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FOREIGN DIRECT INVESTMENT AND ECONOMIC DEVELOPMENT: AN EXPLORATORY STUDY OF THE INTERNALISATION STRATEGY OF A TECHNOLOGY-INTENSIVE MULTINATIONAL

ABSTRACT
Foreign direct investment is considered an important driver of economic development, particularly through its potential transfer of knowledge, know-how and technology to host countries which may enable industrial or economic upgrading. This study explores the internationalisation process of a technological-intensive Multinational Enterprise (MNE) and, through internalisation theory, explores how it transferred its knowledge, know-how and technology to the host country it entered. Through this exploratory study, findings confirm theoretical expectations developed from the extensive literature review, with data showing that the MNE adopted strict governance structures over the activities of its subsidiary, restricting the transfer of its firm specific advantages to the host market, while leveraging from the central coordination and management of product development and value chain activities.

Key Words: foreign direct investment, internalisation theory, internationalisation, multinational enterprise

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INTRODUCTION
Foreign direct investment is considered an important activity contributing towards broader economic growth and development with host country economies (Akbar and McBride, 2004). It has been postulated within extant literature that multinational enterprises (MNEs) that undertake foreign direct investment (FDI) can contribute not only to employment creation, but also can contribute to the economic development and industrial upgrading of economies through knowledge and technology spill-overs (Akbar and McBride, 2004; Meyer and Sinani, 2009). An opposing view has also been highlighted by Oetzel and Doh (2009), who in a review of extant literature suggests MNEs have the capacity to negatively impact on economic development through actively constraining the potential technology spill-overs, crowding out local business operating in the same industry or by repatriating large amounts of profit. This, along with concerns about MNEs operating standards, impacts on the local environment and social welfare, highlight the importance of investigating how MNEs are actually internationalizing and bringing with them the so-called benefits that are often advocated internationally by the business community.

This research seeks to directly engage in this pursuit, examining the process by which large MNEs internationalise, and specifically focus on the processes by which these organisations transfer knowledge and know-how into a host country. To do so, this research focuses on the Australian context, examining the internationalisation strategy of a large, technology-intensive foreign multinational and how they entered into the market, what specific strategies were put in place to transfer firm specific advantages to the market, and how technology and knowledge were transferred. Australia is a particularly interesting context for this research, as it is considered to be one of the major global recipients for inward FDI (2011–2013) with approximately US$508 billion of aggregate foreign investment stock.

We focus on French MNEs, as one of the sizeable contributors with FDI stock within Australia totalling US$20 billion (UNCTAD, 2011). French organisations are amongst the largest investors from countries within the OECD (2011-2012) (OECD Factbook 2012), with recent indices showing that their investment into Australia is continuing to increase, and has led to France being one of the largest sources of FDI into Australia (Austrade, 2010). French FMNEs have also been identified as focusing on
innovation, with a large presence of French technology- and knowledge-intensive MNEs entering Australia.

These organisations are considered as a major contributor to filling Australia's infrastructure development gap, transferring cutting edge technology and knowledge, and also helping local exporters become integrated into global value chains (Austrade, 2011). As a significant source of FDI in Australia, French organisations have established more than 300 subsidiaries in Australia employing over 85,000 employees (FACCI, 2012).

Despite the significance of their investment into Australia, and their assumed role in transforming Australia towards a knowledge-based economy through the development of knowledge-intensive industries such as pharmaceuticals, energy, advanced manufacturing, and technologically advanced infrastructure (Austrade, 2011), very little is known about how these organisations are entering into Australia, and how they transfer their knowledge and know-how to the Australian market. Understanding the process of how French MNEs, and specifically technology-intensive organisations, successfully enter the Australian market would provide a basis for understanding if, and how, they support the transformation of Australia into a knowledge-based economy with the transfer of knowledge and technology to the domestic market.

In order to understand the process behind French MNEs entering Australia, this study seeks to utilise internalisation theory to explain how the entry process of these organisations occur. As noted above, while the involvement of French MNEs in Australia is significant, a dearth of research investigating the process of their entry into the Australian market is evident. Reviews of research on internationalisation over the last two decades has shown a particular interest on investigating investment into the United States of America, Japan, Western Europe, Great Britain, Germany, PR China, Asia and Canada (Brouthers and Bamossy, 2006; Canabal and White, 2008; Osland and Cavusgil, 1996).

From an extensive review of the literature, research into investment between France and Australia has not yet been undertaken. This research therefore also seeks to address this gap, exploring the dynamics of how French technology-intensive organisations enter into Australia. In doing so, this study may also reveal the important role of transfers in technology, knowledge and know-how that occur as part of the internationalisation of these organisations, and how they will assist the ambition of the Australian Government to transform into a knowledge-based economy.
These dynamics all contextualise the importance of the French-Australian context, highlight the significant investment between both countries, and illustrate the potential important role of French technology-intensive organisations in aiding the transformation of the Australian economy. These interactions have the potential to create a positive impact on growth, sustainable development, and more importantly, the capacity to generate technological and knowledge spill-overs into the Australian economy (Austrade, 2011). It is therefore important to understand the internationalisation process of French MNEs investing into Australia. Yet, it is evident from an extensive review of the literature, that this remains a distinct gap in knowledge. Consequently, this study aims to undertake an empirical research to answer the following questions:

1) What is the internationalisation process of technology-intensive MNEs?
2) How does internalisation theory explain the decision-making process of technology-intensive MNEs when internationalising?
3) How does internalisation theory explain the transfer of knowledge and know-how to the Australian market in the process of a French MNE internationalizing?

THEORETICAL FRAMEWORK

Internalisation theory is particularly appropriate for the context of this study, as it is focused on the internal functions of the firm when internationalizing. In so doing, this theory reveals the process by which technology and knowledge is transferred into the new market being entered, whether it is through the internal functioning of the firm, or whether it looks to integrate external businesses into the value chain. Building from this point, the following section will turn to a more comprehensive examination of the theory. Over the last three decades, a range of authors (for example, Buckley, 1993; Buckley and Hashai, 2004; Buckley and Strange, 2011; Francocur, 2006; Hennart, 1982, 2009; Rugman and Verbeke, 2003, 2008a) have sought to develop Buckley and Casson’s (1976) original ideas.

This study builds beyond the original study of Buckley and Casson (1976) and classifies three key constructs that have emerged from extant literature to constitute the foundation of internalisation theory – transaction costs (Adler and Hashai, 2007; Buckley
and Hashai, 2004, 2005; De Beule and Van Den Buleke, 2009), value chain activities (Adler and Hashai, 2007; Asmussen, Benito, and Petersen, 2009; Buckley and Casson, 1998; Buckley and Hashai, 2004, 2005) and governance (Asmussen et al., 2009; Buckley, 1993; Buckley and Strange, 2011; Kirca, Hult, Roth, Cavusgil, Perryy, Akdeniz, Deligonul, Mena, Pollitte, Hoppner, Miller, and White, 2011; Rugman and Verbeke 2008b; Rugman, Verbeke, and Yuan, 2011).

**Transaction costs**

Internationalisation and transaction costs have a close relationship, as firms willing to expand overseas will be confronted with the costs of establishing operations overseas. These costs can both be based internally, and externally, through market characteristics that constrain this process (Buckley, 2007; Buckley and Casson, 2009; Rugman 1981). From an external perspective, constraints emerge upon the free flow of goods, services and capital between countries which create additional expenses to the internationalisation of firm’s value-added activities (Buckley and Casson, 1976, 2009). For example, the pricing system within international markets where firms trade know-how, products or financial assets, brings about price fluctuation along with other imperfections (Hennart, 1982).

The nature of these costs – both from the tangible activities taken to expand internationally, and the market imperfections associated with modern economic systems – emphasize the importance of a firm considering how it achieves cost minimisation and value maximisation (Buckley and Casson, 1976; Rugman 1981). As Buckley and Hashai (2004) state “an optimal global system minimises the cost of operations and flows within it” (Buckley and Hashai, 2004: 37). In other words, MNEs seek to lessen the costs of internationalisation by optimising the location and the control over the configuration of its value chain (Adler and Hashai, 2007), taking into account MNEs’ products specificity and the transaction costs engendered by these specific markets (Buckley and Hashai, 2004).

Furthermore, high costs flowing from imperfections occurring in markets for firm-specific advantages have an impact on firms’ internationalisation process and specifically on their decision of whether using external or internal markets to enter a country (Collinson and Morgan, 2009; Hennart, 2009). These transaction costs engendered by the transfer of MNEs’ products to foreign market seem to influence the decision over MNEs’
entry mode choice – using either the internal firm’s system (and maintaining control and ownership over operations) or external markets such as arm’s length contracts.

In spite of the services offered by institutions existing in external markets (e.g., supplier, manufacturer, retailer, etc.), an alternative manner to avoid going through those imperfections may occur when the foreign activity is brought under a common ownership through the internalisation of value-added activities. As internalising value-added activities within a firm’s own value chain engender costs too, the internalisation theory asserts the importance for the costs to be offset by the benefits of internalising markets (Buckley, 1988; Buckley and Casson, 1976, 2009; Buckley, Pass, and Prescott, 1990; Casson 1979). Therefore, transaction costs can incur as the result of internationalisation but also through the decision to internalise activities. There are two distinct types of transaction costs associated with internalisation theory: transaction costs from internationalising, and from internalising.

Looking first at the transaction costs from internationalising activities, the avoidance of these imperfections is one of the core arguments of the internalisation theory, as it suggests internalisation of value-added activities within firms’ boundaries as a method of overcoming these imperfections in external markets (Buckley and Casson, 2009). This theory actually emphasises two different drivers impacting on the decision of why MNEs would own and control their own activities. First, external market imperfections such as government regulations leading to possible higher transaction costs of establishing plants overseas is the first factor impacting on the decision to internalise (Buckley and Casson, 2009). Secondly, firms’ cost minimisation objective generally results in the integration of firm’s value-added activities as the market in which firms develop their presence and competitiveness entails imperfections and failures. These can lead to possible dissipation and then devaluation of firms’ know-how (i.e., technology and knowledge), which is an obvious concern for knowledge-intensive companies (Collinson and Morgan, 2009).

Looking now at the costs associated with the internalisation of activities, internalisation theory identifies two explicit groups of transaction costs for consideration – external and internal. External transaction costs refer to the specific costs associated with the transfer of all the resources needed to be competitive overseas which comprise firm-specific advantages, management skills, knowledge and expertise embodied in patent human capital and other tangible and intangible assets (Buckley and Strange, 2011). When internalising activities as part of the international expansion these transaction costs are
observed to be higher as costs are generated by these being transferred through different cultural, language and geographic environments (Buckley and Hashai, 2004; Casson 2000; De Beule and Van Den Bulcke, 2009). The specificity of the knowledge involved in these flows is assumed to be more expensive as the codification of this specific knowledge requires experts in both the parent firm and in the subsidiary (Buckley and Casson 1976, 2009; Buckley and Hashai, 2004; Buckley and Strange, 2011). However, the internalisation of these information flows would also bring an information advantage to the firm and offset some costs, as they would internalise this within existing structures of communication (Buckley and Casson, 1976; Rugman, 1981). These on-going cross-border transactions give incentives to the MNE’s HQ to tightly monitor and supervise the subsidiary’s expenses to enhance profit maximisation (Buckley, 2009; Buckley and Casson, 2009; Buckley and Strange, 2011; Casson 2000; Kirca et al., 2011; Verbeke, 2003).

The importance of transaction costs in directing the process of internationalisation was recently shown in a study by Pak and Park (2004). In their study, an empirical investigation was undertaken on the internationalisation processes of Japanese companies, demonstrating a tendency to avoid outsourcing, franchising or licensing due to their likelihood of knowledge dissipation and additional costs generation. Instead, Japanese firms prefer joint ventures, particularly with companies that are members of the Keiretsu, to avoid going through the prices fluctuation generated by external markets and to achieve lower costs associated with on-going trust building and opportunism from new partnerships (Pak and Park, 2004).

In the same vein, Verbeke and Kano (2012) recently reaffirmed the importance of transaction costs – within the context of internalisation theory. Their study showed that the high costs engendered through psychic distance (values, norms and customs variations) was associated with the decision to internalise international activities, and highlighted the ability of internalisation theory in explaining the entry choice of firms (Verbeke and Kano, 2012).

Building from extant literature, it can therefore be proposed:

**Proposition 1:** the type and extent of transaction costs will determine the degree to which a firm internalises their operations when internationalising.
Value chain activities

Within the context of internationalisation theory, the process of internationalisation refers to the international extension of a firm's value chain and their value-added activities (Buckley and Casson, 2009). An international value chain can be described as “a complex vertical and horizontal [network] … of cross-border transactions and value adding activities… brought under the administration and co-ordination of a single MNE” (Mtigwe, 2006: 11). The expansion of the value chain internationally is characterised by flows of not only tangible products but also information including knowledge, technology and managerial skills (Buckley and Casson, 1976, 1998, 2009; Casson, 1979). Rugman et al. (2011) go further in detailing the nature of value chain activities arguing that they may be classified into four key categories - innovation, production, sales and administration – that need to be considered. The structure and the coordination of these activities make the value chain a crucial component of firms’ internationalisation strategy as firms’ value and competitiveness, return on investment and international success are driven by the efficiency of these activities (De Beule and Van Den Bulcke, 2009; Holsapple and Singh, 2001). As such, internalisation theory emphasizes the importance of the integration of, and the control over, value chain activities (Buckley and Casson, 1998, 2009; Buckley and Hashai, 2004).

As alluded to above, this process of international expansion through the extension of the firms’ value chain can be achieved internally through horizontal or vertical integration (Buckley and Casson, 2009). The former suggests replicating the activities of the organisation in the home country to that of international markets, whereas the latter reflects the internalisation of downstream or upstream activities within the value chain (Buckley, 2011; Buckley and Casson, 2009). According to the internalisation theory, firms will be driven to keep tight control over their specific advantage due to imperfections within external markets and the transaction costs engendered (Buckley and Casson, 2009; Rugman and Verbeke, 2004, 2008a, 2008b). These imperfect markets can be avoided by the internalisation of firms’ value-added activities which exist under a joint control and management by the parent firm and subsidiary.

Another key element influencing the firms’ value chain decisions is the product specificity. Buckley and Hashai (2004) argue that differences among firms’ organisational strategy and structure are influenced by the nature of their product specificity. Specifically, they suggest that a knowledge-intensive product value chain involving know-how and
technology capability would be more disposed to be geographically concentrated (Buckley and Hashai, 2004). Rugman and Verbeke (2004) support this assertion, arguing that firms in knowledge-intensive industries have a tendency to concentrate key operations in the regional home market. This proposition has been more recently empirically supported by Rugman and Verbeke (2008a, 2008b), who demonstrate this point when investigating the dispersion of value-added activities for the world’s largest firms (Global Fortune 500). They show a strong tendency toward regionalisation, with very few MNEs globally dispersed (seven out of 500). Rugman and Verbeke’s (2008a, 2008b) study also demonstrates how the specificity of a firm’s assets correlates with the location of their downstream (through marketing and sales) and upstream (through the size of foreign investment) value-added activities.

Firms must therefore develop a strategic structure to their value chain activities, when expanding internationally, with the main purpose of adding significant value through their on-going activities. Based on extant literature, it is proposed that:

**Proposition 2:** Firm specific advantages and product specificity will influence the type and degree of internalisation over value chain activities adopted by the organisation.

As MNEs increasingly seek to internalise value chain activities due to the transaction costs associated with internationalising, they must also seek an efficient and effective network to coordinate and manage these activities across borders (Buckley and Strange, 2011). It is from this context, that governance systems emerge as the final key construct explaining the internalisation process of firms. The next section will detail the importance of considering governance systems and how it forms a fundamental aspect of the process of internalisation.

**Governance structures**

Governance relates to the management, control and coordination of firms’ internal structure through the establishment of rules and policies, core objectives and consistent management systems (Bert and Bart, 1997; Buckley 1993; Gereffi, Humphrey, and Sturgeon, 2005). An efficient management system governing a firm’s value chain comes from managers’ ability to generate a synergy amongst the firm’s objectives, guidelines and managerial control in order to achieve firms’ value and profit maximisation (Buckley and Casson, 2009; Buckley and Strange, 2011).
In addition, the international expansion of a firm’s value chain gives rise to transaction costs, management and coordination issues. The increase in costs enhances the importance of an accurate control over, and coordination amongst, firms’ value-added activities (Aharoni, 2011; Schlierer, Werner, Signori, Garriga, Von Weltzien Hoivik, Van Rossem, and Fassin, 2012). Effective coordination and control would allow the firm to align common objectives throughout its entire value chain and thereby lead to profit and value maximisation (Kirc et al., 2011).

As noted above, governance related issues are largely focused on how common control and ownership is established between various value-added activities (which may be dispersed between the parent firm and subsidiary). Efficient and effective internal structures thus enable the organisation to achieve greater coordination and communication across different business units (Casson, Dark, and Gulamhussen, 2008; Hennart, 1982). Governance related issues are not limited, however, to only internal structures. As managing and coordinating an entire value chain, in reality, is not a common practice as organisations often outsource different elements of the value chain. This issue can therefore also extend to groups of companies working together (e.g., partnerships, outsourcing and other arm’s length transactions) (Gereffi et al., 2005).

Irrespective of the degree to which an organisation decides to internalise value chain activities, the presence of market imperfections such as a low protection on patents and IP rights can lead to the possible dissipation and then devaluation of specific knowledge and know-how for organisations (Collinson and Morgan, 2009; Rugman 1981). This situation emphasizes the importance of maintaining control over value added activities, and particularly those activities that are linked with the firm-specific advantage.

The role of an efficient governance structure was articulated in the study by Bert and Bart (1997). They suggest that stable and harmonized governance structures, according to the firms’ product specificity, can be considered as a competitive advantage. Bert and Bart (1997) illustrate the impact of the centrality of decisions on the efficiency and success of four companies which have established a wholly owned production plant in Thailand. According to their specific advantages and objectives, these foreign subsidiaries were tightly controlled by the parent firms. In one example, the headquarters was orientated on ensuring the quality of the product, and thus adopted rigorous governance system to control the subsidiary. Their research also highlighted that management was orientated around internalising subsidiary activities to ensure quality and timing of production inputs.
Proposition 3: the greater the degree of internalisation, the more efficient and effective the governance systems will need to be.

Building from this point, the study will now turn to the methodology employed in this exploratory study, before examining the results.

METHODOLOGY
This research aims to provide a greater understanding into how French knowledge-intensive MNEs expand their value-added activities overseas, and in particular, how these organisations manage, structure, and coordinate their foreign operations in Australia. The exploratory nature of this study makes the utilisation of a qualitative research approach indispensable (Yin, 2003). Qualitative research approaches enable the research to “see and understand the context within which decisions and actions take place” (Myers, 2009: 5).

Generally, this process implies the involvement of key decision-makers such as senior directors, strategic business development managers or senior managing directors. Among the various data collection techniques that a qualitative research approach offers, interviews seem the most appropriate due to its ability to capture key decision-makers’ perceptions, opinions and experiences. Moreover, their degree of seniority within the company will provide different innovative insights to the current knowledge on the business activities of MNEs when internationalising.

Yin (2003) highlights how when undertaking qualitative research that the boundaries lying between the context and the phenomenon studied are not very evident. Hence, it reinforces the need for certain flexibility during the collection of primary data. The flexibility required for this approach will be embedded in the semi-structure interview structure. The outcomes associated with the use of a semi-structured interview format is likely to provide insights into the decision-making process of French MNEs and how knowledge and technology is transferred and managed as part of the internationalisation process.

From invitations sent to 12 knowledge-intensive French organisations based in Australia, this study presents the results based on one organisation. The semi-structured interview was conducted in person, went for approximately 55 minutes, and was recorded using an electronic recorder. The interview was subsequently transcribed by the researchers, and checked for accuracy following the completion of the transcription. As
the respondent who was interviewed has a very senior position within the subsidiary, he is much more likely to be able to reflect on not only the development of the Australian subsidiary, but also the interaction between the headquarters and subsidiary operations during the on-going operations. The respondent, Robert (named changed), is a French expatriate who has worked for Technology-Intensive Organisation (organisation name changed) – which operates across the energy and transportation industries -- since 1999. He has worked in Technology-Intensive Organisation's (henceforth, TIOrg) international operations, as well as the HQ located in Paris. He has worked predominantly in the business development department, and more recently in one of the key divisions within the organisation. Despite the fact Robert is only senior regional director in Australia; he has also travelled and held various functional and strategic positions including within the HQ operations. He also has extensive experience with the decision-making process of the HQs. He has also been in Australia since the establishment and the development of the division in which he is a director since 2010. In turn, his long experience in the organisation, his specific positions both in France and internationally, as well as his specific knowledge within the firm, makes him a very relevant participant for this study.

Furthermore, secondary data was used to provide a basis for triangulation to increase the reliability and the validity of this research. Secondary data was collected through the internet, social networks, the company website, and news regalia. This data provided background information on annual and financial reports, governance structure on the HQ's website, as well as recent or envisaged investments by the French HQ. The latter has been achievable by performing and comparing investments found throughout an archival search and more recent search thanks to news regalia. The information from secondary data has then been analysed and compared with respondent's responses in order to confirm the reliability of the information collected. The information from the secondary data has been integrated throughout the narrative provided in the results section.

The analysis and comparison of this information helped the researcher confirm the respondent's responses, and to also provide a more complete picture of their activities and objectives where the respondent was unable to answer. To make sure that the data collection procedures have been respected, a copy of a transcript was sent to respondent in order to confirm the interviewer's perceptions. This was utilised to reinforce the quality and the reliability of the data. The use of interview data collection added to the secondary data, plus the transcript sent back to the respondent, reinforces the principles of data
triangulation expressed earlier and therefore emphasises the quality and the validity of this research findings.

RESULTS
This section will introduce the main findings from the semi-structured interview that was conducted with the French knowledge-intensive MNE, TIOrg, which undertook FDI into Australia. According to Robert, TIOrg has expanded its business operations through the use of M&A: “It’s all about acquiring new markets smoothly in different countries with different cultures”. During the early 2000s the organisation experienced significant financial difficulty, which resulted in the sale of the subsidiary to another organisation. As part of the sale agreement, the new owner agreed to continue purchasing products exclusively from TIOrg HQ operations. This divestment of assets was reversed recently, with TIOrg HQ buying back the subsidiary activities. After a rather turbulent decade, TIOrg has now emerged as a worldwide leader in the two key industries it serves, including within the Australian market (Company Website, 2012).

Associated with TIOrg’s international expansion strategy is its two firm-specific advantages – cutting edge technology and product/process innovation (Company Website, 2012). Looking more closely, TIOrg’s firm-specific advantages are grounded firmly in the unique expertise within cutting edge technologies (specific knowledge) and highly skilled labour force (specific to know-how) (Company Website, 2012). This was reinforced by Robert who highlighted the focus of the organisation on competency development around technology and people, stating that “our competency specificity is very narrow”. Developing these specific knowledge based assets across national boundaries is particularly challenging for the organisation, with the need to access qualified and expert employees who are able to absorb, and work with, highly specialised technology and very sophisticated systems.

In summary, TIOrg’s strategic objective of continuing to develop its presence internationally is supported by its capacity to reach globally with its core firm-specific advantages. The next section will investigate the role of transaction costs in TIOrg’s decisions to internationalise before moving on to explore the different activities implemented both at the HQ and the Australian subsidiary levels. This will help
highlighting not only the drivers, but also the methods, of internalisation utilised within TIOrg's global value chain activities.

**Transaction costs**
Transaction costs refer to the costs engendered by the process of internationalisation, as well as the costs associated with internalising activities. These transaction costs are considered as drivers of the internalisation of value-added activities. Market imperfections (such as regulations) are a driver on whether these costs will be substantial. In the Australian market, however, Robert suggested that this was not an issue. Rather, he focused on comparing the Australian situation with low cost markets, where he indicated that external transaction costs become much more significant as part of the internationalisation process. He specifically highlighted external transaction costs related to potential governmental regulations, political requirements, fluctuations in currency rates, and the need to develop operations from the ground-up (particularly as these locations tend to be manufacturing hubs).

“We are interested from Australia about Asia-pacific apart from China and India because they are very particular markets… if you open a manufacture centre; you have to invest on the equipment, real estate, HRM, training, etc. Nowadays, we have to produce in local for political requirements and also to be wary against the currency rate. … so [the investment] is [also] complicated in terms of engineer and management” (Robert).

Australia appears to be much more liberal in the entry of MNEs when compared with certain markets which might have more state-controlled economies and in which market imperfections are more evident: “We don't have the same issues (with Australia) as with China and India. Nowadays, they are really problematic toward French companies”. This explains the decision of TIOrg to outsource production of software in these low-cost countries (rather than internalise it through direct ownership). The increased external transaction costs have thus influenced the market entry options, and decision not to internalise, within these markets. This contrasts with the approach within the Australian market, where TIOrg was willing to internalise operations, and undertake FDI.

When examining the decision to internalise activities within Australia, it becomes clear that TIOrg is willing to orientate towards a long-term profit objective, overlooking
the costs of establishing a subsidiary within Australia. Robert illustrated this point in the interview, by emphasising the importance of the project length and the need for long-term returns from a significant investment:

“Concerning the Australian subsidiary... if you don’t have any foresee for long term opportunities, we are not going to provide a big structure... We know we can do it if we have a long term recurrent business with a certain volume which allows us to offset our investments”.

It appears that when TIOrg is willing to internalise their activities, they lessen the costs associated with a direct investment through ensuring the longevity of their activities within the market. Robert outlined the methods utilised by the HQ to lessen these costs throughout the lifespan of the Australian subsidiary. He highlighted how a replication of the divisional structure from the HQ operations was implemented within Australia. This model – which is also adopted in other key markets –allowed the minimisation of costs through strategic coordination of activities, thus removing the need to re-invent the product. This is a strategic approach to managing the high transaction costs associated with expanding their operation internationally.

According to Robert, while TIOrg’s products are characterised by a distinct European origin, and are adapted very little to suit the local market, this has not been identified as an issue. The Australian market appears to be open to standardised products associated with the type of industry TIOrg operates within, as Robert notes:

“[transport] industry is kind of late in Australia in terms of development compared to the rest of countries so the [transport providers], undertook some studies and found out that the European technology (which is standardised in Europe) is the best, so that’s why they call European firm. … We do not have cultural problems. They just called us for better technology already widespread, but they absolutely do not want us to develop new technology for them, they do not want to take technical risks. They want something already existing in the market”.

Thus, it appears in the international expansion of TIOrg into Australia, that the external and internal transaction costs were not critical factor in the decision to internalise.
Rather, it was seen as a necessary condition for enabling TIOrg to establish a cost-
efficient network system.

**Value chain activities**

From a HQ perspective, HQ corporate activities (HQCA) have well-defined divisions
that operate across the key industries the organisation competes within. It is clear from an
examination of the organisational structure that it is largely orientated around a
hierarchical basis (Company Website, 2012), with the French HQ’s coordinating the
entire global network from Paris. Robert supports this, and articulated the basis of the
structure suggesting: “our organisational structure is ... [as following] Central organisation in Paris,
corporate and transport”.

At the Australian subsidiary level, a similar divisional structure is evident, albeit
without the management responsibility of international operations. According to Robert,
the Australian subsidiary exists solely within the Australian market and operates its own
activities. This reflects TIOrg’s international strategy, by enabling subsidiaries to operate
and service local markets utilising the technology-intensive products developed at the HQ
level. The local orientation of the subsidiary seems to extend to their international
expansion which is limited to Australia. The subsidiary has been developed to specifically
cater to only the Australian market, as Robert notes, “We are an operational division, so we
participate for the global capacity of the group”. Despite the capacity to adapt products to the
Australian context, it seems that any new product solutions need to be accepted by the
HQ:

“all solutions that we find relevant for customer's needs is validated by the design
authority which is in Europe and which serve TIOrg worldwide, so ...we are not
evocated to do business development, we utilise what it's been developed in our worldwide
centres” (Robert).

TIOrg’s strategy emphasises its global expansion through long term projects offering
globally TIOrg’s products, with some capacity for customisation within local markets.
This leverages of the R&D undertaken within the HQ operations. R&D centres, under
the umbrella of HQ operations, are the precursor for innovation and technology
development to occur, suggesting the importance of transfers in intangible assets between
the HQ operations and the subsidiary. Robert stated that the teams working in the Australian manufacture centres “apply the manufacture of engineering to machinery that comes from Europe”. He also provided an example illustrating how products flow through the global value chain, with product innovations originating from the HQ in France and distributed globally through the subsidiaries:

“To give you an example, the computer that you are going to buy from TIOrg that is sold in China or USA, is the same computer. The Windows operation system is developed in Paris, the specification of the computer is done in Paris but the codec/linear programming of circle and dots and bar and pixel are done in India. However, what we write in Word and Excel is done locally (in Australia).”

Robert articulated the intricate connections between the subsidiaries and the HQ operations, demonstrating the dependence that the Australian subsidiary has on the HQ:

“with the example of the computer, if [the HQ] removed the screen (i.e., if the HQs does not provide the Australian subsidiary with the technology developed within European centres), we cannot find another screen that matches the old one as the whole processes of connection is not the same as well as the prices”.

The importance of the HQ’s firm-specific advantages is thus integral to the Australian subsidiary being able to provide its products. The nature of the product specifications (very sophisticated technology) expertise required to develop TIOrg’s products may explain the need for them to maintain development within the HQs, ensuring quality, reliability and sustainability. As the Australian subsidiary cannot rely on its own resources due to scarcity of skilled people, TIOrg’s firm-specific advantages and product specificity thus influence the type and degree of internalisation over value chain activities in their international operations.

Looking more closely at the rationale for such an autocratic and hierarchical relationship with the subsidiaries, it is clear that two specific factors are impacting upon this approach adopted by TIOrg – reputation, due to the industry that they operate in; and specific know-how, associated with the very specialised product they produce.
TIOrg’s reputation is inherently linked with being able to provide a reliable and quality product, with Robert articulating how the responsibility for any quality and safety issues return to the HQ operations:

“If we (TIOrg) have a [product malfunction] where there are three deaths, if it’s a TIOrg [product], it’s a TIOrg [product] even though it’s operated by [another organisation]”.

However, given the issues around quality and reliability, it becomes more reasonable to see why innovations/product developments from the Australian subsidiary go back to the HQs, who then test and scrutinise these proposed changes. Robert highlighted explicitly that this is part of avoiding any risk-taking within product development:

“We are a deployment centre, so we have engineering here but every technical solution that we create has to be validated technically by Europe (3/4 of our design authority is in Europe) to avoid to put some risks for the Group”.

As the main innovation centres and other key intangible assets are based in Europe, the transfer of technical personnel (with their specialised knowledge) may be critical for the on-going sustainability of the Australian subsidiary – ensuring that there can be an effective transfer of knowledge and know-how. Robert emphasised the importance of specialised personnel in enabling the transfer of know-how associated with new innovative technologies introduced into the Australian subsidiary, as they are not developed there:

“[TIOrg] vocation is not to let indefinitely expatriates in Australia […]. So [it] localises the know-how […] to use”.

**Governance structures**

When internationalising, the governance structures of an MNE needs to be taken into consideration according to the location and the level of control planned over the investment. The transaction costs associated with entering into a new market, engendered through market imperfections and establishment costs are thought to be controlled through effective governance put in place to achieve cost minimisation.
The importance of aligning clear objectives between the subsidiary and HQ has been emphasized above. TIOrg has structured its HQ activities through departmentalisation of different tasks and responsibilities, and focusing each area on a specific task to control. This enables a fast but reliable coordination and control over the compliance of regulations worldwide, financial reporting, etc. (Company Website, 2012). The HQ’s managers have a critical role in directing the distribution of clear objectives throughout the international operations, framing them with specific rules and procedures in order to direct employees’ behaviour (Buckley and Carter, 1996; Buckley and Casson, 2009). Robert details the subsidiary perspective of this, suggesting his role within the Australian subsidiary was focused on coordinating a regular flow of information between Australia to the French HQs:

“There is a report going back to Paris as our role is to make sure Paris knows about what is going on here … [and] if we are alright and following the process and [if] everything is validated”.

As expressed previously, the role of the HQ’s managers is crucial in controlling employees’ behaviour from overseas (France); thus, it pushes the HQ to implement strict rules to follow and to guide the appointed directors overseas, for example Robert in Australia. It seems that the Australian subsidiary has a limited scope of responsibilities with very tight control by the HQs:

“[i]f we are going to a new project it is typically validated by the whole hierarchy and also we have a process who’s called the ‘Win-No-go’:… there is a long and heavy process but when we decide WIN, we have the money, so it means that budget are unblocked from the central headquarter” (Robert).

As observed earlier, the Australian subsidiary leverages from TIOrg’s firm-specific advantages generated and maintained from the HQ’s in France. The subsidiary is tasked with the responsibility of adapting the final products distributed to the Australian customers. Robert explained that the coordination between corporate function and operations occurring within the subsidiary is done by the regional HQ:
“At a regional level, we have a HQ in Singapore which is Asia pacific headquarter all the employees are in Singapore in terms of administration (HR finance accounting, business development and monitoring of it).”

This regional HQ was established to provide a more time-efficient and cost-effective coordination of activities within the region – including with the Australian subsidiary operations. It also acts as an intermediary between Australia and France, ensuring greater collation of information before it reaches the HQ. This organisational structure also helps decrease time constraints over problematic situations, as Robert details: “If I have a problem with [products] in Melbourne … I want to call someone at the local level and have someone who can solve my problem in 2 hours”. According to Robert, this “regional commercial structure” not only monitors the subsidiary operations, but also “makes sure the presence of TIOrg is evident for customers where key account managers or customer directors are”.

Governance systems also emphasize controlling budget allocations within TIOrg’s global network of subsidiaries. Coordination of the budget activities for subsidiaries within the region – including the Australian subsidiary – occurs to an extent within the regional structure, allowing a measure of decentralisation from the HQs. Some level of delegation is also done, enabling the subsidiary some measure of control, as Robert illustrates: “Key account managers have a certain authority in function of the margin and the risks they take but the scope given to the decision making process is very limited”. This statement suggests that the HQ keeps control over any actions taken involving significant budgetary allocations:

“This decision, from a certain amount of money and margin, is validated in Singapore and Paris and even above, it’s going to corporate of TIOrg group. Even an offer of 10 millions of dollars is validated in Paris. Here, personally I cannot sign a project more than 3 million dollars.”

Even though the role of the regional HQ is to monitor and to coordinate through an efficient cost-system, the budget seems to be set up at the HQ level in France.

This clearly demonstrates a well-developed governance system, emphasising targets that are measurable and very specific. This remains orientated around the French HQ operations determining targets for international operations.
DISCUSSION

Internalisation theory has been acknowledged as a particularly relevant theory for exploring the process of internationalisation by knowledge-intensive MNEs. The theory also help to explain how knowledge-intensive MNEs structure, control and coordinate their internationalised operations with the purpose of achieving an optimal structure to their international value chain in terms of both costs and performance (Buckley and Casson, 2009). As noted, above, this theory is particularly relevant for explaining the internationalisation of knowledge-intensive organisation. However, internalisation theory has experienced a dearth of empirical studies (Brouthers and Hennart, 2007; Canabal and White, 2008, Francoeur, 2006, Malone and Rose, 2006; Yeung, 2003). Despite the limited empirical studies undertaken on this theory, it was clearly demonstrated in the literature review that this is the most appropriate and applicable theoretical basis for this study. This research sought to address the paucity of empirical research on this theory, with a focused research study illustrating its on-going utility and application to knowledge-intensive MNE activities.

Transaction costs

When considering the transaction costs associated with the internationalisation of the case under examination, it appears that the expansionist objectives of the HQ orientated it towards acquiring a local presence in the market it wanted to serve. This desire resulted in establishing a presence within the Australian market, which according to respondent, was the predominant driver of its market entry. When examining the threat posed by knowledge dissipation or leakage, the respondent highlighted how the cutting edge technology of the organisation, ensured that even if competitors attempted to assimilate their current product technology, it would not impact upon its operations. This leads to the conclusion that the strategic objectives of the organisation, particularly those aimed at long-term market entry, outweighs the initial high transaction costs associated with the process of internationalisation.

Internalisation also brings about transaction costs that stem from the costs of doing business abroad (liability of foreignness) (Buckley and Casson, 1976, 2009). The theoretical framework developed earlier identified them as: external and internal transaction costs. These costs also stem from imperfections in the markets and, in the case of knowledge-intensive MNEs, firm-specific advantage markets are assumed to be
very expensive due to the high specificity, implicit and hard to codify assets flowing within these markets (Buckley and Hashai, 2004; Hennart 2009). It is evident from an analysis of the results, that the respondent’s organisation experienced substantial internal costs through the initial adaptation of its operations to suit the local market. This was related to the transfer of the know-how and technology to the market for the organisation, and ensuring that its business model was adapted to suit the local market.

Despite these substantial costs, the respondent’s organisation still chose to internalise its operations through the establishment of subsidiaries, as it aligned again with its strategic objectives for market entry. The argument of Buckley and Casson (1976, 2009) that organisations will internalise value-added activities while the benefits outweigh the costs is confirmed by this finding. As the respondent’s organisation decided to enter the market, despite the fact that it would encounter substantial set-up costs, but determined that the long-run benefits of this entry would lead to more substantial returns, making this worthwhile. As the respondent aptly expressed, “we know we can do it (investing in a big structure) if we have a long term recurrent business with a certain volume which allows us to offset our investments”.

Thus, it appears that the results provide initial support for Proposition 1 developed from the literature: the type and extent of transaction costs will determine the degree to which a firm internalised their operations when internationalising.

**Value chain activities**

As firm-specific advantages are a key determinant for MNE’s competitiveness, performance and success, it has been argued that these are more likely to be internalised, enabling control by the MNE’s value-added activities associated with their firm-specific advantages. Bringing these value-added activities under the MNE’s ownership also overcomes the inefficiencies in external markets. Hence, the efficient exploitation of MNE’s firm-specific advantages requires tighter control and efficient coordination over the transfer of knowledge, information, technology or managerial skills between the MNE’s business units (Buckley and Casson, 2009; De Beule and Van Den Bulcke, 2009; Holsapple and Singh, 2001).

With the organisation examined here being a global leader in its industries, it adopted internalisation and tight control over value-added activities that were related to its key firm-specific advantages. The respondent noted this when detailing how the HQ
operations control any activities associated with its firm-specific advantages. This was evident in the respondent’s organisation, which requires that any adaptation to the core product offering be first tested and approved by the HQ operations.

The other key element identified within the literature review as influencing the firms’ value chain control configuration was product specificity. Previous research has emphasised how differences among firms’ organisational strategy and structure are influenced by the nature of their product specificity (Buckley and Hashai, 2004). Specifically, they suggest that a knowledge-intensive product value chain involving know-how and technology capabilities would be more disposed to be geographically concentrated (Buckley and Hashai, 2004; Rugman and Verbeke, 2004).

The high specificity associated with the product characteristics of the respondent’s organisation was also indicated as being central to the internalisation decision. It was able to maintain the quality and reliability of its very specific products through orientating any subsidiary activities to be approved through the HQ operations. The possibility of this occurring within an organisation that is not part of their internal network would be very difficult – and has been suggested as one of the reasons why after the divestment in 2003 that the subsidiary performance decreased dramatically. The respondent’s organisation clearly orientated itself around the central development of its products within the HQ operations, and thus conforms to the expectations established in the literature review (and specifically with the studies of Buckley and Hashai, 2004; Rugman and Verbeke, 2004).

Thus, it appears that the results provide clear support to Proposition 2 developed from the literature: Firm specific advantages and product specificity will influence the type and degree of internalisation over value chain activities adopted by the organisation.

**Governance structures**

The current literature demonstrates that MNE’s competitiveness and success do not only come from strategic organisational structure but also from the efficiency of the management and coordination mechanisms behind this structure (Aharoni, 2011; Schlierer et al., 2012). MNE’s success is inherently related to the efficiency that the structure implemented will give to the whole value chain system. In other words, an efficient governance structure is considered as influential on performance (Rugman and Verbeke, 2001) but also on profit maximisation (Buckley and Casson, 2009; Kirca et al., 2011). Since the international expansion of value-added activities brings about costs,
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management and coordination issues, it is critical for MNEs to be able to control and minimise these costs (Schlierer et al., 2012).

The implementation of governance systems to enable control over value-added activities implies the need for ownership over international activities, with which internalisation enables. This gives decision-makers the ability to implement clear objectives, guidelines, and consistent management systems linking the firms’ international operations (Buckley and Carter, 1996; Buckley and Casson, 2009; Kirca et al., 2011).

The findings in this research strongly support existing literature, when examining the governance systems implement across the respondent’s organisation. Respondent expressed a strong emphasis on control enforced by the HQ, with specific guidelines and rules that the subsidiaries are required to follow, and regularly report mechanisms. This is particularly the case when it comes to the control over financial assets. Results show that both HQs seek to closely control the activities of the subsidiaries, by controlling the scope of decisions they can make, and by implementing a rigorous budgeting model. The respondent’s organisation also implemented a regional HQ to enable more responsive coordination and control within the region. Robert also detailed how TIOrg also closely manages and monitors the assemblage of the final products, which reflects a focus on protecting the firm-specific advantages. Based on the analysis of the results, the control and the coordination of the Australian subsidiary seems to be very rigorous with detailed governance systems thus supporting the proposition that: the greater the degree of internalisation, the more efficient and effective the governance systems will need to be.

CONCLUSION

The primary aim of this study was to explore the process by which knowledge-intensive MNEs internationalise, and how this might accentuate the process of knowledge, technology and know-how transfer into foreign markets. The findings here initially point to the fact that MNEs will seek to internalise activities that are linked with their firm specific advantage and retain control over these. So it can be postulated that while these organisations may be vehicles for the transfer of knowledge, technology, and know-how into new markets, the degree to which this creates spill-overs into the local market may be relatively limited through direct exchange. This case articulated how activities with a greater level of product specificity and association with competitive advantage are more
likely to be closely controlled and remain internal to the organisation. While this does limit the level of positive spill-overs that may be associated with the international activities of MNEs, it could also be intuitively argued indirect spill-overs are likely to occur through local employees that are trained and integrated into these subsidiaries. When transitioning between organisations, it is likely that these local employees will generate the positive externalities through transferring knowledge and know-how.

While this research has shown the potential positive spill-overs from MNEs may be limited by their decision to internalise activities that are associated with firm specific advantage, and in the case of knowledge- or technology-intensive MNEs the transferral of knowledge, technology or know-how linked with their competitive advantage, it does have limitations. Specifically, as this research only has only one case study, the findings are limited in their generalisability. However, the development of a rigorous theoretical framework built on extant of literature has allowed this study to draw some exploratory findings. Further research is encouraged to build further evidence to prove or disprove the exploratory findings provided in this study.

Moreover, as this study seeks to explore the processes of knowledge, know-how and technology transfer between the HQ and subsidiary operations, this research would have had further value if it had been able to undertake a multi-level case study approach. This would have enabled further insights in the decision process of the HQ operations when entering Australia, and thereby not only assist in clarifying the decisions that result in the internalisation of value-added activities, but also potentially identify findings of relevance to the Australian government. These findings could have provided insights into how further investment can be encouraged to enter Australia within knowledge-intensive industries.

Thus, it is recommended that further research is needed to confirm the empirical findings from this study. A larger scale study would enable not only greater detail to be provided on this process being explored, across a variety of organisations, but it would also enable greater generalisability to be achieved. Given that there have been relatively few studies that have sought to utilise this theory for examining how the knowledge and technology spill-overs occur through MNE internationalisation, future research could seek to further explore further the process by which knowledge, know-how and technology is transferred from these organisations into host countries they are entering. Finally, the case study for this research was based on a French knowledge-intensive
organisation entering into Australia. Further research could seek to investigate the processes of other knowledge or technology intensive organisations from other countries, including the United Kingdom or the United States, and how this may occur in the developing country context which may have a less conducive environment for knowledge, technology and know-how to be transferred (through a lack of absorptive capacity).

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