test of significant differences in FDI motives of British MNEs in the South East Asian region, by sectors, in percent

<table>
<thead>
<tr>
<th>No</th>
<th>FDI motives</th>
<th>Manufacturing</th>
<th>Service</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To gain presence in the market in order to expand sales and profits</td>
<td>44.2</td>
<td>44.1</td>
<td>0.417</td>
</tr>
<tr>
<td>2</td>
<td>To follow corporate clients abroad</td>
<td>13.1</td>
<td>19.7</td>
<td>0.087</td>
</tr>
<tr>
<td>3</td>
<td>To sell products and services within the regional trading block (e.g. AFTA, ASEA4+4, AANZFTA)</td>
<td>8.9</td>
<td>7.1</td>
<td>0.752</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal (1+2+3): Market seeking (a)</strong></td>
<td><strong>66.2</strong></td>
<td><strong>70.9</strong></td>
<td><strong>0.401</strong></td>
</tr>
<tr>
<td>4</td>
<td>To reduce operating costs</td>
<td>9.5</td>
<td>8.7</td>
<td>0.548</td>
</tr>
<tr>
<td>5</td>
<td>To develop new products and/or services for local and/or regional markets</td>
<td>3.2</td>
<td>9.4</td>
<td>0.046</td>
</tr>
<tr>
<td>6</td>
<td>To access low cost labour forces</td>
<td>6.3</td>
<td>5.5</td>
<td>0.842</td>
</tr>
<tr>
<td>7</td>
<td>To establish a sourcing network (e.g. subcontractors, outsourcing, materials, etc.)</td>
<td>5.3</td>
<td>3.0</td>
<td>0.452</td>
</tr>
<tr>
<td>8</td>
<td>Other factor (e.g. to get special preferential tax treatment, etc.)</td>
<td>1.1</td>
<td>0.0</td>
<td>0.417</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal (4+5+6+7+8): Efficiency seeking (b)</strong></td>
<td><strong>25.4</strong></td>
<td><strong>26.7</strong></td>
<td><strong>0.710</strong></td>
</tr>
<tr>
<td>9</td>
<td>To access natural resources (e.g. oil, gas, mining, etc.)</td>
<td>4.3</td>
<td>0.0</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal (9): natural resource seeking (c)</strong></td>
<td><strong>4.3</strong></td>
<td><strong>0.0</strong></td>
<td><strong>0.008</strong></td>
</tr>
<tr>
<td></td>
<td><strong>ASSET EXPLOITATION (a) + (b) + (c)</strong></td>
<td><strong>95.9</strong></td>
<td><strong>97.5</strong></td>
<td><strong>0.897</strong></td>
</tr>
<tr>
<td>10</td>
<td><em>Strategic asset seeking (e.g. new technology, etc.)</em></td>
<td>4.1</td>
<td>2.5</td>
<td>0.457</td>
</tr>
<tr>
<td></td>
<td><strong>STRATEGIC ASSET SEEKING</strong></td>
<td><strong>4.1</strong></td>
<td><strong>2.5</strong></td>
<td><strong>0.457</strong></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Sources:* British MNE subsidiaries in the South East Asian region with a sample size of 101 subsidiaries (44 manufacturing and 57 service subsidiaries), primary data collected by questionnaire survey via e-mail.

Note: significant at p<0.05.

df=1 (between groups), df=99 (within groups).
<table>
<thead>
<tr>
<th>No</th>
<th>Types of FDI</th>
<th>Manufacturing</th>
<th>Service</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Horizontal FDI</td>
<td>88.8</td>
<td>100.0</td>
<td>0.424</td>
</tr>
<tr>
<td>2</td>
<td>Vertical FDI</td>
<td>6.9</td>
<td>0.0</td>
<td>0.045</td>
</tr>
<tr>
<td>3</td>
<td>Complex FDI (combination of both vertical and horizontal FDI)</td>
<td>4.3</td>
<td>0.0</td>
<td>0.106</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Sources: British MNE subsidiaries in the South East Asian region with a sample size of 101 subsidiaries (44 manufacturing and 57 service subsidiaries), primary data collected by questionnaire survey via e-mail.
Note: significant at p<0.05.
df=1 (between groups), df=99 (within groups).
Table 3: Test of significant differences of types of product and service offerings of British MNE subsidiaries in the South East Asian region, by sectors, in percent, 2003-2007

<table>
<thead>
<tr>
<th>Types of product and service offerings</th>
<th>Manufacturing</th>
<th>Service</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global product/ service offerings</td>
<td>46.0</td>
<td>35.0</td>
<td>0.549</td>
</tr>
<tr>
<td>Regional product/ service offerings</td>
<td>38.0</td>
<td>24.0</td>
<td>0.108</td>
</tr>
<tr>
<td>Local product/ service offerings</td>
<td>16.0</td>
<td>41.0</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Sources*: British MNE subsidiaries in the South East Asian region with a sample size of 101 subsidiaries (44 manufacturing and 57 service subsidiaries), primary data collected by questionnaire survey via e-mail

Note: significant at p<0.05.

df=1 (between groups), df=99 (within groups).
Table 4: Test of significant differences of British MNE subsidiary sales break-down by geographic areas and by markets, by sectors, in percent, average 2003–2007

<table>
<thead>
<tr>
<th>Item</th>
<th>Sales break down</th>
<th>Manufacturing</th>
<th>Service</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home local domestic market sales (HOMES)/total sales</td>
<td>68.9</td>
<td>76.6</td>
<td>0.188</td>
</tr>
<tr>
<td>2</td>
<td>Rest of home region in the Asia Pacific sales (ROR)/total sales</td>
<td>24.3</td>
<td>18.7</td>
<td>0.386</td>
</tr>
<tr>
<td>3</td>
<td>Rest of world sales (ROW)/total sales</td>
<td>6.8</td>
<td>4.7</td>
<td>0.867</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intra-regional sales</td>
<td>93.2</td>
<td>95.3</td>
<td>0.287</td>
</tr>
<tr>
<td></td>
<td>R/T = HOMES + ROR (1+2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Export sales (also known as foreign sales)</td>
<td>31.1</td>
<td>23.4</td>
<td>0.417</td>
</tr>
<tr>
<td></td>
<td>F/T = ROR + ROW (2+3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Sources:* British MNE subsidiaries in the South East Asian region with a sample size of 101 subsidiaries (n=101; 44 manufacturing and 57 service subsidiaries), primary data collected by questionnaire survey via e-mail.

Home domestic market sales as a percentage share of total sales (HOMES/T)
Rest of (home) region in the Asia Pacific sales as a percentage share of total sales (ROR/T)
Rest of the world sales as a percentage share of total sales (ROW/T)
Intra-regional sales as a percentage share of total sales (R/T = (HOMES + ROR)/T)
Export/foreign sales as a percentage share of total sales (F/T = (ROR + ROW)/T)

*Notes:* significant at p<0.05.

df=1 (between groups), df=99 (within groups).
Table 5: Test of significant differences of British MNE subsidiary sales break-down by customer types and by geographic areas of customer types, by sectors, in percent, average 2003–2007

<table>
<thead>
<tr>
<th>Item</th>
<th>Sales break-down</th>
<th>Manufacturing</th>
<th>Service</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sales to external customers in home local domestic markets/ total sales</td>
<td>68.9</td>
<td>76.6</td>
<td>0.188</td>
</tr>
<tr>
<td>2</td>
<td>Sales to external customers in the Asia Pacific region/ total sales</td>
<td>18.2</td>
<td>12.7</td>
<td>0.358</td>
</tr>
<tr>
<td>3</td>
<td>Sales to external customers in ROW/ total sales</td>
<td>2.2</td>
<td>2.4</td>
<td>0.869</td>
</tr>
<tr>
<td>4</td>
<td>Intra-firm sales to sister affiliates in the Asia Pacific region/ total sales</td>
<td>6.1</td>
<td>5.8</td>
<td>0.893</td>
</tr>
<tr>
<td>5</td>
<td>Intra-firm sales to parent and sister affiliates in ROW/total sales</td>
<td>4.6</td>
<td>2.5</td>
<td>0.804</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sales to external customers (I+2+3)</strong></td>
<td><strong>89.3</strong></td>
<td><strong>91.7</strong></td>
<td><strong>0.463</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Intra-firm sales (4+5)</strong></td>
<td><strong>10.7</strong></td>
<td><strong>8.3</strong></td>
<td><strong>0.791</strong></td>
</tr>
</tbody>
</table>

Sources: British MNE subsidiaries in the South East Asian region with a sample size of 101 subsidiaries (n=101; 44 manufacturing and 57 service subsidiaries), primary data collected by questionnaire survey via e-mail. Notes: significant at p<0.05.

df=1 (between groups), df=99 (within groups).