

Coiteux, Martin; Rizzetto, Patrick; Suchanek, Lena; Voll, Jane

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Why Do Canadian Firms Invest and Operate Abroad? Implications for Canadian Exports

by Martin Coiteux, Patrick Rizzetto, Lena Suchanek and
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Why Do Canadian Firms Invest and Operate Abroad? Implications for Canadian Exports

by

Martin Coiteux,* Patrick Rizzetto, Lena Suchanek and Jane Voll

Canadian Economic Analysis Department
Bank of Canada
Ottawa, Ontario, Canada K1A 0G9
Contact author: prizzetto@bankofcanada.ca

*Martin Coiteux's contribution to this research was made prior to his departure from the Bank, which followed his election as a Member of the Quebec National Assembly on 7 April 2014.

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Abstract

Canadian foreign direct investment and sales of Canadian multinational firms' operations abroad, particularly in the manufacturing industry and in the United States, have accelerated sharply over the past decade. At the same time, although foreign demand has accelerated following the Great Recession, Canadian exports have failed to rebound as strongly as historical correlation would suggest. If part of Canadian firms' investment abroad over the past decade was intended to replace their Canadian production and exports, it could help to explain recent export weakness. This paper investigates these issues in the Canadian forest products industry and the motor vehicle parts manufacturing industry, using a case study approach. Specifically, we examine 15 large, Canadian, publicly traded firms, dominant in each of these industries, over the period 2000–13. We triangulate (i) financial statement data and (ii) public statements about decisions to invest abroad with (iii) macroeconomic data on the activity of Canadian foreign affiliates, focusing on investments in the United States and Mexico. We find that over this period, the companies in the study increasingly chose to invest abroad, leading to a shift in relative operational capacity from Canada to locations abroad. Motives behind this trend include market-seeking objectives, as well as relative cost factors and strategic asset seeking abroad. This shift in the location of production capacity may, at least for the industries and the time period studied, help to explain the weakness in Canadian merchandise exports over the past years, since these firms increasingly choose to serve foreign demand through their operations abroad, rather than exclusively through exports.

JEL classification: F10, F41, F21, F23

Bank classification: International topics; Recent economic and financial developments

Résumé

Les dix dernières années ont vu une nette augmentation des investissements directs canadiens à l'étranger et du chiffre d'affaires des filiales étrangères de multinationales canadiennes, particulièrement dans le secteur manufacturier et aux États-Unis. En dépit de la hausse de la demande étrangère survenue à la suite de la Grande Récession, les exportations canadiennes n'ont pas rebondi aussi fortement que les corrélations historiques le laissaient supposer. Dans cette étude, les auteurs cherchent à déterminer si la faiblesse des exportations observée récemment pourrait s'expliquer par le fait que les investissements effectués à l'étranger par les entreprises canadiennes au cours des dix dernières années étaient en partie destinés à remplacer leur capacité de production au Canada ainsi que leurs exportations. Ils tentent de répondre à cette question à partir d'une étude de cas en analysant le secteur des produits forestiers et celui de la fabrication de

pièces automobiles. Ils examinent plus précisément l'évolution des opérations de quinze grandes sociétés canadiennes cotées en bourse, dominantes dans ces deux secteurs, pour la période allant de 2000 à 2013. Pour ce faire, ils procèdent à l'analyse croisée de trois sources d'informations : 1) les données tirées d'états financiers; 2) les annonces d'investissements à l'étranger; 3) les données macroéconomiques sur l'activité de filiales étrangères de sociétés canadiennes, leur attention portant sur les investissements réalisés aux États-Unis et au Mexique. Les auteurs constatent que durant la période retenue, les firmes de l'échantillon ont de plus en plus choisi d'investir à l'étranger, ce qui a provoqué une délocalisation accrue de leur production. Cette tendance est justifiée par la quête de nouveaux marchés et d'actifs stratégiques, ainsi que par les coûts relatifs des facteurs. Ce déplacement de la capacité de production pourrait, du moins pour les secteurs et la période visés, contribuer à expliquer la faible progression des exportations canadiennes de biens enregistrée ces dernières années, puisque les entreprises étudiées choisissent de plus en plus de répondre à la demande étrangère par l'intermédiaire de leurs filiales plutôt qu'exclusivement au moyen des exportations.

Classification JEL : F10, F41, F21, F23

Classification de la Banque : Questions internationales; Évolution économique et financière récente

1. Introduction

As foreign demand has accelerated in the post-recession period, Canadian exports have failed to rebound as strongly as historical correlation would suggest. Indeed, manufacturing export growth has been slower than expected for several years (Bank of Canada 2013). At the same time, Canada's stock of direct investment abroad grew rapidly over the past decade, and is equal to a significant and rising share of Canada's GDP (40 per cent in the late 2000s). In particular, Canadian foreign direct investment (FDI) in the United States and Mexico has accelerated over this period, while sales of Canadian multinational firms' operations¹ in the United States have grown rapidly, and much faster than exports. This leads to the question this paper investigates: are weaker-than-expected exports due to Canadian firms simply choosing to serve foreign markets through foreign operations to a greater extent than in the past?

The surge in Canadian FDI and sales from foreign operations need not imply export substitution. Some foreign operations can be export-supporting; e.g., in the case of vertical FDI that frequently generates intrafirm trade of intermediate goods and demand for other products such as capital (Poloz 2012).² In other cases, however – in the case of horizontal FDI, for example – such foreign operations could substitute, at least in part, for Canadian operations, implying that these firms would export fewer products produced in Canada, and increasingly produce and sell abroad. Moreover, increasing foreign production may, in many cases, be the best option not only for the firm, but for the domestic economy as well. For example, an investment that moves production outside of Canada (substituting for exports) may give the firm productivity and competitiveness benefits that allow it to survive (Poloz 2012), which supports the remaining exports of that firm, and keeps head office jobs and profits³ in the domestic economy. While FDI has many benefits, the overall net impact of FDI on exports in certain industries is, a priori, ambiguous.

This paper uses a case study approach to examine the nature of the investment decisions of 15 large Canadian publicly traded firms in two industries over the period 2000–13. Manufacturing exports, in particular, have underperformed over the past decade; therefore, we concentrate on two major manufacturing export industries – the forest products industry⁴ and the motor vehicle parts industry. We note that not all manufacturing sectors have underperformed, and in fact one forest products-related subsector (logs, pulpwood and other forestry products) has been shown to have outperformed its U.S. benchmark in recent years (Binette et al. 2014). However, this outperforming sector constitutes a much smaller share of exports than the underperforming pulp and paper stock subsector (0.2 per cent versus 2.9 per cent) and also includes logs, a product not considered in our analysis.⁵ Structural changes in these industries and the significant appreciation of the Canadian dollar relative to the U.S. dollar during

¹ We use the terms “sales of Canadian multinational firms' operations” and “Canadian foreign affiliate sales” interchangeably.

² Sales offices are another example of export-supporting foreign operations.

³ Note that while profits of firms operating abroad should increase with efficiency gains, some profits are not repatriated. As Chart 3 illustrates, reinvested earnings are an important share of FDI in the United States, suggesting that firms reinvest at least an important share of profits, rather than repatriate them.

⁴ The forest products industry in this analysis refers to wood products and pulp and paper, but excludes the logging industry.

⁵ The subcategories used for the forest products sector in this paper differ from the categories used in Binette et al. (2014), owing to differences in data sources (the U.S. Bureau of Economic Analysis versus Statistics Canada).

the 2000s can be expected to have played a role in motivating firms' investment decisions. Between 2000 and 2012, Canada suffered a 75 per cent decline in competitiveness (i.e., relative unit labour costs) compared with the United States (Bank of Canada 2014). More than two-thirds of the change was due to the appreciating Canadian dollar, which resulted in a direct price increase in Canadian exports to the United States. The remaining loss in Canada's competitiveness was due to slow productivity growth.

Multiple other challenges have hampered the forest products industry's performance and would have had a bearing on the location of investment decisions: the U.S. housing market slowdown and collapse, the mountain pine beetle infestation in British Columbia, the softwood lumber duties for exports to the United States, regulations regarding mill shutdowns, and minimum allowable cut issues in Quebec, to mention only a few. The paper industry, especially newsprint, has been facing declining demand due to the rise of online media.

Corporate decision-making in the auto parts sector would have been influenced by the increase in overall manufacturing production capacity in Mexico and China, auto assemblers' increased operations in the southern United States and Mexico, the signing of a number of favourable trade agreements by Mexico,⁶ and developments in logistics and global supply-chain management, among other factors.

Our results suggest that the Canadian firms analyzed invested increasingly south of the border over the past decade. Moreover, they divested in Canada to a greater extent than abroad, leading to a relative shift of production capacity from Canada to locations abroad. Further, we find evidence that their stated motives to move operations abroad are in line with Dunning (1993, 1998): first investments are often related to market-seeking objectives, while consequent investments frequently involve resource, efficiency and strategic asset-seeking objectives. Efficiency-seeking objectives (in response to changes in relative costs) are found to have been particularly important in motivating firms to choose the United States and Mexico rather than Canada for new investments.

These results contribute to our understanding of the weakness in Canadian exports of the two industries in question. They suggest that, rather than serving foreign markets exclusively through exports, Canadian firms studied in this research increasingly serve these markets locally through foreign operations, which were expanded in an absolute and relative sense over the past decade.

The paper is organized as follows. Section 2 motivates the research by discussing trends in Canadian firms' presence abroad using available macroeconomic data. This is followed by a summary of the relevant literature and theories in section 3. Section 4 justifies the choice of a case study approach and discusses the methodology. Section 5 reports the results for the forest products industry and the Canadian motor vehicle parts manufacturing industry. Section 6 concludes.

⁶ Mexico has a total of 12 trade agreements involving 44 countries (Mexican Ministry of Economy 2014), while Canada currently has agreements in force with only 13 countries (Department of Foreign Affairs, Trade and Development Canada 2014).

2. Motivation and Background

This section motivates the research by describing available macroeconomic data on Canadian firms' FDI and operations abroad: (i) data on FDI,⁷ and (ii) data on foreign affiliate activity.⁸

Canada's stock of FDI in the United States has been growing rapidly over the past decade, at an average annual growth rate of 10 per cent.⁹ The stock of Canadian manufacturing FDI in the United States grew by an average of 7 per cent over the same period (Chart 1). Turning to FDI flows, Canadian investment in the United States and Mexico has risen steadily over the past two decades (Chart 2). In the manufacturing sector in the United States, investment first accelerated and collapsed with the "tech bubble" of the late 1990s (Chart 3). FDI then increased again from 2002 to the onset of the last recession. A combination of possibly lower-cost U.S. assets and competitive challenges associated with the strong Canadian dollar may have induced several Canadian firms to expand in the United States through FDI. Indeed, costs related to production, such as construction and labour costs, rose more sharply during this period in Canada when measured in the same currency (Chart 4).

Chart 5 shows that the sectors that have contributed the most to the recent wave are the transportation equipment industry and the "other manufacturing" category.¹⁰ The data thus justify a case study of the automotive parts industry (a significant part of the transportation sector) and a representative from the "other manufacturing" category – the forest products industry. These two industries appear to have experienced rapid growth in FDI in the United States over the past decade.¹¹ Moreover, not only are they among Canada's largest manufacturing export industries,¹² they also have remained well below their pre-Great Recession level of exports (Chart 6). As of 2013Q3, the volume of exports in the category of motor vehicle engines and motor vehicle parts was 30 per cent below pre-crisis levels, and exports of the forestry products and building and packaging materials industry were 23 per cent below 2007 levels. Over and above the absolute decline in exports relative to pre-crisis levels in these industries, Canadian exports have lost significant market share. By focusing on these two major industries, we thus go a long way in explaining the weakness in Canadian merchandise exports.

⁷ Data are available from both Statistics Canada and the U.S. Bureau of Economic Analysis (BEA). Data on the *stock* of Canadian FDI are available from Statistics Canada from 1987 to 2012 by country of destination. BEA data on the stock are comparable, with the major difference stemming from the fact that BEA data are reported in U.S. dollars rather than Canadian dollars. Data on the *flow* of Canadian FDI are available from 2007Q1 to 2013Q1, while the BEA provides annual per country and per industry data starting in 1980 (quarterly per country data: 1994Q1 to 2013Q1). Because the BEA provides more detailed flows data than Statistics Canada, and because it also reports the annual totals since 1980, we use BEA data.

⁸ Data on Canadian foreign affiliate sales are available from Statistics Canada. A breakdown by either industry or country is available, but not by industry within specific countries. However, the BEA publishes data on operations of U.S. affiliates of foreign companies, by country of origin and industry.

⁹ Total FDI (in all countries) also increased sharply, from Can\$435 billion in 2002 to over Can\$700 billion in 2012.

¹⁰ Cumulative flows over the 2001–12 period amounted to US\$19 billion in the transportation equipment industry, or 25 per cent of total flows, and US\$16 billion in the "other" manufacturing industries, or 22 per cent of total flows.

¹¹ One might argue that Canadian FDI in the financial sector has grown rapidly and would thus be an interesting case to study. However, the latter industry exports relatively little. Thus, increasing Canadian FDI in the financial sector cannot substitute for exports and does not help to explain the weakness of Canadian exports.

¹² The motor vehicles and parts industry represented 26 per cent of manufacturing exports in 2012, and forestry products and building and packaging materials 13 per cent.

As for data on the activity of Canadian foreign affiliates, over the past decade, sales of Canadian foreign affiliates in the United States rose twice as fast as export sales originating from Canada, at 6.2 per cent per annum versus 2.8 per cent per annum, respectively. Foreign affiliate sales exceeded exports for the first time on record in 2009 (Chart 7). The manufacturing industry accounted for nearly half of foreign affiliate sales over the past decade (Chart 8), supporting the hypothesis that the manufacturing industry in particular appears to have increased its presence abroad. However, the increase in foreign affiliate sales may have partly complemented Canadian exports: a survey by Export Development Canada reveals that, for 71 per cent of the companies with foreign investments, the main activity abroad is the sale and distribution of goods and/or services (of products that have likely been produced in and exported from Canada). The second-most important activity, reported by 34 per cent of respondents, is the production of goods and/or services, followed by after-sales service at 29 per cent (EDC 2010). While production may be an activity that substitutes for Canadian exports, sales and distribution and after-sales service are most likely export-supporting activities.

3. Literature Review and Relevant Theory

Our research is related to several interlinked strands of the literature. In the literature on the internationalization of the firm, FDI and exports are often presented as two competing modes of serving a foreign market (Brainard 1993, 1997; Helpman, Melitz and Yeaple 2004). Choosing between exports and FDI is largely a question of relative costs: the option of exports allows the firm to spread the fixed costs of its domestic operations over a larger volume of sales (economies of scale), while the FDI option allows the firm to avoid trading and border costs, but it implies additional fixed costs of replicating its production facilities abroad. This choice problem is often referred to as a **trade-off between the cost advantages of proximity and those of concentration**.

In practice, not all types of FDI are export-substituting and some can instead be export-supporting.¹³ Indeed, empirical evidence for the relationship between Canadian FDI abroad and Canadian exports is mixed. Specifically, studying the forest products industry, Nagubadi and Zhang (2011) find a complementary relationship between Canadian forest product exports to the United States and FDI. Ahmad, Legault and Rao (1994) and Hejazi and Safarian (1999) also find a complementary relationship between FDI and exports at an aggregate level, although, at the industry level, the latter authors do find some negative links.¹⁴ Hejazi (2010), in a more recent study, finds a negative (but not statistically significant) relationship between trade and FDI, suggesting that FDI is, if anything, export-substituting.

Dunning (1993) developed a general framework that groups firms' **strategic motives for FDI** into four types of objectives (UNCTAD 1998, Chart 9). First, a firm can be motivated by a **market-seeking** objective, which is the one usually considered in the aforementioned literature. Second, a firm may invest abroad to gain access to specific resources (**resource seeking**); e.g., natural resources or a

¹³ Krautheim (2013) uses a firm-level database on the universe of affiliates owned by German multinationals from 1989 to 2009 and finds that firms choosing to duplicate their production in foreign countries tend to be larger and tend to have higher foreign sales than those opting for the sales subsidiary option.

¹⁴ Of note, the two studies cover only the 1971–89 and the 1970–96 period, respectively, and thus miss important dynamics or potential breaks, especially in response to major trade agreements (the Free Trade Agreement in 1988 and the North American Free Trade Agreement in 1994), as well as the appreciation of the Canadian dollar over the past decade.

skilled/unskilled labour force. Third, it may invest in order to serve its already existing markets in a more cost-efficient way (**efficiency seeking**). And fourth, FDI may augment the firm's own technological, knowledge-based specific sources of competitive advantage (**strategic assets seeking**). Several papers incorporate efficiency-seeking elements in their models. For instance, Head and Ries (2004) develop a simple model where changes in relative costs trigger efficiency-seeking investments away from or toward the domestic economy, affecting trade flows. Similarly, Rangan (1998), using data on foreign affiliates in the United States, shows that large and persistent changes in real exchange rates (implying changes in relative costs across the regions where the firm's assets are located) lead to a reallocation of capital between countries.

Together, these theories provide a concrete anchor for studying the recent performance of Canadian firms in the forest products and motor vehicle parts industries and to address questions such as:

- Have Canadian firms in these industries changed their method of serving foreign markets over time?
- What were the motives pursued by these firms when investing abroad?
- Did recent foreign investments in these industries support or substitute for exports?
- Did Canadian firms reallocate production between Canada and the foreign countries in which they invested in response to changes in relative costs (e.g., the exchange rate)?

4. Methodology: Case Study Approach

Macroeconomic data on Canadian FDI and Canadian foreign affiliate sales reported above are insufficient to address our research questions for two major reasons. First, there are no macroeconomic data on the motives behind the trend toward increased FDI that might help judge the consequences for exports. Second, available macroeconomic data cannot explain what type of investment is predominant and thus does not help determine whether Canadian operations abroad substitute for Canadian exports in these industries (demand that had previously been served through Canadian operations is now being served through foreign operations) or, to the contrary, support Canadian firms' export activity.

While international studies on the link between FDI and exports exploit databases on firm-level data, to our knowledge such a database does not exist for Canadian firms. We thus follow the existing studies on Canada in using a case study approach (e.g., Globerman 2012) on the largest firms in two industries.¹⁵ The literature recommends specific case study techniques. First, Yin (2014) expresses a preference for the multiple case study, due to its strength in providing "analytical generalization": by replicating findings across multiple cases (ideally at least 6–10), in the aggregate, results would provide "compelling support for the initial set of propositions," thereby increasing the robustness of the finding. Second, "triangulation" implies using various (and ideally at least three) independent sources of data to support the case study's findings. Third, the "pattern matching approach" recommends comparison of the

¹⁵ Case studies have been widely used in the field of industrial organization and economics, and international business research (Vissak 2010). Globerman (2012) studies strategic objectives behind FDI of 22 multinational Canadian companies by matching FDI motives with those identified in the FDI literature.

pattern found in the data¹⁶ with a pattern predicted by theory (Yin 2014); this approach is applied in Globerman (2012).

Our approach satisfies these three recommendations on case study methods (multiple case study, triangulation and pattern matching). We conduct a case study on 15 firms in two industries, which is a larger sample size than the recommended minimum and closer to the sample of 22 firms covered in Globerman (2012).¹⁷ The selection criteria for the inclusion of firms in the sample were as follows: their size in terms of sales; the firms were based in Canada; and their annual financial information was available. In other words, we chose the largest Canadian, publicly traded firms in the industry.¹⁸ Canadian sales by the 12 firms in the forest products industry represented about 13 per cent of sales in Canada in 2012, while the three auto parts firms' Canadian sales represented 37 per cent of the sector's sales in Canada that same year.

We further use three different sources of data ("triangulation"): first, we use data on the geographic distribution of facilities, fixed assets, sales and capacity from companies' financial statements to observe a potential shift of operations to the United States and Mexico. Second, we extract information on the stated motives behind each investment abroad and in Canada (new plants or acquisitions) from the statements contained on their websites, annual reports, and annual information forms, as well as CEO statements in the specialized press.¹⁹ We extend the methodology applied in Globerman (2012) by also studying the motives of divestments (e.g., sales or shutdowns), which, in the forest products industry, have importantly contributed to the relative shift in the geographic distribution of production capacity. We then categorize the stated motives through the lens of the literature on the generic motives of FDI (Dunning 1998, Chart 9) ("pattern-matching approach"). We use the Dunning framework because it is the core reference to current international business research, namely for studying location decisions, foreign investment, entry modes and internationalization, and for the multinational enterprise theory (Ferreira et al. 2013).²⁰ This approach allows us to quantify the relative importance of Canadian firms' stated motives to move operations abroad. Third, the results are checked against macroeconomic data on the activity of Canadian foreign affiliates in the United States (including sales, capital stock and employment).^{21,22}

¹⁶ Data can be obtained from statements contained in company websites, annual reports and other relevant documents available through the System for Electronic Document Analysis and Retrieval (SEDAR).

¹⁷ Investments of all 15 firms were studied, although supporting data shown in the tables were not always available for each firm.

¹⁸ Studying the largest firms appears to be a sensible approximation of industry trends. In addition, according to the literature, it is the largest and most productive firms that engage in FDI in addition to exports. Thus, by concentrating on the largest firms, we likely capture the essence of the increase in FDI. We focus on Canadian firms to explore the link between outward FDI and exports.

¹⁹ We did not use any confidential information gathered through the Bank of Canada consultations with businesses for this analysis. All information is accessible to the public.

²⁰ More recent papers further build on or support Dunning's framework (cf. Buckley and Hashai 2009; Cantwell 2009). We also considered alternative frameworks to classify FDI decisions. However, there are no real alternatives on the motives of FDI (Franco et al. 2010). Related frameworks on slightly different aspects of FDI (e.g., the classification of FDI into "horizontal" vs. "vertical" FDI, or determinants of FDI) would offer little conclusions for the research questions.

²¹ Fourth and fifth sources of data could be analyst reports of the company in question (for instance, in a specialized industry journal) and interviews with company CEOs, which are, however, beyond the scope of the paper.

5. Case Study Results

This section discusses results of the case study for the forest products industry and the motor vehicle parts industry.

5.1. The forest products industry

The forest products industry is an interesting case, since it has undergone a significant consolidation and restructuring over the past decade, such as closing less-efficient mills, investing in new technologies, and reducing unit labour costs. Overall, Canadian nominal exports to the United States, the main market, of the two subindustries combined (wood product manufacturing and paper manufacturing, including pulp) are still 24 per cent below pre-crisis levels, or 48 per cent below their peak level in 2000. Although the industry is now benefiting from strengthening lumber demand from the U.S. housing market as well as improving Asian demand for lumber, pulp and raw logs, Canadian exports have lost significant market share, measured by Canadian exports as a percentage of U.S. apparent consumption: while Canadian exports represented 15.4 per cent of U.S. demand for wood products in 2004, this share fell to 8.7 per cent in 2009 (i.e., exports declined relatively more than the decline in demand in the United States) and only recovered to 11.5 per cent in 2012.²³ Similarly, in the paper products industry, market share of Canadian exports continues to decline (from 7.9 per cent in 2004 to 6.0 per cent in 2012), implying that Canadian exports serve a shrinking share of lower total U.S. demand. Table 1 shows the firms included in the study.

5.1.1. Data collected from annual reports

As a first indicator of whether operations shifted abroad, we simply document the number of manufacturing facilities in 2000 and 2012 in Canada and abroad. Table 2 shows the proportion of facilities in Canada with respect to total facilities. Only one company increased the relative number of manufacturing facilities in Canada, whereas most others increased the number of manufacturing facilities abroad; i.e., in the United States in the majority of cases. The caveat is of course that no information on the size of these facilities is available.

The ideal metric to measure a potential shift in the geographic distribution of firms' operations is production capacity per country. Table 3 documents that 4 out of 6 firms reduced capacity in Canada relative to the United States, whereas only one company increased the Canadian proportion. Since data are available for only a subset of firms and often for a short time horizon, we turn to fixed assets (property, plant and equipment) (Table 4), which are available for 10 out of the 12 firms in the sample. Fixed assets may proxy the geographic distribution of production capacity, assuming that sales offices represent relatively small amounts of fixed assets compared with production facilities. Canadian firms appear to have shifted fixed assets to the United States (or reduced fixed assets in Canada to a larger

²² Some years of data are missing due to confidentiality rules, and slight changes in the appellation of subindustries in 1997 and 1987 potentially involve a change in the sample of firms surveyed.

²³ One reason why Canadian wood exports to the United States have not picked up more may also be increased exports to China by \$749.9 million from 2010 to 2013 (or +105 per cent), compared with an increase of \$2,514.1 million for exports to the United States (+43 per cent). As Chinese demand increased, firms might have chosen to avoid U.S. labour duties and export to Asia instead.

extent than in the United States, given the overall decline of the sector over the past decade). The proportion of fixed assets in Canada decreased for eight companies, and increased only for one. It should be noted that within the time period studied (from 2003 to 2012), the Canadian dollar appreciated significantly against the U.S. dollar (by over 30 per cent). This exchange rate effect understates the extent to which the share of fixed assets that Canadian firms hold abroad has increased, because data are reported in Canadian dollars; therefore, the value of fixed assets in the United States is converted to Canadian dollars each year. For example, the share of Canadian fixed assets in the sample remained broadly unchanged between 2005 and 2012, but with a constant 2005 exchange rate it would have decreased by 5 per cent.

One might argue that this shift in capacity to the United States was simply to match a decrease in Canadian demand, and stronger U.S. demand. Table 5 shows that six firms saw the proportion of sales in Canada declining, while five saw the proportion of sales in Canada increasing.²⁴ Thus, while the trend to move production capacity out of Canada may be explained by the desire to be closer to product markets for some firms, the shift in capacity appears more pronounced than the shift in sales, suggesting that other factors were at play.

5.1.2. Information collected from company statements

To gain further insights into why Canadian firms invested in the United States versus Canada, we analyze each firm from 2000 onwards, counting investments (acquisitions or new plants) in Canada versus abroad, as well as divestments (sales or shutdowns). All investments studied involve production, rather than sales offices, and given relatively short value chains, were largely horizontal in nature (rather than vertical specialization). For each investment or divestment, we categorize the stated motive according to the literature (Dunning 1998, Chart 9). In many cases, firms cite several reasons; therefore, an investment may be classified in multiple categories. As an example, in the sample period we studied, a Canadian lumber producer acquired a mill in the United States. The CEO explained the reason for the FDI as follows:

The mill ... serves key markets in the United States. The mill is one of the industry's most cost effective plants. The acquisition increased [our] total North American production capacity by X per cent.

Clearly, the company was looking to expand its markets (market seeking), and sought to reduce costs (efficiency seeking).

Frequency of investments by objective

Overall, Canadian firms in the forest products industry opened or acquired 47 facilities in the United States, versus only 33 facilities in Canada (Table 6). This suggests that production capacity has shifted to the United States. Categorizing motives helps to classify investment decisions into those that likely shift production out of Canada, and those that either do not or reinforce Canadian supply (Table 7). For

²⁴ GDP growth rates in the wood industry and the pulp and paper industry have been similar in the United States versus Canada over the past 10 years.

instance, *market-seeking* investments can, in theory, be both: if the investment seeks to serve a new market, it would not affect exports, but if it seeks to serve an existing customer base that was previously served through exports, it is at least partially export-substituting. To the contrary, *efficiency-seeking* investments abroad, if of the horizontal type, likely substitute for exports, as the firm seeks to produce the same product, but in a more cost-efficient way. *Resource seeking* complements a company's export strategy, since it allows the company to access resources beyond what is possible within the home country. Last, a *strategic asset-seeking* investment can be ambiguous. If it allows the company to expand beyond what is possible within the home country, it supports exports, but if the resulting foreign presence also serves markets previously served through exports, it is export-substituting.

The relative importance of FDI motives, from least to most frequently cited, is as follows. First, **resource-seeking** objectives were cited in six investments in the United States (Table 8). To give a few examples, one firm cites reasons such as being closer to the relevant fibre market. Other firms acquired companies in the United States to ensure a steady supply of raw material for their mills, or because of the favourable location of the acquired company from a log supply standpoint. Yet another firm investing in the South of the United States mentions the excellent fibre supply, as harvests of a particular tree in that region were projected to continue increasing. Resource seeking is the one category where firms chose to invest in Canada more often than in the United States (10 Canadian investments).

Second, **efficiency-seeking** objectives justified 12 investments in the United States. For example, one firm opened up new facilities in the United States to be closer to its clients and to reduce shipment costs. Another firm concretely cites the competitive disadvantage it has with its primary competitors whose remanufacturing facilities are already in the United States. It thus decided to shift its operation to the United States to avoid punitive U.S. lumber duties and high costs associated with doing business in Canada. Moreover, the shift moved its operations closer to its customer base, simplified transportation arrangements (thus reducing transportation costs) and reduced operating costs, eventually improving its competitive position. Several firms cite important synergies by acquiring similar firms, such as reducing operating costs and increasing financial flexibility. Although this is not necessarily efficiency seeking in the sense of Dunning (1998), such synergies are often vital for companies to remain competitive in a consolidating industry.

Third, **strategic asset seeking** was a stated objective in 18 U.S. investments. To give a few examples, one firm acquired a U.S. firm because of its strong customer base and to improve its strategic position in the market. A later investment in the United States allowed it to position itself strategically to serve the Latin American market in the future – this FDI was thus an important strategic step in its long-term development plan. Another firm acquired a U.S. counterpart because of its research capabilities, to further differentiate its product range and to integrate the best available technology to grow its businesses. In particular, the acquired company possessed a patented manufacturing process that it judged to be key to success in the particular market. Several firms also mention that a certain acquisition was just another important step in their longer-term strategic plan of expansion. While the latter argument also qualifies as *market seeking*, an acquisition can be *strategic asset seeking* if it brings a firm closer to its long-term strategic plan that ensures the viability of its existence.

And last, for most investments in the United States (38 out of 47), **market seeking** was the major stated objective (Table 8). Going beyond the distinction of FDI objectives classified in Dunning (1998), we further disaggregate market seeking into four categories (Table 9):

1. For 17 investments, firms sought to *diversify their product lines*. For instance, one firm acquired a U.S. corporation and constructed a new facility because these FDIs further enhanced its product and service offerings. Another firm mentions that an acquisition complemented its product mix and broadened its product lines. Yet another firm expanded into a broader range of products through an acquisition, mentioning the growth potential of the new products. By comparison, only nine product diversification investments were made in Canada.
2. A second, often related type of market seeking is *geographic expansion/diversification*, cited in 29 decisions. To name a few examples, one firm acquired a mill in the United States to meet demand for a particular grade in large urban regions in the United States, citing that the mill is well located to serve growing population centres in western North America and that it is the freight-logical supplier to a number of key markets. Other firms mention their objective to increase market reach through an acquisition or the desire to establish a major presence in the U.S. South, which represented a unique growth opportunity in terms of size and diversification because it was the fastest-growing market in North America.
3. Several firms mention the simple desire to *expand capacity*; i.e., to increase their presence in a certain market and grow the business to enhance their position (29 investments). This is more than twice the number of domestic expansions (13 investments).
4. Last, a couple of firms (for seven investments) cite that the investment has strengthened their *competitive position* (by reducing the number of competitors and growing in size) in a consolidating industry (which often also overlaps with strategic asset seeking).²⁵ This was the only type of market-seeking investment that was more common in Canada (13 investments).

First investments predominantly involved market-seeking objectives (Chart 10). For instance, one firm justifies its first investment in the United States as a way to access a particular retail market, an objective clearly related to market seeking. Subsequent investments involved more and more efficiency seeking. As firms became more accustomed and experienced in the United States, they sought investments that allowed them to operate more efficiently; e.g., by reducing costs or transportation distance.

Displaying the frequency of motives of FDI by calendar year (Chart 11) shows that overall investments decelerated during the recession, but have picked up since. Of note, efficiency-seeking investments accelerated throughout the past decade, potentially linked to the shift in relative costs induced by the appreciation of the Canadian dollar.

²⁵ We also split the sample by industry growth, as well as subindustry (lumber versus pulp and paper), but FDI objectives do not materially differ.

Frequency of *divestments* by objective

Overall, companies sold 32 operations, and closed 56 operations. The 12 companies in the sample closed or sold 70 facilities in Canada since 2000, but only 14 in the United States (Table 10). This result again supports the hypothesis that capacity has shifted to the United States.

Turning to the objective of such divestment decisions, we categorize motives according to the mirror objectives of FDI such as in Dunning (1998). First, rather than conquering new markets (**market seeking**), firms decided to *leave* markets because of lack of demand or low prices. Second, rather than seeking to reduce costs and increase efficiency (**efficiency seeking**) through FDI, firms decided to *discontinue* operations for the same reasons, namely cost-inefficiency. And last, rather than seeking assets close to the relevant resources (**resource seeking**), the lack of the relevant resource can justify closure of an operation. All 70 divestments in Canada (closure or sale of the Canadian operation) likely reduced Canadian exports, since any increase in U.S. demand cannot be served by these operations anymore.

As for the equivalent of **market seeking**, Table 11 shows that market forces were behind many downsizing activities. We disaggregate these objectives into three interlinked subcategories:

1. For 33 of the 70 divestitures in Canada (or 39 out of 84 in North America), firms cited *lack of demand and/or low prices*. This result is not surprising, given the overall challenging business environment for the industry. Concretely, to justify the closure or sale of several operations over the 2000–13 period, one firm cites the steep decline in commodity paper markets and the necessity to adjust to the reality of the domestic marketplace, and overall unfavourable economic factors. A lumber firm argues that the historically low level of U.S. housing starts forced them to close a mill in Canada. Yet another firm justifies several divestments by citing the steep drop of lumber prices and declining demand for pulp and paper products owing to the Internet.
2. Similarly, for 20 Canadian divestments, firms cited the need to *downsize in a consolidating industry*. One firm adopted a plan to divest itself of non-core assets, while others sought to permanently reduce Canadian manufacturing capacity to maximize output on the remaining plants.
3. Finally, for 17 divestments, firms cited *financial losses* at the operation in question, either because of cost inefficiency or low demand and prices. Several firms mention continued financial losses, one stating that losses resulted from intense supply input cost and market pressures.

Analyzing **efficiency-seeking** objectives for divestments reveals that country-specific factors can explain why Canadian firms predominantly closed operations in Canada rather than in the United States. In particular, we distinguish between three subcategories:

1. Nearly half of the divestments in Canada (32 out of 70) were related to cost inefficiency, i.e. *high operating costs*, whereas less than a third of the divestments in the United States (4 out of 13) were motivated by high costs. This result implies that high costs were a bigger problem in Canada, as suggested in the motivation (Chart 4). To name only a few of the numerous

examples, firms cite uncompetitive labour and tax costs, high labour costs, increased operating costs, and very high recycled-fibre costs.

2. Similarly, for 16 divestments, firms cite the *strength of the Canadian dollar* (resulting in high and uncompetitive costs) for divestments in Canada.
3. Last, in five instances, firms mention *regulatory constraints* for divestments in Canada; for example, punitive U.S. lumber duties. One firm argues that 27.2 per cent of duty charges, coupled with the already high costs associated with doing business in Canada, made it uneconomical for the company to keep this operation in Canada. Also, although not explicitly mentioned in motives for rationalization of production capacity in Canada, regulatory changes in British Columbia in 2003 and their implementation in the following years also likely affected the decisions of firms to close unviable or inefficient mills in British Columbia (B.C. Ministry of Forests 2003).²⁶

Finally, nine examples fall into the category that would mirror the **resource-seeking objective**; namely, *supply constraints*. Particularly in the lumber industry, firms cited factors such as harvesting limits as a reason for divestments in Canada (British Columbia and Quebec), while such reasons were not mentioned for U.S. divestments. Recently, some firms reacted to the expected change in supply due to the mountain pine beetle by closing B.C. sawmills.

Displaying divestments in Canada by motive and year (Chart 12) reveals that divestments have become more frequent over the 2005–10 period, but decelerated as demand picked up in the following years (the uptick in 2014 is related to the mountain pine beetle phenomenon in British Columbia). Efficiency-seeking divestments increased importantly over the 2005–11 period, likely related to the relative increase in costs in Canada.

5.1.3. *Data on foreign affiliate activity in the forest products industry*

As a third supporting source, this section discusses BEA data on foreign affiliate sales for the forest products sector.

Pulp and paper industry

Comparing Canadian **foreign affiliate sales** in the United States with Canadian exports for the pulp and paper industry, Chart 13 shows that these two series increased steadily, at an average annual growth rate of 6 per cent, during the 1985–2000 period. However, from 2001–06, a period of important appreciation of the Canadian dollar, foreign affiliate sales accelerated sharply (average annual growth rate of +15 per cent), whereas exports remained flat (+0 per cent). This supports the idea that Canadian firms increasingly served U.S. demand through their foreign affiliates in the United States, rather than exclusively through exports. Both series plummeted during the recession (2007–09), falling 9 per cent in the case of exports, and 17 per cent in the case of foreign affiliate sales. As U.S. demand recovered

²⁶ In 2003, the government implemented the *Forestry Revitalization Plan*, which contained sweeping reforms to revitalize British Columbia's forest industry. In particular, outdated regulations were removed, such as impediments to close less-efficient mills and rules that stipulated at which mills logged timber had to be processed.

(2010–12), foreign affiliate sales growth outpaced exports again, growing by an average 15 per cent, compared with flat export growth.

A similar pattern emerges for **foreign affiliate employment** (Chart 14). Given the overall secular decline in the paper industry, it is not surprising that employment in both Canada and at Canadian foreign affiliates in the United States declined somewhat over the 1985–2000 period (average growth of -2 per cent and -1 per cent, respectively). However, over the 2001–06 period, employment in Canada continued to trend down (-1 per cent), but accelerated among foreign affiliates (average annual growth of 6 per cent), in parallel with foreign affiliate sales growth. This supports the idea that growth in foreign affiliate sales was not simply due to an increase in sales offices (needing relatively few staff), but likely involved more production (using more staff). Both employment series decelerated sharply during the recession (-17 per cent of average annual growth in foreign affiliates, and -7 per cent in Canada). With the recovery in 2010–12, employment growth picked up among Canadian affiliates (average growth of 12 per cent), but continued to trend downward in Canada (-4 per cent). This suggests that Canadian firms employ more and more resources abroad.

Finally, **gross property, plant and equipment** of Canadian affiliates in the United States grew at an average annual rate of 5 per cent over the 1985–2000 period (Chart 15), similar to the end-of-year stock of Canadian firms in Canada (+4 per cent). While growth of the stock of capital in Canada slowed over the 2001–06 period (average growth of 1 per cent), the growth of foreign affiliate capital accelerated to 6 per cent, in line with the acceleration of sales and employment. Following a drop in both series during the recession, firms in Canada continued to reduce the stock over the recovery period (average annual growth of -4 per cent), while foreign affiliates continued to build their stock of capital (+5 per cent).

Overall, the data suggest that Canadian firms in the pulp and paper industry increased their presence in the United States over the past decade, notwithstanding the reduction during the recession, and at a faster rate than comparable domestic metrics.

Wood products industry

Unfortunately, incomplete data for foreign affiliates in the wood products sector (after 2000) does not allow for a similar comparison. However, it is clear that even over the 1985–2000 period, foreign affiliate sales growth (average of +15 per cent) outpaced export growth (+10 per cent) (Chart 16). Similarly, employment at foreign affiliates grew by an average of 6 per cent, while Canadian firms in Canada increased employment only modestly (+3 per cent) (Chart 17). Finally, the stock of capital increased by an average growth rate of 26 per cent in the case of foreign affiliates, but only by 4 per cent on average in Canada (Chart 18).

5.2. The motor vehicle parts industry

The motor vehicle parts industry offers its own unique attributes to help illuminate the relationship between FDI, foreign affiliate sales and exports. The automobile market is one of the most integrated on the continent, with some components crossing borders multiple times before ultimately being assembled into a vehicle. Although the North American auto industry surpassed its pre-crisis level of auto production in 2013 (16.5 million vehicles in 2013 compared with 15.4 million in 2007), Canadian

auto parts exports have not recovered so quickly and have lost a significant share of U.S. imports. According to the U.S. International Trade Commission, Canada represented 27 per cent of U.S. imports of auto parts in 2002; by 2012, that share had fallen to 14 per cent.

Given that assembly plants and their location determine the market for a motor vehicle parts firm, we also consider how production levels across North America have changed in recent years. The overall number of assembly plants has decreased in North America since 2007: Canada lost three plants, the United States lost 12 plants and Mexico added two plants (totalling 11, 56 and 21 plants in 2013, respectively). Although the number of U.S. plants decreased, more cars were produced in the United States in 2013 than in 2007. Production was up over 45 per cent in Mexico in 2013 compared with 2007, while Canadian vehicle production dropped, by almost 8 per cent, in that period. We follow the same general process for the motor vehicle parts industry as with the forest products industry by examining three Canadian motor vehicle parts firms (Table 12). While the forest products industry is concentrated in Canada and the United States, the motor vehicle parts industry's "local" market includes Mexico. Other than the addition of Mexico, however, the analysis of the motor vehicle parts industry is identical to that of the forest products industry.

5.2.1. *Data collected from annual reports*

We first document the geographic distribution of manufacturing facilities and employees. One firm in the sample provides a geographic distribution of facilities in its annual reports for the sample period, while the other two provide a distribution of employees (Table 13). In all three cases we see a loss in Canada's share of either facilities or employees in North America. Two firms show an absolute increase in Canada, but the bulk of growth is outside of Canada. The third firm had an outright decline in the number of facilities in Canada even while the total number of North American facilities increased.

Data on capacity are not available for the firms considered. We thus turn to property, plant and equipment in Table 14 for all three firms – a useful proxy for the geographic distribution of production capacity. Over the past decade, Canadian firms appear to have shifted fixed assets south (at least on a relative basis), not only to the United States but also to Mexico: two of the firms increased their fixed assets in Canada, but to a lesser extent than the increase in fixed assets abroad. The remaining firm reports an outright decline in Canadian assets, while total North American assets increase. As noted above, relative data on fixed assets reported in Canadian dollars understate the real shift in fixed assets, due to the appreciation of the Canadian dollar. Between 2003 and 2012, Canada's relative share of North American fixed assets dropped from 58 per cent to 37 per cent – despite the fact that the Canadian dollar appreciated by over 30 per cent against the U.S. dollar and by over 50 per cent against the Mexican peso. To illustrate, if we use a constant 2003 exchange rate to convert the value of assets abroad, Canada's relative share of fixed assets would drop much further, down to 29 per cent in 2012.

Finally, turning to the geographic distribution of sales, the share of sales in Canada relative to the United States and Mexico (Table 15) decreased for all three firms, but Canada's share of North American fixed assets decreased by a larger proportion than the shift in sales.

5.2.2. *Information collected from company statements*

For each firm, we count investments (acquisitions or new plants) in Canada versus the United States and Mexico from 1998 onward.²⁷

Frequency of investments by objective

The three Canadian auto parts firms opened or acquired 72 facilities in North America over the time period under examination, with only 23 of them being within Canada (Table 16). This evidence supports the idea that production capacity has shifted out of Canada and into the United States and Mexico. Although the focus will remain on the North American market in this case study, we note that over the period in question these Canadian firms made about as many investments outside of North America as within (74 versus 72).

As with the forest products sector, we categorize the motives for investments according to Dunning (1998). First, **resource-seeking** objectives were not cited in any North American investments (Table 16). Unlike the forest sector, which requires a direct link to a natural resource, the auto parts sector requires value-added inputs.

Second, **efficiency-seeking** objectives justified 15 investments, 13 of which were outside of Canada. Efficiency-seeking investments typically brought firms closer to their customers, which would allow for faster delivery and lower transportation costs. In many cases, this type of investment was necessary to retain a customer and therefore would also be considered market seeking. For example, in 2010 one firm added a new industrial facility in Mexico, recognizing the importance of being able to service their customers from facilities close to their assembly plants, “given the nature of (their) product offerings.” Close proximity reduces both transportation cost and time; therefore, it is not surprising that efficiency-seeking investments were more common in the south, far from Canada’s auto cluster. Seven of 32 investments in the United States were made with efficiency-seeking motives, and these investments were relatively most common in Mexico, being cited in six of the 17 investments in Mexico.

Third, **strategic asset seeking** was a stated objective in 30 investments, making it the second-most common objective. Only five of these investments were located in Canada. Strategic investments include those that give a firm a more-diversified customer base or technology. A firm may also make a strategic investment by acquiring another firm that employs a team with desired capabilities, as in 1998, when one of the firms purchased a Mexican engine-manufacturing company, boasting that its people were its most valuable asset.

Finally, as with the forest sector, most investments in North America were made with a **market-seeking** objective (55 out of 72). Unlike in the forest sector, market-seeking investments were made at comparable levels in both the United States and Canada (22 of 32 and 16 of 23 investments, respectively). However, when looking further south to Mexico, a market that does not have the same history of integration as the United States and Canada, market seeking was cited relatively more frequently. All 17 investments made in Mexico were of a market-seeking nature. We also note that there

²⁷ Linamar’s sample includes one investment in late 1997, while Martinrea’s sample begins in 2002.

were two first foreign investments in the sample (i.e., the first time a firm invested outside of Canada), and in both cases the investments involved market-seeking objectives, with the firms acquiring other firms that were already established outside of Canada.

When further disaggregating the market-seeking category into three subcategories, we find (Table 17):

1. For 23 of the 55 market-seeking investments, firms sought to *diversify their product lines*. Only five of these product diversification-driven investments were made in Canada, meaning that when firms wanted to enter into a new auto part market, they were much more likely to do so in the United States or Mexico than in Canada. For instance, one firm's belief that composite plastics were a strategic new product area led to the acquisition of an American firm with operations in the United States and Mexico.
2. *Geographic expansion/diversification* was cited for only 11 investments, none of which was in Canada. The concentration of Canadian auto assembly firms in Ontario makes this unsurprising. One example of this type of investment in the sample occurred in 2003, when one firm wanted to increase its manufacturing capabilities in the southern United States: it did so by both launching a new facility and purchasing a firm located there.
3. *Expansion* was the most commonly cited reason for market-seeking investment in North America, nowhere more so than in Canada, where 14 of the 16 market-seeking investments were at least partly due to expansion.

Displaying the frequency of investments by objective over time (Chart 19) shows that market seeking was a major objective throughout the period covered, while strategic asset seeking has been cited less frequently in recent years.

Frequency of *divestments* by objective

The data for divestments in the motor vehicle parts industry are much more limited than they are in the forest products industry. This makes a similar, detailed analysis of motor vehicle parts industry divestments infeasible, although the limited data (not shown) do suggest the same general trend, with most of the divestments occurring in Canada.

5.2.3. *Data on foreign affiliate activity in the motor vehicle parts industry*

This section discusses the third source of triangulation: BEA data on foreign affiliate sales for the auto sector.²⁸ The foreign affiliate sales data are available only for the United States; therefore, the omission of Mexico implies that any shift out of Canada of relative capacity, employment or sales shown by these data is actually understated.

Although Canadian **auto affiliate sales** in the United States are a fraction of exports by Canadian firms that manufacture transportation equipment, they have performed better in recent years. Chart 20 shows that Canadian exports of transportation equipment have been relatively flat since 1999. This category includes other sectors, but auto parts are a significant portion of the total. In contrast, sales by Canadian

²⁸ These data concern the auto sector in general, but – considering that no auto assemblers are internationally headquartered in Canada – they should be predominantly related to the parts sector. They serve as the best proxy given the available data.

multinational firms' operations in the United States have grown importantly. While exports dropped dramatically during the Great Recession and then started to recover in recent years, foreign affiliate sales did not see the same drop during the recession and grew more rapidly than exports in the following years.

Second, we compare **foreign affiliate employment** (Chart 21) in the auto sector with employment in the auto parts sector in Canada. Canadian affiliate employment in the United States grew considerably in the 1990s and then fluctuated at around 20,000 employees afterward. Employment in the Canadian auto parts sector, on the other hand, declined by almost 60 per cent from 2000 to 2009, and has since experienced only a very minimal recovery.

Last, the level of **gross property, plant and equipment** of firms in Canada that manufacture transportation equipment (consisting largely of the parts sector) did not change materially from 2000 to 2012. In contrast, Canadian auto parts firms' operations in the United States increased their fixed assets by almost 80 per cent from 2000 to 2009 (the last year of available data) (Chart 22).

Overall, the data suggest that Canadian firms in the motor vehicle parts industry increased their presence in the United States in recent years, including during the recession.

5.3. Summary and interpretation of case study results

To summarize, while an overall challenging business environment in both industries studied led to a consolidation, results suggest that the firms studied increasingly shifted their activity to the United States in the forest products industry, and to the United States and Mexico in the motor vehicle parts industry. First, we document that the increase in firm's fixed capital and sales abroad outpaced their activity in Canada, while the number of facilities in Canada relative to the rest of North America has been declining. When factoring in the appreciation of the Canadian dollar over the period in question, the trend is even stronger than it first appears. Second, an analysis of investment and divestment decisions in Canada, the United States and Mexico clearly reveals that firms in the forest products and the auto parts industries favoured the United States and Mexico over Canada for new investments, and that the operations they closed or sold were predominantly in Canada, leading to a shift in relative capacity. While market seeking was important for their expansion of operations abroad, relative costs did importantly affect firms' subsequent decisions for both investments and divestments in the case of the forest products industry. Firms in the auto parts industry mostly cited market seeking and strategic reasons. Finally, data on the activity of Canadian foreign affiliates in the United States support the findings: activity grew more strongly abroad than at home.

The results allow our research questions to be answered to some extent. First, Canadian forest products and auto parts firms' investments abroad were, in some cases, complementing exports, as in the case of investments for resource-seeking objectives. Investments for market-seeking purposes (most of which were of the horizontal, rather than vertical, type) were more likely to shift the location of the production that would satisfy foreign demand. Rather than serve the specific market demand through exports, many firms chose to invest in that region to serve the market locally. In addition, the fact that several firms cite efficiency gains as a result of moving operations abroad suggest that such investments were export-

substituting: given the choice of investment in Canada (with subsequent exports from this operation) versus the choice of horizontal investment in the United States or Mexico (implying no exports from Canada), firms increasingly chose the FDI option. Firms often cited lower operational costs such as labour costs, some directly relating the relative Canadian cost disadvantage to the strength of the Canadian dollar. The relative shift of production capacity to locations abroad helps explain why the accelerating foreign demand in these industries over the past years has not led to a proportional rebound in Canadian exports: simply put, some Canadian firms now use their foreign facilities to serve this demand to a greater extent than they did before the recession, because a larger share of their production capacity is now located abroad.

6. Conclusion

This paper sheds light on the question of why Canadian exports in the forest products and motor vehicle parts industries are slow to recover from the fall experienced during the Great Recession and have underperformed despite the acceleration in foreign activity. In particular, it studies the growing trend of Canadian firms in these industries using foreign operations, in addition to exports, to serve foreign markets. Using a case study approach on the largest firms in these industries, this paper finds that Canadian firms have increasingly invested south of the border over the past decade. While some of these investments complemented Canadian exports, an important share appear to have been export-substituting: in particular, now that foreign demand has been improving in recent years, the firms studied appear to increasingly serve foreign market demand through their facilities abroad, rather than exclusively through exports.

Further studying investments of the largest firms in each industry since the year 2000, we find that Canadian firms' stated motives to move operations abroad can be classified (according to the literature) as market, resource, efficiency or strategic asset seeking. While first investments were usually of a market-seeking nature, subsequent investments sought to improve firms' efficiency – for instance, by lowering costs, or increasing their competitive position through strategic asset seeking. When studying firms' decisions to divest (either in Canada or abroad), it is clear that relative costs played a major role in inciting these firms to predominantly close Canadian facilities and continue operating their foreign facilities. The results imply that Canadian firms in the forest products and auto parts industries increasingly serve foreign markets through their operations abroad, rather than only through exports. We may thus conclude that horizontal Canadian FDI in these industries can partly explain why exports failed to rebound as strongly as their historical correlation with foreign demand would suggest. Indeed, Canadian firms might not have lost market share to U.S. firms, but simply changed the way in which they serve foreign demand.

While Canadian operations abroad might substitute for exports to some extent, they also have important implications for Canadian firms' productivity and competitiveness. While beyond the scope of this paper, future research should aim at evaluating the importance of the benefits that Canadian operations abroad generate for the investing companies in terms of higher profitability, productivity, trade, and competitiveness, and for the Canadian economy overall (Poloz 2012). Moreover, investing abroad might be an indispensable strategic tool for staying internationally competitive. Not investing abroad may

result in a loss of competitiveness, with respect to internationally active firms, which could force firms to downsize or even go out of business (Conference Board of Canada 2011).

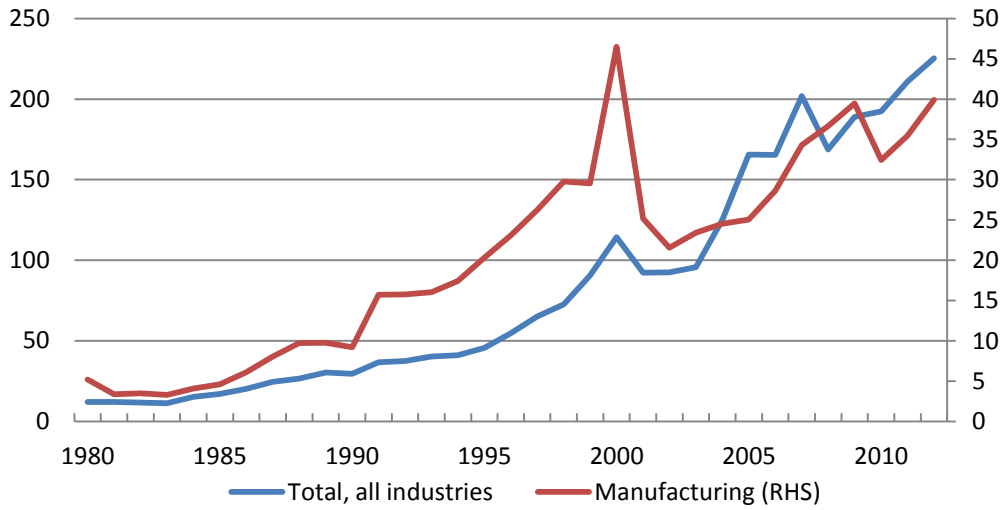
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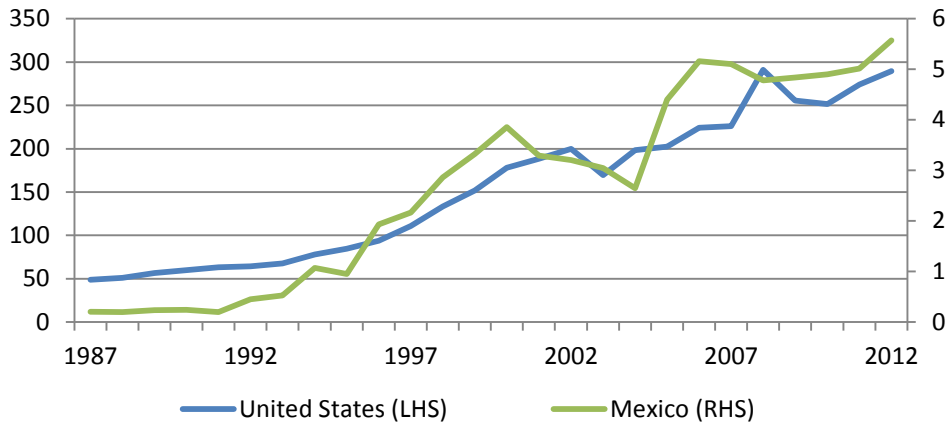
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**Chart 1: Stock of Canadian Investment in the United States
(in US\$ bn)**



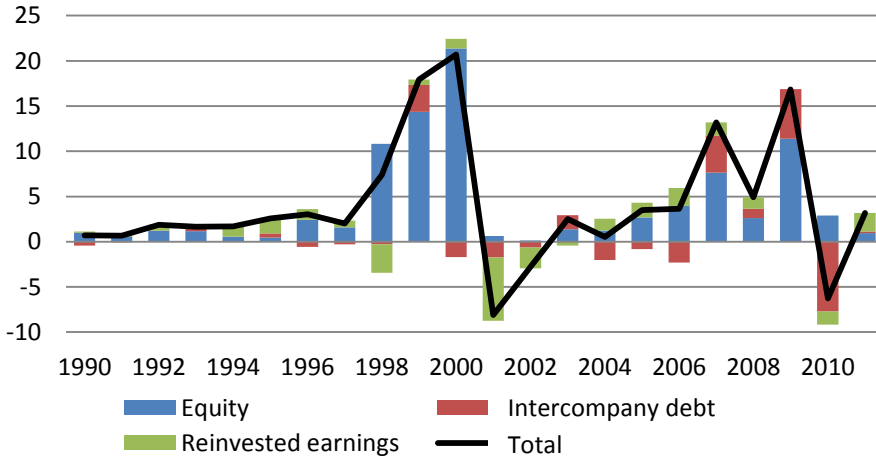
Source: BEA

**Chart 2: Canadian Stocks of FDI in the United States and Mexico
(Total, in Can\$ bn)**



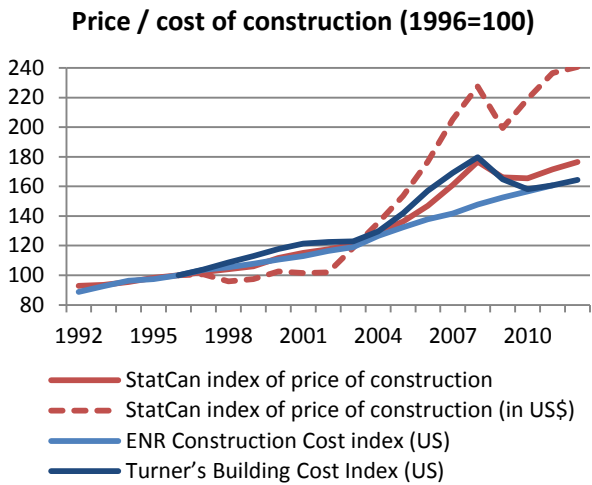
Source: Statistics Canada

**Chart 3: Canadian Flows of FDI in the United States
(Manufacturing, in Can\$ bn)**



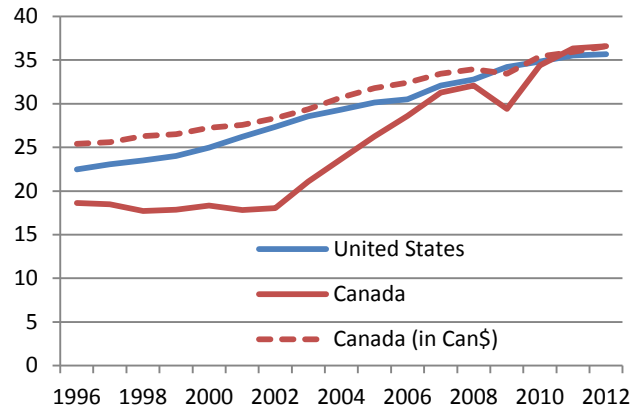
Source: BEA

Chart 4: Relative Construction and Labour Costs in Canada and the United States



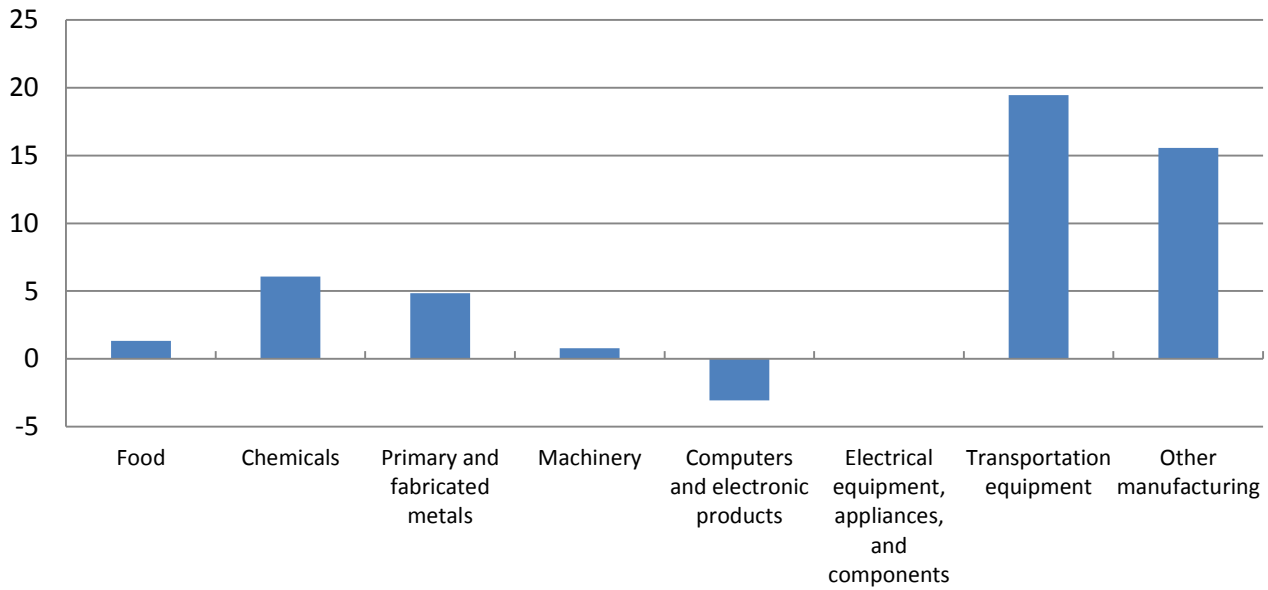
Sources: Statcan, ENR.com, Turner. Note: Definitions of the different indicators differ, but all include factors such as labour costs, material prices and market place conditions.

Hourly compensation costs in manufacturing, U.S. dollars



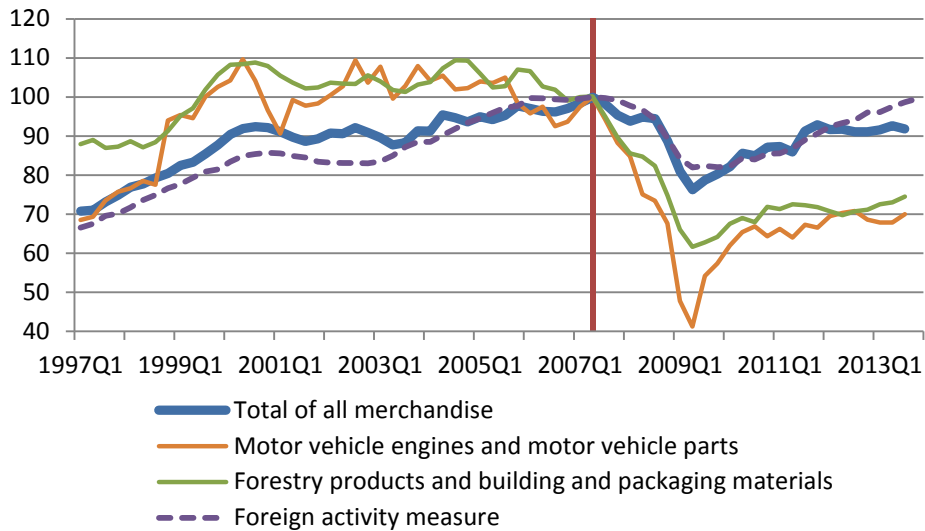
Source: U.S. Bureau of Labor Statistics, International Labor Comparisons, August 2013

Chart 5: Sectorial Decomposition of Canadian Flows of Manufacturing FDI in the United States (cumulative flows 2001–12, in US\$ bn)



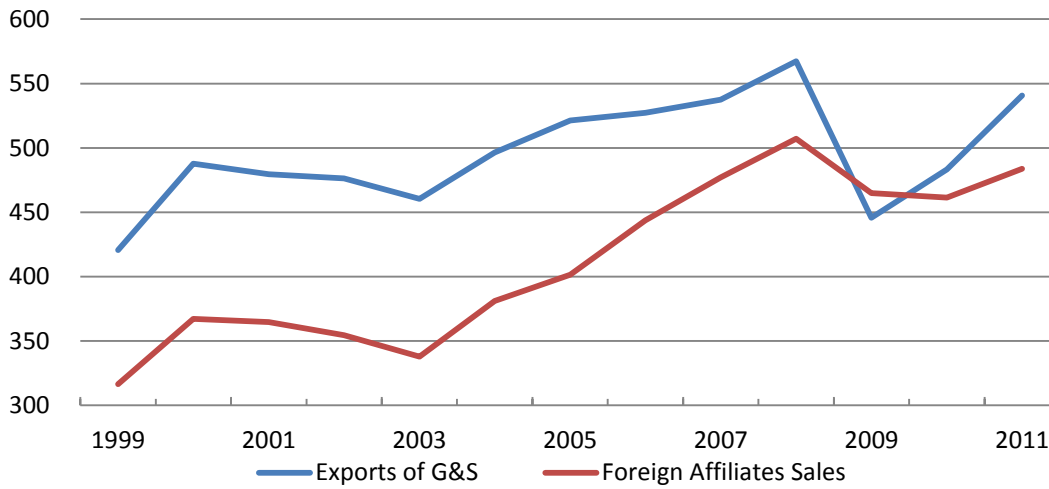
Source: BEA

Chart 6: Canadian Merchandise Exports
2007Q2=100 (pre-recession peak in total exports)



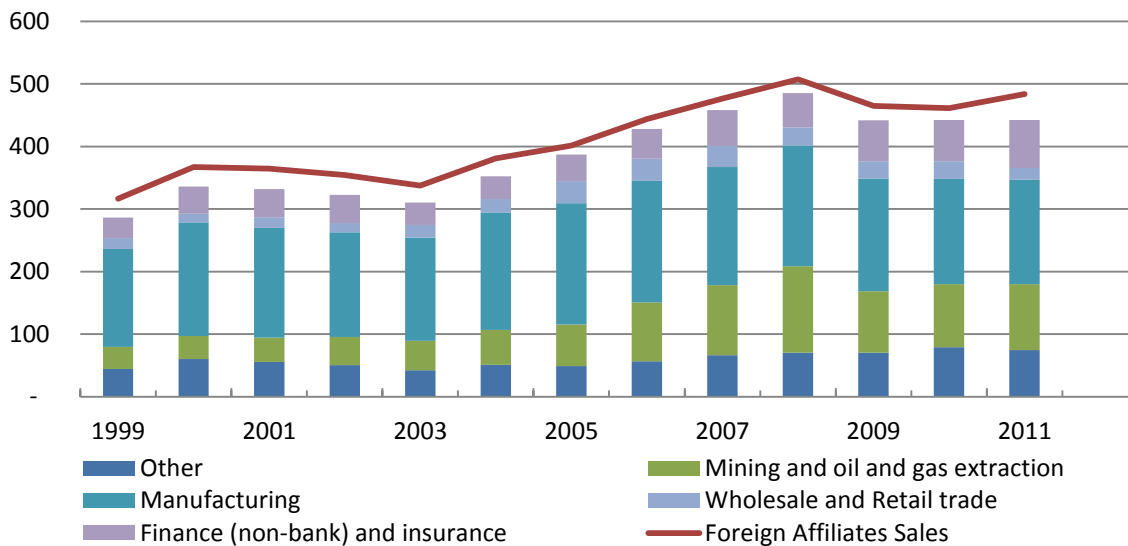
Sources: Bank of Canada, StatCan, Merchandise Imports and Exports, Table 228-0064

Chart 7: Sales by Canadian Foreign Affiliates Abroad vs Canadian Exports of Goods and Services, 1999–2011, \$billions



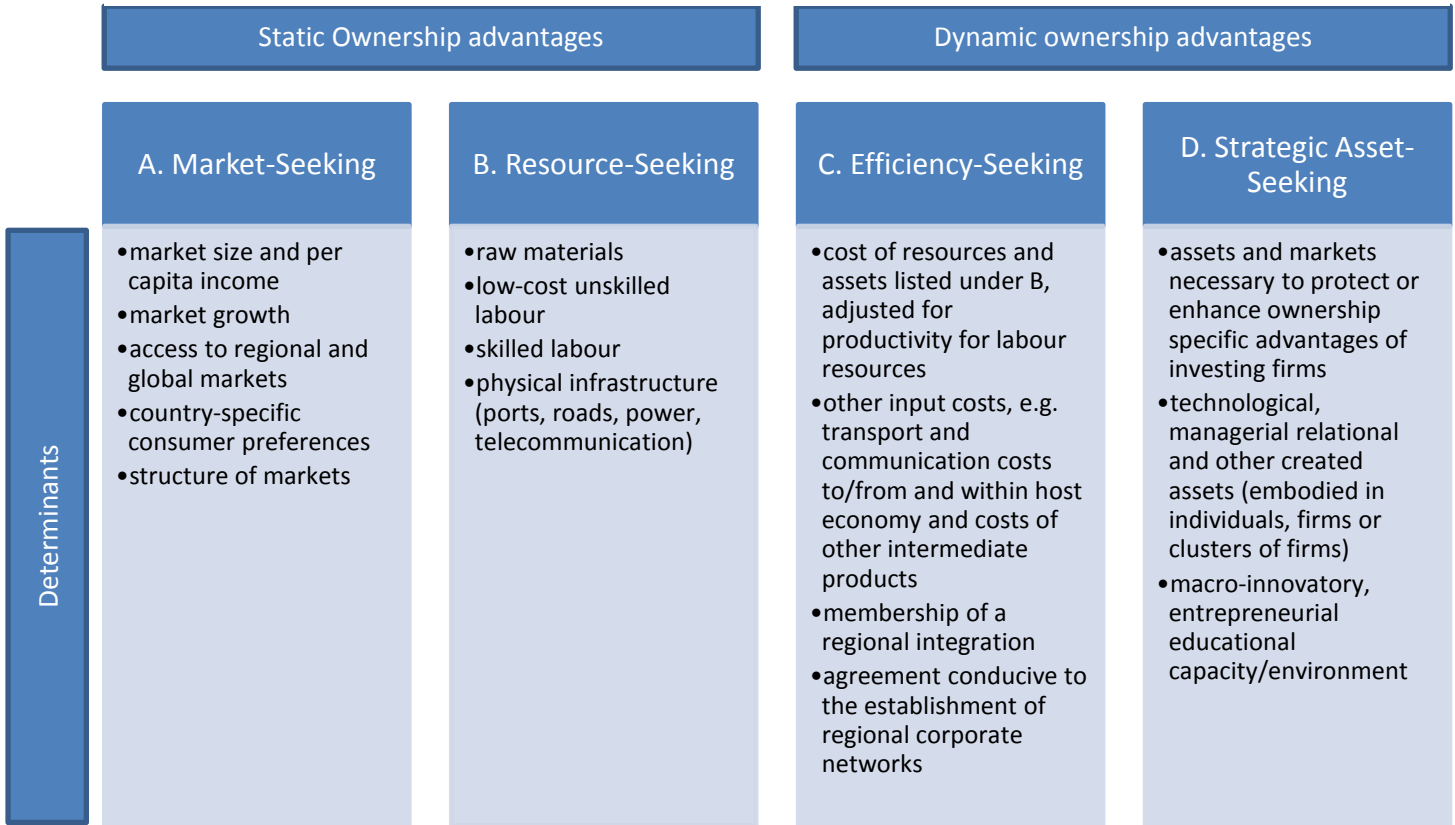
Source: StatCan CANSIM tables 376-0101, 376-0060

Chart 8: Sales by Canadian Foreign Affiliates Abroad by Industry, 1999–2011, \$billions



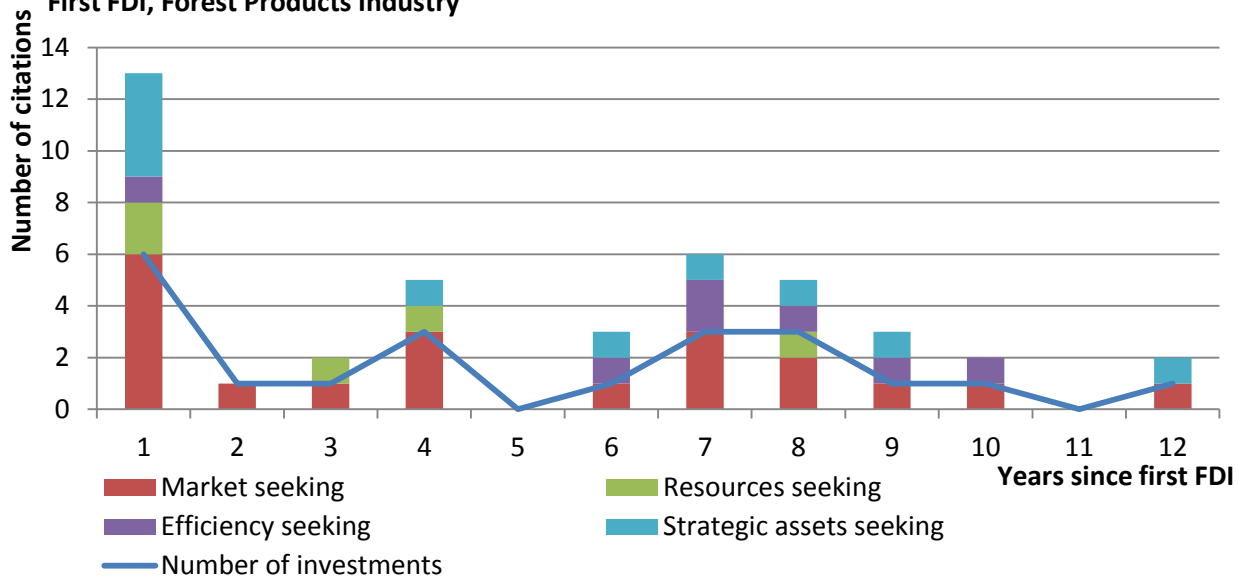
Source: StatCan table 376-0060. Note: Other includes Agriculture, forestry, fishing and hunting; Utilities and construction; Professional, scientific and technical services; Management of companies and enterprises; Transportation and warehousing; Other service

Chart 9: Foreign Direct Investment Objectives by Dunning



Sources: Adapted from UNCTAD (1998), Dunning (1998, 2000, 2004)

Chart 10: Frequency of Stated Objectives of Investments Abroad per Year since First FDI, Forest Products Industry



Note: Chart only includes the six companies that made their first FDI investment in 2000 or later.

Chart 11: Number of Investments Abroad per Motive per Calendar Year, Forest Products Industry

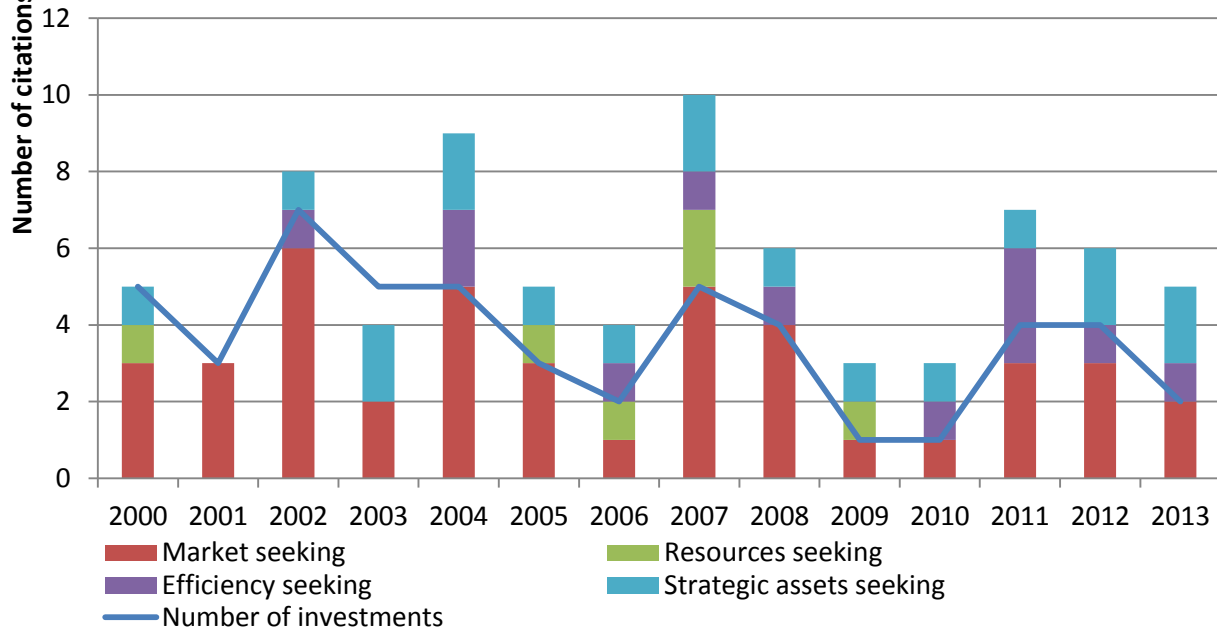


Chart 12: Number of Divestments in Canada per Motive per Year, Forest Products Industry

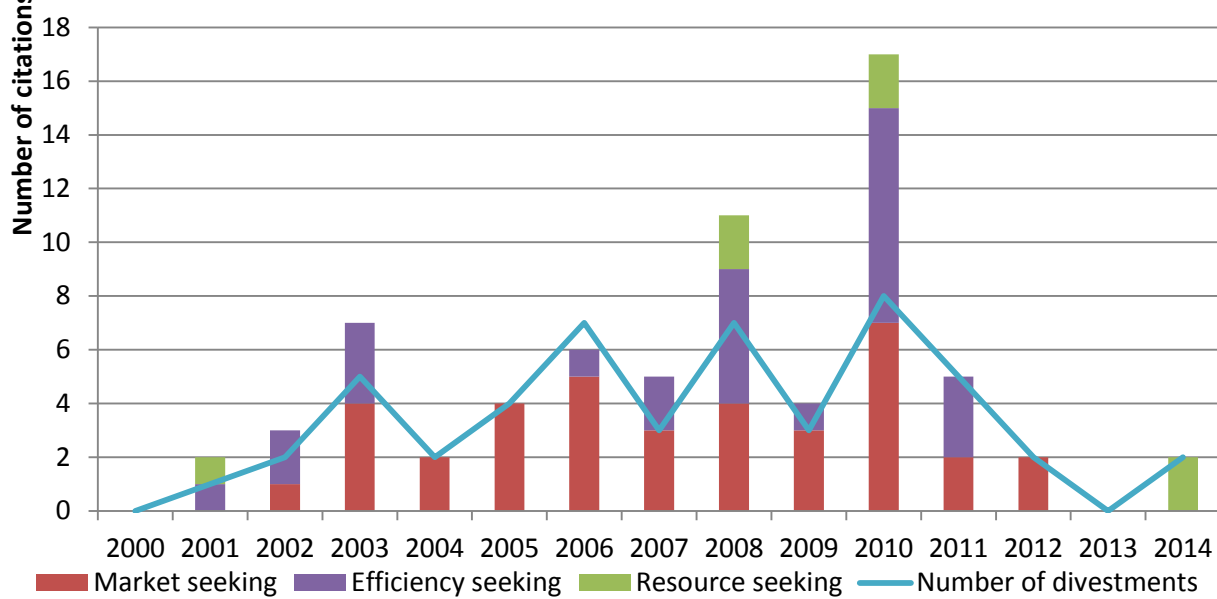
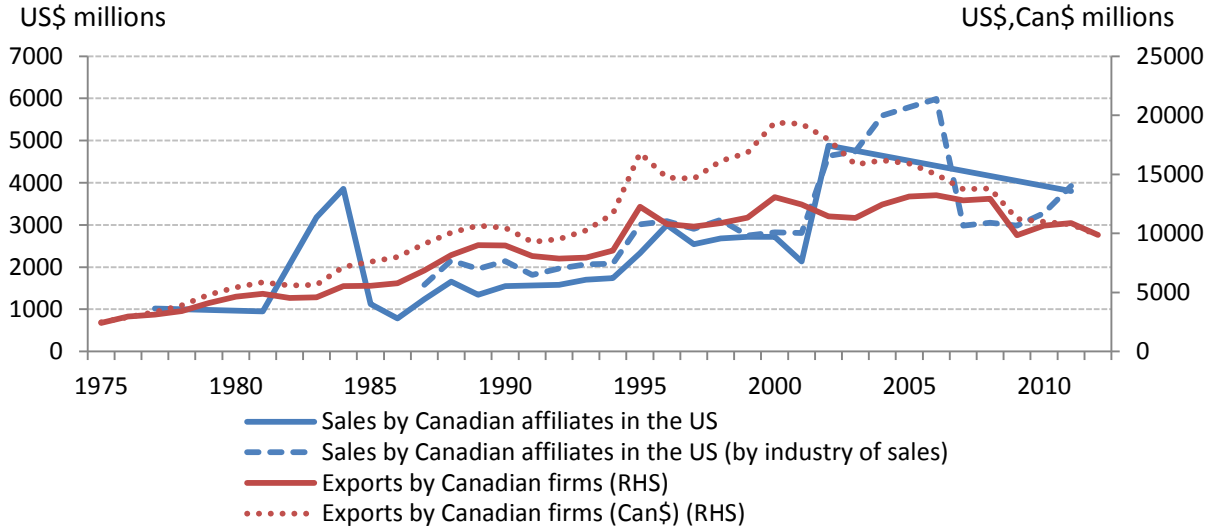
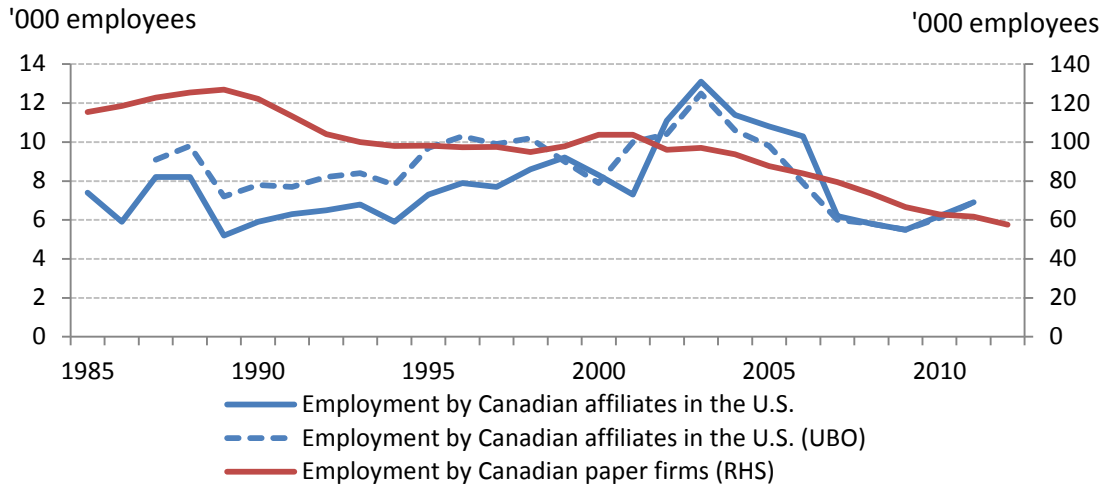


Chart 13: Sales of Canadian affiliates in the United States and Canadian Exports to the United States - Pulp and Paper



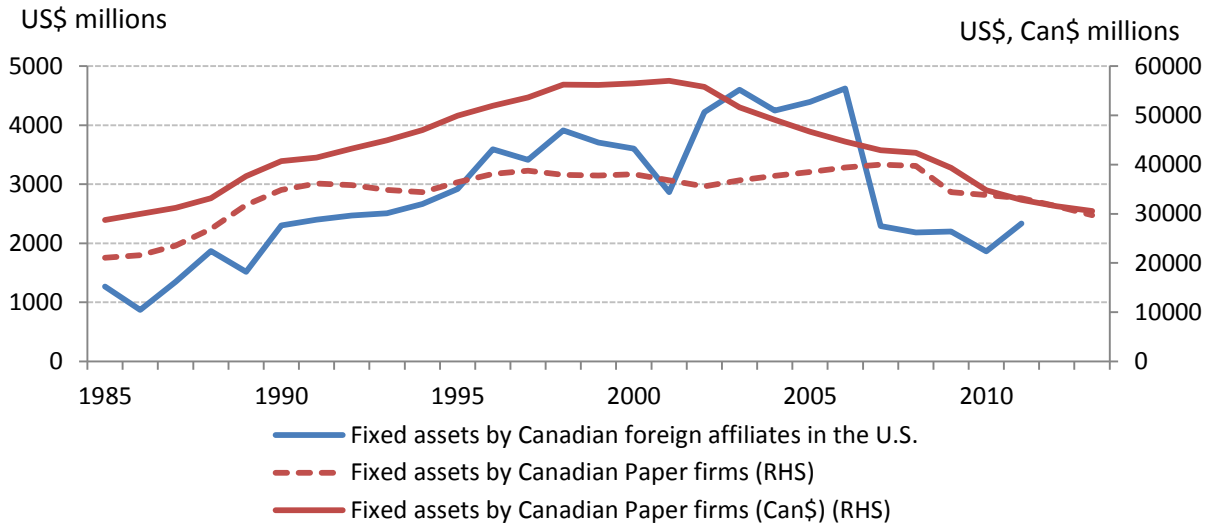
Sources: BEA (foreign affiliate sales), Export .gov (U.S. imports from Canada), StatCan (Table 226-0001) (Exports to U.S.)

Chart 14: Employment by Canadian Foreign Affiliates in the United States and Employment in Canada - Pulp and Paper



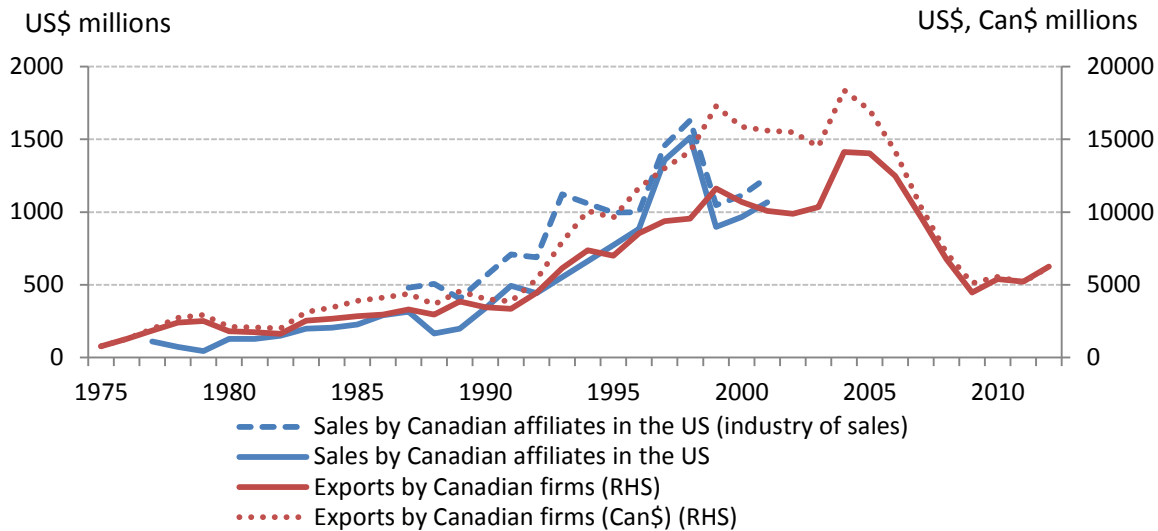
Sources: BEA (foreign affiliate employment), StatCan (Tables 281-0001, 281-0024) (Employment in Canada)

Chart 15: Gross Property, Plant, and Equipment of Canadian Foreign Affiliates in the United States and in Canada - Pulp and Paper



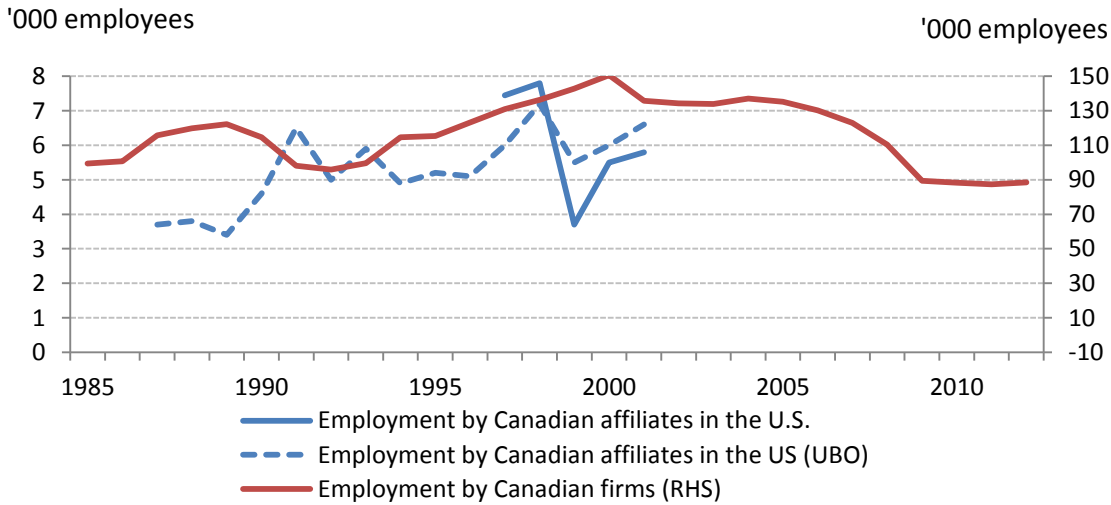
Sources: BEA (foreign affiliate property, plant, equipment), StatCan (Table 031-0002)(Fixed Assets)

Chart 16: Sales of Canadian affiliates in the United States and Canadian Exports to the United States - Wood Products



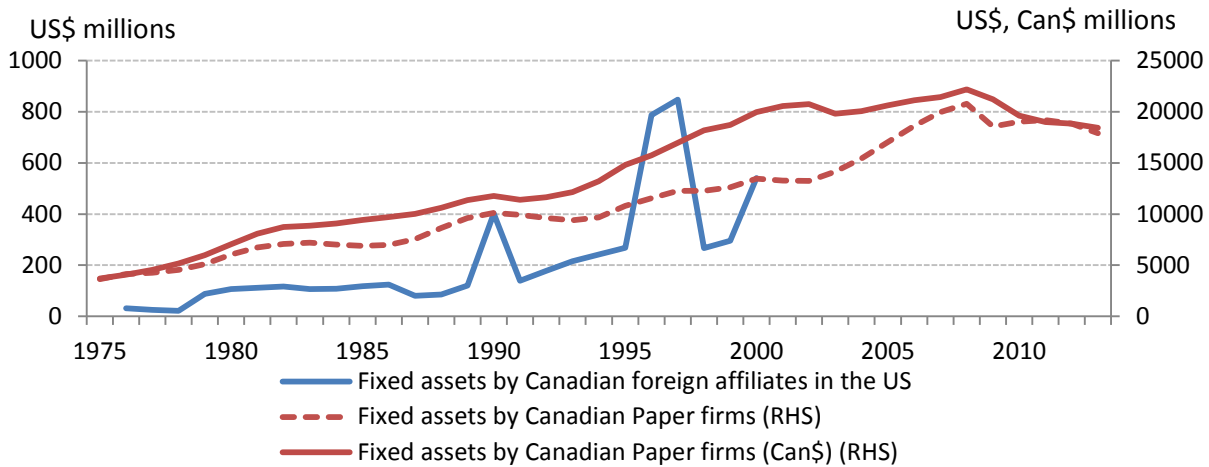
Sources: BEA (foreign affiliate sales), Export.gov (U.S. imports from Canada), StatCan (Table 226-0001) (Exports to U.S.)

Chart 17: Employment by Canadian Foreign Affiliates in the United States and Employment in Canada - Wood Products



Sources: BEA (foreign affiliate employment),
StatCan (Tables 281-0001, 281-0024) (Employment in Canada)

Chart 18: Gross Property, Plant and Equipment of Canadian Foreign Affiliates in the United States and in Canada - Wood Products



Sources: BEA (foreign affiliate property, plant, equipment), StatCan (Table 031-0002)(Fixed Assets)

Chart 19: Number of Investments Abroad per Motive per Year by Auto Parts Firms

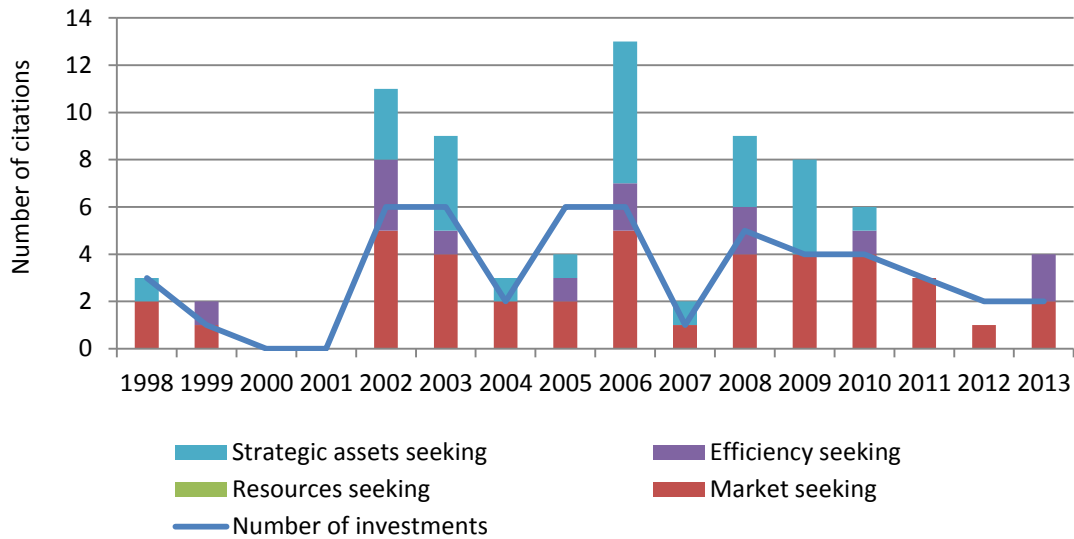
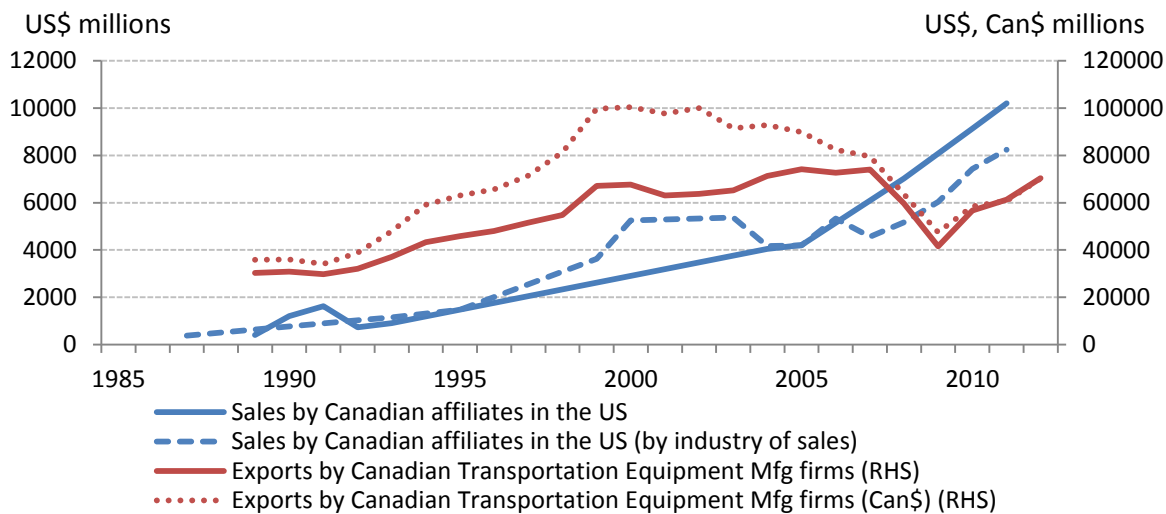
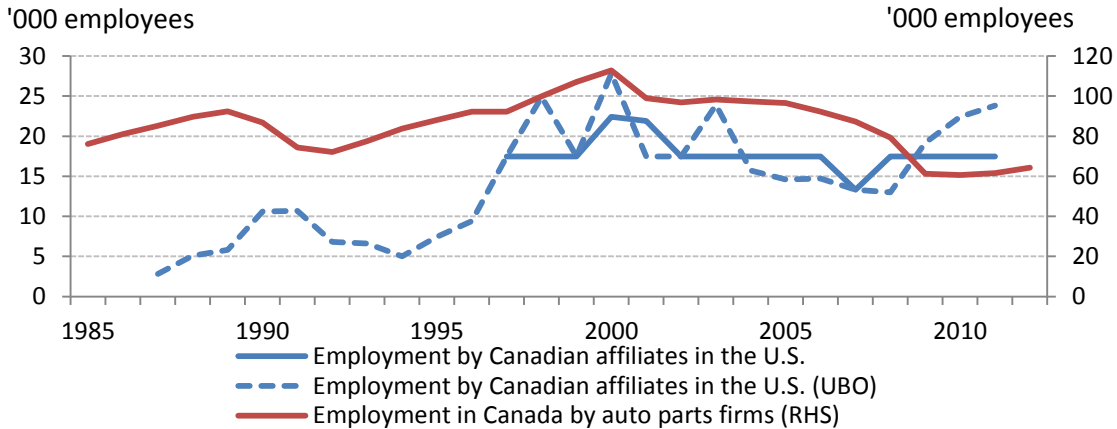


Chart 20: Sales of Canadian Auto Affiliates in the United States and Canadian Exports of Transportation Equipment to the United States



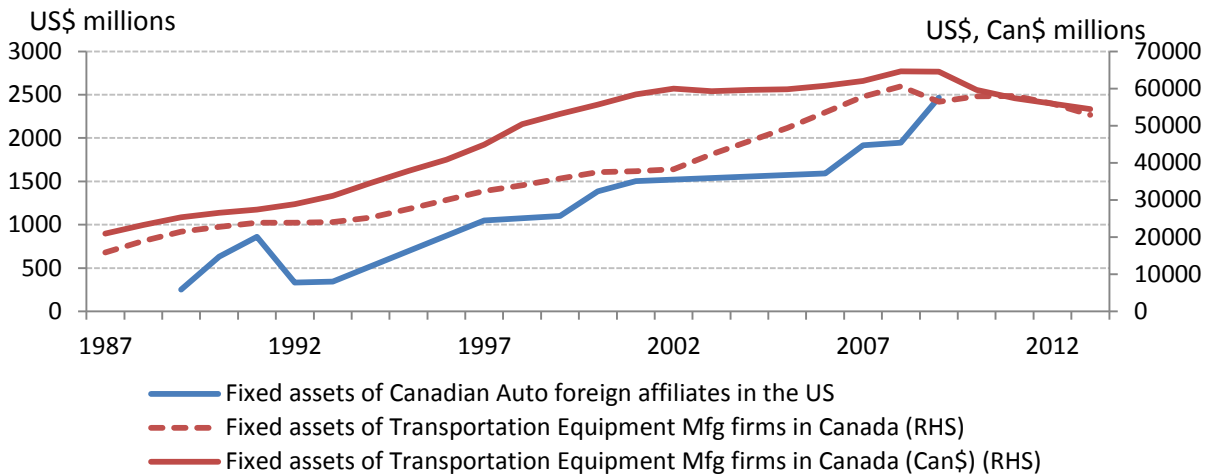
Sources: BEA (foreign affiliate sales), Export .gov (U.S. imports from Canada) , StatCan (Table 226-0001) (Exports to U.S.)

Chart 21: Employment by Canadian Foreign Affiliates in the United States and Employment in Canada - Auto Sector



Sources: BEA (foreign affiliate employment)
 StatCan (Tables 281-0001, 281-0024) (Employment in Canada)

Chart 22: Gross Property, Plant, and Equipment of Canadian Foreign Affiliates in the United States and in Canada - Auto



Sources: BEA (foreign affiliate property, plant, equipment), StatCan (Table 031-0002)(Fixed Assets)

Table 1: Canadian forest products industry: 12 largest firms by annual sales (Can\$ millions)

Firm	Industry	2013 Sales
Domtar	Pulp and Paper	5765
Resolute Forest Products	Wood and Pulp and Paper	4771
Cascades	Pulp and Paper	3848
West Fraser Timber	Wood	3473
Canfor	Wood and Pulp and Paper	3194
Kruger	Wood and Pulp and Paper	2680*
Tembec	Wood and Pulp and Paper	1532
Norbord	Wood	1436
Intefor	Wood	1105
Catalyst Paper	Pulp and Paper	1051
Western Forest Products	Wood	977
Stella Jones	Wood	717

Source: Hoovers.com. Notes: *estimated; West Fraser classifies itself as a wood products company. However, it is partner in a joint venture with The Stern Group in Alberta Newsprint Company, a manufacturer of newsprint (i.e., paper).

Table 2: Number of manufacturing facilities per country in forest products industry

Industry	Number of Manufacturing facilities	2000				2012				Proportion of facilities in Canada	
		Canada	U.S.	Other	Total	Canada	U.S.	Other	Total	2000	2012
Pulp and Paper	Catalyst Paper	3	0	0	3	4	1	0	5	100%	80%
	Cascades	55	18	18	91	67	27	10	104	60%	64%
	Domtar	49	2	1	52	4	9	0	13	94%	31%
Both	Canfor	18	0	0	18	22	5	0	27	100%	81%
	Kruger					41	27	0	68	-	60%
	Tembec	36	0	3	39	30	1	2	33	92%	91%
Wood	Resolute	26	10	3	39	13	8	1	22	67%	59%
	Stella-Jones	5	0	0	5	9	13	0	22	100%	41%
	Interfor	6	0	0	6	5	4	0	9	100%	56%
	Norbord	8	7	4	19	2	7	4	13	42%	15%
	Western Forest Products	6	0	0	6	10	0	0	10	100%	100%
	West Fraser Timber	18	2	0	20	24	13	0	37	90%	65%

Source: Companies' financial reports, websites. Notes: 2000 Domtar: Estimated values from Domtar and Norampac 2000 annual reports. Cascades 2000: 2001 values. Cascades 2012: 2011 values. Western Forest Products 2000: 2005 values. Kruger: data unavailable prior to 2012.

Table 3: Capacity of major Canadian forest products industry firms, by country

Industry	Company											Proportion of capacity in Canada			
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	first available year	2007	2012	
Pulp and Paper	Domtar Paper	Canada					898	898	747	731	723	718	19%	19%	21%
		U.S.					3914	3914	3425	3086	2818	2712			
	Domtar Pulp	Canada					1601	1601	1601	1609	1602	1507	33%	33%	36%
		U.S.					3300	3300	3258	2779	2681	2681			
	Catalyst Paper	Canada					2403	2403	2144	2161	1563	1458	100%	100%	81%
		U.S.							347	346	337	337			
Norampac									840	840		75%	-	51%	
								275	815						
Both	Resolute	Canada						5438	5053	4985	3595	3331	59%	59%	55%
		U.S.						3765	3595	3651	2899	2684			
Wood	Interfor	Canada	644	823	742	752	448	290	346	719	795	826	100%	52%	61%
		U.S.		94	419	426	407	208	315	391	469	525			
	Western Forest Products	Canada		289	648	1000	805	768	565	693	813	878	100%	100%	100%
		U.S.		0	0	0	0	0	0	0	0	0			

Note: Capacity is measured in 1000 short tons for Domtar Paper, in 1000 air dry metric tons for Domtar Pulp, in 1000 metric tons for Resolute, in 1000 tons for Interfor and Catalyst Paper, and million board foot for Western Forest Products. Data are not reported by other firms used in the case study. Aggregate data for Domtar are not available; we therefore report data available for two of its subsegments. Data for Cascades are not available, but for Norampac, one of its divisions, which we report instead. Source: Company annual reports (obtained from SEDAR). Note: Norampac is a division of Cascades, for which data are not available.

Table 4: Property, plant, equipment of major Canadian forest products industry firms, by country

Industry	Company												Proportion of property, plant and equipment in Canada			
		1998	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	first available year	2007	2012	
Pulp and Paper	Catalyst Paper	Canada					1913	1645	1493	1128	378	612	100%	100%	100%	
		U.S.					0	209	172	158	9	0				
	Cascades	Canada	1012	1013	993	930	1358	1247	1208	1198	1111	1092	1066	89%	73%	82%
		U.S.	125	399	476	479	527	472	591	499	391	249	239			
	Domtar	Canada		2461	2324	1886	755	1974	1228	1330	1270	1148	1069	54%	34%	29%
		U.S.		2127	1953	1822	2324	3760	3073	2799	2553	2675	2629			
both	Canfor	Canada				2206	2162	1869	1698	1598	1524	1591	1572	100%	92%	92%
		U.S.				5	201	160	186	152	142	149	134			
	Kruger											300	294	100%	-	51%
												124	287			
	Tembec	Canada				1744	1495	1385	492	449	424	407	393	91%	100%	100%
		U.S.				175	6	6	2	-	-	-	0			
Resolute	Canada						3717	2968	2785	1736	1629	1538	66%	66%	59%	
	U.S.						1907	1812	1449	1189	1110	1071				
Stella Jones	Stella Jones	Canada			31	33	55	53	55	54	46	48	59	100%	76%	32%
		U.S.			0	4	5	17	54	43	59	71	128			
	Interfor	Canada			259	214	210	233	317	299	337	315	333	78%	63%	72%
		U.S.			73	143	161	139	197	158	142	137	127			
	West Fraser Timber	Canada					2307	2174	1982	1657	1574	1627	1633	96%	88%	91%
		U.S.					91	300	322	231	191	146	162			
Total	Canada	1012	4194	4079	8904	9927	14498	12536	11055	9152	8293	8263				
	U.S.	125	3148	2900	4927	5505	6693	7544	5700	4828	4626	4472				
	Proportion in Canada	89%	57%	58%	64%	64%	68%	62%	66%	65%	64%	65%				68%

Note: Property, plant and equipment are in Can\$ millions (except Domtar and Resolute: US\$ millions, converted to Can\$ in the total using end-of-period exchange rates). Norbord and Western Forest Products do not report PP&E by country. Kruger went public in 2012 only, so that data prior to 2011 are not available, but since its first investment in the U.S. was in 2002, the table indicates 100% of assets in Canada for first year. Source: Company annual reports and annual information forms (obtained from SEDAR), companies' webpages.

Table 5: Sales of major Canadian forest products industry firms, by country

Industry	Company												Proportion of property, plant and equipment in Canada			
		1998	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	first available year	2007	2012	
Pulp and Paper	Catalyst Paper	Canada				200.63	207.08	196	209	148	138	161	38	17%	18%	23%
		U.S.				948.43	978.9	905	1077	832	691	678	132			
	Cascades	Canada	1403	1696	1665	1256	1188	1529	1556	1512	1468	1455	1382	66%	46%	50%
	U.S.	710	1154	1388	1428	1590	1788	1812	1776	1347	1321	1397				
	Domtar	Canada		1285	733	559	515	742	832	789	837	756	716	26%	13%	15%
		U.S.		3637	3470	2663	2791	4841	5012	4139	4245	4200	4086			
both	Canfor	Canada		421	472	540	572	590	616	505	275	300	291	26%	19%	23%
		U.S.		1204	1526	2611	2486	2537	1855	1378	1043	1115	956			
	Kruger	Canada										642	663	73%	-	74%
		U.S.										233	232			
	Tembec	Canada					650	534	236	326	367	321	304	35%	35%	33%
		U.S.					1182	995	478	667	582	591	614			
	Resolute	Canada						333	559	508	703	636	636	12%	12%	19%
		U.S.						2498	4583	2852	2775	2859	2766			
Wood	Stella Jones	Canada			107	126	153	163	180	188	215	228	228	85%	60%	32%
		U.S.			19	31	71	107	205	223	346	412	489			
	Interfor	Canada			300	237	264	222	163	114	171	215	235	53%	45%	39%
		U.S.			270	456	424	273	162	161	245	263	365			
Western Forest Products	Canada			87	160	345	393	323	237	281	369	403	44%	64%	78%	
	U.S.			111	242	265	219	178	79	71	92	116				
West Fraser Timber	Canada					754	717	662	610	704	652	747	29%	28%	34%	
	U.S.					1831	1829	1596	1200	1410	1303	1435				
Total Sales	Canada	1403	3402	3363	3079	4647	5420	5335	4937	5160	5735	5644	25%	31%		
	U.S.	710	5995	6783	8380	11619	15991	16959	13308	12754	13067	12588				
Proportion in Canada		66%	36%	33%	27%	29%	25%	24%	27%	29%	31%	31%	25%	31%		

Note: Sales are in Can\$ millions (except Domtar and Resolute: US\$ millions, converted to Can\$ in the total using average exchange rates). Norbord does not report sales by country (only by region). Source: Company annual reports (obtained from SEDAR).

Table 6: Number of acquisitions/new plants in forest products industry by country

Total # of acquisitions/new plants	# of acquisitions/new plants by country	
85	Canada	33
	U.S.	47
	Other	5

Table 7: Classification of FDI Motives according to the impact on exports

FDI motives (Dunning, 1998)	Likely impact on exports
Market seeking	Complementing or substituting
Efficiency seeking	Substituting
Resource seeking	Complementing
Strategic asset seeking	Complementing or substituting

Table 8: Reasons for acquisitions/new plants in forest products industry

# of citations	Stated Objective				Total
	Resources seeking	Market seeking	Strategic assets seeking	Efficiency seeking	
Canada	10	24	12	8	33
U.S.	6	38	18	12	47
other	0	4	0	0	5
lumber	12	36	20	13	42
pulp and paper	4	30	10	7	43
total # of citations	16	66	30	20	85

Notes: The total of all investments exclude double counts. Source: Citations from annual reports, CEO statements in press releases and annual information forms (Sedar).

Table 9: Reasons for acquisitions/new plants in forest products industry: Market Seeking

# of citations	Market Seeking			
	Product diversification	Geographic diversification	(other) Expansion	Competition
Canada	9	7	13	13
U.S.	17	29	29	7
other	0	4	4	0
lumber	14	22	24	15
pulp and paper	12	18	22	5
total # of citations	26	40	46	20

Source: Annual reports, CEO statements in press releases and annual information forms (Sedar).

Table 10: Number of sales/closures in forest products industry by country

Total # of sales/closures	# of sales/closures by country	
88	Canada	70
	U.S.	14
	other	4

Table 11: Reasons for divestments (sales and shutdowns) for firms in forest products industry

Dunning motives equivalent	Industry-specific market forces			Country-specific forces				total
	Market Seeking			Efficiency Seeking			Resource Seeking	
	Lack of demand/low prices	Streamlining /downsizing	Financial losses	Can\$ strength	High costs	Regulation	Lack of supply/harvesting limits	
Canada	33	20	17	16	32	5	9	70
U.S.	6	6	2	0	4	1	0	14
other	1	1	0	0	1	0	0	4
lumber	17	11	9	9	15	4	8	41
pulp and paper	23	16	10	7	22	2	1	46
total # of citations	40	27	19	16	37	6	9	88

Notes: The total (last column) excludes double counts. Source: Citations are from annual reports, CEO statements in press releases and annual information forms (Sedar).

Table 12: Canadian auto parts industry: three largest firms by annual sales (Can\$ millions)

Firm	2013 sales
Magna International	37,252
Linamar Corporation	3,594
Martinrea International	3,221

Source: Hoovers.com

Table 13: Number of manufacturing facilities or employees per country in auto parts industry

	Company	2000 (2003 for Martinrea)						2012						Proportion in Canada	
		Canada	U.S.	Mexico	NA Total	Other	Total	Canada	U.S.	Mexico	NA Total	Other	Total	2000	2012
Number of manufacturing facilities	Magna	55	36	8	99	67	166	46	58	29	133	180	313	56%	35%
Number of Employees	Linamar	6049	340	886	7275	1357	8632	8153	721	3620	12494	4228	16722	83%	65%
	Martinrea	2068	690	327	3085	181	3266	2400	4350	3100	9850	2800	12650	67%	24%

Source: Companies' financial reports, websites.

Table 14: Property, plant and equipment of major Canadian auto parts industry firms, by country

																	Proportion of property, plant and equipment in Canada		
																	first year available	2007	2012
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012			
Magna Intl. Can\$	Canada		1546	1539	1489	1677	1348	1331	1305	1207	1215	722	744	657	579	659	44%	45%	30%
	U.S.		1579	1712	1141	1312	982	1335	1504	1243	1057	854	793	688	794	972	46%	39%	44%
	Mexico		402	500	563	477	327	416	408	417	406	396	406	382	471	572	13%	15%	26%
Linamar Can\$	Canada	330	371	392	373	434	488	564	590	599	603	579	474	503	552	563	87%	78%	61%
	U.S.	14	16	12	41	36	38	34	42	46	68	77	80	77	152	215	4%	9%	23%
	Mexico	34	47	34	39	59	62	104	109	119	106	91	84	102	114	149	9%	14%	16%
Martinrea Can\$	Canada				60	137	162	167	165	135	194	188	172	165	145	147	100%	52%	24%
	U.S.				0	34	30	27	43	185	131	176	162	169	237	294	0%	35%	48%
	Mexico				0	11	10	14	17	50	51	64	61	68	162	177	0%	13%	29%
Total	Canada	330	1917	1930	1923	2247	1997	2062	2061	1941	2012	1489	1390	1325	1276	1369	48%	52%	37%
	U.S.	14	1595	1724	1181	1382	1050	1396	1590	1474	1256	1106	1035	934	1184	1481	40%	33%	40%
	Mexico	34	449	534	603	547	399	533	534	586	562	551	550	553	747	899	11%	15%	24%

Note: Property, plant and equipment is in Can\$ millions. Source: Company annual reports (obtained from SEDAR).

Table 15: Sales of major Canadian auto parts industry firms, by country

																	Proportion of Sales in Canada		
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	first year available	2007	2012
Magna International Can\$	Canada	5039	5673	5220	5856	5673	5220	9757	8610	8729	6215	3663	5104	5881	5901	55%	48%	36%	
	U.S.	3685	4233	4189	5086	4233	4189	8584	7546	7522	6105	4260	5714	6900	7046				
	Mexico	373	827	1311	1325	827	1311	1681	2085	1779	1996	1306	2339	2858	3278				
Linamar Can\$	Canada	915	1110	1136	1011	1105	1130	1413	1659	1673	1580	1436	1042	1465	1833	2051	96%	79%	78%
	U.S.	34	59	66	45	58	116	140	168	193	216	212	148	146	188	302			
	Mexico	0	46	74	92	90	111	126	143	186	205	197	154	208	249	271			
Martinrea Can\$	Canada						350	356	405	500	1070	807	499	697	803	810	57%	53%	35%
	U.S.						169	134	177	232	742	547	444	694	703	966			
	Mexico						89	93	88	139	191	202	192	296	381	521			
Total	Canada	915	1110	6809	6255	7068	7153	6989	11820	10784	11378	8459	5204	7266	8517	8763	57%	52%	41%
	U.S.	34	59	4299	4236	5253	4518	4462	8928	7971	8480	6865	4852	6554	7792	8314			
	Mexico	0	46	901	1404	1421	1027	1530	1913	2411	2174	2396	1652	2842	3488	4070			

Note: Sales are in Can\$ millions (except Magna: US\$ millions, converted to Can\$ in the total using average exchange rates). Source: Company annual reports (obtained from SEDAR).

2003 is the first year Martinrea sales data are available by source

Table 16: Reasons for acquisitions/new plants in auto parts industry

# of citations	Stated Objective				Total
	Market seeking	Resources seeking	Efficiency seeking	Strategic assets seeking	
Canada	16	0	2	5	23
U.S.	22	0	7	17	32
Mexico	17	0	6	8	17
total # of citations	55	0	15	30	72

Notes: The total of all investments exclude double counts. Citations are from annual reports, CEO statements in press releases and annual information forms (Sedar).

Table 17: Reasons for acquisitions/new plants in auto parts industry: Market seeking

# of citations	Market Seeking			
	Product diversification	Geographic diversification	(other) Expansion	Competition
Canada	5	0	14	0
U.S.	12	6	13	0
Mexico	6	5	11	0
total # of citations	23	11	38	0