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Internationalization of Quebec Based Firms via Outward Foreign Direct Investment: An Empirical Investigation

by

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RÉSUMÉ

Objectif: L'objectif de la présente étude est de déterminer les différences d'étendue et de destination entre les investissements directs à l'étranger (IDE) des sociétés mères enregistrées au Québec et celles enregistrées dans les autres provinces canadiennes.

Méthodologie: Cette étude empirique utilise une méthode de régression par les moindres carrés ordinaires sur un échantillon de 953 sociétés mères enregistrées au Canada possédant collectivement 40 240 filiales.

Résultats: Les sociétés mères enregistrées au Québec ne s'internationalisent pas autant que leurs homologues des autres provinces, mais elles établissent plus de filiales dans les pays francophones. En conséquence, les sociétés mères enregistrées au Québec établissent moins de filiales dans les paradis fiscaux que celles qui ne sont pas enregistrées au Québec.

Limites: Malheureusement, l'indisponibilité des données m'empêche d'inclure plusieurs variables au niveau de l'entreprise que j'aurais aimé utiliser dans mon modèle. En exemple l'intensité en R&D limitant les possibilités d'utilisation des régressions par panel. En outre, cette étude suggère que les spécificités régionales affectent les IDE des multinationales et doivent être prises en compte dans les futurs modèles, mais cette conclusion ne peut être généralisée au-delà des entreprises enregistrées au Canada et doit ainsi être testée dans d'autres contextes.

Implications théoriques: La plupart des études existantes sur les IDE se concentrent sur les pays de la triade (États-Unis, Europe, Japon). Cette étude va au-delà des limites des théories précédentes en les testant sur le paysage canadien. Les résultats confirment que les sociétés mères préfèrent investir dans des pays utilisant la même langue. Plus important encore, l'étude prend en compte les différences au sein des pays, en montrant que les spécificités provinciales et territoriales ont également une incidence sur la destination des IDE et plaide pour une prise en compte plus systématique des niveaux sous-régionaux dans les études futures.

Implications pratiques: La contribution pratique consiste à mettre la lumière pour les gestionnaires et les décideurs politiques au sujet des motivations des entreprises québécoises et la répartition géographique de leurs filiales.

Originalité: De ce que nous savons, c'est la seule étude qui se concentre uniquement sur l'internationalisation des sociétés mères québécoises.

Mots clés: Investissement direct étranger (IDE); Entreprises multinationales (EMN); Québec.

ABSTRACT

Objective: The objective of the present study is to determine the differences in extent and destination between outward foreign direct investment (OFDI) originating from parent firms registered in Quebec and other Canadian provinces.

Methodology: This empirical investigation uses an ordinary least squares regression method on a sample of 953 Canadian parent-companies that collectively own 40,240 subsidiaries.

Results: Quebec-based parent firms do not internationalize to a greater extent than their counterparts from other provinces, but they are more likely to establish subsidiaries in French-speaking countries. In contrast, Quebec based parent firms set up fewer subsidiaries in tax havens than non-Quebec based parent firms.

Limitations: Unfortunately, data unavailability prevents me from including several firm-level variables I would have liked to use in my model, such as, e.g., R&D intensity, and limit the possibilities of using panel techniques. Besides, this study suggests that regional specificities affect MNCs' FDIs and shall be considered in future models, but such conclusion cannot be generalized beyond Canadian listed firms and shall be tested in other settings.

Theoretical Implications: Most existing studies on OFDI focus on the triad countries (US, Europe, Japan). This paper extends the boundary conditions of previous theories and tests them on a sample of Canadian OFDIs. It confirms that parent firms prefer to invest in countries using the same language as in their home market. But more importantly, it considers within-country variations, shows that provincial specificities also impact OFDI destination, and argues for more systematic consideration of sub-country levels in future FDIs studies.

Practical Implications: The practical contribution lay in shedding light for managers and policymakers on the motivations of Quebec based parent-firms and the geographical repartition of their subsidiaries.

Originality: To the best of our knowledge, this is the only study that focuses solely on the internationalization of Quebec parent corporations.

Keywords: Outward FDI; Multinational firms; Quebec.

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LIST OF ABBREVIATIONS AND ACRONYMS

BvD	Bureau van Dijk
CME	Coordinated Market Economy
CSA	Country-Specific Advantage
FDI	Foreign Direct Investment
FSA	Firm-Specific Advantage
GDP	Gross Domestic Product
GUO	Global Ultimate Owner
IMF	International Monetary Fund
LME	Liberal Market
MNE	Multinational Enterprise
NAFTA	North American Free Trade Agreement
OFDI/ODI	Outward Foreign Direct Investment
OECD	Organization for Economic Co-operation and Development
OFC	Offshore Financial Centre
ROE	Return on Equity
SIC	Standard Industrial Classification
SME	Small and Medium Enterprises
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
USA	United States of America
VIF	Variance Inflation Factor

INTRODUCTION

A multinational enterprise (MNE) takes at least three decisions when it considers investing abroad. First, it decides whether to serve a specific foreign market or not. Second, it determines how it will serve this market (Gauselmann & Marek, 2012). The investment can take place through exports, joint ventures, licensing or foreign direct investment (FDI). Helpman, Melitz, and Yeaple (2004) argue that while the least productive firms serve only the domestic market, more productive firms engage in exporting and the most productive firms engage in foreign direct investment. Third, the investing company chooses a region for its foreign investment (Gauselmann & Marek, 2012). Regional specificities may not only matter at the receiving end though.

Selecting a suitable FDI location is primarily a firm-level decision that requires analyzing national, regional, and global environments at the macro level, and firm-specific factors at the micro level (Aharoni, 1966; Buckley, Devinney, & Louviere, 2007). Traditionally, FDI is evaluated through macro-level FDI determinants using country-level economic, political, and infrastructural variables (Lonner, Berry, & Hofstede, 1980; Root & Ahmed, 1978), despite provinces differing widely in demography, infrastructure and other attributes (Sethi, Judge, & Sun, 2011).

Using country-level FDI determinants to analyze the internationalization of firms made sense during the Cold War era, when only a few Third World countries were allowing FDI, and MNEs had limited intra-country location choices (Sethi et al., 2011). But since the early 1980s, the situation has changed dramatically. Both developed and developing countries now welcome and foster FDI, increasing, therefore, the number of prospective locations (Dunning, 1998). Due to increasing competition for FDI, even provincial governments are now offering lucrative investment incentives to different sectors (United Nations Conference on Trade and Development, 2006). But if provincial specificities matter to attract FDI, differences across MNEs-regions of origin may also influence OFDIs existence and characteristics.

I argue in this study that the differences across MNEs' provinces of origin may also influence the extent and destination of outward foreign direct investment (OFDI). More specifically, I focus on Canadian OFDI and aim at uncovering whether Quebec-based MNEs internationalize differently from their counterparts registered in other Canadian provinces.

To pursue these objectives, I use Orbis, a database built by Bureau van Dijk, to collect both financial, industrial and ownership information on 953 Canadian firms and their 40,240 subsidiaries. Past studies using country-level OFDIs determinants did not offer the possibility to compare intra-country regions' OFDIs. But Orbis firm-level data enables me to compare OFDIs across MNEs-provinces of origin. I use an Ordinary Least Squares (OLS) regression model to test my results, and perform several robustness checks (e.g., alternative sample and control variables) to ensure the reliability of my findings.

The present research suggests three hypotheses. First, Quebec-based parent firms need to expand beyond what the current market can offer. Additionally, strong economic ties and a joint infrastructure with the United States enable corporations to be among the first to expand in this neighboring market, which in turn represent a strong learning power for Quebec based parent firms that establish more subsidiaries in distant markets than parent firms based in other Canadian provinces. Besides, while firms from other provinces tend to have a large market size, they also have less diversified clusters, unlike Quebec based firms that have specific know-how which would explain the selection of outward foreign direct investment instead of using other internationalization strategies. For all the mentioned reasons, the first hypothesis is Quebec-based parent firms have more subsidiaries abroad than their counterparts based in other provinces.

Second, using a similar language enable lower costs and higher levels of trust as well as insurance of receiving and transmitting the right information within and across organizations. Furthermore, Quebec-based parent firms share strong economic historical and political ties with France. Additionally, the province of Quebec has a strong commitment with the international group La Francophonie as a bridge to tighten international its relations with French-speaking countries. This rationale leads us to the second hypothesis in which Quebec based parent corporations have more subsidiaries in French-speaking countries than non-Quebec based parent firms.

Third, the provincial government of Quebec recently ensures that the province has one of the most competitive corporate taxes across the country. Quebec-based firms receive provincial support in the form of subsidies and a lower sales corporate tax burden than counterparts based in other Canadian provinces. Hence, the third hypothesis is Quebec-based parent firms have fewer subsidiaries in tax havens than non-Quebec based parent firms.

Both the second and third hypotheses have enough evidence to be supported. The main findings are that Quebec based parent firms both have a higher absolute number and proportion of subsidiaries in French-speaking countries than firms based in other Canadian provinces. There is partial but enough evidence to conclude that Quebec based parent firms that establish fewer proportions of subsidiaries in tax haven countries and jurisdictions than counterparts based in the other Canadian provinces.

The contribution of this research is manifold. According to the Ministry of International Relations (Quebec) (2017b), Quebec's growth and prosperity are strongly dependent on its foreign expansion (2017b). The primary challenge for Quebec's economy will be to adapt to the new global economic environment while consolidating its position in traditional markets, and taking advantage of the opportunities afforded by emerging economies (Sauvant, Jost, Davies, & Garcés, 2011). Besides, new regulatory changes are expected to enhance firm's abilities to invest in private equity and help Quebec companies to expand and grow their businesses internationally (Ministry of International Relations (Quebec), 2017b). Hence, better understanding provincial differences in Canadian OFDIs may interest managers, but also public policy decision-makers. Before knowing where these firms should go next, this study analyzes where these firms go, and how they compare to firms established in other Canadian provinces.

But this study also presents empirical and theoretical contributions. First, it sheds light on the internationalization of firms at the provincial level of Quebec, a topic that received little attention from previous scholars. Indeed, most publications on OFDIs (Coughlin, Terza, & Arromdee, 1991; Mody & Srinivasan, 1998; Ray, 1971) focus on companies originating from the countries of the triad including North America, the European Union, and Japan, or influential emerging economies such as China and India (Wilinski, 2012).

This study enables me to test whether existing theories are confirmed, or not, in the Canadian context. Second, this study suggests MNEs-regions of origin also influence OFDIs destination. But it also looks at the extent to which MNCs internationalize, an issue that is less frequently tackled in the literature.

My thesis is structured in the following way:

i. In the first chapter, I present the relevant empirical studies on Canadian outward direct investment and compare their findings to recent federal statistics;

ii. In the second chapter, I review the literature on internationalization motives and the links between language or tax heavens and OFDIs;

iii. In the third chapter, to capture the internationalization of Quebec's based parent firms, I develop the arguments of my three hypotheses;

iv. In the fourth chapter, I present my sample of Canadian based MNEs along with the data source I use;

v. In the fifth chapter, I present the methodological approach and the empirical model;

vi. The sixth chapter summarizes my empirical results;

vii. And in the last chapter, I discuss the study's findings, theoretical implications, and limitations. I also reflect on the questions this study may raise in the future.

1. CANADIAN OUTWARD FOREIGN DIRECT INVESTMENT

The chapter summarizes the main findings of past empirical studies on Canadian outward investment and compares the results to recent statistical patterns. The chapter concludes with the limitation of data on FDI and tax havens that show the importance of firm-level databases.

1.1. Definitions

1.1.1. Foreign Direct Investment

In this study, I use the definition of foreign direct investment (FDI) provided by the Organisation for Economic Co-operation and Development (2009, p. 3) :

"A category of investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise."

Similarly, Statistics Canada (2017a) defines direct investment as the interest of a direct investor from one country in obtaining a lasting interest in an entity called direct investment enterprise in another country. Reports such as those presented by Statistics Canada (2017a) usually present cumulative year-end positions of investment, measured as the value of equity and the net amount of debts instruments between investors and the direct investment enterprises.

1.1.2. Inward Direct Investment

Inward Direct Investment, also named *direct investment* includes all liabilities and assets transferred between resident direct investment enterprises and their direct investors (World Bank). FDI net inflows are the value of an inward direct investment made by non-resident investors in the reporting economy (World Bank).

1.1.3. Outward Foreign Direct Investment

Outward direct investment (ODI), also referred to as *direct investment abroad* is the investment by a resident direct investor in a non-resident investment enterprise through the transfer of assets and liabilities. The direction of the influence by the investor is "outward" for the reporting economy (Organisation for Economic Co-operation and Development, 2009; World Bank). FDI net outflows are the value of an outward direct investment made by the residents of the reporting economy to external economies (World Bank).

Investors that opt for outward foreign direct investment are usually motivated by certain strategic aims to increase global competitiveness (Gorynia, Nowak, Trapczyński, & Wolniak, 2015). The pursuit of these strategic aims enables a presence and better control of foreign markets for the products of multinationals, and better control of the resources and strategic assets necessary to implement the production and distribution process (Gorynia et al., 2015).

Outward FDI is commonly used as an effective method to overcome host-country trade barriers in an attempt to get access to foreign markets by obtaining economies of scale and increasing their productivity (Gorynia et al., 2015). This, in turn, will allow for factor inputs such as technology and new management practices that enhance firm's competitive potential in both domestic and foreign markets (Gorynia et al., 2015).

The notion that investing abroad diminish the amount of capital for investment in the domestic market can be challenged by two counterarguments. First, outward FDI can be financed using foreign and international capital markets without reducing of the capital available in domestic investment (Gorynia et al., 2015). Second, expansion via FDI occurs usually when the investor concludes that the home-country market is saturated or the possibilities of extending market share are limited (Gorynia et al., 2015).

1.1.4. Difference between Portfolio Investment and Direct Investment

As Rugman and Tilley (1987) note, it is essential to distinguish between direct and portfolio investment. They point out that direct investments can take the form of equity capital, assets of unincorporated branches, and loans from parents to subsidiaries.

They provide direct control over assets and play a significant role in transferring technologies between nations (Rugman & Tilley, 1987). Moreover, direct investment has both a microeconomic and macroeconomic impact on employment, taxation, and other economic factors, and raise both cultural and political issues about foreign ownership (Rugman & Tilley, 1987).

In contrast, portfolio investments are financial investments which transfer savings, but not technology. The portfolio investment has a macroeconomic impact but not a microeconomic effect on the financial aggregates in the host nations (Rugman & Tilley, 1987). Unlike foreign direct investment, the portfolio investment does not entail a strategic commitment to the host nation (Rugman & Tilley, 1987).

1.1.5. Canadian Provinces

The ten provinces and three territories of Canada make up the world's second-largest country by area after Russia. They represent the administrative divisions which are responsible for the delivery of sub-national governance in the geographical areas of Canada under the authority of the Canadian Constitution (Statistics Canada, 2016b). The ten provinces are Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec and Saskatchewan (Statistics Canada, 2016b). Several of the provinces were former British Colonies while Quebec was originally a French colony (Statistics Canada, 2016b). The three territories are Northwest Territories, Nunavut, and Yukon (Statistics Canada, 2016b).

1.1.6. Canadian Corporate Tax System

1.1.6.1. Federal Income Tax

Table 1. Canadian Federal Income Tax

Federal rate	**(%)**
Basic rate	38
Less: Provincial abatement	-10
Federal rate	28
Less: General rate reduction or manufacturing and processing deduction	-13
Net federal tax rate	15

Source: Adapted from PricewaterhouseCoopers (2017)

There are two types of corporate income in Canada. First, the federal tax has a basic rate of 38% of the taxable income (PricewaterhouseCoopers, 2017). This rate becomes 28% after federal tax abatement, and 15% after general tax reductions (PricewaterhouseCoopers, 2017). For Canadian-controlled private corporations which claim the small business deduction, the net federal tax rate is 10.5% (PricewaterhouseCoopers, 2017). The mentioned federal income tax rates in Table 1 apply for December 31, 2017, year-ends[1].

[1] For non-resident corporations, the rates apply to business income attributable to a permanence establishment (PE) in Canada; they may also be subject to branch tax or have different rate depending on the circumstances (PricewaterhouseCoopers, 2017).

1.1.6.2. Provincial Income Tax

Table 2. Canadian Provincial Income Tax

Province/Territory	High-Income tax rate (%)
Alberta	12
British Columbia	11
Manitoba	12
New Brunswick	14
Newfoundland and Labrador	15
Northwest Territories	11.5
Nova Scotia	16
Nuvanut	12
Ontario	11.5 or 10
Prince Edward Island	16
Quebec	**11.8**
Saskatchewan	11.75 or 9.75
Yukon	13.49 or 2.5

Source: Adapted from PricewaterhouseCoopers (2017)
Note: When two rates are indicated, the lower rates apply to manufacturing and processing incomes

Second, provincial or territorial taxes apply, in addition to the federal rate. According to the PricewaterhouseCoopers (2017)'s report, provinces and territories have two rates of income tax: a lower rate and a higher rate. The report specifies that the lower rate applies to the income eligible for the federal small business deduction for the first CAD 500,000 (CAD 450,000 in Manitoba). The higher rate applies to all the other income (PricewaterhouseCoopers, 2017). The provincial rates are given in Table 2 are higher rates and apply to December 31, 2017, year-ends and do not take into account the provincial tax holiday that may reduce or eliminate tax in certain circumstance (PricewaterhouseCoopers, 2017).

1.1.6.3. Corporate Residence

Under the Income Tax Act, a corporation incorporated in Canada whether at the federal or provincial level is deemed to be resident in Canada (PricewaterhouseCoopers, 2017).

A corporation not incorporated in the country will be resident under Canadian common law if the central management exercises control – where the Board of Directors meet and makes decisions – in Canada (PricewaterhouseCoopers, 2017). If the central management is situated both in and outside of the country, the corporation will be deemed non-resident of Canada and will depend on the existence of treaty rules (PricewaterhouseCoopers, 2017).

A foreign corporation can become resident in Canada if it is continued in the country or is a predecessor corporation of an amalgamated corporation that is a Canadian resident (PricewaterhouseCoopers, 2017). Likewise, a corporation can cease to be Canadian resident if it is granted Articles of Continuance in a foreign jurisdiction (PricewaterhouseCoopers, 2017).

1.1.6.4. Foreign Income

There is a clear distinction in the tax system between passive sources of income (dividends, interest income, royalties without any activity) and active sources of income (business income or active business) (Quebec Chartered Professional Accountants Order, 2016). Therefore, passive income is subject to foreign accrual property income (FAVI) rules, while passive foreign-source income is taxable in Canada. Non-business foreign tax credit and deductions for foreign income are available but are subject to limitations (Quebec Chartered Professional Accountants Order, 2016). For instance, if a Canadian business incorporates a foreign business, and the foreign affiliate invests in bonds or other securities, the investments are taxable in Canada (Quebec Chartered Professional Accountants Order, 2016).

For foreign subsidiaries of Canadian multinationals, the Income Tax Act of Canada provides a series of detailed tax measures regarding passive payments between a corporation and its foreign subsidiaries (PricewaterhouseCoopers, 2017). By the rules, the payments are treated as active income and are therefore exempt from Canadian tax (PricewaterhouseCoopers, 2017). In fact, dividends received by Canadian resident private corporations or public corporations controlled by one or more individuals from non-connected foreign corporations are subject to the special refundable tax of $38^{1/3}$%, the dividends are deductible in determining taxable income (PricewaterhouseCoopers, 2017).

The tax treatment of foreign dividends received by a Canadian resident corporation will depend on whether the firm is a foreign affiliate (PricewaterhouseCoopers, 2017).

Dividends received by Canadian resident corporations from foreign corporations that are not affiliates are taxed as received, with a non-business foreign tax credit and a deduction for income or profits subject to conditions (PricewaterhouseCoopers, 2017). Dividends received from foreign affiliates may be allowed to flow tax-free, subject to limitations related to the nature of the earnings from which the dividends were paid, the foreign income or profit taxes paid, and withhold taxes paid (PricewaterhouseCoopers, 2017).

Canada acts similarly to other countries and cedes taxation to the country where the income is earned. Thus, countries with low tax rates attract foreign businesses (Quebec Chartered Professional Accountants Order, 2016). For Canadian multinationals, the decision to repatriate the profits of their foreign subsidiaries will depend on whether a tax treaty exists between the pair countries (PricewaterhouseCoopers, 2017).

A tax treaty enables corporations to transfer dividends back to Canada tax-free. Until December 2017, 22 Tax Information Exchange Agreements (TIEAs) have entered into force, one has been signed but not yet in force, and Canada is currently negotiating seven other TIEAs (PricewaterhouseCoopers, 2017). Usually, if there is no tax treaty, the dividends must be taxed in Canada, however, in practice, the subsidiary will select another way to transfer the profits (Quebec Chartered Professional Accountants Order, 2016). Moreover, relief from double taxation occurs not only through international treaties but also through foreign tax credits and deductions for foreign income or profits taxes paid on income derived from foreign sources (PricewaterhouseCoopers, 2017).

1.2. Past Empirical studies on Canadian Outward Direct Investment

1.2.1. Importance of Outward FDI

Although Canadian OFDIs are critical for the country, there is little literature on the subject. Indeed, most studies on direct investment abroad either are theoretical or focus on investors from the triad countries (United States, Europe, Japan) (Nyahoho, 2006).

There are a few exceptions though, such as recent statistics made by Statistics Canada (2017a) or a few scholars' studies, which point out to the increasing flows of Canadian direct investment abroad (Rugman and Tilley, 1987; Nyahoho (2006)). I summarize their findings below.

Rugman and Tilley (1987) argue that the dramatic change of Canada shifting from an importer of FDI to an exporter started in 1975 with significant outflows averaging almost $ 3 billion. Nyahoho (2006) reasons that between 1926 and 1972 the percentage of outward investment out of foreign direct investment did not exceed 22%, 70% in 1987 and exceeded 112% in 2003. Chow (1994) documents Canadian investment abroad rose in the 80s and 90s, and Hejazi (2010) clarifies that except for the 1980s, Canada's share of global outward FDI has been in the 4 % range, which is higher than its 2% share of global GDP. Recently, Statistics Canada (2017a) estimate that the value of Canadian outward FDI is four times higher than the value of foreign direct investment in Canada in 2016.

Existing studies on Canadian FDI address the following questions: the geographical distribution of FDI, their origins by industry, the motives of multinationals investing in some areas and not others, and the effects of direct investment on host countries (Meyer & Green, 1996).

1.2.2. Destinations of Canadian Outward FDI

1.2.2.1. Predominance of the United States and Europe

The few studies on the destinations of Canadian outward foreign investment (such as Meyer and Green (1996) and (Nyahoho, 2006)) tend to reach common conclusions despite analyzing different methods and time periods.

Most of the Canadian direct investment transactions have been with the United States (Rugman & Tilley, 1987). Rao, Legault, and Aḥmad (1994) argue that the significant outward flows to the United States are attributable to a comparatively high productivity performance of Canadian subsidiaries vis-a-vis other foreign firms operating in the United States. The Canadian outflows to the United States did not lead to any significant U.S. concerns on the Canadian ownership of the U.S. economy[2] though (Rugman & Tilley, 1987). Chow (1994) also find that the United States and European Economic Community (EEC) (1991) are the main destinations for Canadian investors. Meyer and Green (1996) reach somehow the same results with the two main targets of Canadian investors being the United States and the United Kingdom.

[2] On the other hand, there are political concerns from a foreign "invasion" of US companies investing in Canada (Rugman & Tilley, 1987)

Recently, Nyahoho (2006) infers that the United States remain the first destination for Canadian outward FDI, although the stock of US FDI out of Canadian global FDI decreased from 65.93% in 1987 to 41.31% in 2003. Similar to Meyer and Green (1996), he argues that the United Kingdom is the second leading destination. FDI stock remained somehow the same with a rate of 9.9% in 1987 and 10.2% in 2003.

In the 1970s and before the advent of the continent free trade of NAFTA, Hejazi (2010) argues that Canadian firms have become significantly more active than their US and Mexican counterparts. On the other hand, compared later to its international peers, and the G7 countries – *Japan, Germany, France, Italy and the UK except for the US* – in particular, he declares that Canada experiences a decline from a 14% to an 8% share of global outward foreign investment. One reason for this decline may be that with the Canada-US Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA) signed, setting up US affiliates is no longer necessary for Canadian MNEs to avoid export tariffs. But, an increasing interest in the European continent partially offsets this decline (Hejazi (2010).

Nyahoho (2006) notes though that except for the Netherlands Canadian direct investment abroad seems absent from South (Portugal, Italy, Spain) or North (Denmark, Sweden, Norway, Finland) Europe.

1.2.2.2. Tax Havens

Before delving into the importance of tax heavens for Canadian MNCs, it is important to mention that holding a bank account or investing in an offshore financial center or a tax haven is not necessarily illegal (Ministry of Finance (Quebec), 2015). Rather, it is the undue removal of a portion of its income from tax liability that is contrary to Canadian law (Ministry of Finance (Quebec), 2015). Tax havens and offshore financial centers can be used for tax planning purposes while respecting the intent of the legislation (Ministry of Finance (Quebec), 2015).

On the international scene, there is little data on the extent of the phenomenon of tax havens and the impact of these tax havens regarding tax losses for the countries affected (Ministry of Finance (Quebec), 2015).

The data is rare for Canada and non-existent for Quebec (Ministry of Finance (Quebec), 2015). Still, some authors ((Meyer & Green, 1996; Nyahoho, 2006) have studied the geographical distribution of Canadian investments and sustained that MNEs use tax haven subsidiary affiliates. Nyahoho (2006) argues that the existence of tax havens represent an attractive determinant of Canadian outward FDI. Meyer and Green (1996) specify that Canadian firms expand in Barbados, Cayman Islands, Netherlands, the Antilles and the Virgin Islands.

Hejazi (2010)'s interest is in the investment flows through offshore financial centers (OFCs). The OFCs usually have zero or a little corporate tax rate. He reports that more than $80 billions of Canadian FDI is invested in the Caribbean: the Cayman Islands ($19 billion), Bermuda ($22 billion), and Barbados ($45 billion). The use of tax havens enables multinationals to reduce the after-tax cost of foreign capital and facilitate their international expansion (Hejazi, 2010). The report of the Ministry of Finance (Quebec) (2015) confirm these results and estimate that between 1988 and 2014, Canadian assets in offshore financial centres increased 22-fold.

Since the late 1980s, an increasing proportion of Canadian direct investment abroad has been directed to offshore financial centres, many of which are located in the Caribbean (Ministry of Finance (Quebec), 2015). The report notes that in 2014, these centers accounted for almost one-quarter of all Canadian direct investment abroad (24%). It also reveals that over the last ten years, from 2005 to 2014, the amount of Canadian direct investment to offshore financial centers has more than doubled (2.3 fold) from $ 87 billion to $ 199 billion.

Ministry of Finance (Quebec) (2015) emphasizes that none of the countries in the offshore financial centers have trade links with Canada. Canada's major economic partners have remained relatively the same over the last 30 years; these are the United States, the European Union, China, Mexico and South Korea (Ministry of Finance (Quebec), 2015). From 1997 to 2014, these countries accounted for more than 90% of Canada's exports of goods and services and accounted for more than 85% of Canada's import (Ministry of Finance (Quebec), 2015). Canada's share of outward investment in offshore financial centers changed from 11% to about 25% in 25 years, and the increasing rate is not justified by significant trade links (Ministry of Finance (Quebec), 2015).

1.2.3. Sources of Canadian Outward FDI by Industry

Meyer and Green (1996) note that manufacturing, financial and mining activities constitute the main activities of Outward Canadian FDI. Similarly, Nyahoho (2006) highlights the importance of the banking and finance as well as the energy and mineral sectors.

Between 1987 and 2003, the energy sector remains stable (around 23% of Canadian outward FDI) and the finance sector rises from 25.39% to 42.2% (Nyahoho, 2006). Nyahoho (2006) points out that the share of communication and financial services in OFDIs have nearly tripled since 1984, and that the financial services accounted for more than 43% of all total assets abroad in 2007.

Nyahoho (2006) also suggests that the industry composition of Canadian outward FDI is similar to the industry export composition, implying the importance of the energy, minerals, wood and paper industries. Indeed, Canadian MNEs invest in the industries where they have a competitive advantage. Using 24 large Canadian firms part of the Fortune International 500 and based on the internalization theory and Porter's competitiveness, Rugman (1988) infers that Canada has immense resources in timber, minerals, fish, energy sources.

He realizes that the majority of Canadian MNEs have firm-specific advantages (FSAs) in the production, distribution, and trading of resource-based products. Thus, Canadian MNEs FSAs derive from the country-specific advantages (CSAs), in particular in the resource sectors[3].

Finally, Globerman (1996) affirms that the characteristics of Canadian direct investment abroad resemble the investment of other countries with a high concentration of OFDI among a small number of firms. In fact, Scotiabank, Trilon Financial Corporation, and Royal Trustco Limited are the top three enterprises out of 159 to have the largest amount of outward FDI (Rao et al., 1994).

1.2.4. Geographical Sources of Canadian Outward FDI

Meyer and Green (1996) are the only scholars who study Canadian OFDIs per region. They assert that Western Canada focuses its FDIs on the US, whereas Eastern Canada favors the UK and Western Europe.

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[3]. Rugman (1988) criticizes the internalization theory for not entirely applying to the Canadian context – of the time – where MNEs may not have advantages in knowledge and advanced technology such as the traditional triad countries (US, Europe, Japan) but can be successful in marketing and experiences.

They also affirm that Western Canada tends to have a higher propensity to own subsidiaries in Barbados, Bermuda, and Australia. MNEs in Atlantic Canada favor the European continent as well, particularly in the UK, Netherlands, France, and Germany (Meyer & Green, 1996). Lastly, Quebec parent firms have strong ties with subsidiaries in France, Germany, and Brazil that surpass the national Canadian average (Meyer & Green, 1996).

Canadian parent firms are mainly located in large cities. In fact, Toronto and Montreal typically emerge as the centers of control that rank among the top 20 important headquarters and have the highest number of foreign subsidiaries (Meyer & Green, 1996).

1.2.5. Motives of Canadian Outward FDI

Rugman and Tilley (1987) explain the motivation of Canadian FDI through 'pull' and 'push' factors. They consider the Canadian market and policy factors, tax and monetary policies as push factors that affect the domestic investment climate. According to them, push factors to represent 15% of the total factors which explain Canadian outward FDI and are distributed as follow: taxation (7%); unit labor costs (4%); and regulation (4%) (Rugman & Tilley, 1987). Pull factors prevail (85 %) with market size (27%); market potential (27%); proximity to customers (14%); trade barriers (5%); potential profit (4%); other (8%) explaining the decision to expand abroad.

Litvak and Maule (1981) also find that market-driven considerations are more important than push factors for Canadian firms, in particular for small-sized multinationals. They argue that Canadian companies pay less attention to cost factors than to market factors. Large-sized companies also need to gain access to faster-growing markets and avoid barriers to trade by investing rather than exporting (Rugman, 1988).

Canadian MNEs are especially attracted to the U.S because of the size of the market and its growth rate (Rugman, 1988). Another reason is that the US started a myriad of federal, state, and municipal regulations to protect its domestic industries and workers (Rugman, 1988) which has pushed Canadian multinationals to substitute export by foreign direct investment. Hejazi (2010) argues that this was relevant until the advent of the North American Free Trade Agreement.

More recently, Meyer and Green (1996) assert that the determinants that affect the spatial decision of Canadian investors are market size; trade with Canada; labor cost; and crime conditions, while Hejazi (2010) conclude that Canadian FDI outflows are a function of both size of economies and geographic proximity.

Besides, Rugman and Tilley (1987) infer that Canadian firms are attracted to other markets because of higher productivity and affordable factor costs compared to the Canadian landscape. Firm factors such as developing and maintaining technological advantages are considered more critical as motives of Canadian FDI than environmental factors (Litvak & Maule, 1981).

Tax policies, trade union attitudes, and government policies also rank as minor factors in the investment decision though (Litvak & Maule, 1981).

1.2.6. Limitations and Methods of Existing Studies

1.2.6.1. Methods

Most of the scholars who study Canadian outward foreign direct investment use surveys and interviews (e.g. (Arslan & Larimo, 2011; Meyer & Green, 1996; Rao et al., 1994). Hejazi (2010) uses a gravity model with data at both the country and industry level. There are only a few studies conducted at the firm-level, including Meyer and Green (1996) which retrieve a sample of 17,000 of Canadian FDI at various points in time.

Their primary data source is the Dun and Bradstreet's Who Owns Whom volumes: for each ultimate Canadian parent-firm, it provides a list of subsidiaries and host countries.

While my study presents similarities with Meyer & Green's (1996), such as looking at the geographical repartition of subsidiaries, and at tax havens, in particular, it also differs from it.

First, ORBIS, the firm-level database I use, contains information on parent-firms' provinces of origin and hence enables me to determine whether Quebec and non-Quebec based corporations internationalize differently. The current study hence focuses and provides a thorough investigation of Quebec-based MNEs and compare them with their counterparts from other provinces.

Meyer and Green (1996), in contrast, include Quebec-firms in their sample, but they focus on the global view and consider Canadian OFDIs as a whole. Second, updating their findings is necessary as Meyer and Green (1996) were conducted more than 20 years ago.

1.2.6.2. Limitations

Critic of the Measure of FDI

As mentioned previously, many existing studies look at OFDIs at the country level, but there are certain methodological issues concerning the measurement of outward investment in general, which remain valid in the particular context of Canada. Rugman and Tilley (1987) mention, for example, that at any point in time there is a stock of accumulated direct investment named the book value of historical flows, whereas flow rates represent a specific period, i.e., year or quarter. Statistics Canada (2017a) acknowledge that the data they present is compiled on an annual basis[4]. Book values are understated during a period of inflation (Rugman & Tilley, 1987).

Moreover, Rugman and Tilley (1987) clarify that flows might not represent the only source of FDI; retained earnings tend to be an important source of investment capital. Therefore, FDI may not reflect all the real changes in investment (Rugman & Tilley, 1987).

Rugman and Tilley (1987) urge to pay attention to capital flows reported by Statistics Canada or other sources that do not include reinvested earnings and undistributed earnings in an attempt to achieve aggregate figures of total direct investment.

This situation does not create a problem in the case of an FDI expansion, but in the case of repatriation, there may be double counting. Rugman and Tilley (1987) illustrate it with the example of a foreign subsidiary sale (for $ 500 million), where the cost of the original investment is $ 100 million costs and the undistributed earnings amount to $ 400 million.

The transaction will reports a gross negative inflow of $ 500 million and a reduction of $ 400 million, meaning a total reduction of $ 900 million, and this last amount does not represent the actual outflow of direct investment from the subsidiary country (Rugman & Tilley, 1987).

[4]. In line with the Canadian System of Macroeconomic Accounts revision policy, they will include the changes of both book and market values during the third quarter 2017 release in December.

The net changes in foreign direct investments should hence be read carefully (Rugman & Tilley, 1987). Statistics Canada use substantial adjustment amounts, i.e., hundreds of million dollars (Rugman & Tilley, 1987). Using foreign direct investment flows should be limited to real flows such as cash flow transactions or include all elements that might affect the investment position (Rugman & Tilley, 1987). Other factors to consider are tax havens, coverage of smaller firms, valuation adjustments, and different definitional issues between the numerous international statistical agencies (Rugman & Tilley, 1987).

Moreover, Jones and Temouri (2016) are concerned with the fact that FDI stock and flows include the first but not the ultimate destinations. The authors describe that there are cases of outward FDI returning home or other cases of FDI that are passing through tax havens to other foreign countries and are still considered genuine FDI. Not knowing where the investment come from or where it leads to biased results if the incidence of tax havens is pronounced, and even OECD and IMF are making efforts to exclude FDI destined to tax haven locations (Jones & Temouri, 2016). Therein lie the advantage of using a database such as ORBIS for this study, a database that provides information on private firms of different sizes and provides information on the existence and location of their subsidiaries registered abroad in general, and in tax havens in particular.

Data Limitations on Tax Havens

There are data availability issues in estimating the phenomenon of tax havens. The OECD does not assess it since it considers that its data is not sufficiently reliable (Comité permanent des finances de la chambre des communes du Canada, 2013). One of the OECD's actions is in fact to develop methods for collecting and analyzing data on transfer pricing and tax avoidance schemes (Organisation for Economic Co-operation and Development, 2015).

For the same reason, the governments of Quebec and Canada, as well as the various statistical institutes (the Statistic Institute of Quebec and Statistics Canada), do not create estimates on tax havens and the tax losses attributed to the phenomenon (Ministry of Finance (Quebec), 2015).

However, there exist estimates based on the analysis of different banking and financial data that consider money transfers made by individuals or companies (Ministry of Finance (Quebec), 2015).

A preliminary study by the International Monetary Fund (IMF) estimates that global corporate income tax losses caused by profit shifting at 5% of worldwide tax revenues, with twice as high losses for developing countries than for OECD countries (International Monetary Fund, 2014). The International Monetary Fund (2014), however, qualifies its calculations as very preliminary and highly speculative. Similarly, a preliminary analysis of the Ministry of Finance (Quebec) (2015) shows that the Quebec losses caused by profit shifting are less than $200 million a year.

The IMF's estimation does not allow to isolate the impact of the transfer of benefits between countries from the differences in tax policies (i.e., tax deductions) and the compliance and enforcement measures of tax laws (Ministry of Finance (Quebec), 2015). The analysis is conducted with a relatively small sample of 51 countries, which does not include Canada. It also excludes countries considered as tax havens, and therefore cannot capture the profit transfers involved in these countries (Ministry of Finance (Quebec), 2015).

The Organisation for Economic Co-operation and Development (2015) also indicates that the significant limitations of existing data sources severely limit economic analyses on tax havens. Available data sources relevant to the analysis on tax havens and profit shifting range from aggregate macroeconomic statistics (national accounts, foreign direct investment, corporate tax revenues, etc.) to a microeconomic statistic on firm data (customs data, financial statements of multinationals, company tax return data, etc.) (Ministry of Finance (Quebec), 2015).

One of the main challenges with the data is the difficulty to separate actual economic effects from behavioural effects (Ministry of Finance (Quebec), 2015). For analyses, financial databases for private enterprises are the most useful despite having limited representativeness across countries and multinationals (Ministry of Finance (Quebec), 2015).

Most countries either do not have such data or do not publicly disclose them for economic and statistical analysis (Ministry of Finance (Quebec), 2015). The countries also do not report the total incomes of multinational enterprises separated from purely national enterprises (Ministry of Finance (Quebec), 2015). More comprehensive and detailed data on multinational enterprises will be needed to provide more accurate assessments of the magnitude and impact of tax havens (Ministry of Finance (Quebec), 2015).

1.3. Canadian FDI in 2016

1.3.1. The Stock Value

Table 3 shows the evolution of Canadia's direct investment abroad and foreign direct investment. Following several years of steady growth, the stock of Canadian outward investment increases at its slowest pace in six years with 1.4% to $1,049.6 billion in 2016 (Statistics Canada, 2017a). Equity accounts for nearly 90% of the value of Canada's outward FDI (Statistics Canada, 2017a). The stock increases in the form of equity by 2.0% to $965.3 billion while it declines in the type of debt instrument by 5.4% to $84.3 billion (Statistics Canada, 2017a).

Table 3. Canada's Foreign Direct Investment Position

Year	Canadian direct investment abroad	Foreign direct investment in Canada	Net direct investment position
2002	435	357	79
2003	412	374	39
2004	449	379	69
2005	452	398	54
2006	519	437	82
2007	515	512	3
2008	642	551	91
2009	631	574	57
2010	637	592	45
2011	675	603	72
2012	704	634	71
2013	778	689	89
2014	845	745	101
2015	1035	789	246
2016	1050	826	223

Source: Statistics Canada (2017a)

On the other hand, the stock of foreign direct investment in Canada rose by 4.7% to $825.7 billion reflecting funds invested by foreign investors in existing affiliates (Statistics Canada, 2017). Therefore, Canada's net direct investment lessen by $22.3 billion in 2016, to $223.9 billion (Statistics Canada, 2017a).

The main reason behind this slowdown is an appreciation of the Canadian dollar that moderated strong investment activity of $59.1 billion led by mergers and acquisitions during the year (Statistics Canada, 2017a). Indeed, the Canadian dollar performs well against other currencies such as the US dollar (+3%) and the Euro (+6%) (Statistics Canada, 2017a). The value of Canadian outward foreign direct investment is denominated in foreign currency and converted to Canadian dollars at the end of the period for a calculated year-end position (Statistics Canada, 2016a). When the Canadian dollar is appreciating in value, the restatement of the value of outward direct investment in Canadian dollars decreases the recorded value, and the opposite is true when the dollar is depreciating (Statistics Canada, 2016a).

1.3.2. Location

Statistics Canada (2017a)'s report describes that the increase in the value of Canadian outward foreign investment is mainly due to higher investment positions in North and South America, primarily in the United States. With a 26.7% increase in 2015, the stock of direct investment in the United States rises a further 8% to $474.4 billion in 2016 (Statistics Canada, 2017a). The U.S share of direct investment abroad reaches its highest degree (45.2%) since 2008. Other countries with a noticeable increase are Barbados, Brazil, and Chile (Statistics Canada, 2017a).

The declines in other regions of the world are mainly in Europe (Statistics Canada, 2017a). In 2016, lower investment in Ireland and Luxembourg result in the value of Canadian outward FDI in Europe to decline by 7.9% to $245.7 billion (Statistics Canada, 2017a).

1.3.3. Industry

Canadian firms that set up their subsidiaries abroad mostly come from the finance and insurance industries (36.6% share of OFDIs), followed by the mining, oil, and gas extraction sectors (18.5% share).

1.3.4. Comparison with Past Studies

The latest outward FDI statistics confirm the importance of the financial and mining industries, which existing studies highlight (Meyer and Green (1996) and Nyahoho (2006)).

These statistics also confirm the results of previous empirical studies (Meyer and Green (1996) and Hejazi (2010)) on the United States being the leading destination for Canadian investors interested in outward investment and on the European continent is the second most favored destination. Nyahoho (2006) and Hejazi (2010)) demonstrate that the primary destinations of OFDIs (The US and Western Europe) barely change across time, although one can sense a need for diversification.

2. LITERATURE REVIEW

The chapter summarizes critically existing studies. The first part describes the complexity of studying internationalization motives, followed by the empirical studies on language and FDI. The next section describes the tax havens phenomenon and the types of MNEs which establish their subsidiaries in tax havens. The chapter concludes by presenting the gap this study attempts to answer.

2.1.Existence of MNEs: Internalization Theory

Hennart (2001, p. 133) defines the MNE as "a private institution that organizes, through employment contracts, interdependencies between individuals located in more than one country. MNEs arise and expand abroad when they can organize interdependencies-through employment contracts-between agents located in different countries more efficiently than markets". Most importantly, the author emphasizes that the costs incurred must be lower than the benefits.

When natural market imperfections arise because of the "boundedly rational," "opportunistic" and "untrusty" economic agents (Williamson, 1975), the expansion of firms abroad can be an efficient way of internalizing externalities (Hennart, 2001). Caves (1998) argues that internalization represents the dominant theory in IB studies.

Hennart (2001) present several situations where inter-dependencies are pricier within the market and evaluate the use of MNEs vis a vis other investment equity modes.

i. ***Know-how.*** The author affirms that knowledge developed in one country could be transferred at a marginal cost to another country. The difficulty lay in information-asymmetry. One way to counteract is to set up a patent system. However, there are limitations, mainly the difficulty of writing tacit knowledge and enforcing patent rights (Hennart, 1982). If patents provide a reasonable degree of protection, then knowledge inter-dependencies will be organized by licensing contracts (Davies, 1977). Otherwise, the transfer of knowledge will occur within a firm where both buyers and sellers are trying to maximize their joint income and not cheat each other (Hennart, 1982).

ii. ***Reputation***. Similar to knowledge, reputation developed in a country can be transferred to another country (Hennart, 2001). Hennart (2001)declares that this process could take place using franchising. However, the main issue is free-riding. Accordingly, he mentions that good-will interdependencies would arise within the MNE if : (1) it is difficult to write contracts that denote a certain level of quality and it is hard to detect a violation and if (2) if it is not costly to control shirking/neglect of employees. Otherwise, franchising will be used (Hennart, 2001).

iii. ***Raw materials and components.*** Hennart (2001) also notes that inter-dependencies arise when different stages of the value chain are controlled by various agents positioned in different countries. He concludes that putting buyers and sellers inside one organization enables employees to benefit from facilitated transfer between partners.

iv. ***Marketing and distribution services.*** Selling a product in a foreign market requires physical and intellectual investments (Hennart, 2001). The author suggests that the integration of marketing and distribution services within MNEs should be preferred once stakes are large and the environment is hard to predict. Additionally, he describes that a third-party could free-ride, making the provision of the optimal level of service challenging. He affirms that if imposing behavioral constraints on quality standards cannot be easily defined or enforced, then MNEs will again be favored.

v. ***Financial capital***. Hennart (2001) concedes that lending money is risky: due to bounded rationality and opportunism, lenders cannot distinguish honest borrowers from dishonest or incompetent ones. However, by joining lenders and borrowers within the same firm, he believes that lenders have now more control and can be part of the decision process, and therefore have higher flexibility if problems occur with loans (Williamson, 1988). Borrower-entrepreneurs are now employees and are not rewarded for taking excessive risks (Hennart, 2001). Hennart (2001) argues that financial capital should be transferred across countries by MNEs and not by bank loans.

2.2. Internationalization Motives

2.2.1. Evolution

It took time to perceive the changing internationalization motives of MNEs. Initial motives were discussed during a post-World-War II Era when FDI was still considered either as substitute or complement for trade (Cuervo-Cazurra & Narula, 2015) and MNEs were predominantly in Europe or North America and Japan (Bartlett & Ghoshal, 1989; Doz & Pralahad, 1987).

Globalization changed the world by shrinking economic distance, lowering transactions costs and creating a higher degree of economic integration (Cuervo-Cazurra & Narula, 2015). It took several sociological, political and economic shifts during the 80s and 90s, including the emergence of other nations such as China to the level of an economic superpower, to acknowledge that MNEs could have other internationalization motives besides trade enhancement, such as augmenting their firm-specific advantages (FSA) (Cuervo-Cazurra & Narula, 2015).

2.2.2. Early Classifications

With the literature expanding, several additional internationalization motives were mentioned.

Hollander (1970) first separates commercial and non-commercial motives, while focusing on sales as the driver of internationalization. Behrman (1969) first introduces the seeking motives on which Dunning (1993) based his work. Behrman (1969) indeed links expansion motives to the search of 'something' and identifies four types of motives: resource seeking, market seeking, efficiency seeking and asset seeking. *A detailed discussion of Dunning's motives is in the section entitled Eclectic paradigm.*

Kacker (1985), followed by Treadgold and Davies (1988), advances the theory of pull and proactive factors, where *a push* or reactive factors in the host country, such as market saturation or slow growth, push firms to expand abroad, while *pull* factors attract firms to invest abroad. Porter (1986), using the analysis of the value chain based on the economic view of Hymer (1976), distinguishes between upstream motives, where firms seek opportunities in raw materials, and downstream motives, where companies try to reduce uncertainty in distribution.

Williams (1992) also provides a list of motives. He tackles not only previously mentioned motives such as growth-orientation and limited domestic market, but also introduces other motives such as passive and subjective ones (imitation of competitors, surplus, and foreign offer) but also other drivers such as transfer of know-how, use capacity and management driver.

2.2.3. Limitations of Early Classifications

van Tulder (2015) suggests that the lack of a detailed analysis of internationalization motives has several consequences:

i. Single motives prevail. By studying only one-dimensional approaches of the motives of internationalization, it has a negative impact on exploring the "how," and "what" questions which usually bring answers to what determines the success or failure of MNEs. IB studies do not address irrational motives, therefore ‘bandwagon effects' and ‘herding' where firms follow strategies of their competitors are rarely considered. Furthermore, de-internationalization is not a topic of attention yet.

ii. Strategic motives but not tactical motives are understood. There is no distinction between intended and realized strategies. A gap between descriptive and prescriptive schools of thought prevail because of the limited understanding of motivational constellations of MNEs.

iii. Ownership views are poorly addressed. Family firm's motives have rarely been studied.

iv. The focus in IB is generally on studying management of cultural diversity but not the mindset of CEOs/managers, and while company’s missing and vision statements can provide ideas on the ultimate motives, they have been largely ignored.

v. The skewed attention given to motives lowers the practical relevance of studies for managers who are usually confronted with complex constellations of motives (van Tulder, 2015). As the challenges and critics illustrate, there is a need for creating taxonomies of motives and revisiting past definitions. In the next section, we present some of the taxonomies introduced in the recent literature.

2.2.4. Recent Internationalization Motives Frameworks

Cuervo-Cazurra, Narula, and Un (2015) present a taxonomy based on two dimensions: i*) economics-driven* with exploitation and exploration of resources. It is based on a behavioral economics view 'driven by the expectations of managers and their learning about the firm and the conditions of operations at home and abroad' and ii) a *psychology-driven* dimension for better host country conditions.

Authors suggest there are four internationalization motives, which can be classified into two categories: exploiting existing resources and exploring new resources (Cuervo-Cazurra et al., 2015). Within the existing resources, Cuervo-Cazurra et al. (2015) name two categories: *sell more* in which managers exploit existing home-country resource and capabilities to obtain additional profit as well as benefit from economies of scale. And, *buy better* in which managers usually reduce the number of operation in the home-market to exploit existing host-country resources and capabilities to avoid high costs of operating in the home-country (Cuervo-Cazurra et al., 2015).

Within the exploration of new resources, Cuervo-Cazurra et al. (2015) distinguish between *upgrade* where firms explore unique resources and capabilities in host-countries to upgrade home operations, typically used by advanced economy firms to acquire emerging economy rivals. And *escape* where businesses avoid home-conditions and explore better conditions in host-countries (Cuervo-Cazurra et al. (2015).

Besides, van Tulder (2015) suggests another taxonomy by presenting three clusters of motives. First, *intrinsic motives* represent efficiency gains from being an MNE, where firms explore resources where they are located and transfer them elsewhere, they represent the locational advantages of Dunning (1993) (van Tulder, 2015).

Second, van Tulder (2015) discuss *extrinsic motives* which cover home and host country factors. He describes home considerations as psychological effects on MNE's decision of expansion. The home country represents an institutional environment with a "cognitive, normative and cultural frame of reference." (van Tulder, 2015, p. 39). On the other hand, host considerations can be negative reasons including the evasion of high taxes, stricter regulations and unfriendly labor conditions (van Tulder, 2015).

van Tulder (2015) makes an unusual distinction by declaring that those motives do no need to be materialized and can represent a simple game of threats between MNEs and governments, a difference which he considers is still not tackled enough in the IB literature.

Host considerations can also be positive reasons such as pollution havens; tax-free zones and friendly labor conditions (van Tulder, 2015). Besides, other extrinsic motives firms consider regulatory barriers and adaptation to the local cultural (van Tulder, 2015). van Tulder (2015) evaluates extrinsic factors as hard to prove since IB and management studies prefer to use rational motives. Consequently, scholars tend to focus on intrinsic factors (van Tulder, 2015).

Third, mixed factors express both intrinsic and extrinsic and usually refer to sector dynamics (van Tulder, 2015). There are substantial psychological effects such as ‘bandwagon' and ‘herding effects' encountered mainly in oligopolistic sectors which are rarely studied. van Tulder (2015) implies strategies such as "follow the competitors" and "follow the client." His argument is related to Porter (1990) idea that firm dynamism in its domestic markets makes it more competitive once it operates internationally.

2.2.5. Challenges

2.2.5.1. Scarcity of Studies

One of the most commons critics on the topic of internationalization motives within leading IB journals and textbook is that motives are rarely discussed. van Tulder (2015) affirms that they are usually presupposed. The focus is generally on answering "how" and "what" companies internationalize (van Tulder, 2015). He describes some of the reasons as theoretical fragmentation, disciplinary conservatism or a search for neutral and universal drivers, etc. Similarly, Cuervo-Cazurra et al. (2015) argue that the drivers behind internationalization have not been studied in detail.

As previously demonstrated, either author assumes that firms expand abroad in search of markets, or they present an ad hoc list of motives without hierarchy or classification while highlighting Dunning's motives (Cuervo-Cazurra et al., 2015; van Tulder, 2015). Cuervo-Cazurra and Narula (2015) indicate though that Dunning's internationalization motives were not intended as a stand-alone theory but should be a way to understand the behavior of MNEs and foreign direct investment.

2.2.5.2. Complexity

Scholars acknowledge that there is a certain complexity in studying internationalization drivers. Firms, for instance, have used mixed motives with some being considered more important than others while the motives change over time (Cuervo-Cazurra & Narula, 2015). A “simplicity-through stylization” has been a helpful tool to understand the motives theoretically, but inter-firm and intra-firm relationships increase the degree of complexity (Cuervo-Cazurra & Narula, 2015).

One of the first limitations of the motives literature is that it is not always in line with the reality of managers. Stakeholders find it hard to reveal their "true intrinsic" motives (Cuervo-Cazurra & Narula, 2015). van Tulder (2015) also defends this argument by describing that managers are unable to divulge their exact motives out of fear from other parties including governments, tax authorities, and even their rivals. Also, there exist differences between units of the same MNE, and the motives of headquarters can be differently implemented by foreign subsidiaries (Athreye, Tuncay-Celikel, & Ujjual, 2014).

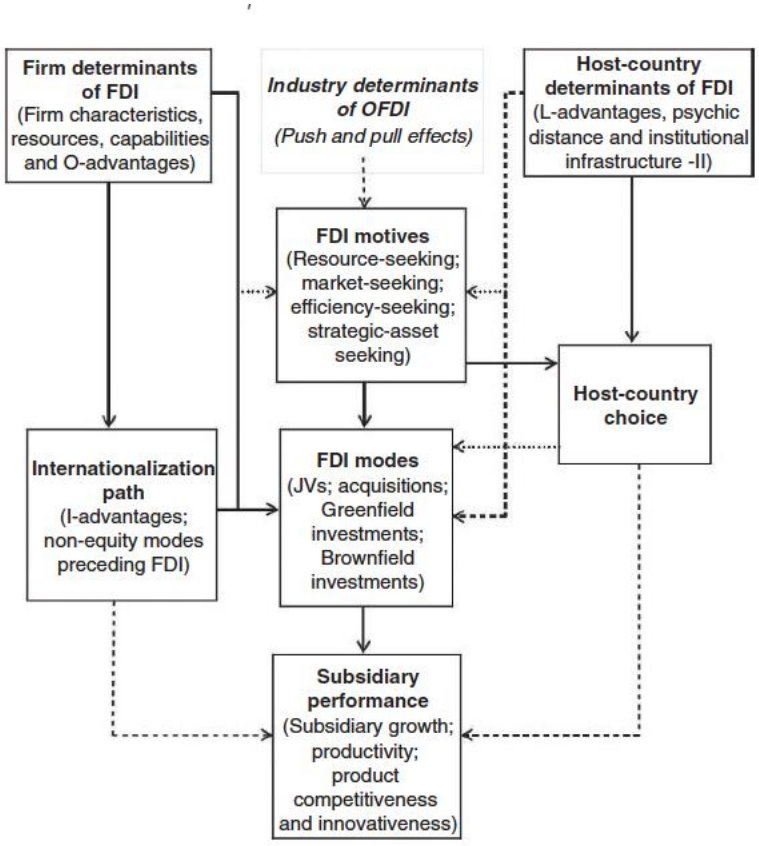
Moreover, motives tend to be "aspirational and evolving," once they fail to produce the desired output, both motives and strategies need revisions (Cuervo-Cazurra & Narula, 2015). Another layer of complexity is that the success of those motives and therefore of MNEs depend upon exogenous actors (Cuervo-Cazurra & Narula, 2015).

Besides firm interactions, van Tulder (2015) explains that multinationals are faced with changing host and home-country regimes. This volatility creates uncertainty which in turns affects the motivations of firms to go abroad (van Tulder, 2015). An uncertainty which tends to diverge from a manager to another.

2.3. Determinants of Country Selection

The analytical framework set out in Figure 1, shows the relationships between the different outward foreign direct investment determinants:

Figure 1. Analytical Framework of Outward FDI



Source: Gorynia, Nowak, Trąpczyński, and Wolniak (2014)

Gorynia et al. (2014) framework are based on Dunning's Eclectic Paradigm of International Production, and two internationalization modes: the Uppsala and Strategy Tripod models, as well as other relevant concepts and classifications of FDI motives derived from the extant literature.

The mainstream international business literature explains the strategy of MNEs using the concepts of internalization ((Buckley & Casson, 1976), transaction costs (Hennart, 2001), and monopoly advantage (Hymer, 1976). Along with location advantages, these concepts are synthesized by Dunning (1980),

2.3.1. Eclectic Paradigm

Dunning (1980) published his Eclectic Paradigm of International Production and developed it over the next two decades as a synthesis of his research along with several author's contributions to the IB theory. The eclectic paradigm is commonly known as the OLI Paradigm, with the OLI abbreviation denoting the three pillars: O – ownership-specific advantages; L – location-specific advantages; and I – internalization advantages.

The Eclectic Paradigm has gained full acceptance in the IB field and is described by many as the best theory that explains the international activity of firms (Cuervo-Cazurra et al., 2015; Gorynia et al., 2014). Gorynia et al. (2014) argue that the paradigm represents a relatively comprehensive explanation for the reasons firms would engage in FDI and their choice of entry modes. In Figure 1, the OLI Model is explained under the firm for ownership advantages, the host country for location advantages and the internationalization path for the internalization advantages.

With licensing being unsafe, companies internalize and set up production facilities in foreign countries via outward investment to protect their property rights (Buckley & Casson, 1976; Dunning, 1988, 1993). Driffield and Love (2007) develop a taxonomy based on the classic ownership and locational influences of FDI and note that the ownership advantage embodied by R&D and exploitation of economies involve a form of technological superiority over rivals.

Based on Fosfuri and Motta (1999), Driffield and Love (2007) acknowledge that a possible motivation for investment is not to exploit proprietary technology, but to access it and transfer it from the host economy to the multinational via spillover effects. The argument is confirmed in the literature on the internationalization of R&D and proximity suggesting that MNEs are willing to locate their facilities close to leading centers of research and innovation to absorb learning spillovers (see (Niosi, 1999)). Technological sourcing does not imply technology weakness, meaning that MNEs usually attempt to acquire knowledge in locations that are at least as technologically advanced as their home countries (Driffield & Love, 2007). This is particularly evident in the idea of 'home-base augmenting FDI' of Kuemmerle (1999) or strategic asset-seeking of Dunning (1998).

2.3.2. FDI Destination Choice

Based on the taxonomy developed by Behrman (1972), Dunning (1993) proposes the four main motives for international expansion *(resource seeking, market seeking, efficiency seeking and strategic asset seeking*) and supplement them with other ad hoc motives including *escape investments, support investment, and passive investments*. However, the IB literature and Dunning himself rarely refer to these different motives (Cuervo-Cazurra et al., 2015; van Tulder, 2015). Until Dunning and Lundan (2008) reintroduce them in an update of the original work while acknowledging the difficulty of classifying them into the primary four motives (van Tulder, 2015). In the framework, firm-level, industry-level, and host country-level OFDI determinants influence these motives. The motives, in turn, determine the choice of host nations and the modes of FDI (Gorynia et al., 2014).

Dunning (1998) argue that resource-seeking and market-seeking motives characterize the first stages of FDI, whereas efficiency and strategic asset seeking characterize sequential FDI. He establishes that as the strategic asset-acquiring investment has become more critical, the locational needs of corporations have shifted from the access to markets or to natural resources to the access to knowledge-intensive assets and learning experiences, which positively impact their existing ownership advantages.

2.3.3. Uppsala Model

In addition to Dunning's model, the analytical framework integrates the Stages Internationalization Process Model also named the Uppsala Model and the Strategy Tripod Model (Gorynia et al., 2014). Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977) develope the Uppsala Model and propose a gradual deepening in the engagement of the MNE with host nations and a gradual widening of the host countries entered on a ‘closes first’ basis. Based on their empirical studies of Swedish companies, these authors identify four stages in the internationalization process. First, firms do not conduct any regular exporting. Second, they start exporting via independent export or import agents. In the third stage, they establish foreign-country-based sales subsidiaries. Lastly, firms engage in foreign production.

2.3.4.Strategy Tripod Model

A recent model of internationalization is that of the Strategy Tripod propagated by Peng (2001). This model combines three perspectives of international business: resource-based, institution-based and industry-based.

2.3.4.1. Resource-Based View

Gorynia et al. (2014) note that the resource-based perspective resembles Dunning's ownership advantages, but goes beyond the model by specifying the nature of the resources and capabilities. Peng (2001) argue that besides exploring their unique assets, firms seek assets in the international market to improve their level of competitiveness. He also indicates that the resource-based view provides a useful tool for analyzing foreign's subsidiary role in enhancing parent's ownership advantages. In **Figure 1,** the resource-based view is incorporated as the firm determinants of OFDI (Gorynia et al., 2014).

2.3.4.2. Institution-Based View

According to the industry-based view of Peng (2001), each industry's unique competitive pressure through pull and push effects will result in different levels of internationalization, which in turn affect the strategies firms utilize. For instance, a highly competitive and saturated market will drive firms to expand abroad, especially if they want to avoid clashing with other dominant MNEs in their home markets (Peng, 2001). Therefore, a company may seek to enhance its firm capabilities, knowledge base and overall competitive position in the home market by entering a more sophisticated developed market (Gorynia et al., 2014). On the other hand, if the competition is not high enough, domestic firms may attempt to find incentives in host nations (Peng, 2001).

2.3.4.3. Industry-Based View

Peng (2001) present the third leg of the tripod as the institution-based view. He summarizes the perspective as strategic choices that are the reflection of the formal and informal constraints of the institutional framework of both home and host economies. Besides, Dunning and Lundan (2008) recognized the importance of institutions and incorporated them in the OLI paradigm. Gorynia et al. (2014) assume that institutional infrastructure along with psychic distance and location advantages tend to determine the host-country choice and may also influence FDI mode choice. In the figure, the institutional dimension is incorporated under the host country determinants of OFDI (Gorynia et al., 2014).

2.4.Distance

2.4.1.Dimensions

There is no doubt that distance-related research is one of the most important streams within the international business (Zaheer, Schomaker, & Nachum, 2012). Distance usually refers to the extent of differences between country pairs that introduce friction and complexity and makes it hard for MNEs to successfully sustain cross-border activities (Hutzschenreuter, Kleindienst, & Lange, 2016). A few scholars tried to review the existing body of research on distance in the MNE context, such as Hutzschenreuter et al. (2016)'s review on the effects of distance resulting from country differences on outcomes at the firm and subsidiary level.

Several scholars focus mainly on the cultural dimension of distance (Hutzschenreuter et al., 2016). Shenkar (2001) criticizes this exclusive as well as the lack of consensus on the use of intrinsic characteristics of distance, all elements which pushed for the need of a holistic view on the concept of distance (Hutzschenreuter et al., 2016).

Based on the work of Johanson and Vahlne (1977), Ghemawat (2001) determine that distance originates from differences along cultural, administrative, geographic and economic (CAGE) dimensions. Ghemawat (2001) affirm that the CAGE distance framework helps managers assess market opportunities through the impact of distance which tends to vary across industries.

Some of the most know proxies to capture cultural distance are Hofstede (1984)'s dimensions (indulgence vs. restraint; long term vs. short term; masculinity vs. femininity; tolerance of uncertainty; individuality; power distance). Kogut and Singh (1988) create an index (K-S index) which transform Hofstede's values into cultural scores. Despite recognition of the limitations of these constructs, numerous scholars are still considering them as useful (Zaheer et al., 2012). Other researchers base their assessment on survey answers, and either develop their items or rely on previously published ones (Hutzschenreuter et al., 2016).

Hutzschenreuter et al. (2016) argue that cultural distance does not entirely capture the complexity associated with cross-border activities. Institutional distance, which embodies the differences in the regulatory, normative and cognitive pillars of institutions (DiMaggio & Powell, 2012), matter as well.

When they do not develop their items, researchers mainly use the World Bank's Governance Indicators (Gallego & Casillas, 2014) or the Economic Freedom Index (De Beule, Elia, & Piscitello, 2014). Geographic distance dates back to half a century but is rarely used as a dimension of distance and is often looked in combination with other dimensions (Hutzschenreuter et al., 2016).

Hutzschenreuter et al. (2016) criticize that few researchers rely on economic distance since its effects are more ambiguous than other dimensions, the distance usually captures differences in per capita Gross Domestic Product (GDP). Other measures include inward and outward FDI stock, and UN Human Development Index (Hutzschenreuter et al., 2016).

Johanson and Wiedersheim-Paul (1975, p. 308) famously introduce psychic distance as the "factors preventing or disturbing the flow of information between firms and the market." The researchers establish that expanding firms will first select foreign countries psychically close and with market conditions similar to the ones they experience at home. As the firm's international experience and knowledge grow, so does its commitment to more distant countries (Johanson & Vahlne, 1977). As Dow and Karunaratna (2006) highlight, better local market knowledge raises the value of resources to be committed to the market. Lastly, Hutzschenreuter et al. (2016), clarify there is not a consensus on the number and type of dimensions to assess psychic distance.

2.4.2.Critic

In addition to Ghemawat (2001)'s dimensions, there are a number of unconventional distances operationalization West and Graham (2004), what shows the difficulty of defining and measuring the effects of distance.

Besides, several studies contribute to the discussion and reconceptualization of distance, distinguishing for instance between the psychic distance stimuli and perceived psychic distance (PPD-PDS). There is strong disagreement on the appropriate level of analysis (country vs. individual level) and reference point of distance between two entities (Hutzschenreuter et al., 2016).

While most articles focus on the home country as the reference point, Tung and Verbeke (2010) consider it an oversimplification, since no two firms face the same distance. Some authors attempt to assess the distance relative to all the countries in which the company is active, its home-region or -cluster (Hutzschenreuter et al., 2016). Consequently, scholars agree that there is not a consensus on the conceptualization of distance, its dimensions or measurement despite four decades of research but there is a definite involvement in furthering the development of the concept of distance (Hutzschenreuter et al., 2016).

2.4.3. Impact of Distance

2.4.3.1. Entry Mode

Studies on the effect of distance on entry mode are divided between those concerned with its effect on the degree of equity and the choice of establishment (Hutzschenreuter et al., 2016). The main argument is that as cultural distance increases, firms favor low-commitment over high-commitment entry modes and lower-equity modes over high-equity modes (Arora & Fosfuri, 2000; Magnusson, Baack, Zdravkovic, Staub, & Amine, 2008).

Concerning the choice of establishment, Arslan and Larimo (2011) argue that formal institutional distance is negatively related to greenfield investments whereas informational institution is positively associated with greenfield investments. As Hutzschenreuter et al. (2016) note, there is, though, a lack of studies investigating the individual attributes of distance on entry mode choice.

2.4.3.2. Market Selection

On the impact of distance on market selection, despite few exceptions, most studies are in line with the Uppsala model (Hutzschenreuter et al., 2016). Most of the studies focus on the cultural dimension as it is a source of uncertainty and risk, due to its tacit nature (Håkanson & Ambos, 2010). In fact, firms have less power to counterweight the adverse effects of differences in values and norms compared to the variations in other dimensions (Hutzschenreuter et al., 2016).

On another note, O'grady and Lane (1996)'s psychic distance paradox implies that companies tend to overestimate the similarities between two countries and ignore small but crucial differences (Hutzschenreuter et al., 2016).

Moreover, in highly distance markets, firms can face less competition and have more diversity (Hutzschenreuter et al., 2016). Interestingly, Malhotra, Sivakumar, and Zhu (2009) conclude that the effect of distance on market selection differs depending on the selected dimension of distance.

2.4.3.3. Proximity

The proximity of a country to other countries is a factor that affects the choice of an MNE location. Nachum, Zaheer, and Gross (2008) delve into the topic of geographic distance through the concept of proximity to the distribution of knowledge, markets, and resources. They find that a country's proximity to the world's knowledge affects MNE location choices in all regions but Africa.

Proximity to markets raises the probability a country is chosen as FDI destination by MNEs. Proximity to markets matter for both firms that directly seek the market (market-seeking investment) or only use it as an export platform (Nachum et al., 2008). According to The Economist (2005), the world's fleets still carry about 90% of total world exports; therefore, costs continue to be a significant factor for MNEs and will deter them from selecting remote countries. Close countries tend to have trade agreements, which in turn ease market access.

Although investments in geographically distant locations can be a source of a variety of expertise which is not commonly available, they have been shown to be less profitable because firms operating in those countries suffer from information disadvantages (Coval & Moskowitz, 2001). Moreover, Nachum et al. (2008) affirm that at 1,200 km distance from the source of knowledge, spillovers are reduced by half.

While Nachum et al. (2008) find that proximity to the world’s resources is not significant, they argue that firm-specific factors and geographic characteristics of countries (climate, time zone, landlocking, islands) affect location choice. Nachum et al. (2008) suggest that large firms with resources are more likely to select distant countries.

2.5.Language

Past studies (Konara & Wei, 2014; Oh, Selmier, & Lien, 2011) focus on the economic determinants of FDI such as GDP and trade openness while the role of language remains understudied. MNEs broaden their use of FDI, and they often need to deal with numerous languages and the associated transaction costs of language differences (Konara & Wei, 2014).

Most of the studies use language as a component of the dimension of cultural, psychic or administrative distance (Dow & Karunaratna, 2006). Konara and Wei (2014) point there is a vast literature on the impact of differences or commonalities in languages on bilateral trade, , but only few studies on language and bilateral FDI (for exceptions, see e.g. (Goldberg, Heinkel, & Levi, 2005); (Hejazi & Ma, 2011) and (Oh et al., 2011)).

2.5.1. Empirical Studies

Goldberg et al. (2005) argue that FDI is plagued by information asymmetries. The authors examine personal interaction through distance, language, and travel. They look at the US inward and outward FDI and investigate whether sharing a common tongue between two countries matters. Goldberg et al. (2005) consider a two-country world in which residents of each country face a potential set of a project at home and abroad. They consider that investors could discriminate between projects at home better than they can overseas. Their main findings are that a common language is perceived to increase human interaction. US FDI into foreign countries is more significant if the foreign country has English as its mother tongue, and distance then seems to be less relevant (Goldberg et al., 2005).

While most studies restrict their language choice to either English or a limited number of languages, Hejazi and Ma (2011) examine the role of seven languages (English, Dutch, French, German, Italian, Spanish and Swedish) to explain bilateral FDI within 30 OECD countries, They find that only English is statistically significant for both outward and inward FDI, and had an above-average positive impact on FDI.

Oh et al. (2011) look at 28 OECD countries and 87 non-OECD countries and confirm that speaking a common language increased FDI flows, with a common-language partner investing three times more than a non-common language partner.

In another study, Selmier and Oh (2013) examine the transaction costs of languages using three different measures of language closeness: same language, direct communication, and language distance. They use a gravity model to estimate the impact of languages on FDI flows. The gravity model predicts that the lesser the ‘distance between country-pairs, regarding economic, geographic, institutional and cultural factors, the lower the transaction costs between the countries (Selmier & Oh, 2013).

The authors find that a similar language increases outward FDI flows with 84% compared with a pair speaking with different languages. Direct communication increase FDI flows by 26%. Selmier and Oh (2013) also discover that there is a hierarchy within the order of communication costs. Selmier and Oh (2013) conclude that English is the least costly business language followed by French.

All empirical studies find that speaking a common language increase FDI flows. Moreover, they commonly conclude that this impact is more substantial on FDI than on international trade. Konara and Wei (2014) ; (Oh et al., 2011) and (Selmier & Oh, 2013) explain that FDI is more sensitive to language distance because of a more sophisticated transactional relationship, and a greater investment for FDI than for trade or other international transactions.

2.6. Tax Havens

2.6.1. Historical Origins

Historically, tax havens appear at the beginning of the 20th century because of two phenomena. The first phenomenon is the introduction of modern taxation rules - taxes on the income, wealth, capital and inheritance - in most countries developed as a result of the First World War (Ministry of Finance (Quebec), 2015). Some European jurisdictions - Switzerland and Liechtenstein - have chosen another strategy, consisting in maintaining a low tax on individuals and corporations, for residents or non-residents (Ministry of Finance (Quebec), 2015).

The second phenomenon is the development of illegal activities in North America, following the prohibition (Ministry of Finance (Quebec), 2015). Because of past colonialism power, several jurisdictions in the Caribbean have become the backbone of the traffickers and the place of protection of illegally collected income (Ministry of Finance (Quebec), 2015).

Since the Second World War, tax havens have relied on a third phenomenon, namely the extremely rapid expansion of the capital market (Ministry of Finance (Quebec), 2015). This has led to the development of financial centers in island states or small territories; these financial markets are referred to as "offshore financial centers" or "extraterritorial financial centers" (Ministry of Finance (Quebec), 2015).

2.6.2. The Phenomenon of Tax Havens

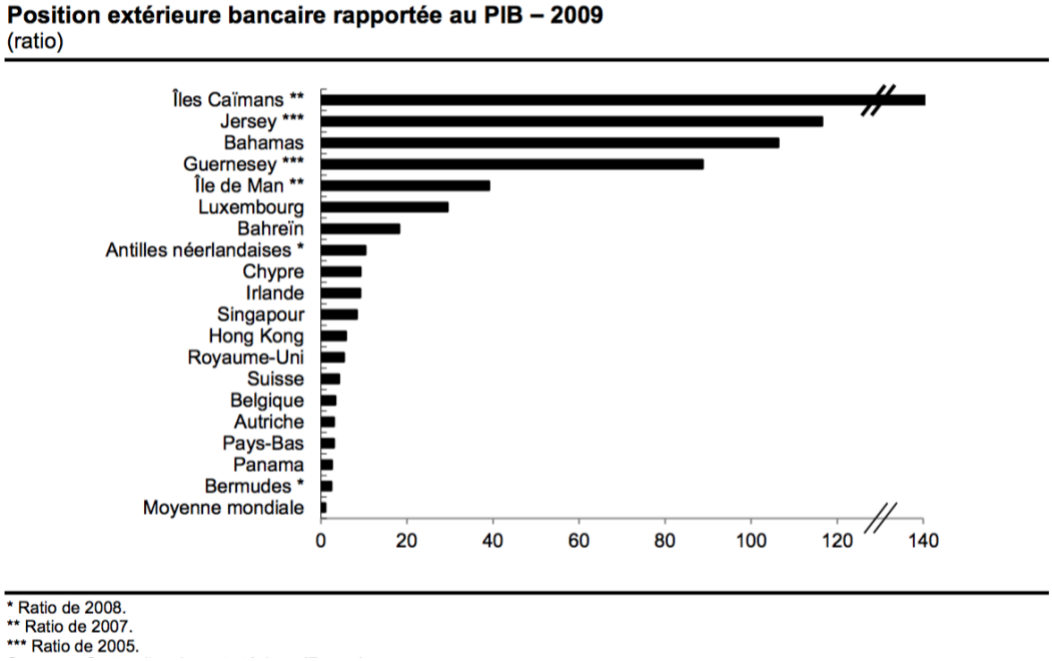
There is no consensus on what defines tax havens. Desai, Foley, and Hines (2006) describe tax havens as low-tax jurisdictions which provide investors opportunities for tax avoidance. Additionally, tax havens are characterized by a high degree of secrecy, low and even zero rates of corporate income taxation (Jones & Temouri, 2016). They list various Caribbean Island nations in the Americas, Ireland and Luxembourg in Europe, and Hong Kong and Singapore in Asia among them. They clarify that low-tax jurisdictions could also be parts of countries, such as special economic zones in China, low-tax states and zones in the United States, and tax-favored subnational regions including southern Italy, eastern Germany, eastern Canada, and others.

A recent World Investment Report (United Nations Conference on Trade and Development, 2013), highlights the fact that increasing shares of global FDI flows are linked to investments into offshore financial centers, which in turn are at historically high levels. (Beugelsdijk, Hennart, Slangen, & Smeets, 2010) find that current measures of FDI stocks bias multinational firms affiliate activity.

The report of the United Nations Conference on Trade and Development (2015) addresses the issue of FDI by multinational companies in tax havens. The organization notes that in 2012, the British Virgin Islands was the 5th largest FDI recipient (the US $ 72 billion), higher than those of the United Kingdom ($ 46 billion) an economy yet 3,000 times larger. Outflows of FDI from the Virgin Islands ($ 64 billion) are just as disproportionate to the size of the economy of this jurisdiction.

Thus, tax havens that have specialized over the last decades in the financial activities have in common a banking and financial sector hypertrophied compared to the size of the country and the real importance of the economy (Ministry of Finance (Quebec), 2015). Figure 2 illustrates the hypertrophy of the financial sector of tax havens.

Figure 2. Net External Liabilities (external to GDP)



Source: (Le Moign, 2011)

The ratio of portfolio investment to GDP makes it possible to identify the jurisdictions oriented towards the management of financial transactions for non-residents (Le Moign, 2011).This ratio is 1.3 in Norway and 1.8 in Switzerland; it reaches new heights in Bermuda (65.0), Guernsey (62.1), Jersey (53.9) and Luxembourg (36.9) (Le Moign, 2011). Again, in small jurisdictions, there is a disconnect between financial activities for non-residents and the real economy (Le Moign, 2011).

2.6.3.Corporate Strategies

Corporations that select tax havens use mainly three strategies: a) the use of conduit (shadow) companies; b) transfer pricing as a tax avoidance scheme and; c) misuse of tax treaties (Ministry of Finance (Quebec), 2015).

2.6.3.1. Conduit Companies

It is possible to create companies that do not engage in any real economic activity but serves as conduit (shadow) companies (Ministry of Finance (Quebec), 2015).

To avoid high tax rates, multinationals can reduce the taxable income by directing their income to subsidiaries of these companies located in tax havens (Ministry of Finance (Quebec), 2015). The companies can, then, hide the identity of investors and conceal profits from criminal activities (Ministry of Finance (Quebec), 2015).

2.6.3.2. Transfer Pricing

Firms use transfer pricing within firm-transaction to reduce their tax obligations. Multinationals transfer the maximum amount of profits to a subsidiary located in a tax haven, to reduce their taxable income (Ministry of Finance (Quebec), 2015). This transfer can be achieved in a variety of ways. Desai et al. (2006) and Jones and Temouri (2016) describe that MNEs could benefit by lowering prices of items and services provided to their affiliates in lower-tax countries, More specifically firms decrease revenues through the sale of low-cost goods from an entity located in a higher-tax jurisdiction to a subsidiary located in a tax haven, followed by a sale by the high-taxed subsidiary (Ministry of Finance (Quebec), 2015).

Firms can also increase the expenses through the remuneration of services; these services may be overvalued when they are billed to the subsidiary located in the tax haven or may even be fictitious, the latter case represents a tax evasion scheme (Ministry of Finance (Quebec), 2015). Another strategy is the payment of royalties; a corporation located in a high-tax country pays royalties to a subsidiary located in a tax haven for a license, patent or trademark (Ministry of Finance (Quebec), 2015).

Although it is relatively easy to determine abusive transfer pricing practicing for goods, it is quiet complex concerning services (Ministry of Finance (Quebec), 2015). While, the OECD requires firms to use transfer prices similar to the prices paid by unrelated parties, but enforcing such rule is complicated, especially when pricing issues concern differentiated or proprietary items such as patent rights (Desai et al., 2006). With the looseness of legal restrictions, firms can adjust transfer pricing through a variety of transaction – intrafirm debt, royalty payments, dividend repatriations, and intrafirm trade – without violating laws (Desai et al., 2006).

2.6.3.3. Misuse of Tax Treaties

According to the Organisation for Economic Co-operation Development (2014) abusing tax treaties means manipulating the transfer pricing and attempting to circumvent the limitation provided by tax conventions.

The purpose of tax treaties between countries is to avoid double taxation and to facilitate economic relations between the signatory countries since double taxation negatively affects the free movement of capital, technologies, people and products and services (Ministry of Finance (Quebec), 2015).

2.6.4. Impact of Tax Havens

Tax policies are affecting the volume and location of foreign direct investment since, all other considerations equal, higher tax rates reduce after-tax returns, which in turn reduce investment (Desai et al., 2006). Several studies identify the impact of taxes through time-series estimation of the sensitivity of FDI to annual variation in after-tax rates of return, and cross-sectional evaluation that uses the differences in corporate taxes around the world (Desai et al., 2006). Their common finding reviewed in Hines Jr (1999) is that the estimated tax elasticity of investment is around 0.6.

On the other hand, Jones and Temouri (2016) while acknowledging the importance of taxes as a factor in driving MNEs to select tax havens, affirm that as long as there is a significant gap between the OECD nations corporate tax and rates and the tax haven rates, MNEs will continue setting up tax haven subsidiaries. They consider that the home country corporate tax rate has a limited if not a negligible impact.

Therefore, the liberalization of corporate taxes is unlikely to deter MNEs from undertaking tax avoidance (Jones & Temouri, 2016). The OECD focus on sharing information via Tax Information Exchange Agreements compared with broader tax liberalization measures (Jones & Temouri, 2016).

2.6.5. Characteristics of MNEs Established in Tax Havens

Past research mainly focuses on the US, but recent studies have now access to disaggregated and novel data records on subsidiary locations around the world. Desai et al. (2006) study the types of firms that established tax haven operations through affiliate-level data of American companies from 1982 to 1999, but Jones and Temouri (2016) use a database covering 14,209 MNEs in twelve OECD nations for the period 2002-2010 to examine the determinants of MNEs' establishment into a tax haven.

Overall, empirical studies arrive at common conclusions regarding the type of MNEs that select tax havens as destinations. Desai et al. (2006) find that firms that are larger, actively international, technology-intensive, with extensive intrafirm trade and, in industries with low foreign taxes, are the most likely to use tax havens. Jones and Temouri (2016) also argue that technology-intensive manufacturing MNEs with significant levels of intangible assets increase the probability of selection of tax havens. Besides, the size and type of tax havens affect both the objective and the likelihood of MNEs' establishment there. Desai et al. (2006) find the primary use of affiliates in larger tax havens is to reallocate taxable income, while the primary purpose of subsidiaries in smaller tax havens is to facilitate deferral of U.S taxation of foreign income.

Furthermore, Jones and Temouri (2016) built a matrix in the form of a cube in Figure 3 which provides an insight into what type of firms are more likely to invest in a tax haven. They argue that both the variety of capitalism of a firm home-market and the firm degree of technological intensity determine the selection of tax havens as destinations. Indeed, Jones and Temouri (2016) argue that the likelihood that technologically-intensive MNEs establish subsidiaries in tax havens increases if their home country is a liberal market (LMEs, such as *Australia, Canada, New Zealand, the United Kingdom and the US*) as opposed to a coordinated market economy (CMEs, such as *Austria, Germany, Japan and the Nordic countries*).

Figure 3. Types of MNEs in Tax Havens

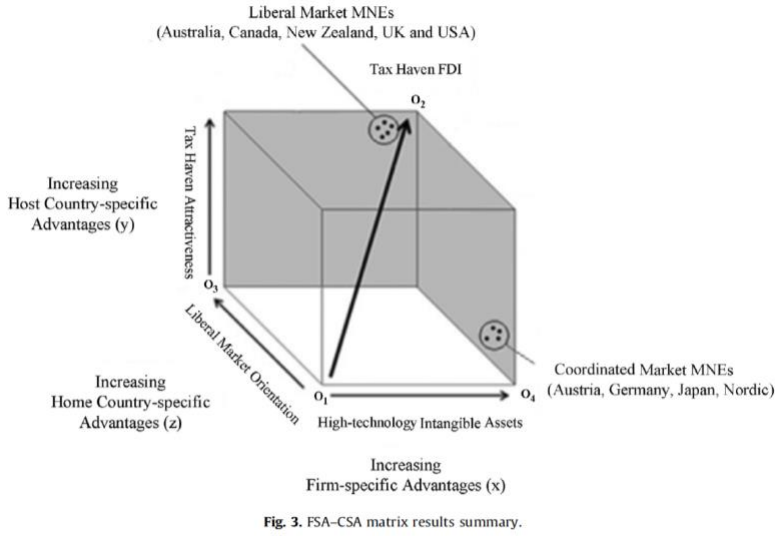


Fig. 3. FSA–CSA matrix results summary.

Source: Jones and Temouri (2016, p. 245)

2.7.Literature Gap: Subnational Level

There are numerous investigations of FDI through location choices between countries (e.g., (Porter, 1996; Vernon, 1966). The studies that consider location choice within countries are scarce. Most of them focus on the experience of internationalization of the United States (Coughlin et al., 1991; Ray, 1971); Japan (and the United States) (Mody & Srinivasan, 1998); the UK (Taylor, 1993) and Ireland (Blackborn, 1972). The Canadian landscape has been ignored.

Countries possess distinctive economic, physical and political attributes (Chadee, Qiu, & Rose, 2003). Lipsey (1999) considers that the national characteristics, including economic growth rates, availability of technology, skilled labor, labor rates, government regulation can affect the success of FDI.

Regional differences include population, manufacturing density and infrastructure (Coughlin et al., 1991), local and government incentives (Dunning, 1998) and the level of economic development (Bagchi-Sen & Wheeler, 1989) are all factors that have been found to influence MNE's location decisions.

Additionally, many of the influences are industry-specific (Chadee et al., 2003). Mineral resources are required for mining industries, labor costs are more important for labor-intensive sectors compare to capital-intensive industries, and lastly, distance to market is important for consumer trade goods (Chadee et al., 2003).

Since between-country differences can be important determinants of where MNEs decide to locate their international activities for inward FDI, there is a reason to believe that regional distinctions within countries also influence the volume and the location of outward FDI (Chadee et al., 2003). Large nations have diverse economic and physical landscapes (Chadee et al., 2003). It is, therefore, not surprising for province and regions within a country to possess unique characteristics that provide distinctive sources of competitive advantages (Chadee et al., 2003) which, promote MNE's direct investment activities.

Dunning (1998) considers that the recent changes in the political and economic and landscapes of various regions lead to significant shifts in the worldwide distribution of FDI. Despite the fact that contextual variables at the subnational level are essential in determining the location and development of outward FDI, the topic has not attracted much attention from IB researchers.

Therein lay the major gap this study will be filling, the lack of research of internationalization at the provincial level. This study fills the gap by analyzing the firm-level factors that have an impact on the extent and the location of the outward investment of Quebec-based parent firms compared to non-Quebec based parent firms.

3. HYPOTHESES DEVELOPMENT

In this chapter, I elaborate the different hypotheses. In the first section, I argue that MNCs based in the province of Quebec tend to internationalize more than their counterparts from other Canadian provinces. In the second section, I argue that Quebec MNEs will favor French-speaking countries as their outward FDI destinations more than firms based in other provinces. I conclude by developing the idea that Quebec-based MNEs are less likely than others to have subsidiaries in tax heavens.

3.1. The Motivation for Outward Investment

3.1.1. Market Size and Local Environment

Quebec has a slow-growing population rate of 3.3% compared to the average national 5% rate between 2011 and 2016. Alberta is the fastest growing province with a rate of 11.6% (Statistics Canada, 2017b). Having a small population (8 million) and a slower growth rate than most Canadian provinces, we argue that Quebec-based firms will have a higher tendency than others to seek new markets to expand following the market-seeking motives of Dunning (1993, 2001). In fact, in one of the rare studies on the motives of internationalization expansion of Quebec MNEs, Niosi and Zhegu (2011) interview 306 managers of SMEs (Small and Medium Enterprises) in the manufacturing sector and find that nearly 70% of firms consider seeking new markets as their primary motive.

Penrose (2009) affirms that there are limits to the extent to which firms can grow within a single market. She argues that the overall size of the market and the existence of competitors set the boundaries of such an expansion. Penrose (2009) concludes that a firm can evade market size by diversifying into other markets. Furthermore, market characteristics such as market size are recognized as a significant determinant of FDI flows: as market size increases along with FDIs, so do the opportunities for the exploitation of economies of scale and scope and the efficient utilization of resources (United Nations Conference on Trade and Development, 1998).

Besides, Niosi and Zhegu (2011) note that the strict laws and regulations of the Quebec market, along with the high production costs and the difficulty to access capital and technology favor firms' internationalization decision, since setting subsidiaries abroad may enable them to benefit from more favorable business conditions than in their home market.

According to Statistics Canada (2011) census, there are 7,054,975 (7 million) individuals in Canada with French as their mother tongue, representing 21% of the country's population. 6,102,210 (6 million) of them live in Quebec; they account for 78% of the provincial population. In this predominantly francophone province, linguistic minorities have a much greater need to express themselves in French than the francophone majority feels the need to speak in English (The Canadian Encyclopedia & Mougeon, 2006).

The Canadian Encyclopedia and Mougeon (2006) notes that in all nine other Canadian provinces, the proportion of individuals whose mother tongue is not French but who can converse in French is only 6% and there is little variation from this average from one province to another. On the other hand, he points out that in these same provinces, the proportion of French-speaking individuals who can express themselves in English is very high, it is 71% in New Brunswick and well over 80% in other provinces. For this population, learning French is more a personal choice than a necessity (The Canadian Encyclopedia & Mougeon, 2006).

These statistics confirm that the market size of Quebec is small and firms have no choice but to expand. Either inside the country or abroad, Quebec firms must make significant efforts in translating, getting a bilingual workforce, etc. to sell or export to consumers in English-speaking Canadian provinces and other foreign markets.

Other provinces have the opportunity to expand to other English-speaking provinces and can develop their business relatively easily within Canadian borders. In contrast, French-speaking Quebec may incur a significant fixed cost to reach these provinces, and once they have, they may as well target a more significant market across borders.

3.1.2.Initial Experience: Ties with the United States

The Ministry of International Relations (Quebec) (2017c) considers the United States as a critical market for Quebec companies with its 300 million consumers and countless companies requiring goods and services. More than 12,000 Quebec companies do business in the United States (Government of Quebec, 2017). Regarding financial value, Canadian firms hold $ 249 billion in outward investments in the US (Export Development Canada, 2011).

3.1.2.1. Joint Infrastructure

The geographic proximity of Quebec and the USA enable them to develop shared infrastructures, which facilitate cross-border business. The Seaway is named for the Saint Lawrence River, which flows from Lake Ontario to the Atlantic Ocean (Great Lakes St. Lawrence Seaway Systems, 2017b). It is in Montreal, Quebec that the Seaway is first built (Great Lakes St. Lawrence Seaway Systems, 2017b)[5]. Even if it is considered an international and multiprovincial system since the Seaway extends from Quebec to Lake Erie and the Welland Canal in Ontario (Great Lakes St. Lawrence Seaway Systems, 2017a), it is also considered an intra-Quebec system (Encyclopedia Britannica, Hamelin, Camu, & Benedict).

The St. Lawrence Seaway provides economical freight rates for bulk commodities and makes an essential contribution to the primary industries of the region of Quebec (The Canadian Encyclopedia, Kaczkowski, & Gordon, 2009). The Seaway makes possible the exploitation of the vast iron ore deposits of Quebec[6], and changes the province from an importer to an exporter of iron ore (The Canadian Encyclopedia et al., 2009).

Since 1959, the St. Lawrence Seaway provides ocean-going vessels to Quebec and US ports on the Great Lakes (The Canadian Encyclopedia & Crane, 2009). Thus, besides a shared border, being the first province that has a joint infrastructure further deepens economic relations between Quebec and the US and gives Quebec-based firms a greater opportunity than others to invest in the US to leverage this international experience to venture in other countries.

[5] Dollier de Casson, Superior of the Sulpician Seminary in 1680 makes a 1.5 m (5 feet) deep canal to bypass the Lachine Rapids between Lake St. Louis and Montreal (Great Lakes St. Lawrence Seaway Systems, 2017b). The canal is completed in 1824 (Great Lakes St. Lawrence Seaway Systems, 2017b).
[6] And Labrador (Great Lakes St. Lawrence Seaway Systems, 2017b)

3.1.2.2. Relation between Exports and Outward Investment

The Quebec-US trade relationship is particularly strong. From a recent report of the Ministry of Economy Science and Innovation (Quebec) (2017b), 74.6% of Quebec's exports of goods are destined to the United States in 2007, and in 2016 the rate is still maintained at 71%. Thus, the United States remains the primary destination of exports of goods for Quebec. In comparison to other foreign destinations from the same report, the rate of exports stagnates in Europe around 13%, it increases for Asia from 5.4% to 9.4%, and for the South American region, the African and the Middle-East region the rate did not exceed 3%.

In the international economics and business literature, two significant aspects of possible linkages between outward foreign direct investment (OFDI) and exports are discussed: (1) whether the outward investment is a substitute for, or a complement to, exports and (2) whether exports causes outward investment or the other way around.

The focus is on the complementary relationship between outward investment and exports. Vernon (1966) in the product cycle theory postulates that the initial exploration of foreign markets starts with exports followed by overseas investment. Outward investment helps trade-supporting infrastructure abroad with the distribution of networks, customer care and service centers which improve exports of products (Verma & Brennan, 2011). In the 1990s, the investment motives of developed country enterprises are to assist the export markets with a local presence and establish marketing networks and after-sales service (Verma & Brennan, 2011). Pfaffermayr (1996) also argues that outward investment and exports can have common determinants including labor, skill and R&D intensities.

The fact that the province of Quebec is the first to share a shared infrastructure with the US along with the geographical closeness of the two frontiers enable Quebec firms to have a higher propensity to invest in the US than companies based on other provinces.

The Uppsala model discussed earlier suggests that the internationalization of firms starts with exports in the initial stages and results in higher levels of international involvement including foreign direct investment in the successive stages (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975).

The more market knowledge the firm acquires through its own experience, the less internationalization is perceived as risky, and the higher becomes the propensity to invest abroad (Johanson & Vahlne, 1977). Carlson (1966, p. 15) argue that "once the firm has passed the cultural barriers and had its first experience of foreign operations, it is willing to conquer one market after another."

Therefore, to expand abroad through exports in the US, Quebec based firms have to overcome some barriers including language differences. Once Quebec MNEs develop a competitive advantage over other firms from the benefits gained with the export and outward investment with the US, they will capitalize on their experience and venture further abroad in markets with higher distances.

3.1.3.Innovative Clusters

Clusters can stimulate innovation and outward investment and therefore affect the intent of internationalization of firms. Porter (1998, p. 78) defined clusters as:

> "(…) Geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and companies in industries related to skills, technologies, or common inputs. Finally, many clusters include governmental and other institutions--such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations- that provide specialized training, education, information, research, and technical support".

3.1.3.1. Overview of Canada's Cluster Landscape

Spencer (2014)'s study provides an overview of the industrial cluster landscape in Canada and identifies specific areas of strength of each province in the national economy. There is a difficulty in identifying when and where clusters occur.

Spencer (2014)'s methodology is broad and inclusive. It is based on geographic patterns colocation of employment in specific industries (4-digit NAICS) using the 2001 Census of Population and the 2011 National Household Survey (Spencer, 2014).

Clusters are identified if they meet three criteria: (i) *scale:* the sum of local employment must be greater than 1,000, (ii) *specialization:* the percent share of regional jobs in industries must be greater than the percent share of these sectors (location quotient > 1), (iii) *scope:* the location quotient at least half of the component industries must be greater than 1 (Spencer, 2014).

Spencer (2014) declares that resource clusters including agriculture, forestry, mining and oil & gas tend to be in smaller urban areas that support vast surrounding hinterlands. He also explains that manufacturing clusters tend to be located in mid-sized city-regions in Southern Ontario and Quebec. These clusters are often linked with one another and with similar ones in the United States (Spencer, 2014). He reports that the majority of service clusters are located in large urban areas with both critical anchor firms and high numbers of small companies and self-employment.

Atlantic Canada

Spencer (2014) observes a lack of clusters in the Atlantic Provinces. He explains that this is due to the lack of larger urban areas. The region does not have a strong tradition of manufacturing due to its lack of proximity to markets and supply chains (Spencer, 2014). The researcher acknowledges that there are still resource based clusters which account for 7 out of the 18 clusters on the east coast.

Prairies

According to Spencer (2014)'s observations, resources dominate the economic landscape of Manitoba, Saskatchewan, and Alberta and account for 19 of the 41 clusters of the Prairies. He estimates that there are 11 oil & gas clusters of which ten are in Alberta.

He observes that other clusters tend to be co-located with oil & gas, such as construction clusters (9 in Alberta and 1 in Saskatchewan) and steel clusters (2 in Calgary and Edmonton). He states that Winnipeg has a growing life sciences and aerospace clusters. Also, there are four growing service clusters in the Prairie provinces with two higher education clusters in Edmonton and Saskatoon (Spencer, 2014).

British Columbia

Resource and service clusters characterize British Columbia. Spencer (2014) informs there are 11 forestry & wood clusters. He also reports that British Columbia has four maritime clusters, two agriculture, two mining and one oil & gas. Spencer (2014) reveals that the construction cluster is one of the most prominent clusters of the province.

Unlike Ontario and Quebec, . Spencer (2014) remarks that there are only two manufacturing clusters in food & beverage (Vancouver and Abottsford-Mission) and life sciences (Vancouver). The author notes some emerging technologies such as fuel cells and environmental technologies. He reports that British Columbia also has higher education clusters in Victoria and Nanaimo with high growth rates. Additionally, he points out that Vancouver hosts all five service clusters.

Ontario

Ontario has the highest numbers clusters with 86 in total, 16 in resources, 49 in manufacturing, 14 in services and 7 in construction and logistics (Spencer, 2014). According to Spencer (2014)'s study, mining makes up the majority of the resource clusters and manufacturing is an essential part of the Ontario economy, in particular, auto manufacturing.

3.1.3.2. Quebec's Competitive Clusters

Quebec is one of the three leading provinces with the highest number of clusters (Spencer, 2014). Quebec is the only province to report at least one cluster of each manufacturing type (Spencer, 2014). Quebec distinguishes itself from the rest of the regions with the diversified basis of its clusters. Since clusters tend to communicate and cooperate across borders (Spencer, 2014), more opportunities of outward investment arise (Porter, 2000). With a diversified cluster base, Quebec corporations have a higher probability of expanding abroad in comparison to multinationals from other provinces.

The Institute for Competitiveness & Prosperity (2016) develop a location quotient of the Canadian clusters[7]. According to this institute, Quebec has a higher concentration compared to the other provinces in the following clusters: Aerospace Vehicles and Defense; Biopharmaceutical and Electric Power Generation and Transmission.

[7]. They determine the location quotient through a ratio measure of concentration for a cluster in a location relative to the national average.

Additionally, Spencer (2014) identifies aluminum and aerospace as specifically developed specializations that Quebec possess which are limited in the rest of the provinces. These industries are capital intensive and tend to internationalize more.

Similarly, according to the Montreal Metropolitan Community (2017), Quebec has nine significant clusters, and several of the firms in the clusters are international:

- Aerospace
- Life sciences
- Information and communication technology
- Film and television
- Clean technology
- Financial services
- Logistics and transportation
- Aluminum
- Fashion

Since 2002, a significant exercise is undertaken to coordinate activities aimed at developing the mentioned sectors (Montreal Metropolitan Community, 2017). Each cluster in the region benefits from the support of a secretariat that is financed by both the Canadian and Quebec governments, the private sector, and the Montreal Metropolitan Community (Montreal Metropolitan Community, 2017). The secretariats also include firms, associations as well as research and training institutions, firms which belong to a cluster are expected to operate more efficiently by accessing information, technology, and institutions; coordinating with other firms, and comparing their performance to improve (Montreal Metropolitan Community, 2017). Thanks to additional support from numerous organization, Quebec based firms have more opportunities to develop their clusters internationally.

The province is oriented towards developing innovative and knowledge-intensive clusters. In a recent communiqué, Dominique Anglade, Minister of Economy, Science and Innovation and Minister responsible for the Digital Strategy declare:

> "Quebec firms must rely on innovation to bolster their productivity and competitiveness at the international level (Ministry of Economy Science and Innovation (Quebec), 2017a). "

The Quebec government is aware that to develop the competencies of firms, they must improve their innovative activities. As an indicator of innovation activity, Nicholson (2009) provides the business expenditure on research and development (BERD) intensity at the provincial level. He uses data from the Quebec Statistical Institute (Institut de la statistique du Québec).

Nicholson (2009) estimates that between 1991 and 2005, the BERD ratio has increased more significantly in Quebec and Ontario than in the other Canadian provinces. He also reports that in 2006, Quebec had the highest BERD ratio (nearly 1.6) as a percentage of provincial GDP. He shows that only Quebec and Ontario have levels at or near the OECD average, they account for nearly 80% of business research and development (R&D). This reflects the relatively heavy weight of manufacturing and other R&D intensive industries (e.g., pharmaceuticals and information and communications technology) (Nicholson, 2009).

By focusing on innovation, Quebec MNEs will opt for outward investment rather than other internationalization alternatives – including licensing – to protect their information advantage. Hennart (2001) argue that patents are limited since they provide only a degree of protection. He also implies that MNEs will favor internalization to transfer their innovative knowledge and avoid being cheated by other entities. The knowledge developed in Canada can be transferred at a marginal cost to other foreign markets. Quebec corporations will also need to amortize on the costs of R&D, and with a limited size market, they have no choice but to expand abroad.

3.1.3.3. Impact of Clusters

Competitive Advantage

Porter (2000) demonstrate that clusters affect competition in three ways : (a) increasing the current productivity of firms or industries, (b) increasing the capacity for innovation and productivity growth, and (c) stimulating business formation that supports innovation and expands clusters. He acknowledges the existence of a cluster ease relationships between participants but does not imply that the relationships are automatic.

Innovation

Porter (2000) explains that cluster participation offers several potential advantages in innovation compared to an isolated location. He remarks that firms can more rapidly perceive new buyer needs since they benefit from the concentration firms with buyer knowledge and relationships, the concentration of specialized information-generating entities and buyer sophistication.

Accordingly, participation in clusters also offers advantages in perceiving new technological possibilities. Porter (2000) declares that entities which are exposed to richer insights into evolving technology, component and machinery availability service concepts through site visits and direct observation from firms and universities. He notes that besides perceiving, firms can act upon the opportunities of innovation rapidly. He also mentions that local suppliers and partner usually get involved in the innovation process, so the inputs supplied meet organization's requirements.

Porter (2000) reveals that competitive pressure and constant comparison are what reinforces the advantages of innovation. He describes that the similarity of circumstances (e.g., labor costs, utility costs) combined with the presence of rivals, pushes firms to achieve creative ways to distinguish themselves. However, he concludes that firms in the cluster need to stay ahead in the competition since several companies progress much faster than those based in isolated locations.

Outward Investment

Clusters can stimulate outward direct investment. In a previous study, Porter (1998) argues that advantages gained through clusters can be the foundations of successful internationalization. Cook, Pandit, Lööf, and Johansson (2012) also find a positive relationship between clusters and outward foreign direct investment.

They determine that specific clusters with experienced firms and stronger resources prosper more than the rest. They concluded that clusters within major global cities and nodes engage in more outward investment activities. Moreover, the study affirms that localization and urbanization economies promote outward FDI, in particular, within-industries. Overall, the research confirms Dunning (1998)'s call for the focus on the location pillar of the OLI paradigm.

Advantages not only attract foreign direct investment but from the same advantages, direct investment abroad can flourish (Dunning, 1998). Based on this rationale, having clusters encourage Quebec MNEs to promote outward direct investment activities.

To summarize, Quebec MNEs have several reasons to opt for more outward investment. Most of the other Canadian provinces tend to have a larger market size. Quebec based firms have used their learning experience with the United States, developed and sustained a competitive advantage that they would later use to conquer other foreign markets. Additionally, most firms based in other Canadian provinces do not have as diversified clusters as firms in Quebec's' clusters. Based on this rationale, we derive the following hypothesis:

Hypothesis1: Quebec-based parent firms have more subsidiaries abroad than non-Quebec based parent firms.

3.2. Ties with French-Speaking Countries

Quebec MNEs have a greater tendency to invest in French-speaking countries than their counterparts from other provinces.

3.2.1. Ties with France and Political Link

In the past, King Henry IV of France established the first French colonization companies in New France (modern Canada) (University of Ottawa). Quebec plays a unique role since the modern province occupied much of the land where French settlers founded the colony of Canada (University of Ottawa). During the 17th century, the French colonization was first limited to the valleys of the St-Lawrence and its tributaries (University of Ottawa). These historical ties favor the establishment of modern economic ties between France and the province of Quebec.

Today, the stock of Canadian direct investment in France reaches $ 4.7 billion (Canadian Trade Commissioner, 2016), accounting for 0.6% of the total Canadian outward investment and 2.7% in Europe. They also estimate that more than 220 parent Canadian companies are implemented in France, representing more than 20,300 employees.

The Quebec government has the objective of cementing ties with France. Molinaro (2002) argues that the ties take the form of institutionalized exchanges and cooperative arrangements. France has had 'direct and special relations' with the province since the 1960s based on historical, cultural and economic ties (Ministry of Europe and Foreign Affairs (France), 2017).

For instance, since 1977, there is a tradition of Alternating Meeting in each region between the premier minister of Quebec and the prime minister of France (Government of Quebec, 2016). In 2016, at the 19th Alternate Meeting, Philippe Couillard, the premier of Quebec declared that:

> "Quebec and France are natural partners. For more than 50 years, the Franco-Quebec relationship has been based on a powerful foundation that is being renewed and deepened (Government of Quebec, 2016)[8]."

The meetings provide an opportunity to set out objectives and sign bilateral agreements and joint declarations (Government of Quebec, 2016).

Molinaro (2002) affirms that France has concluded more ententes and accords with Quebec than any other sovereign state. The objective is to support Quebec's efforts to secure the French language and culture within Quebec and "overcome its sense of isolation within North America" (Molinaro, 2002, p. 39). Thanks to this proximity Quebec-based firms have more opportunities than firms based in other provinces to establish strong links with France and leading to more outward foreign direct investment.

3.2.2. Exports and Successful Firms

According to the Canadian Trade Commissioner (2016), exports of Canadian goods to France exceeds C$ 3 billion in 2015. From the Government of Canada (2013)'s report on the economic relations between Canada and France, one can note the several successful Quebec firms implemented in France such as: Bombardier, The Caisse de dépôt et placement du Québec, Cascades, CGI, SNC Lavalin, Tembec, Transat[9].

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[8] Translated by the author. Original quote: "Le Québec et la France sont des partenaires naturels. Depuis plus de 50 ans, la relation franco-québécoise repose sur une puissante assise qui se renouvelle et s'approfondit (Government of Quebec, 2016)."

[9] *Bombardier*, the second-largest rail equipment supplier with its subsidiary ANF-Industrie);
The Caisse de dépôt et placement du Québec represents the largest public fund manager in Canada, is active in real estate (SITQ subsidiary), private equity funds and finance (Martin Maurel Bank);
Cascades is the first producer of cardboard;
CGI's computer engineering services company gained power in France and around the world through its merger with Britain's Logica;
SNC-Lavalin, a Quebec engineering and construction group;
Tembec, a leading producer of specialty celluloses;
The travel group *Transat* (Look Voyages, Brokair, Air Transat Vacations, Benett, Club Voyages) ranked fifth in the sector.

3.2.3.Involvement in La Francophonie

Quebec is also interested in nurturing its relationship with other French-speaking countries. This is following the objectives of Ministry of International Relations (Quebec) (2017a). The delegate for Francophone and Multilateral Affairs aims to maintain and develop ties with diplomatic representatives of the member countries of the International Organization of La Francophonie (commonly called the Francophonie).

The International Organization of La Francophonie (2017) (IOF) was created in March 20th, 1970 while the term Francophonie appeared around 1880, when a French geographer, Onesime Reclus, use it to designate all people and countries speaking French.

The interest of Quebec can be explained by the large size of the French-speaking market. Indeed, the International Organization of La Francophonie (2017) points out that French is the 5th most widely spoken language on the planet and the only one, together with English, to be spoken on all five continents. The organization also considers French as the 2nd business language of the European Area and the 3rd global business language in the world.

The International Organization of La Francophonie (2017) mission is to embody the solidarity between 84 member states and governments (58 members and 26 observers), which represents over a third of the United Nation's member states and account for a population of 900 million people, including 274 million French speakers.

The International Organization of La Francophonie (2017) conclude 33 cooperation agreements with international and regional organizations and establish the permanent dialogue between the major international linguistic zones (the English, Arabic, Spanish, and Portuguese-speaking zones). Since November 30, 2014, Michaëlle Jean, a Quebecer is the Secretary-General of La Francophonie (International Organization of La Francophonie, 2017).

According to the International Organization of La Francophonie (2017), the Government of Quebec is one of the five largest funders of the Organization and is considered one of the most active members of the IOF since the government is involved in all instances (summit, conferences, and commissions). In 2012, the Government of Quebec supported the Francophonie group with $ 14 million (International Organization of La Francophonie, 2017).

Quebec is actively involved in the construction of a Francophonie based on the sharing of the French language and universal values, making the recognition and promotion of the cultural diversity of Francophone countries a factor of dialogue and peace in the service of development (International Organization of La Francophonie, 2017).Sharing formal (or informal ties) promote outward investment (Makino & Tsang, 2011). Quebec and French-speaking countries share a better cultural understand and common networks, an advantage that other English-speaking provinces lack.

3.2.4.Importance of French in Quebec

French is recognized as an official language at both the national (Canada) and provincial level (Quebec) (The Canadian Encyclopedia & Mougeon, 2006). At the country level, French is recognized in Canada's Constitution through the Canadian Charter of Rights and Freedoms, and the Official Languages Act guarantee the equality of use and status of French and English in the Canadian society (The Canadian Encyclopedia & Mougeon, 2006). The Charter of the French Language recognizes French as an official language of the Quebec province.

3.2.4.1. Charter of the French Language

During the Quiet Revolution of the 1960s, Quebec's separatists gain strength, and call for an independent nation but are defeated in two referenda (Superior Council of the French Language). The province imposes stringent laws favoring the French language; several Anglophones individuals and corporations left (Superior Council of the French Language).

Besides the fact that majority of French-speaking people are in the Quebec province (The Canadian Encyclopedia & Mougeon, 2006), one of the symbols of the French language is the Charter of the French Language, also known as Law 101. In 1977, the Charter defined French as the official language of Quebec (The Canadian Encyclopedia & Mougeon, 2006). This law allows Francophones to communicate in this language at work, particularly in economic sectors where English dominates French. It also requires a public display and obliges the schooling of immigrants and their children in French (Legis Quebec).

There are some exceptions to the rules of the commercial products, signs, and advertising. For instance, either product destined exclusively for export or multinational corporations that sign an agreement with the Office Québécois de la langue française (OQLF) (Legis Quebec). However, the right of a worker to work in French will always apply (Legis Quebec).

3.2.5. Impact of Language on Outward Investment

Differences in languages increase the liability of foreignness raising the costs of foreign direct investment. A large language distance is associated with increased costs of communication and the risk of miscommunication or misinterpretation (Konara & Wei, 2014). Likewise, Oh et al. (2011) explain that new languages require time to learn; the more difficult it is to adopt the target language, the higher the transaction cost involved.

Behavior scholars argue that distance raises uncertainty and since managers are risk-averse, this is not desirable (Hutzschenreuter et al., 2016). Since language differences can raise uncertainty of international transactions (Dow & Karunaratna, 2006), the likelihood of investing in countries with a similar language raises.

Knowledge and information flow within the MNE and across borders are vital for an MNE success (Konara & Wei, 2014). Goldberg et al. (2005) and Konara and Wei (2014) confirm that effective language interactions enable MNEs to acquire information pre-investment and post-investment. They argue that MNEs can distinguish between ‘good’ and ‘bad’ investment and realign subsequent strategies of investment, which affects the firm’s decision of direct investment and location. They also infer that language barriers and differences can act an impediment since language determines who has the information, whether, how it is articulated and, if it is shared and in what form.

Konara and Wei (2014) describe that to accurately encode a meaningful message, the sender and the receiver need to understand the language. The researchers insist large language differences can lead to a distortion of the original message or even blockage of knowledge and information flows between and within MNEs. Similarly, Goldberg et al. (2005) affirm without traveling or learning from somebody who does, information about specific investments could be difficult to verify.

Konara and Wei (2014) consider that adopting a common language gives MNEs confidence to undertake more FDI in a host country. They attest that MNEs tend to expand in regions within their language groups. Selmier and Oh (2013) describe that MNEs of a country-pair engaged in investment must negotiate in the investor's language, the host-country language or a common language. Whenever the two languages are similar, there is a little linguistic impediment to investment as transaction costs decline (Konara & Wei, 2014). Besides, in developing their internationalization strategies, MNEs consider language skills of their employees and usually adopt a common corporate language (Konara & Wei, 2014).

Makino and Tsang (2011) find that historical ties promote outward investment. They empirically determine the positive relationship by using Vietnam as a case. They realize that Vietnam has substantial ties with the Group of La Francophonie. Additionally, they conclude that countries which have historical ties, a similar culture and ethnic origins tend to adopt similar administrative systems which favor FDI.

Based on the theoretical benefits of investing in a country with a common language including lower costs of investment, higher levels of trust, less uncertainty about the 'right' information, we posit the following hypothesis:

Hypothesis 2. Quebec-based parent firms have more subsidiaries in French-speaking countries than non-Quebec based parent firms.

3.3. Quebec and Tax Incentives

While Quebec has one of the highest provincial net business tax burden ratio for each year between 2008 to 2011(Conference Board of Canada, 2016), the Quebec government has started making reductions on tax rates for businesses, and now the province has one of the most competitive rates in the country. Quebec's provincial corporate rate decreased from 11.9% to 11.8% on January 1st, 2017, and will continue to decrease every year until it reaches 11.5% on January 1st, 2020 (PricewaterhouseCoopers, 2017). For more details, see Table 2.

Second, regarding sales taxes, Quebec corporations have a lower burden than almost all other provinces (Conference Board of Canada, 2016). The province has also comparatively high levels of business subsidies (Conference Board of Canada, 2016). For instance, there are numerous tax credit benefits Quebec based corporations receive: tax holiday for large investment projects; investment tax credit; tax credit for the production of multimedia titles (including benefits for the video game industry); tax credit for scientific research and experimental development and the tax credit for the development of e-business and tax credit for film production services (Revenu Quebec, 2015).

The fact that Quebec based corporations do not face the highest corporate taxes across the country, have advantageous subsidiaries and reduced operating costs thanks to a lower sales tax confirm that Quebec-based firms have fewer incentives to establish subsidiaries in tax havens than their counterparts based in other provinces with higher corporate taxes and less provincial support.

Hypothesis 3. Quebec-based parent firms have fewer subsidiaries in tax havens than non-Quebec based parent firms.

4. SAMPLE DESCRIPTION

This chapter explains how the data is generated to test whether Quebec parent firms' outward investment regarding extent and location differs from the investment abroad of the parent firms based in the other provinces. The first part starts with a description of the data source named ORBIS. The second part specifies the sample description. The third part is the sample analysis of the global ultimate owners and their subsidiaries. The last part of this chapter defines the regression model and the variables selected.

The purpose of the study is to evaluate the outward investment process of Quebec parent-firms in contrast to the firms in the other Canadian provinces by testing the following three hypotheses:

1. **Quebec-based parent firms have more subsidiaries abroad than non-Quebec based parent firms.**
2. **Quebec-based parent firms have more subsidiaries in French-speaking countries than non-Quebec based parent firms.**
3. **Quebec-based parent firms have fewer subsidiaries in tax havens than non-Quebec based parent firms.**

4.1. Data Source: ORBIS

For the present research, I employ firm-level information relying on the database ORBIS. Bureau Van Dijk (BvD) is an electronic publishing firm which provides ORBIS. ORBIS is a commercial database that contains information on 220 million private companies in more than 100 countries (Bureau Van Dijk, 2017) and exhibits some distinctive features (Gattai & Sali, 2016).

Ribeiro et al. (2010) describe the database as a collection of business records where we can replicate the data. ORBIS contains the sections ORBIS Financials with firm financial information and ORBIS Ownership with ownership information (Gattai & Sali, 2016). Auditors and Advisors, Board Members, Patents. Etc. are other sections in ORBIS with valuable information (Gattai & Sali, 2016).

Unlike other administrative firm-level databases, ORBIS covers different firm sizes, listed and unlisted companies, all industries, all continents; and unlike census-type firm-level databases, ORBIS reports financial variables and a large set of information regarding the firm's ownership structure, including lists of shareholders and subsidiaries (Gattai & Sali, 2016).

BvD collects public data from national administrative sources and issues them in a standard format to allow for cross-company comparisons (Gattai & Sali, 2016). In fact, the company collects relevant database(s) in each country from 40 different providers using both national and local public institutions data, Chambers of Commerce and regional experts (Ribeiro, Menghinello, De Backer, & OECD Statistics Directorate, 2010).

The database considers accuracy and quality insurance to increase its credibility (Ribeiro et al., 2010). The strength of the ORBIS database comes from the fact that it is one of the rare databases that have both financial and ownership information on public and private firms. Following the assessment by the Organization for Economic Co-operation and Development (OECD) of ORBIS against numerous quality dimensions, and starting with relevance, the database responds to a need for international business micro-data (Ribeiro et al., 2010). Ribeiro et al. (2010) affirm that the consultancy firms are mostly transparent, and one can easily track the variable operations and classifications. Several studies and organizations also use this database in different fields including the United Nations General Assembly in their United Nations Conference on Trade and Development (2016) report as well as empirical studies on FDI (such as, (Kalemli-Ozcan, Sorensen, Villegas-Sanchez, Volosovych, & Yesiltas, 2015; Ribeiro et al., 2010).

4.2. Sample Presentation

Starting with the criteria of selection, I consider only registered and publicly listed firms[10] located in Canada to ensure the validity of the data. Additionally, I extract ownership, industrial and financial information of parent's firms complemented with subsidiaries information for each parent firm.

An ultimate owner represents an entity that controls either directly or indirectly a company. There exist different thresholds that can be studied. The global ultimate owner (GUO) is the most critical entity within the corporate family tree. If the shareholder is independent, meaning if no shareholder owns 50% of the firm equity or more, I design it as the GUO. If it is dependent, one repeats the same procedure until an independent GUO is identified. Therefore, I import the ownership information of parent firms and their subsidiaries with an initial sample of 2006 GUOs for the year 2015. Similar to studies (e.g., (Ribeiro et al., 2010); Shleifer, La Porta, and Lopez-De-Silanes (1999)) that use or present the ORBIS database, I have opted for the 50% threshold with the closest quoted company in the path leading to ultimate owners.

This study considers the maximum number of subsidiaries allowed by ORBIS by unfolding ten levels of subsidiaries.

I import several financial variables, including: *turnover, net income, total assets, profit margin, number of employees, current ratio, return on equity, fixed assets, intangible assets, long-term debt, research and development (R&D), number of patents, report basis and filling report* for the year 2015 in the US currency.

Afterwards, I complement this information with a 5-yearly average from 2011 to 2015 to have a more accurate picture of the financial performance of Canadian parent firms.

Additionally, I extract the four-digit Standard Industrial Classification (SIC) codes of the sector of parent firms and shorten it to the first two digits. Based on ORBIS detailed listing of the industries, I classify them using the first two-digits as a threshold with digits less than 15 as the primary sector. Digits that are between 15 and 40 represents the secondary industry and above 40

[10] I select both active and unknown firms. The unknown status means that Bureau van Dijk is not able to determine whether the firms are active, bankrupt dissolved or inactive.

characterizes the tertiary sector. I complement information on subsidiaries with continents and language spoken, by identifying French-speaking countries using the World Factbook of the Central Intelligence Agency (2016)[11] (CIA), I only consider countries where French is one of the official languages.

To identify a list of tax haven countries, I first search for the information by the Organization for Economic Co-operation and Development (OECD)[12].

In 2000, the OECD provided a list of un-cooperative tax havens[13], however by 2009, their Committee of Fiscal Affairs remove all countries and jurisdictions affirming that all jurisdictions[14] abide by the OECD standards of transparency and effective exchange of information (Organisation for Economic Co-operation and Development, 2017b). Thus, no jurisdiction or country is currently listed by the OECD as an 'unco-operative' tax haven. Therefore, the selection of tax haven countries for this research is based on a combination of the list of tax havens identified by Akamah, Hope, and Thomas (2016) and Dharmapala and Hines (2009). The list is in accordance with lists provided by the Organisation for Economic Co-operation and Development (OECD); International Monetary Fund (IMF)[15] and Tax Justice Network[16] (Raposo & Mourão, 2013).

The selected tax havens countries, identified by ORBIS, are then merged with the ownership and subsidiary information of the database.

[11] The CIA is a civilian foreign intelligence service of the United States, tasked with gathering and analyzing national security information worldwide, primarily through the use of human intelligence (Central Intelligence Agency)

[12] The OECD is an intergovernmental organization to stimulate economic progress and world trade (Organisation for Economic Co-operation and Development, 2017a). The mandate of the OECD covers economic, environmental and social issues. The objective is to work through consensus to develop policy recommendations to encourage policy reform in member countries (Organisation for Economic Co-operation and Development, 2017a). One of the objectives of the OECD is to secure the integrity of tax systems by addressing the issues raised by practices that distort the location of capital and services and unfairly erode the tax systems of other countries (Organisation for Economic Co-operation and Development, 2000b).

[13] For more details. See Organisation for Economic Co-operation and Development (2000a)

[14] Including Andorra, The Principality of Liechtenstein, Liberia, The Principality of Monaco, The Republic of the Marshall Islands, The Republic of Nauru and The Republic of Vanuatu

[15] The IMF is an organization of more than hundreds of countries that work to "foster global monetary cooperation, secure financial stability, facilitate international trade, promote sustainable economic growth worldwide (International Monetary Fund)

[16] Tax Justice Network is an advocacy group which consists of a collation of activities and researchers with a shared concern about tax havens, tax avoidance and tax competition (Tax Justice Network)

After omitting duplicates and missing variables, I have a final sample of 953 global ultimate owners that collectively own 40,240 subsidiaries. Data analysis statistical tests and graphs have been performed using STATA.

The following tables summarize the distribution of Global Ultimate Owners (GUOs). The first two tables summarize the distribution of GUOs regionally. The tables represent the repartition of GUOs of their subsidiaries in foreign countries; in French-speaking countries and tax havens.

Table 4. GUO Distribution by Province *(Quebec vs non-Quebec)*

Global Ultimate Owner	Frequency	Percentage	Cumulative Percentage
Quebec	860	90.24%	90.24%
Non-Quebec	93	9.76%	100.00%

Table 4 shows that Quebec has 9.76% of the parent-firms of our sample. Other Canadian provinces own the remaining 90.24% of the global ultimate owners.

Table 5. GUO Distribution by Province *(Detailed)*

Province	Frequency	Percentage	Cumulative Percentage
Alberta	174	18.26%	18.26%
British Columbia	330	34.63%	52.89%
Manitoba	8	0.84%	53.73%
New Brunswick	4	0.42%	54.14%
Newfoundland and Labrador	3	0.31%	54.46%
Nova Scotia	13	1.36%	55.82%
Ontario	321	33.68%	89.51%
Quebec	93	9.76%	99.27%
Saskatchewan	5	0.52%	99.79%
Yukon	2	0.21%	100%

Table 5 includes nine provinces (*Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Quebec, and Saskatchewan*) and one territory (*Yukon*). ORBIS does not identify information on the parent-corporations of the province of Prince Edward Island and the two territories Northwest Territories and Nunavut.

British Columbia and Ontario have more than the third of the GUOs of the sample (34.63% and 33.68% respectively). Alberta own 18.26% of the GUOs. Nova Scotia own only 1.36%, and the rest of the provinces have less than 1% of the GUOs of the sample

Table 6. GUO Distribution of Foreign Subsidiaries

Global Ultimate Owner	Domestic Subsidiaries	Foreign Subsidiaries	Total
Non-Quebec based GUO	9026	23650	32676
	27.62%	**72.38%**	**100.00%**
Quebec based GUO	2348	5216	7564
	31.04%	**68.96%**	**100.00%**
Total	11374	28866	40240
	28.27%	**71.73%**	**100.00%**

Table 6 shows that Quebec based GUOs locate 68.96% of their subsidiaries in foreign countries whereas non-Quebec based parent firms establish 72.38% of their subsidiaries abroad. For the domestic market, 31.04% of Quebec-based firms and 27.62% of non-Quebec based parent firms have their subsidiaries in Canada.

Table 7. GUO Distribution of French-Speaking Subsidiaries

Global Ultimate Owner	Non French-Speaking Subsidiaries	French-Speaking Subsidiaries	Total
Non-Quebec based GUO	31642	1034	32676
	96.84%	**3.16%**	**100.00%**
Quebec based GUO	6967	597	7564
	92.11%	**7.89%**	**100.00%**
Total	38609	1631	40240
	95.95%	**4.05%**	**100.00%**

It is clear from Table 7 that Quebec based GUOs locate 7.89% of their subsidiaries in French-speaking countries and the rest (92.11%) in other countries. Similarly, non-Quebec based GUOs locate the majority of their subsidiaries (96.84%) in non-French speaking countries and only 3.16% of their subsidiaries in French-speaking countries.

Table 8. GUO Distribution of Tax Haven Subsidiaries

Global Ultimate Owner	Non-Tax Haven Subsidiaries	Tax Haven Subsidiaries	Total
Non-Quebec based GUO	29837	2839	32676
	91.31%	**8.69%**	**100.00%**
Quebec based GUO	7179	385	7564
	94.91%	**5.09%**	**100.00%**
Total	37016	3224	40240
	91.99%	**8.01%**	**100.00%**

In Table 8, Quebec based GUOs seem to locate only 5.09% of their subsidiaries in tax havens. Likewise, Non-Quebec based GUOs with a slightly higher rate establish 8.69% of their subsidiaries in tax havens. See Table 2 for more details.

4.3.Sample Analysis

The objective of this section is to understand the main differences between Quebec based GUOs and non-Quebec based GUOs. The first part includes the mean and median of subsidiaries for each GUO; the second part describes the financial performance of the GUOs the third part contains the sectoral distribution of GUOs. The last part covers the geographical distribution of subsidiaries.

4.3.1.Mean and Median of Subsidiaries by GUO

Table 9 and Table 10 contain respectively the mean and the median of the subsidiaries for each global ultimate owner. The focus is on the median of the variables as it tends to be more robust for outliers.

Table 9. Mean Subsidiaries per GUO

Mean Variable	Non-Quebec based GUO	Quebec based GUO	Total
Total subsidiaries	**25.61**	**67.29**	**29.68**
	(860)	(93)	(953)
Foreign subsidiaries	**17.75**	**45.96**	**20.51**
	(860)	(93)	(953)
Domestic subsidiaries	**7.55**	**19.56**	**8.72**
	(860)	(93)	(953)
French-speaking subsidiaries	**0.82**	**5.42**	**1.27**
	(860)	(93)	(953)
Tax haven subsidiaries	**1.75**	**3.65**	**1.93**
	(860)	(93)	(953)

Notes : The numbers inside the parentheses are the number of GUOs.

Table 10. Median Subsidiaries per GUO

Median Variable	Non-Quebec based GUO	Quebec based GUO	Total
Total subsidiaries	**5**	**10**	**5**
	(860)	(93)	(953)
Foreign subsidiaries	**2**	**3**	**2**
	(860)	(93)	(953)
Domestic subsidiaries	**2**	**4**	**2**
	(860)	(93)	(953)
French-speaking subsidiaries	**0**	**0**	**0**
	(860)	(93)	(953)
Tax haven subsidiaries	**0**	**0**	**0**
	(860)	(93)	(953)

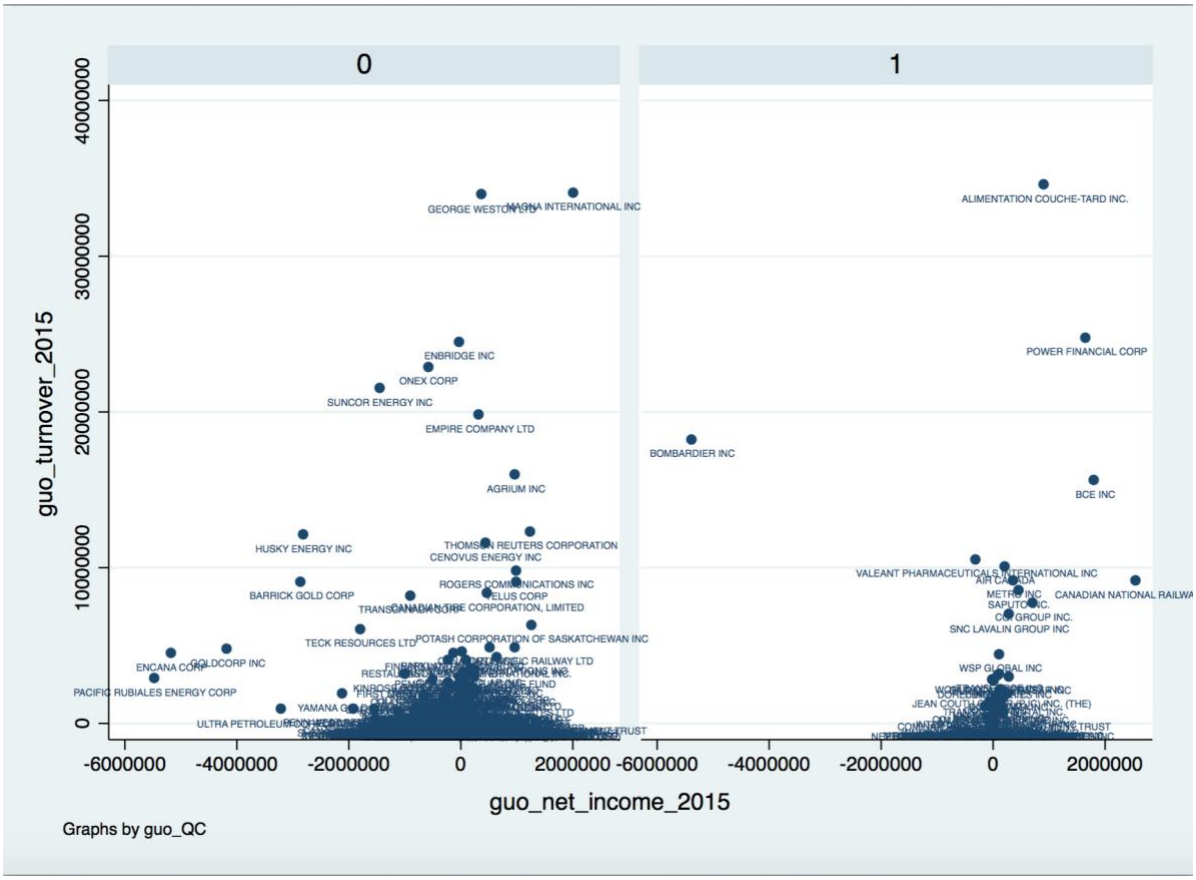
Notes : The numbers inside the parentheses are the number of GUOs.

Quebec based GUOs have on average a higher number of total subsidiaries. Using the median, there are on average ten subsidiaries for Quebec based GUOs against five subsidiaries for non-Quebec based GUOs. The trend is similar in subsidiaries in foreign countries. While non-Quebec based GUOs have on average two subsidiaries, Quebec based GUOs have on average three subsidiaries outside of Canada. With zero as a median, both Quebec and non-Quebec based GUOs establish more subsidiaries in other locations than in French-speaking countries or tax havens.

4.3.2. Financial Performance

4.3.2.1. Performance in 2015

Figure 4. Financial Performance of GUOs in 2015

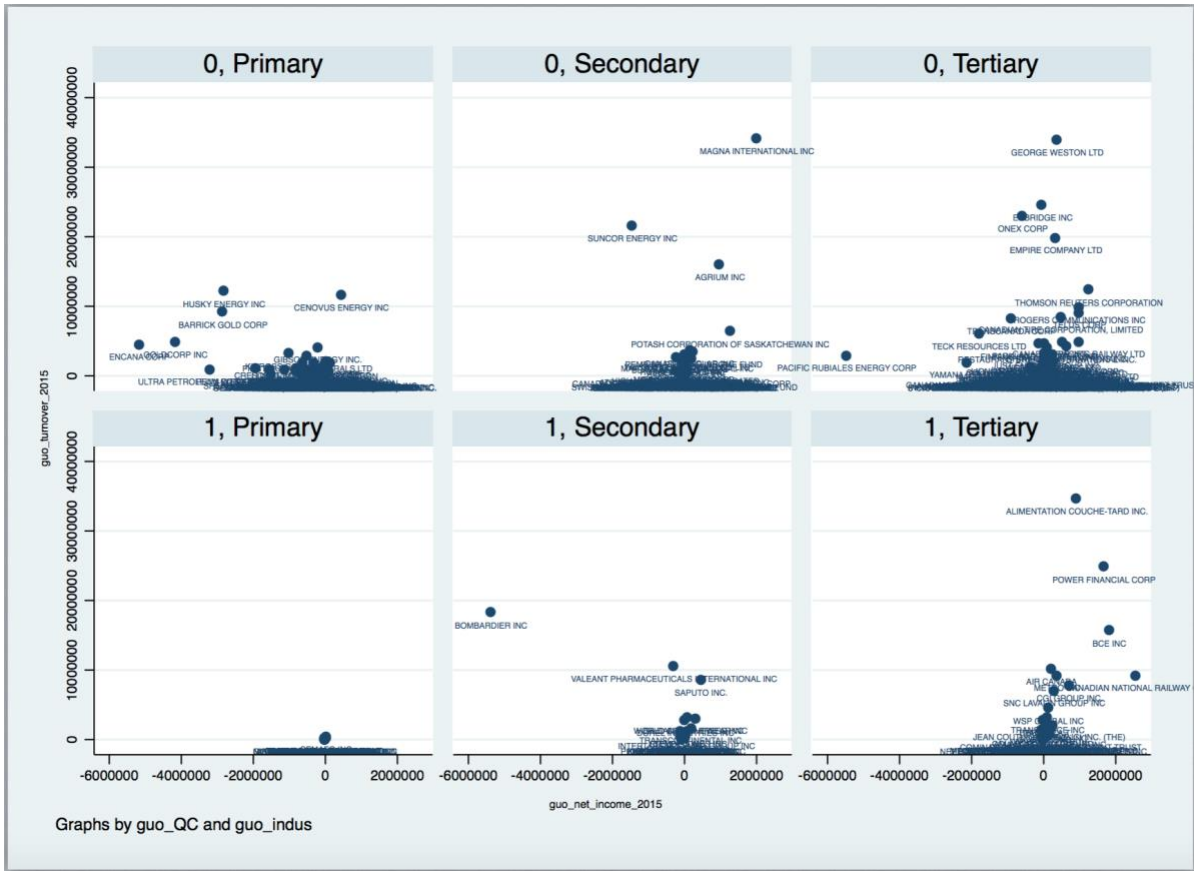


Notes : Quebec based GUOs are assigned the value of 1 and non-Quebec based GUOs are assigned the value of 0. The variables selected are net income and turnover for the year 2015.

I first initially take only the financial variables for the year 2015. The financial variables in Figure 4 are net income and turnover. In 2015, nearly half of the GUOs established in Quebec or the other Canadian provinces tend to have a negative income. On the other hand, Alimentation Couche-Tard, Power Financial Corporation and BCE Inc (formerly Bell Canada Enterprises) are examples of Quebec based GUOs that have made profits. From the side of profitable non-Quebec based GUOs, there is Magna International, George Weston, and Enbridge. Unlike the next scatterplot, Figure 4 does not take into consideration sectoral effects on performance.

4.3.2.2. Performance per Sector in 2015

Figure 5. Financial Performance of GUOs by sector in 2015



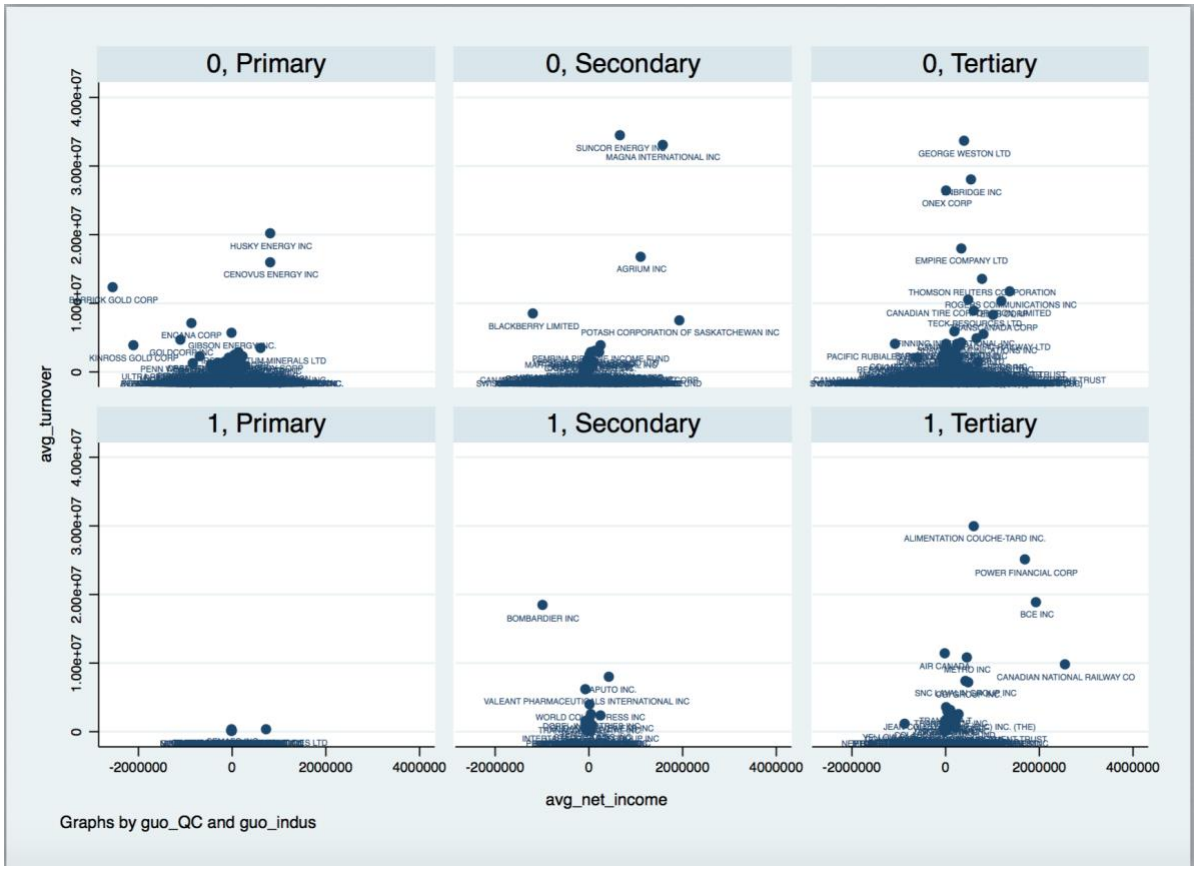
Notes : Quebec based GUOs are assigned the value of 1 and non-Quebec based GUOs are assigned the value of 0.
The first three scatterplots are non-Quebec based GUOs in the primary, secondary and tertiary industries.
The last three scatterplots are Quebec based GUOs in the primary, secondary and tertiary industries.
The variables selected are net income and turnover for the year 2015.

Accordingly, the second step is to incorporate the sector and determine how it affects the performance of these firms. The scatterplot in Figure 5 shows that for the year 2015, non-Quebec based GUOs such as Husky Energy and Barrick Gold are negatively affected particularly in the primary sector, especially once compared to Quebec based GUOs. Conversely, the financial performance of non-Quebec based GUOs is better in the secondary sector as there are more profitable corporations such as Magna International and Suncor Energy. On the other hand, for Quebec-based parent-corporations, Bombardier is the firm with the largest losses during the year. Valeant Pharmaceuticals and Saputo seem to barely recover their expenses.

The most profitable GUOs based in Canada is within the tertiary sector for the year 2015, and they represent the most profitable corporations of the previous scatterplot in Figure 4. Alimentation Couche Tard, Power Financial and (to a certain extent) BCE are profitable corporations based in Quebec. George Weston, Enbridge, Onex Corp and Empire Company are the most profitable GUOs based on the rest of the Canadian provinces.

4.3.2.3. Performance per Sector during 2011-2015

Figure 6. Financial Performance of GUOs by sector in 2011-2015



Notes : Quebec based GUOs are assigned the value of 1 and non-Quebec based GUOs are assigned the value of 0.
The first three scatterplots are non-Quebec based GUOs in the primary, secondary and tertiary industries.
The last three scatterplots are Quebec based GUOs in the primary, secondary and tertiary industries.
The variables selected are net income and turnover for the years 2011-2015.

To determine if the performance of the firms during the year 2015 is representative of their standard performance, I have taken the average of the financial variables from 2011 to 2015. The results of Figure 6 are overall similar to the previous scatterplot. In the primary sector, Quebec based GUOs performance did not change.

Using the 5-year average, Non-Quebec based GUOs are making fewer losses compared to the results of the single year 2015, in particular, Blackberry and Potash Corporation of Saskatchewan.

In the secondary sector, non-Quebec based parent firms, Magna International along with Suncor Energy have the highest earnings whereas, in the previous scatterplot, corporations in the tertiary sector seem more profitable. The rest of the firms have a similar performance except for Blackberry that makes more losses during the 5-year average than in the single year 2015. GUOs based in Quebec have a similar performance. Bombardier is the most affected firm although it has more significant losses in 2015 than in the overall 5-year average.

There is not a noticeable change in the tertiary sector. Alimentation Couche Tard, Power Financial, and BCE based in Quebec and George Weston, Enbridge and Onex Corporation based in other provinces excluding Quebec remain the most profitable firms.

4.3.2.4. Mean and Median of Financial Variables

Table 11 and Table 12 show the mean and median financial variables for both the GUOs based in Quebec and non-Quebec.

Table 11. Mean of Financial Variables per GUO

Average	Non-Quebec based GUO	Quebec based GUO	Total
Total assets	**1313193.9**	**5532044.4**	**1724897.1**
	(860)	(93)	(953)
Turnover	**651327.5**	**2110704.1**	**793743.1**
	(860)	(93)	(953)
Net income	**11473.0**	**100765.6**	**20186.8**
	(860)	(93)	(953)
Profit margin	**-3.64**	**1.08**	**-3.11**
	(627)	(79)	(706)
Number of employees	**5469.3**	**20070.6**	**10336.4**
	(38)	(19)	(57)
Current ratio	**3.970**	**3.505**	**3.925**
	(859)	(93)	(952)
Return on equity	**-51.70**	**-15.39**	**-48.16**
	(860)	(93)	(953)
Fixed assets	**1059719.3**	**4638657.5**	**1409342.4**
	(859)	(93)	(952)
Intangible assets	**183987.2**	**967402.2**	**260922.3**
	(854)	(93)	(947)
Long term debt	**358462.9**	**849318.2**	**406515.0**
	(857)	(93)	(950)
R&D	**2646.7**	**9597.2**	**3326.4**
	(858)	(93)	(951)
Export	**.**	**.**	**.**
	(0)	(0)	(0)
Number of patents	**16.83**	**10.54**	**16.21**
	(860)	(93)	(953)

Notes : The numbers inside the parentheses are the number of GUOs.

Table 12. Median of Financial Variables per GUO

Average	Non-Quebec based GUO	Quebec based GUO	Total
Total assets	**34224.4**	**174746.0**	**40175.2**
	(860)	(93)	(953)
Turnover	**12717.6**	**106732.9**	**16682.0**
	(860)	(93)	(953)
Net income	**-1147.2**	**1425.7**	**-1073.8**
	(860)	(93)	(953)
Profit margin	**1.599**	**4.361**	**2.128**
	(627)	(79)	(706)
Number of employees	**1605.5**	**11875**	**1850**
	(38)	(19)	(57)
Current ratio	**1.998**	**1.931**	**1.982**
	(859)	(93)	(952)
Return on equity	**-15.78**	**5.921**	**-12.63**
	(860)	(93)	(953)
Fixed assets	**18440.3**	**90680.0**	**21831.9**
	(859)	(93)	(952)
Intangible assets	**21.88**	**12517.6**	**129.2**
	(854)	(93)	(947)
Long term debt	**702.6**	**8837.7**	**983.8**
	(857)	(93)	(950)
R&D	**0**	**0**	**0**
	(858)	(93)	(951)
Export			
	(0)	(0)	(0)
Number of patents	**0**	**0**	**0**
	(860)	(93)	(953)

Notes : The numbers inside the parentheses are the number of GUOs.

Regarding business value, on average Quebec based GUOs have a higher number of total assets and fixed assets. Additionally, their turnover median is nearly ten times higher than the median turnover of non-Quebec firms, meaning they can quickly convert their receivables and sell their inventory if needed. Thus, Quebec based GUOs have higher financial resources to deploy in internationalization.

The median profit margin of non-Quebec based GUOs implies that they are facing more difficulties converting their sales into actual profits compared to Quebec based GUOs. Similarly, the negative net income and return on equity indicate unprofitability. Quebec based GUOs tend to have long-term loans compared to their counterparts based in other provinces. Still, the median current ratio suggests that they can pay off their obligations if they are due, on average, with a higher probability than their counterparts established in other provinces.

Quebec based GUOs have a higher number of intangible assets which mean they have stronger brand recognition and goodwill and a valuable corporate intellectual property.

Because of data limitations from the ORBIS database, I cannot comment on the research and development (R&D) expenses; export or number of patents.

4.3.3. Sectoral Distribution

Table 13. GUO Sectoral Distribution

Industry	Non-Quebec based GUO	Quebec based GUO	Total
Primary	403	15	418
	46.86%	**16.13%**	**43.86%**
Secondary	150	29	179
	17.44%	**31.18%**	**18.78%**
Tertiary	307	49	356
	35.70%	**52.69%**	**37.36%**
Total	860	93	953
	100.00%	**100.00%**	**100.00%**

Table 13 above describes the industrial composition of the sample. The sectoral pattern of the Quebec-based corporation differs from the pattern of the non-Quebec based corporations. The industrial repartition for non-Quebec based GUOs is as follow: i) primary sector (46.86%); ii) tertiary sector (35.70%); iii) secondary sector (17.44%) while the distribution for Quebec based GUOs is: i) tertiary sector (52.69%); ii) secondary (31.18%), iii) primary (16.13%).

4.3.4. Geographical Distribution of Subsidiaries

4.3.4.1. Distribution of Subsidiaries by Region

The first section analyzes the averages, the financial and sectoral distribution of global ultimate owners. The number of the sample changes – from 953 GUOs to 40,240 subsidiaries – as the focus shift to the geographical and sectoral distribution of subsidiaries.

Table 14. Regional Distribution of Subsidiaries

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Africa	926	129	1055
	2.83%	**1.71%**	**2.62%**
Canada	9026	2348	11374%
	27.62%	**31.04%**	**28.27%**
Eastern Europe	242	65	307
	0.74%	**0.86%**	**0.76%**
Far East	2940	299	2789
	7.62%	**3.95%**	**6.93%**
Middle East	245	72	317
	0.75%	**0.95%**	**0.79%**
USA	9507	2105	11612
	29.09%	**27.83%**	**28.86%**
Oceania	1244	231	1475
	3.81%	**3.05%**	**3.67%**
South & Central America	3652	446	4098
	11.18%	**5.90%**	**10.18%**
Western Europe	5344	1869	7213
	16.35%	**24.71%**	**17.92%**
Total	32676	7564	40240
	100.00%	**100.00%**	**100.00%**

The division of the regions is similar to the one of the divisions provided by the ORBIS database. The selected regions are Africa; Eastern Europe; Western Europe; Far East; Middle East; Oceania; South and Central America. For North America, I separate between the United States and Canada to distinguish between firms that stay domestically and firms that expand abroad.

Table 14 shows that there is a different internationalization process between the firms established in the different Canadian provinces. Quebec based GUOs own more subsidiaries domestically than non-Quebec based GUOs (31.04% against 27.62%). The United States is the first destination for all Canadian based GUOs with a relatively higher percentage for non-Quebec parent firms (29.09%) compared to Quebec parent firms (27.83%).

What the Canadian based GUOs mainly diverge at is the magnitude of establishing their subsidiaries across international regions. Non-Quebec based parent firms favor a more diversified approach by locating 16.35% of their subsidiaries in Western Europe and 11.18% in South and Central America. On the other hand, Quebec based parent firms establish less than a third of their subsidiaries in the United States (27.83%) and Western-Europe (24.71%), clearly favoring these regions. Quebec based GUOs establish fewer subsidiaries in South and Central America and Far East (5.90% and 3.95% respectively) than non-Quebec based GUOs (11.18% and 7.62% respectively).

With somehow changing rates, Canadian based parent corporations set up less than 4% of their subsidiaries in the remaining regions. Non-Quebec based GUOs place a slightly higher number of subsidiaries in Oceania (3.81% against 3.05%) and Africa (2.83% against 1.71%) whereas Quebec based GUOs barely favor the Middle East (0.95% against 0.75%) and Eastern Europe (0.86% against 0.74%).

4.3.4.2. Distribution of Subsidiaries in Western Europe

Table 15. Distribution of Subsidiaries in Western Europe

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Andorra	5		5
	0.09%		**0.07%**
Austria	127	21	148
	2.38%	**1.12%**	**2.05%**
Belgium	93	102	195
	1.74%	**5.46%**	**2.70%**
Cyprus	390	10	400
	7.30%	**0.54%**	**5.55%**
Denmark	61	33	94
	1.14%	**1.77%**	**1.30%**
Finland	40	19	59
	0.75%	**1.02%**	**0.82%**
France	271	344	615
	5.07%	**18.41%**	**8.53%**
Germany	684	207	891
	12.80%	**11.08%**	**12.35%**
Gibraltar	3		3
	0.06%		**0.04%**
Greece	39	11	50
	0.73%	**0.59%**	**0.69%**
Iceland	35		35
	0.65%		**0.49%**
Ireland	224	107	331
	4.19%	**5.72%**	**4.59%**
Italy	179	89	268
	3.35%	**4.76%**	**3.72%**
Liechtenstein		1	1
		0.05%	**0.01%**
Luxembourg	263	67	330
	4.92%	**3.58%**	**4.58%**
Malta	27	13	40
	0.51%	**0.70%**	**0.55%**
Monaco	4	2	6
	0.07%	**0.11%**	**0.08%**

Netherlands	476	113	589
	8.91%	**6.05%**	**8.17%**
Norway	59	23	82
	1.10%	**1.23%**	**1.14%**
Portugal	60	31	91
	1.12%	**1.66%**	**1.26%**
Spain	192	67	259
	3.59%	**3.58%**	**3.59%**
Sweden	130	48	178
	2.43%	**2.57%**	**2.47%**
Switzerland	167	49	216
	3.12%	**2.62%**	**2.99%**
Turkey	95	34	129
	1.78%	**1.82%**	**1.79%**
United Kingdom	1720	478	2198
	32.19%	**25.58%**	**30.47%**
Total	5344	1869	7213
	100.00%	**100.00%**	**100.00%**

Table 15 above illustrates the regional distribution of GUOs and their subsidiaries within the region of Western Europe. In Western Europe, Quebec based GUOs set up 25.58% of their subsidiaries in the United Kingdom against 32.19% for non-Quebec based GUOs. Quebec based GUOs set up 18.41% of their subsidiaries in France while non-Quebec based GUOs establish only 5.07% in France. While the rate is lower in Belgium (5.46% vs. 1.74% for Quebec- and non-Quebec based GUOs respectively), it shows the tendency of Quebec based GUOs to favor French-speaking countries. For the rest of the countries in Western Europe, Quebec and non-Quebec based GUOs tend to converge regarding locations and proportions. For instance, they set up nearly 11 to 12% of their subsidiaries in Germany and establish less than 5% of their subsidiaries in Ireland and Luxembourg.

4.3.4.3. Distribution of Subsidiaries in French-Speaking Countries

Table 16. Distribution of subsidiaries in French-Speaking Countries

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Belgium	93	102	195
	8.99%	**17.09%**	**11.96%**
Benin	1		1
	0.10%		**0.06%**
Burkina Faso	63	14	77
	6.09%	**2.35%**	**4.72%**
Cameroon	7	1	8
	0.68%	**0.17%**	**0.49%**
Central African Republic	3		3
	0.29%		**0.18%**
Congo	17		17
	1.64%		**1.04%**
Democratic Republic of Congo	21	5	26
	2.03%	**0.84%**	**1.59%**
Cote d'Ivoire	10	1	11
	0.97%	**0.17%**	**0.67%**
France	271	344	615
	26.21%	**57.62%**	**37.71%**
Gabon	9		9
	0.87%		**0.55%**
Guinea	10	4	14
	0.97%	**0.67%**	**0.86%**
Haiti	10	1	11
	0.97%	**0.17%**	**0.67%**
Luxembourg	263	67	330
	25.44%	**11.22%**	**20.23%**
Madagascar	7	2	9
	0.68%	**0.34%**	**0.55%**
Mali	50	4	54
	4.84%	**0.67%**	**3.31%**
Monaco	4	2	6
	0.39%	**0.34%**	**0.37%**

Niger	6	1	7
	0.58%	**0.17%**	**0.43%**
Rwanda	1		1
	0.10%		**0.06%**
Senegal	12		12
	1.16%		**0.74%**
Seychelles	6		6
	0.58%		**0.37%**
Switzerland	167	49	216
	16.15%	**8.21%**	**13.24%**
Togo	3		3
	0.29%		**0.18%**
Total	1034	597	1631
	100.00%	**100.00%**	**100.00%**

Table 16 above enable us to determine if Quebec based GUOs favor foreign French-speaking countries elsewhere than in Western Europe. In Western Europe, Quebec based GUOs favors France (57.62%) as the primary destination for their subsidiaries. The following destinations in the region are Belgium (17.09%), Luxembourg (11.22%) and Switzerland (8.21%). Non-Quebec based GUOs establish a lower but similar rate in both France and Luxembourg (26.21% and 25.44% respectively). In comparison to Quebec based GUOs they establish a higher rate in Switzerland (16.5%) and a lower rate in Belgium (8.99%).

Quebec based GUOs set up fewer subsidiaries in the rest of the regions as the rates barely exceed 10%. In Africa, Quebec based parent firms locate their subsidiaries mainly in Burkina Faso (2.35%) whereas non-Quebec based parent firms divide the African territory between Burkina Faso (6.09%) and Mali (4.84%). In South and Central America, it is the non-Quebec based GUOs that establish their subsidiaries with 0.97% in Haiti against a merely 0.17% for Quebec based GUOs.

4.3.4.4. Distribution of Subsidiaries in Tax havens

Table 17. Distribution of Subsidiaries in Tax Havens

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Andorra	5		5
	0.18%		**0.16%**
Anguilla	1		1
	0.04%		**0.03%**
Antigua and Barbuda	2		2
	0.07%		**0.06%**
Aruba	21		21
	0.74%		**0.65%**
Bahamas	33		33
	1.16%		**1.02%**
Bahrain	2	4	6
	0.07%	**1.04%**	**0.19%**
Barbados	295	20	315
	10.39%	**5.19%**	**9.77%**
Belize	11	3	14
	0.39%	**0.78%**	**0.43%**
Bermuda	157	10	1
	5.53%	**2.60%**	**0.03%**
Brunei Darussalam		1	1
		0.26%	**0.03%**
Cayman Islands	192	14	206
	6.76%	**3.64%**	**6.39%**
Costa Rica	4		4
	0.14%		**0.12%**
Cyprus	390	10	400
	13.74%	**2.60%**	**12.41%**
Dominica	2		2
	0.07%		**0.06%**
Gibraltar	3		3
	0.11%		**0.09%**
Hong Kong	192	24	216
	6.76%	**6.23%**	**6.70%**

Ireland	224	107	331
	7.89%	**27.79%**	**10.27%**
Jordan	9		9
	0.32%		**0.28%**
Latvia	3	6	9
	0.11%	**1.56%**	**0.28%**
Lebanon	2	1	3
	0.07%	**0.26%**	**0.09%**
Liberia	17		17
	0.60%		**0.53%**
Liechtenstein		1	1
		0.26%	**0.03%**
Luxembourg	263	67	330
	9.26%	**17.40%**	**10.24%**
Macao	2	2	4
	0.07%	**0.52%**	**0.12%**
Maldives	1		1
	0.04%		**0.03%**
Malta	27	13	40
	0.95%	**3.38%**	**1.24%**
Marshall Islands	4	1	5
	0.14%	**0.26%**	**0.16%**
Mauritius	75	9	84
	2.64%	**2.34%**	**2.61%**
Monaco	4	2	6
	0.14%	**0.52%**	**0.19%**
Nepal	1		1
	0.04%		**0.03%**
Panama	88	6	94
	3.10%	**1.56%**	**2.92%**
Saint Kitts and Nevis	1		1
	0.04%		**0.03%**
Saint Lucia	3		3
	0.11%		**0.09%**
Seychelles	6		6
	0.21%		**0.19%**
Singapore	171	18	189
	6.02%	**4.68%**	**5.86%**
Switzerland	167	49	216
	5.88%	**12.73%**	**6.70%**

Virgin Islands (British)	461	17	478
	16.24%	**4.42%**	**14.83%**
Total	2839	385	3224
	100.00%	**100.00%**	**100.00%**

Among the selected list of tax havens[17] in Table 17, Non-Quebec based GUOs establish 13.74% of their subsidiaries in Cyprus whereas Quebec based GUOs only locate 2.60% of the subsidiaries. In the rest of the Western European region, Quebec based GUOs have more subsidiaries than their counterparts based in other Canadian provinces: 27.79% (against 7.89%) of the subsidiaries in Ireland, 17.40% (against 9.26%) in Luxembourg and 12.73% (against 5.88%) in Switzerland. Quebec based GUOs also have more subsidiaries in Malta (3.38% vs. 0.95%).

In South and Central America, Non-Quebec based GUOs have more subsidiaries than their counterparts based in other provinces. 16.24% (against 4.42%) of the subsidiaries in the British Virgin Islands; 10.39% (against 2.60%) in Bermuda and 10.39% (against 5.19%) in Barbados and 6.76% (against 3.64%) in the Cayman Islands. Non-Quebec based GUOs locate 1.16% of the subsidiaries in the Bahamas. In the other regions (the Far East, Oceania, etc.), non-Quebec based GUOs usually place a limited proportion of their subsidiaries but still at a higher proportion than would Quebec based GUOs.

[17] Based on Akamah et al. (2016) and Dharmapala and Hines (2009)

5. METHODOLOGY

While the sample analysis presents an initial overview of whether Quebec based parent firms expand more abroad and offer an idea of their financial, industrial as well as geographical repartition of the subsidiaries, this section validates the hypotheses through robust statistical tests. The first part presents descriptive statistics followed by Pearson correlations. The following part examines the key results from the regression analysis and corroborates these results with robustness checks.

5.1. Research Design

5.1.1. Quantitative Research

Quantitative research establishes statistically significant conclusions about a population by studying a representative sample of the population (Lowhorn, 2007). It tests the accuracy of a theory by determining if the independent variables affect the dependent variables (Lowhorn, 2007). This argument fits with the present study as I am studying the impact of firm-level factors on the extent and location of outward investment of Quebec based parent firms and compare it to the patterns of non-Quebec based parent firms.

Since the objective is to explore the relationship between variables (internationalization and Quebec based GUOs) through data collected (from ORBIS) and with more than two predictions, this study uses a quantitative approach using an OLS (Ordinary Least Squares) estimation in a multiple linear regression as advised by Colman and Pulford (2006) on how to select the appropriate statistical procedure.

The OLS is one of the best known of all regression techniques and provides a global model to understand or predict the process of interest (Greene, 2003). This method provides powerful and reliable statistics for examining and estimating linear relationships (Greene, 2003).

5.1.2. Equations

The selected equations are:

1.a. $Foreign\ subsidiaries$

$$= \beta_0 + \beta_1 * Quebec\ based\ firms + \beta_2 * primary\ industry + \beta_3 * secondary\ industry + \beta_4 * z_{average\ assets} + \beta_5 * z_{average\ return\ on\ equtiy} + \beta_6 * age + e$$

1.b. $French\ speaking\ subsidiaries$

$$= \beta_0 + \beta_1 * Quebec\ based\ firms + \beta_2 * primary\ industry + \beta_3 * secondary\ industry + \beta_4 * z_{average\ assets} + \beta_5 * z_{average\ return\ on\ equtiy} + \beta_6 * age + e$$

1.c. $Tax\ haven\ subsidiaries$

$$= \beta_0 + \beta_1 * Quebec\ based\ firms + \beta_2 * primary\ industry + \beta_3 * secondary\ industry + \beta_4 * z_{average\ assets} + \beta_5 * z_{average\ return\ on\ equtiy} + \beta_6 * age + e$$

2.a. $Foreign\ subsidiaries\ ratio$

$$= \beta_0 + \beta_1 * Quebec\ based\ firms + \beta_2 * primary\ industry + \beta_3 * secondary\ industry + \beta_4 * z_{average\ assets} + \beta_5 * z_{average\ return\ on\ equtiy} + \beta_6 * age + e$$

2.b. $French\ speaking\ subsidiaries\ ratio$

$$= \beta_0 + \beta_1 * Quebec\ based\ firms + \beta_2 * primary\ industry + \beta_3 * secondary\ industry + \beta_4 * z_{average\ assets} + \beta_5 * z_{average\ return\ on\ equtiy} + \beta_6 * age + e$$

2.c. $Tax\ haven\ subsidiaries\ ratio$

$$= \beta_0 + \beta_1 * Quebec\ based\ firms + \beta_2 * primary\ industry + \beta_3 * secondary\ industry + \beta_4 * z_{average\ assets} + \beta_5 * z_{average\ return\ on\ equtiy} + \beta_6 * age + e$$

5.1.3.Measurement of Variables

5.1.3.1. Dependent Variables

To capture the internationalization of Quebec-based parent firms in comparison to non-Quebec based parent firms, there are three dependent variables and three alternative measures (absolute numbers and proportions). I use alternative measures to avoid presenting misleading information about the coverage of foreign activity.

The variable **foreign subsidiaries** represent the number of foreign subsidiaries per GUO in all countries except Canada. Alternatively, the ratio **foreign subsidiaries ratio** signifies the foreign subsidiaries over the total number of subsidiaries.

I first assign a value of 1 if French is one of the official languages of a country; 0 otherwise and create a variable returning the number of French-speaking subsidiaries for each GUO which represents **French-speaking subsidiaries**. The alternative measure is **the French-speaking subsidiaries ratio**, which represents the sum of the French-speaking subsidiaries over the total number of subsidiaries per parent company.

Similarly, I create a list of tax haven countries based on Akamah et al. (2016) and Dharmapala and Hines (2009) that determine **tax haven subsidiaries,** The alternative measure **tax haven subsidiaries ratio** represent the sum of the tax haven subsidiaries over the total number of subsidiaries per global ultimate owner.

5.1.3.2. Independent Variable

Quebec based GUOs independent variable, a dummy variable assigned the value of 1 for Quebec based GUOs, in contrast to the rest of the GUOs based in other Canadian provinces that are all assigned a value of 0.

5.1.3.3. Control Variables

The industry is the nominal control variable that includes three dummy variables assigned 1 depending on the sector of the parent firm (primary, secondary, tertiary) using the transformed US SIC classification that apply to the North American sectoral repartition.

Also, I assign the standardized[18] a measure of total assets as the main financial explanatory variable representing size. Both turnover and **average assets** offer similar empirical results. I select the average variable assets since it offers the highest explanatory variation in the models. Instead of using the value of assets during the single year 2015, I use the 5-year average to verify if the financial performance of GUOs reflects the performance of the past years. Moreover, I use a standardized measure of **return on equity** to capture the profitability of Canadian based firms.

The last control variable is firm **age** counted by subtracting the year 2015 (the year of retrieval of the data) from the year of incorporation of the parent firm provided by the database ORBIS.

[18] Standardization of variables is necessary as several scales do not contribute evenly to the analysis and the process is usually used in understanding and reporting statistical models (Hemken, 2016)

5.2.Descriptive Statistics

The following section summarizes the descriptive statistics of the final sample composed of 953 parent-firms.

Table 18. Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
Quebec based GUOs	0.10	0.30	0.00	1.00
Total subsidiaries	29.68	93.17	1.00	983.00
Foreign subsidiaries	20.51	75.88	0.00	874.00
Foreign subsidiaries ratio	0.53	0.39	0.00	1.00
French-speaking subsidiaries	1.26	8.22	0.00	174.00
French-speaking subsidiaries ratio	0.02	0.09	0.00	1.00
Tax haven subsidiaries	1.93	7.78	0.00	97.00
Tax haven subsidiaries ratio	0.06	0.15	0.00	1.00
Primary industry	0.44	0.50	0.00	1.00
Secondary industry	0.19	0.39	0.00	1.00
Tertiary industry	0.37	0.48	0.00	1.00
Average Assets	1,720,000	10,800,000	40.96	293,000,000
Average ROE	-48.16	116.34	-894.56	770.00
Age	20.79	16.93	0.00	134.00

Notes: Foreign subsidiaries ratio=Total number of foreign subsidiaries/total number of subsidiaries. French-speaking subsidiaries=Total number of French-speaking subsidiaries/total number of subsidiaries.
Tax haven subsidiaries=Total number of tax haven subsidiaries/total number of subsidiaries.

Table 18 shows that the mean total number of subsidiaries for each GUO is 29.68 with a standard deviation of 93.17 suggesting that GUOs based in Canada have a different composition regarding size. The mean of foreign subsidiaries is 20.51 with a standard deviation of 75.88. It implies that the parent-firms in the sample adopt different patterns of internationalization. The sizeable average assets regarding means and standard deviations suggest that there is a large discrepancy in the size while the negative average of ROE implies that some Canadian based GUO's financial performance has been severely impacted during the 5-year from 2011 until 2015. Lastly, the mean of the firm age indicates that there are experienced firms which have been practicing for an average of 20.79 years.

5.3.Pearson Correlations

This section attempts to identify the patterns of correlation between the variables selected for the models.

Table 19. Correlation Matrix

Variable	Quebec based GUOs	Total subsidiaries	Foreign subsidiaries	French-speaking subsidiaries	Tax haven subsidiaries	Foreign subsidiaries ratio	French-speaking subsidiaries ratio	Tax haven subsidiaries ratio
Quebec based GUOs	1							
Total subsidiaries	0.133***	1						
Foreign subsidiaries	0.110***	0.968***	1					
French-speaking subsidiaries	0.166***	0.609***	0.644***	1				
Tax haven subsidiaries	0.0725**	0.778***	0.776***	0.646***	1			
Foreign subsidiaries ratio	-0.044	0.136***	0.194***	0.121***	0.177***	1		
French-speaking subsidiaries ratio	0.071**	0.064**	0.078**	0.297***	0.168***	0.190***	1	
Tax haven subsidiaries ratio	-0.073**	0.016	0.032	0.081**	0.243***	0.322***	0.159***	1
Primary industry	-0.184***	-0.167***	-0.147***	-0.096*	-0.075**	0.148***	0.01	0.112***
Secondary industry	0.104*	0.003	0.014	-0.012	-0.021	0.061	0.043	0.009
Tertiary industry	0.104*	0.169***	0.139***	0.108***	0.094*	-0.201***	-0.436	-0.123***
Average assets	0.116***	0.411***	0.430***	0.690***	0.319***	0.033	0.061	-0.004
Average ROE	0.093*	0.148***	0.130***	0.077**	0.099*	-0.016	0.005	-0.023
Age	0.114***	0.231***	0.208***	0.164***	0.141***	0.046	-0.007	-0.050

Variable	Primary industry	Secondary industry	Tertiary industry	Average assets	Average ROE	Age
Primary industry	1					
Secondary industry	-0.425***	1				
Tertiary industry	-0.683***	-0.371***	1			
Average assets	-0.070**	-0.014	0.083**	1		
Average ROE	-0.092*	-0.040	0.127***	0.087*	1	
Age	-0.078**	0.063	0.029	0.195***	0.165***	1

In Table 19, the correlation between the three dependent variables is strong. The correlation between the alternative measures is moderate.

Foreign subsidiaries and French-speaking subsidiaries are positively and significantly correlated (r=0.64, at the 1% level), whereas foreign subsidiaries ratio and French-speaking subsidiaries ratio is positively and significantly correlated with a lower coefficient (r=0.19 at the 1% level).

Foreign subsidiaries and tax haven subsidiaries are positively and strongly correlated (r=0.78, at the 1% level) whereas foreign subsidiaries ratio and tax haven subsidiaries ratio are positively correlated with a lower coefficient (r=0.32, at the 1% level).

French-speaking subsidiaries and tax haven subsidiaries are strongly correlated (r=0.64, at the 1% level) while French-speaking subsidiaries ratio and tax haven subsidiaries ratio are positively and significantly correlated with a lower coefficient (r=0.16, at the 1% level).

Therefore, as the absolute number of foreign subsidiaries increases so does the absolute number of French-speaking subsidiaries, similarly but with a less degree with proportions. Also, as the number of foreign subsidiaries increases, the number of tax havens subsidiaries increase both in absolute number and proportions. Lastly, the absolute number and proportion of tax haven subsidiaries tend to increase with the number of French-speaking subsidiaries.

Independent Variable

Quebec based GUOs show a positive and significant correlation with the measure of foreign subsidiaries (r=0.11, at the 1% level). However, once I introduce the proportion, Quebec based GUOs is not correlated to foreign subsidiaries ratio. Quebec based GUOs is significantly and positively correlated to both French-speaking subsidiaries and French-speaking subsidiaries ratio (r=0.17, at the 1% level and r=0.07, at the 5% level respectively). Quebec based GUOs is correlated at the 5% level with a positive association to tax haven subsidiaries (r=0.07) and a negative association to tax haven subsidiaries ratio (r=-0.07).

Quebec based GUOs is correlated to all control variables. It is negatively correlated to the primary industry (r=-0.18 at the 1% level) but positively associated with the secondary and tertiary industries (r=0.10 for both at the 5% level). Quebec based GUOs is also positively associated with at the 1% level with average assets and age (r=0.12 and r=0.11 respectively), and at the 10% level with ROE (r=0.09).

Although correlation does not mean causation, I would argue based on the above results that Quebec based GUOs have strong probabilities to establish a higher absolute number foreign subsidiaries. They would also establish more French-speaking subsidiaries in absolute numbers and proportions. And they would establish a higher absolute number of subsidiaries in tax havens but less in proportions, which is so far predominantly in line with the hypotheses. The regressions will confirm whether the propositions are accurate.

Multicollinearity can represent an issue if two or more independent variables are highly correlated. To attest potential multicollinearity, I use the variance inflation factors (VIF). The mean VIF is 1.12[19] which is well below the threshold 6. Hence, multicollinearity does not threaten the validity of the coefficients (Neter, Kutner, Nachtsheim, & Wasserman, 1996).

[19] The mean VIF of all regression and robustness tables ranges between 1.11 and 1.15

6. RESULTS

6.1. Regression Analysis

Correlation analyses test the strength of the relationship between the variables. Regression analyses, on the other hand, make a stronger claim by demonstrating the degree to which the variable(s) potentially promote positive or negative change in the dependent variables.

The first part of this section contains both the regression of only control variables and the baseline model. The second section shows the robustness tests performed.

6.1.1. Regression: Only Control Variables and Baseline Model

Table 20 predicts the regression of only the control variables while Table 21 presents the baseline model. There is a slight increase in the explanatory power of the baseline model once the dependent variable Quebec based GUOs is introduced across the different dependent variables (absolute numbers) and their alternative measures (ratios). For instance, in Table 20, the model with only control variables explains 48% of the variation in French-speaking subsidiaries while in the baseline model explains 48.6% of the variation in the French-speaking subsidiaries. The F-value of the baseline model is significant at the 1% level for all regressions except for French-speaking subsidiaries ratio where it is significant at the 10% level. See Table 21.

Table 20. OLS Regression – Only Control Variables

Variables	(1) Foreign subsidiaries	(2) French-speaking subsidiaries	(3) Tax haven subsidiaries	(4) Foreign subsidiaries ratio	(5) French-speaking subsidiaries ratio	(6) Tax haven subsidiaries ratio
Primary industry	-18.34***	-0.961**	-0.991*	0.171***	0.008	0.042***
	(4.902)	(0.433)	(0.534)	(0.028)	(0.007)	(0.011)
Secondary industry	-7.015	-0.599	-0.928	0.151***	0.016*	0.027**
	(6.202)	(0.548)	(0.676)	(0.035)	(0.009)	(0.014)
Average assets	29.87***	5.587***	2.298***	0.016	0.007**	0.002
	(2.232)	(0.197)	(0.243)	(0.013)	(0.003)	(0.005)
Average ROE	4.948**	0.056	0.416*	-0.000	0.001	-0.001
	(2.230)	(0.197)	(0.243)	(0.013)	(0.003)	(0.004)
Age	0.506***	0.013	0.033**	0.001	-0.000	-0.000
	(0.133)	(0.012)	(0.015)	(0.001)	(0.000)	(0.000)
Constant	19.36***	1.522***	1.848***	0.400***	0.019***	0.042***
	(4.524)	(0.400)	(0.493)	(0.026)	(0.006)	(0.010)
Observations	953	953	953	953	953	953
F-statistic	0.000	0.000	0.000	0.000	0.221	0.003
R-squared	0.218	0.480	0.116	0.045	0.007	0.019

Notes: Foreign subsidiaries ratio=Total number of foreign subsidiaries/total number of subsidiaries.
French-speaking subsidiaries=Total number of French-speaking subsidiaries/total number of subsidiaries.
Tax haven subsidiaries=Total number of tax haven subsidiaries/total number of subsidiaries.
Average assets (2011-2015) and return on equity (ROE) are standardized.
Standard errors in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Table 21. OLS Regression – Baseline Model

Variables	(7) Foreign subsidiaries	(8) French-speaking subsidiaries	(9) Tax haven subsidiaries	(10) Foreign subsidiaries ratio	(11) French-speaking subsidiaries ratio	(12) Tax haven subsidiaries ratio
Quebec based GUOs	7.419	2.222***	0.504	-0.041	0.023**	-0.027*
	(7.555)	(0.664)	(0.824)	(0.043)	(0.011)	(0.017)
Primary industry	-17.68***	-0.763*	-0.946*	0.168***	0.010	0.040***
	(4.948)	(0.435)	(0.540)	(0.028)	(0.007)	(0.011)
Secondary industry	-7.240	-0.666	-0.943	0.152***	0.015*	0.028**
	(6.206)	(0.545)	(0.677)	(0.035)	(0.009)	(0.014)
Average assets	29.68***	5.529***	2.285***	0.017	0.006*	0.003
	(2.241)	(0.197)	(0.244)	(0.013)	(0.003)	(0.005)
Average ROE	4.813**	0.016	0.407*	0.000	0.000	-0.001
	(2.234)	(0.196)	(0.244)	(0.013)	(0.003)	(0.004)
Age	0.496***	0.011	0.033**	0.001	-0.000	-0.000
	(0.134)	(0.012)	(0.01)	(0.001)	(0.000)	(0.000)
Constant	18.58***	1.290***	1.795***	0.404***	0.017**	0.0452***
	(4.593)	(0.403)	(0.501)	(0.026)	(0.007)	(0.010)
Observations	953	953	953	953	953	953
F-statistic	0.000	0.000	0.000	0.000	0.076	0.002
R-squared	0.219	0.486	0.116	0.046	0.012	0.021

Notes: Foreign subsidiaries ratio=Total number of foreign subsidiaries/total number of subsidiaries.
French-speaking subsidiaries=Total number of French-speaking subsidiaries/total number of subsidiaries.
Tax haven subsidiaries=Total number of tax haven subsidiaries/total number of subsidiaries.
Average assets (2011-2015) and return on equity (ROE) are standardized.
*p-value of Quebec based GUOs in (12) is 0.102.
Standard errors in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Foreign Subsidiaries

The variable Quebec based GUOs is not significant with the dependent variable foreign subsidiaries

Still, there are other significant independent variables at the 1% level for foreign subsidiaries including the primary industry (-17.68), average assets (29.88) and age (0.50) of the parent-firms as well as average return on equity (4.81) at the 5% level of significance. Therefore, large experienced and profitable parent-firms that delve more into the service industry than in the extraction of raw materials have a higher absolute number of foreign subsidiaries and allocate more of their resources abroad.

French-speaking Subsidiaries

Quebec based GUOs (2.22) is significant at the 1% level for the dependent variable French-speaking subsidiaries. The results suggest that Quebec based GUOs have more of an absolute number of subsidiaries in French-speaking countries than non-Quebec based GUOs controlling for size, age, and industry.

The variable average assets is positively and strongly significantly (5.53) related to French-speaking subsidiaries at the 1% significance level. The primary industry is also significant at the 10% level with a negative coefficient (-0.76). Larger parent firms that delve less in the extraction of raw materials than in the service industry have a higher absolute number of subsidiaries in French-speaking countries.

Tax haven Subsidiaries

Quebec based GUOs is not significant with the dependent tax haven subsidiaries. Besides, average assets (2.29) is positively associated with tax haven subsidiaries at the 1% level of significance. Age (0.03) is positively significant at the 5% level. Primary industry (-0.95) and average return on equity (0.41) are associated at the 10% level of significance. Hence, larger, profitable, experienced parent corporations that work less the primary industry than in the tertiary industry set up a higher absolute number of their subsidiaries in tax havens.

Foreign Subsidiaries Ratio

The variable Quebec based GUOs is not significant with the alternative measure foreign subsidiaries ratio. Thus, the first hypothesis is not supported.

Still, the variables primary and secondary industries (0.17 and 0.15 respectively) are strongly significant at the 1% level. Firms that work more in the extraction of raw materials and manufacturing than in the service industry tend to have a higher proportion of foreign subsidiaries.

French-Speaking Subsidiaries Ratio

Furthermore, Quebec based GUOs (0.02) is significant with the dependent variable French-speaking subsidiaries ratio at the 5% level. Therefore, Quebec based GUOs is positively associated with both a higher absolute number and a higher proportion of French-speaking subsidiaries. Hence, the second hypothesis is supported.

Additionally, secondary industry and average assets are positively and significantly (0.02 and 0.01 respectively) related to French-speaking subsidiaries ratio at the 10% level. Thus, firms that work less in manufacturing than in the service industry, as well as large firms, tend to have a greater proportion of subsidiaries in French-speaking countries.

Tax Haven Subsidiaries Ratio

Although Quebec based GUOs is insignificant with the dependent variable tax subsidiaries ratio, its p-value is 0.102 with a negative coefficient of -0.03. I consider, therefore, that to a certain extent Quebec based GUOs set up a lesser proportion of subsidiaries in tax havens than non-Quebec based GUOs controlling for size, age, and industry.

Both the primary industry (0.04) and the secondary industry (0.03) are positive and significant at the 1% and 5% respectively, meaning that corporations that work more in the extraction of raw materials and manufacturing than in the service industry have a fewer proportion of subsidiaries in tax havens. Thus, there is partial but enough support for the third hypothesis.

6.1.1. Robustness Checks

The objective of this section is to assess the robustness of the results and validate the above findings. The first robustness check is to replace the financial variable average assets by the variable average turnover. The second robustness check consists of using a smaller sample of online verified subsidiaries from the ORBIS database.

6.1.1.1. Turnover

Table 22. Robustness Check 1 – Turnover

	(13)	(14)	(15)	(16)	(17)	(18)
Variables	Foreign subsidiaries	French-speaking subsidiaries	Tax haven subsidiaries	Foreign subsidiaries ratio	French-speaking subsidiaries ratio	Tax haven subsidiaries ratio
Quebec based GUOs	8.741	3.221***	0.584	-0.039	0.025**	-0.027
	(7.691)	(0.864)	(0.829)	(0.043)	(0.011)	(0.016)
Primary industry	-15.93***	-0.987*	-0.795	0.168***	0.009	0.040***
	(5.052)	(0.568)	(0.545)	(0.028)	(0.007)	(0.011)
Secondary industry	-10.25	-1.371*	-1.170*	0.150***	0.014	0.028**
	(6.312)	(0.709)	(0.680)	(0.035)	(0.009)	(0.014)
Average turnover	27.46***	2.314***	2.193***	0.014	0.001	0.003
	(2.360)	(0.265)	(0.254)	(0.013)	(0.003)	(0.005)
Average ROE	3.374	0.020	0.288	-0.000	0.001	-0.001
	(2.285)	(0.257)	(0.246)	(0.013)	(0.003)	(0.005)
Age	0.382***	0.033**	0.023	0.001	-0.000	-0.000
	(0.139)	(0.016)	(0.015)	(0.000)	(0.000)	(0.000)
Constant	20.62***	0.963*	1.972***	0.405***	0.016**	0.045***
	(4.700)	(0.528)	(0.507)	(0.026)	(0.007)	(0.010)
Observations	953	953	953	953	953	953
F-statistic	0.000	0.000	0.000	0.000	0.229	0.002
R-squared	0.190	0.128	0.105	0.045	0.009	0.021

Notes: Foreign subsidiaries ratio=Total number of foreign subsidiaries/total number of subsidiaries.
French-speaking subsidiaries=Total number of French-speaking subsidiaries/total number of subsidiaries.
Tax haven subsidiaries=Total number of tax haven subsidiaries/total number of subsidiaries.
Average assets (2011-2015) and return on equity (ROE) are standardized.
Standard errors in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Table 22 summarizes the results of the robustness check where turnover is another financial variable that replaces average assets.

The objective is to validate the results of two main findings (Hypotheses 2 and 3) concerning the variable of interest Quebec based GUOs. For French-speaking subsidiaries, there are qualitatively similar results for Quebec based GUOs for the absolute measure, Quebec based GUOs is still significant at the 1% level. For tax haven subsidiaries ratio, Quebec based GUOs have a p-value of 0.102 in the baseline model. Similarly, it has a p-value of 0.103 in the turnover robustness check.

On the other hand, the ratio measure of French-speaking subsidiaries loses its significance since the p-value of the F-statistic is 0.229. The robustness results confirm the third hypothesis but only partially the second hypothesis.

It is worth mentioning that some variables have changing significance levels; for instance, secondary industry and average assets are not significant in the baseline model but are significant at the 10% and 5% level respectively in the turnover robustness check. Overall, the rest of the results are qualitatively similar.

6.1.1.2. Verified Subsidiaries

Bureau van Dijk (BvD) uses several sources to complement information on corporations. The consulting company employs providers that are considered experts in their regions as well as other sources including news, market research, rating countries and scanned reports (Ribeiro et al., 2010). Therefore, there is a potential risk that there is redundancy in information on a subsidiary.

The BvD ID number (identification number) incorporates either a national ID or the ID provided by BvD information providers (Gattai & Sali, 2016). The ID numbers may change when the national ID numbers are different in the official data sources or if the information providers decide to switch the ID numbers (Gattai & Sali, 2016). Instances of ID changes are changes of address, legal form, etc. (Gattai & Sali, 2016). BvD can also initiate the ID change if an entity is available in more than one of its products or, is provided by more than one information provider (Gattai & Sali, 2016). As long as BvD does not know whether a company (or its subsidiaries) is the same entity, the firm will have several identification numbers on ORBIS (Gattai & Sali, 2016).

To ensure the validity of the information of the current sample, I take the subsidiaries identification numbers of the 953 GUOs and their 40,240 subsidiaries. I mechanically enter the unique identifier of each subsidiary and keep only the verified identifiers in the online BvD database of ORBIS. Additionally, I merge these identification numbers with the past ownership information.

Consequently, out of 953 GUOs, only 343 GUOs have verified subsidiaries, nearly 36% of the parent-corporations are kept as a second sample. I recreate all the tables and figures of the sample analysis, and the results are qualitatively similar. Therefore, for this study, I keep the sample with the highest number of parent-corporations (953 GUOs). Table 23 summarizes the results of the second robustness check using a sample of verified online subsidiaries.

Table 23. Robustness Check 2 – Verified Online Subsidiaries

	(19)	(20)	(21)	(22)	(23)	(24)
Variables	Foreign subsidiaries	French-speaking subsidiaries	Tax haven subsidiaries	Foreign subsidiaries ratio	French-speaking subsidiaries ratio	Tax haven subsidiaries ratio
Quebec based GUOs	15.74	4.457***	0.847	-0.037	0.041***	-0.014*
	(15.07)	(1.154)	(1.572)	(0.057)	(0.012)	(0.018)
Primary industry	-11.77	-0.433	-0.003	0.158***	0.014	0.041***
	(11.17)	(0.855)	(1.165)	(0.042)	(0.009)	(0.014)
Secondary industry	11.35	-0.986	0.232	0.131**	0.010	0.020
	(13.60)	(1.041)	(1.419)	(0.051)	(0.010)	(0.017)
Average assets	29.06***	5.689***	2.172***	0.028**	0.006**	0.002
	(3.172)	(0.243)	(0.331)	(0.012)	(0.002)	(0.004)
Average ROE	9.735	-0.062	0.686	0.001	-0.000	-0.021*
	(9.469)	(0.725)	(0.988)	(0.036)	(0.007)	(0.012)
Age	0.537**	0.030	0.042	0.003***	0.000	0.000
	(0.249)	(0.019)	(0.026)	(0.001)	(0.000)	(0.000)
Constant	10.15	0.356	1.060	0.201***	0.001	0.024*
	(9.867)	(0.755)	(1.029)	(0.037)	(0.008)	(0.012)
Observations	343	343	343	343	343	343
F-statistic	0.000	0.000	0.000	0.000	0.001	0.027
R-squared	0.264	0.662	0.149	0.086	0.066	0.041

Notes: Foreign subsidiaries ratio=Total number of foreign subsidiaries/total number of subsidiaries.
French-speaking subsidiaries=Total number of French-speaking subsidiaries/total number of subsidiaries.
Tax haven subsidiaries=Total number of tax haven subsidiaries/total number of subsidiaries.
Average assets (2011-2015) and return on equity (ROE) are standardized.
*p-value of Quebec based GUOs in (12) is 0.103.
Standard errors in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Quebec based GUOs is still significant with the absolute number of French-speaking subsidiaries and is significant at a stricter level (from 5% to 1%) with French-speaking subsidiaries ratio. However, Quebec based GUOs is not significant with tax haven subsidiaries ratio.

The coefficients of a few variables in the other models have also lost their significance (including primary industry and average ROE in foreign subsidiaries, age in tax haven subsidiaries and secondary industry in tax haven subsidiaries ratio).

The evidence is still in line with the findings for both the first and the second hypothesis. Having nearly a third of the final sample (from 953 to 343) can explain these differences along with the results of the third hypothesis. Moreover, parent-firms with tax haven subsidiaries that are potentially used for tax avoidance and tax evasion are naturally not providing additional information to the verified version of ORBIS.

7. DISCUSSION

The first part of this chapter is a reminder of the main findings. The second part presents the theoretical and practical contributions. The chapter ends with the limitations of the study and suggested avenues for future studies.

7.1.Main Findings

The proximity of Quebec to the US by sharing a joint infrastructure enable Quebec based parent firms to expand to their neighbor market and gain this first learning experience before other firms established across the rest of Canada. Carlson (1966, p. 15) argues that once the firm goes beyond the cultural barriers of its first market, it will continue conquering a market after another. Additionally, most firms based in other Canadian provinces than Quebec are not as competitive and do not have as much governmental support in developing and nurturing innovation which is reflected in the know-how of firms present in Quebec's diversified clusters. As Porter (1998) argues with the gained advantages through firm's participation in clusters, they tend to have foundations for a successful internationalization .

All these factors weight on the size and age of Quebec based parent firms which tend to be both large, more experienced and more profitable. Part of this effect dilute the results, which would explain the lack of significance of whether Quebec based parent firms expand more abroad using outward investment than counterparts based in other provinces. Other significant findings are that large, profitable and experienced parent corporations that work more in the service sector than in the sector of extracting raw materials establish a higher absolute number of foreign subsidiaries. On the contrary, firms that delve more in the primary and secondary industry than in the service sector tend to have a higher proportion of foreign subsidiaries.

The first main finding is that Quebec based parent firms have more subsidiaries in French-speaking countries than non-Quebec based corporations controlling for industry, size, profitability, and age. Additionally, it is larger parent-firms that delve more in the service industry than in the extraction of raw materials that have a higher absolute number of subsidiaries in French-speaking countries whereas only large based corporations that work more in the service industry in the manufacturing sector tend to have a greater proportion of subsidiaries in French-speaking countries.

Overall, the baseline model confirms the second hypothesis for both the absolute number and proportion while the robustness check results validate the results only for the absolute number measure. As Makino and Tsang (2011) predict, historical and political ties have a strong impact on FDI flows between countries. Since Quebec and France are countries with a strong historical tie and a similar language, they tend to adopt similar administrative systems, which in turn promote outward FDI. Besides, the province of Quebec is strongly involved with organizations such as the group La Francophonie which enable it to strengthen ties with other French-speaking countries in the international arena. Quebec based parent firms recognize the importance of French both within and outside of the province. Sharing a language usually involves lower transaction costs. Quebec based firms use this knowledge to their advantage and expand abroad without limiting themselves solely to the USA neighbor but internationalize to the geographically distant yet culturally close French-speaking countries.

The second main finding also has partial, but enough evidence since Quebec based parent firms which delve less in the tertiary service sector compared to both the primary and secondary sectors have fewer proportions of subsidiaries in tax haven countries and jurisdictions than counterparts based in the other Canadian provinces. Additionally, larger, profitable and experienced companies that work more in the extraction of raw materials than in the service industry tend to have a higher absolute number of their subsidiaries in tax havens. Quebec based MNEs have financial advantages through subsidies and a reduced sales tax burden in addition to a competitive corporate tax which potentially explains their reluctance of using subsidiaries in tax avoidance or evasion schemes.

There is a scarcity of studies on the internationalization of firms at the provincial level, especially those using firm-determinants factors of FDI. Still, I share similar results with Meyer and Green (1996) in that Quebec firms have strong ties with the French market compared to the national average. Meyer and Green (1996) affirm that firms in Western Canada tend to have a higher propensity to own subsidiaries in Barbados and Bermuda. Hejazi (2010) conclude that at the national level Candian firms go to tax havens whereas my results take into-consideration within variation and specify that Quebec based corporations set up fewer proportion in tax havens than non-Quebec based parent firms.

7.2. Theoretical and Practical Contributions

Most of the publications (Coughlin et al., 1991; Mody & Srinivasan, 1998; Ray, 1971) on the internationalization of multinational enterprises focus on companies originating from certain countries such as the triad for developed regions (Wilinski, 2012) or strong emerging economies such as China and India. The Canadian landscape has been largely ignored.

Contributions differ to a considerable extent depending on whether the studies focus on inward, or outward FDI flows, developed or developing countries, national or sub-national locations (Procher, 2011). The growing availability of firm-level data facilitates the rapid expansion of the empirical literature on firm location choices in recent years (Procher, 2011). The research explores and analyzes the extent of internationalization of Quebec based parent firms and the differences in geographical repartition with their counterparts based in other provinces in Canada. I see Canada as a diverse economy and believe that the unique characteristics of individual regions and provinces may create different incentives for outward FDI as they commonly create different incentives for inward FDI. Accordingly, the focus on the geographic distribution of FDI activity at the subnational level represents the main theoretical contribution.

A part of the importance of the study emanates from the recent report of the Ministry of International Relations (Quebec) (2017b) with an emphasis that Quebec companies must expand in the international scene not only to traditional developed markets but to adapt to the rapidly global economic changes and expand in emerging economies. Moreover, until recently, the Ministry of Finance (Quebec) (2015) maintains that there is no data available on the breakdown of Canadian direct investment at the provincial level. The practical contribution of the present study is to offer the first insight for interested parties of managers and policy-makers answers to the extent and location of Quebec based parent firm's internationalization as an initial step in knowing where they should internationalize next.

7.3.Limitations of the Study

The study involves the greatest attention in building the database and the model using firm-level from ORBIS, as I follow a highly systematic way of cleaning and organizing the data. I also conduct two robustness checks with a different financial variable (turnover) and a smaller sample (verified online subsidiaries). Repeatability, which is essential in the identification of a sample (Harwell, 2011) is not an issue. But, as with any research, there are certain limitations to the findings of the analysis. The limitations of the study are as follow:

Firstly, the first hypothesis could be defended in both ways. Quebec based firms may have fewer subsidiaries abroad than firms based in other provinces.

Secondly, not all Quebec based firms in this study are French-speaking companies. On the other hand, the fact that only a percentage of them are French-speaking only reinforces our results that Quebec based parent-firms have more subsidiaries in French-speaking countries than counterparts based in other provinces.

Thirdly, the investigation is in the specific case of Quebec which affects the transferability and generalizability of the results. The analysis of the internationalization of firms at the provincial level of Canada using firm-determinants of FDI cannot be transferred to other regions with provinces (e.g., Argentina; Gabon). Future empirical studies for these specific regions will need to be conducted.

Fourthly, there is a limitation linked to the database ORBIS. The database presents some shortcomings. It is not an exhaustive database of all companies around the world. It covers a sample of countries, and within each country, specific industries and size classes are underrepresented (Gattai & Sali, 2016). There is a selection bias in using only publicly listed parent corporations. Still, ORBIS conducts several checks for instance, whether companies have a registration in the Chamber of Commerce (Gattai & Sali, 2016).

I would have liked to include additional firm-level variables into the equations such as R&D intensity – the ratio of research and development expenditures to assets or sales – and advertising intensity. These variables are primarily used as proxies for the presence of intangible assets (Blonigen, 2005).

For this study, a more detailed analysis is limited due to a large number of missing values in the ORBIS database. However, several studies face the same limitation Gattai and Sali (2016); Ribeiro et al. (2010).

Fifthly, there are limitations related to the model. The main disadvantage of using ordinary linear least squares is sensitivity to outliers. Outliers can, therefore, skew the results of the model (Engineering Statistics Handbook, 2012). I do not eliminate outliers, but I use robust statistics for data analysis. Overall, the OLS method offers optimal estimates of unknown parameters (Engineering Statistics Handbook, 2012).

Financial data cover a ten-year period allowing researchers to access not only current but also past information. Because of time constraints, I could not use the archival information of ORBIS. And it is hard to track the same firms beyond the 1- or 2- year lags (Gattai & Sali, 2016). However, data concerning firms' ownership structure are available only for the previous year; this puts some constraints to the empirical analysis preventing from the use of panel techniques (Gattai & Sali, 2016). Future research can add additional information about ownership from the listed companies' database and shareholder's registers.

To cope with these issues, ORBIS is continuously increasing its coverage and implementing several programs to verify the quality of the data (Gattai & Sali, 2016). Despite the mentioned limitations, it represents the richest database with reliable firm-level data that suits the present research.

7.4. Avenues for Future Research

The results of my study raise fruitful areas for future research on the internationalization of Quebec based parent firms. The suggestions for future research:

First, managerial considerations should be investigated. Managers are the at the center of the decision, and it is interesting to include their perspective on the extent of internationalization. A qualitative study through surveys can analyze managerial competencies, prior international experience, and the extent of management contacts in foreign markets, which will provide a better understanding of the nuances of investment and location decisions of Quebec-based parent firms and other parent firms established in other provinces. However, examining manager's motives of internationalization is complex as they do not reveal their 'real' motives out of fear from governments and rivals.

Second, future research should explore further the impact of moderate effects, whether for instance the small size of firms in particular industries compared to large-sized counterparts influence the decision of internationalization of Canadian MNEs at the subnational level. In addition to using larger data that incorporate other strategies of internationalization such as mergers and acquisitions using Zephyr, another product of Bureau van Dijk.

Third, it might be interesting to delve into the macro-determinants of FDI to determine the veracity of the regional differences between Quebec-based parent firms and non-Quebec based parent firms regarding internationalization. Variables to include are population, manufacturing density, infrastructure, in addition to an analysis of the influence of local and government incentives to determine what are the important factors that contribute to the decision of Quebec MNEs in undertaking their internationalization process.

CONCLUSION

This research provides empirical evidence on the internationalization of Quebec-based parent firms in comparison to parent firms based in other Canadian provinces. The results confirm that regarding outward investment, Quebec based GUOs have more subsidiaries in French-speaking countries than their counterparts in the other regions, but they have fewer subsidiaries in tax havens.

This research extends the empirical literature on outward investment of MNEs by combining several research characteristics. Firstly, it increases the explanatory power of the geography and international business literature. While other former studies tend to focus on the country level or the regional level of a few select regions such as the triad countries. This study focuses on the extent and location of Quebec based parent firms to invest abroad compared counterparts based in other Canadian provinces.

Secondly, it focuses on the influence of firm-specific determinants whereas former studies analyze the determinants of the outward foreign direct investment using macro-level determinants. Thirdly, it exploits a dataset of regional, sectoral and subsidiary-level data. The data is drawn from a unique, extensive and up-to-date dataset, ORBIS provided by Bureau Van Dijk.

Further studies are needed to extend the initial understanding of the patterns of internationalization of Quebec based parent firms provided by this study using larger samples and panel data to allow for comparisons with the patterns of other provinces both inside and outside of the country, thus aiding theory development and refinement.

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APPENDIX

1. Distribution of Subsidiaries in Africa

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Algeria	3	7	10
	0.32%	**5.43%**	**0.95%**
Angola	1	2	3
	0.11%	**1.55%**	**0.28%**
Benin	1		1
	0.11%		**0.09%**
Botswana	55	2	57
	5.94%	**1.55%**	**5.40%**
Burkina Faso	63	14	77
	6.80%	**10.85%**	**7.30%**
Cameroon	7	1	8
	0.76%	**0.78%**	**0.76%**
Central African Republic	3		3
	0.32%		**28.00%**
Congo	17		17
	1.84%		**1.61%**
Democratic Republic of Congo	3		3
	0.32%		**0.28%**
Cote d'Ivoire	10	1	11
	1.08%	**0.78%**	**1.04%**
Egypt	12	10	22
	1.30%	**7.75%**	**2.09%**
Eritrea	7		7
	0.76%		**0.66%**
Ethiopia	10		10
	1.08%		**0.95%**
Gabon	9		9
	0.97%		**0.85%**
Ghana	57	1	58
	6.16%	**0.78%**	**5.50%**
Guinea	10	4	14
	1.08%	**3.10%**	**1.33%**

Guinea Bissau	3		3
	0.32%		**0.28%**
Kenya	22	2	24
	2.38%	**1.55%**	**2.27%**
Lesotho	4		4
	0.43%		**0.38%**
Liberia	17		17
	1.84%		**1.61%**
Madagascar	7	2	9
	0.76%	**1.55%**	**0.85%**
Malawi	3		3
	0.32%		**0.28%**
Mali	50	4	54
	5.40%	**3.10%**	**5.12%**
Mauritania	8	1	9
	0.86%	**0.78%**	**0.85%**
Mauritius	75	9	84
	8.10%	**6.98%**	**7.96%**
Morocco	75	9	84
	0.65%	**6.98%**	**1.42%**
Mozambique	14	4	18
	1.51%	**3.10%**	**1.71%**
Namibia	78		78
	8.42%		**7.39%**
Niger	6	1	7
	0.65%	**0.78%**	**0.66%**
Nigeria	13	3	16
	1.40%	**2.33%**	**1.52%**
Rwanda	1		1
	0.11%		**0.09%**
Senegal	12		12
	1.30%		**1.14%**
Seychelles	6		6
	0.65%		**0.57%**
Sierra Leone	6	1	7
	0.65%	**0.78%**	**0.66%**
South Africa	194	38	232
	20.95%	**29.46%**	**21.99%**
Sudan	2		2

	0.22%		**0.19%**
United Republic of Tanzania	69	1	70
	7.45%	**0.78%**	**6.64%**
Togo	3		3
	0.32%		**0.28%**
Tunisia	2	2	4
	0.22%	**1.55%**	**0.38%**
Uganda	4	3	7
	0.43%	**2.33%**	**0.66%**
Zambia	24		24
	2.59%		**2.27%**
Zimbabwe	11	2	13
	119.00%	**1.55%**	**1.23%**
Total	926	129	1055
	100.00%	**100.00%**	**100.00%**

2. Distribution of Subsidiaries in Eastern Europe

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Albania	5		5
	2.07%		**1.63%**
Bosnia and Herzegovina	4	1	5
	1.65%	**1.54%**	**1.63%**
Bulgaria	27	4	31
	11.16%	**6.15%**	**10.10%**
Croatia	6	2	8
	2.48%	**3.08%**	**2.61%**
Estonia	2	3	5
	0.83%	**4.62%**	**1.63%**
Latvia	3	6	9
	1.24%	**9.23%**	**2.93%**
Lithuania	1	2	3
	0.41%	**3.08%**	**0.98%**
Macedonia	11	1	12
	4.55%	**1.54%**	**3.91%**
Montenegro		7	7
		10.77%	**2.28%**
Romania	132	28	160
	54.55%	**43.08%**	**52.12%**
Serbia	49	7	56
	20.25%	**10.77%**	**18.24%**
Slovenia	2	4	6
	0.83%	**6.15%**	**1.95%**
Total	242	65	307
	100.00%	**100.00%**	**100.00%**

3. Distribution of Subsidiaries in North America/United States

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
United States of America	2250	708	2958
	100.00%	**100.00%**	**100.00%**
Total	2250	708	2958
	100.00%	**100.00%**	**100.00%**

4. Distribution of Subsidiaries in Far East

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Armenia	8	2	10
	0.32%	**0.67%**	**0.36%**
Bangladesh	2		2
	0.08%		**0.07%**
Bhutan	1		1
	0.04%		**0.04%**
Brunei Darussalam		1	1
		0.33%	**0.04%**
Cambodia	7	1	8
	0.28%	**0.33%**	**0.29%**
China	424	85	509
	17.03%	**28.43%**	**18.25%**
Georgia	2	2	4
	0.08%	**0.67%**	**0.14%**
Hong Kong	192	24	216
	7.71%	**8.03%**	**7.74%**
India	816	51	867
	32.77%	**17.06%**	**31.09%**
Indonesia	64	12	76
	2.57%	**4.01%**	**2.72%**
Japan	341	28	369
	13.69%	**9.36%**	**13.23%**
Kazakhstan	9	4	13
	0.36%	**1.34%**	**0.47%**

Democratic People's Republic of Korea	61	16	77
	2.45%	**5.35%**	**2.76%**
Kyrgyzstan	10		10
	0.40%		**0.36%**
Lao People's Democratic Republic		1	1
		0.33%	**0.04%**
Macao	2	2	4
	0.08%	**0.67%**	**0.14%**
Malaysia	135	15	150
	5.42%	**5.02%**	**5.38%**
Maldives	1		1
	0.04%		**0.04%**
Mongolia	45		45
	1.81%		**1.61%**
Nepal	1		1
	0.04%		**0.04%**
Pakistan	3	5	8
	0.12%	**1.67%**	**0.29%**
Philippines	65	7	72
	2.61%	**2.34%**	**2.58%**
Singapore	171	18	189
	6.87%	**6.02%**	**6.78%**
Sri Lanka	23	2	25
	0.92%	**0.67%**	**0.90%**
Taiwan	23	11	34
	0.92%	**3.68%**	**1.22%**
Vietnam	11	3	14
	0.44%	**1.00%**	**0.50%**
Total	2490	299	2789
	100.00%	**100.00%**	**100.00%**

5. Distribution of Subsidiaries in Middle East

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Bahrain	2	4	6
	0.82%	**5.56%**	**1.89%**
Iraq	1	1	2
	0.41%	**1.39%**	**0.63%**
Israel	175	35	210
	71.43%	**48.61%**	**66.25%**
Jordan	9		9
	3.67%		**2.84%**
Kuwait	1	1	2
	0.41%	**1.39%**	**0.63%**
Lebanon	2	1	3
	0.82%	**1.39%**	**0.95%**
Oman	2		2
	0.82%		**0.63%**
Saudi Arabia	8	7	15
	3.27%	**9.72%**	**4.73%**
United Arab Emirates	43	19	62
	17.55%	**26.39%**	**19.56%**
Total	245	72	317
	100.00%	**100.00%**	**100.00%**

6. Distribution of Subsidiaries in Oceania

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Australia	1093	199	1292
	87.86%	**86.15%**	**87.59%**
Curaçao	13	4	17
	1.05%	**1.73%**	**1.15%**
Fiji	3		3
	0.24%		**0.20%**
Marshall Islands	4	1	5
	0.32%	**0.43%**	**0.34%**
New Zealand	112	27	139
	9.00%	**11.69%**	**9.42%**
Papua New Guinea	19		19
	1.53%		**1.29%**
Total	1244	231	1475
	100.00%	**100.00%**	**100.00%**

7. Distribution of Subsidiaries in South and Central America

Subsidiary Country Name	Non-Quebec based GUO	Quebec based GUO	Total
Anguilla	1		1
	0.03%		**0.02%**
Antigua and Barbuda	2		2
	0.05%		**0.05%**
Argentina	119	24	143
	3.26%	**5.38%**	**3.49%**
Aruba	21		21
	0.58%		**0.51%**
Bahamas	33		33
	0.90%		**0.81%**
Barbados	295	20	315
	8.08%	**4.48%**	**7.69%**
Belize	11	3	14
	0.30%	**0.67%**	**0.34%**
Bermuda	157	10	167
	4.30%	**2.24%**	**4.08%**
Bolivia	18		18
	0.49%		**0.44%**
Brazil	565	122	687
	15.47%	**27.35%**	**16.76%**
Cayman Islands	192	14	206
	5.26%	**3.14%**	**5.03%**
Chile	327	32	359
	8.95%	**7.17%**	**8.76%**
Colombia	134	17	151
	3.67%	**3.81%**	**3.68%**
Costa Rica	4		4
	0.11%		**0.10%**
Cuba	2	1	3
	0.05%	**0.22%**	**0.07%**
Dominica	2		2
	0.05%		**0.05%**
Dominican Republic	14	5	19
	0.38%	**1.12%**	**0.46%**
Ecuador	33		33
	0.90%		**0.81%**

El Salvador	8		8
	0.22%		**0.20%**
Guatemala	15		15
	0.41%		**0.37%**
Guyana	36		36
	0.99%		**0.88%**
Haiti	10	1	11
	0.27%	**0.22%**	**0.27%**
Honduras	9	11	20
	0.25%	**2.47%**	**0.49%**
Jamaica	8		8
	0.22` %		**0.20%**
Mexico	705	128	833
	19.30%	**28.70%**	**20.33%**
Nicaragua	34	1	35
	0.93%	**0.22%**	**0.85%**
Panama	88	6	10
	2.41%	**1.35%**	**2.29%**
Paraguay	10		10
	0.27%		**0.24%**
Peru	225	24	249
	6.16%	**5.38%**	**6.08%**
Saint Kitts and Nevis	1		1
	0.03%		**0.02%**
Saint Lucia	3		3
	0.08%		**0.07%**
Suriname	3		3
	0.08%		**0.07%**
Trinidad and Tobago	14	3	17
	0.38%	**0.67%**	**0.41%**
Uruguay	30	4	34
	0.82%	**0.90%**	**0.83%**
Venezuela	62	3	65
	1.70%	**0.67%**	**1.59%**
British Virgin Islands	461	17	478
	12.62%	**3.81%**	**11.66%**
Total	3652	446	4098
	100.00%	**100.00%**	**100.00%**