

The Economics of FDI: A Canadian Perspective

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Abstract: This paper reviews trends in inward foreign direct investment (IFDI) and multinational production in Canada, as well as Canada's direct investment abroad, and provides an assessment of their impact on the Canadian economy. It pulls together a large body of existing empirical literature in Canada and other countries on the economic costs and benefits of FDI. The main conclusion of the paper is that both inward and outward FDI provide significant net long-term economic benefits to both home and host countries, provided they maintain competitive and dynamic product and factor markets as well as a competitive business climate. In addition, there is little evidence of a 'hollowing-out' of corporate Canada in terms of multinational enterprises operating in Canada moving their corporate headquarters out of the country.

Key words: inward foreign direct investment, multinational enterprises, Canada, economic policy, investment

1. Introduction

Thanks to multinational enterprises (MNEs), the world economy is much more integrated today than 20 years ago and the pace of globalization is increasing. A number of key global economic trends have facilitated as well as necessitated multinationals to organize their economic activities on a global basis, with a view to minimising costs and improving the quality of their products and services. These include: dramatic reductions in transportation and communication costs; liberalization of trade and foreign investment regimes in both industrialised and developing economies; rapid improvements in production processes; intense global competition among countries and companies for markets, skilled personnel, capital and innovation activities; and the emergence of China and India as major economic players on the world stage.

In 2007, there were around 79 thousand MNEs, with about 790 thousand foreign affiliates, operating all over the world – more than a four-fold increase since 1990.¹ UNCTAD estimates that total sales of MNEs reached \$US 31 trillion in 2007, an increase of 21% over 2006. In addition, the value added (gross

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¹ See World Investment Report 2008, Transnational Corporations and the Infrastructure Challenge (UNCTAD/WIR/2008).

The Economics of FDI: A Canadian Perspective

product) of foreign affiliates worldwide represented an estimated 11% of global GDP, and their number of employees rose to some 82 million in 2007.

Canada too has participated actively in the globalization process by increasing its foreign investment linkages with other countries. Canada's inward and outward orientations are higher than in many OECD countries. Since 1996 Canada has been a net exporter of capital, a dramatic shift from a large net importer in the 70s and 80s. This article aims to assess the impact of FDI on the Canadian economy by pulling together a number of existing literature in Canada as well as in other countries on the economic costs and benefits of FDI.

2. Global trends in FDI

Global FDI has grown steadily since 1980. The average of two-way Global FDI stocks (inward and outward) reached about \$US 15.4 trillion in 2007 from just \$US 0.63 trillion in 1980, an average annual growth rate of 12.6% (see figure 1). Developed countries accounted for about 76% of global FDI during this period. Nevertheless, the share of developing countries has been increasing. Global trends in FDI have actually accelerated since the late 1990s. The average of two-way global FDI stocks grew at an annual rate of 15.4% between 1998 and 2007.

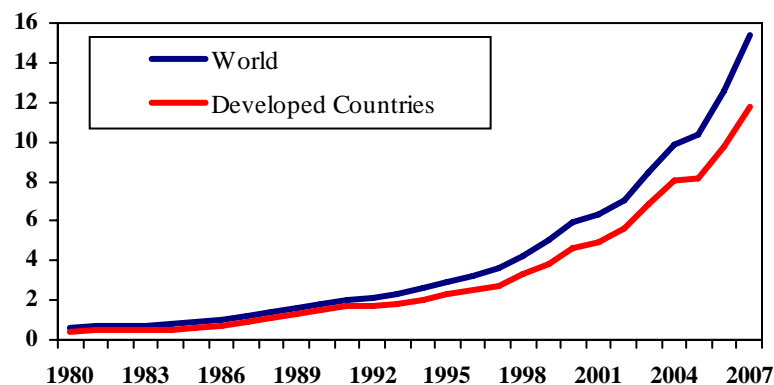


Figure 1. Global FDI stock (in trillions of US dollars)

Source: United Nations Conference on Trade and Development Database.

The three sources of FDI inflows are: green field investments; mergers and acquisitions; and re-investment of retained earnings. In developed economies, mergers and acquisitions (M&As) have been the dominant drivers of FDI inflows. During 1987 to 2007, on average, M&As accounted for more than 70% of developed countries' FDI inflows. On the other hand, green field investment and retained earnings were the dominant sources of FDI inflows in developing economies. In these countries, M&As

accounted for less than one-third of total FDI inflows. The difference in the importance of mergers and acquisitions between the two groups of countries perhaps reflects the difference in their attitudes and regulations towards mergers and takeovers by foreign multinationals.

3. Multinational activities in Canada

Both Canada's inward and outward FDI stocks have increased steadily since 1980 (see figure 2). With a faster growth in outward FDI stock than in inward FDI stock, Canada has been a net exporter of FDI since 1996. In 2008, Canada's net direct investment position (the difference between CDIA and FDI stocks) was about \$CA 132 billion.

Despite a large in 007, Canada's inward FDI stock (in current US dollars) grew at a rate of 8.7% per year, the lowest growth rate among G7 countries and Australia. During the same period, Canada's outward FDI stock (in current US dollars) grew at a rate of 12.1% per year, the third lowest rate among G7 countries and Australia.

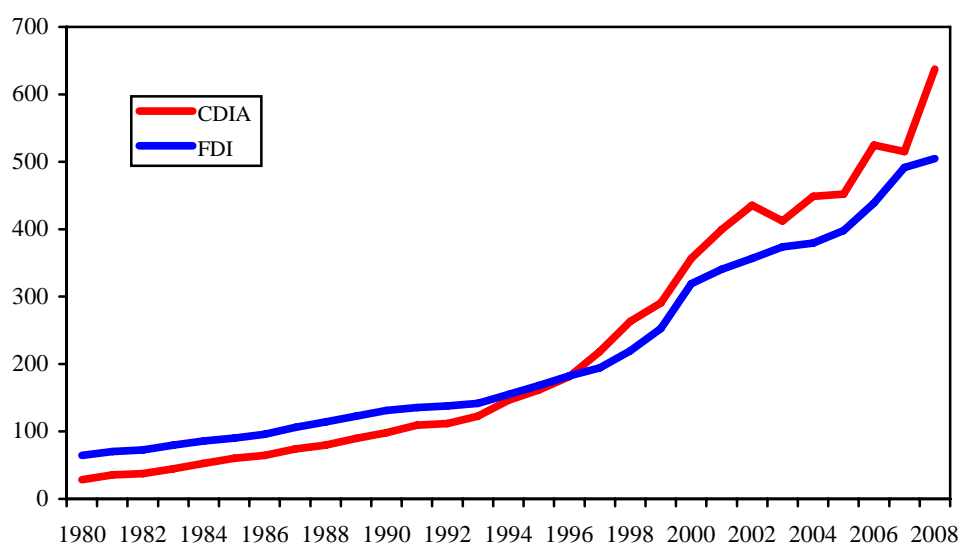


Figure 2. Canada's inward and outward FDI stocks, 1980-2007 (in billions of Canadian dollars)

Source: Statistics Canada

The geographic sources of Canada's inward FDI have become more diversified since 1990. However, the U.S. is still the dominant foreign investor in Canada. In 2008, the U.S. accounted for about 58% of Canada's inward FDI stock, compared to 64.2% in 1990. The share of all countries other than the U.S., the U.K., France, Germany, and Japan increased from 15.3% in 1990 to 24.7% in 2008. Similarly, the U.S. is also the major recipient of Canadian direct investment abroad (CDIA). It accounted for about 49% of

The Economics of FDI: A Canadian Perspective

Canada's total outward FDI stock in 2008, more than 10-percentage-points reduction since 1990. The destination of Canada's outward FDI has become more diversified since 1990 than its inward FDI. The share of all countries other than the U.S., the U.K., France, Germany and Australia has almost doubled since 1990, from about 20% in 1990 to 37% in 2008.

The manufacturing, mining and finance & insurance sectors are the top three contributors to both inward and outward FDI in Canada. The manufacturing sector still receives the biggest share of Canada's inward FDI, but its share has been declining. In 2008, the manufacturing sector accounted for 34.6% of Canada's inward FDI stock, while it was 42.6% in 1999. On the other hand, the share of the mining sector has more than doubled since 1999, reaching 20% in 2008. Finance & insurance sector has the biggest and growing share of CDIA. Its share increased to 40.3% in 2008 from 31.1% in 1990. In the mean time, the manufacturing sector share in the outward FDI stock dropped from 28.1% in 1990 to 18.3% in 2008, while the share of mining sector remained stable.

Activities of MNEs play an important role in the Canadian economy. In 2005, foreign affiliates accounted for 30% of total production in the non-agriculture business sector and more than 50% of total production in the manufacturing sector in Canada. The economic importance of foreign affiliates in Canada varies considerably across industries. The production shares of foreign affiliates varied between more than 85% in motor vehicle manufacturing and 76% in pharmaceuticals, to less than 16% in utilities and construction.

4. The benefits of FDI to the Canadian economy

4.1. FDI and productivity

There are three main channels through which inward FDI impacts a host country's productivity, see Lipsey (2002). First, because of superior technological know-how and management practices, foreign-controlled MNEs tend to have higher productivity levels than domestic firms in the host countries. As a result, the overall productivity level of host countries would increase. There is a large body of empirical literature comparing productivity levels of foreign-controlled and domestic firms, and most of them found evidence in support of this hypothesis. After surveying the empirical literature, De Mello (1999) concluded that the enhanced labour productivity performance in developed countries was through the TFP growth channel and while in developing countries it was via the capital deepening route.

For Canada, higher productivity levels of foreign-controlled firms were reported by Globerman, Ries and Vertinsky (1994), Baldwin and Dhaliwal (2001), Rao and Tang (2005) and Baldwin and Gu (2005). For example, Rao and Tang (2005) found that foreign-controlled firms in Canada, on average, are about 20% more productive (in terms of multifactor productivity) than domestic firms; Baldwin and Gu (2005)

reported that there was a 1.7 percentage-point jump in labour productivity growth between the 1980s and the 1990s in the Canadian manufacturing sector, and of which 1.1 percentage points were attributable to the activities of foreign MNEs in Canada.

Second, there could be intra-industry productivity spillovers from foreign-controlled firms to domestic firms. Foreign-controlled firms in general tend to use more advanced technologies and have superior managerial practices, and these are likely to spillover to domestic firms within the same industry, resulting in productivity spillovers in the industry. Canadian evidence again strongly supports this hypothesis. Gera, Gu and Lee (1999) found that inward FDI has a positive and significant impact on TFP growth in Canadian industries, mainly through reduction of production costs, technology transfer and international R&D spillovers. Baldwin and Gu (2005) and Rao and Tang (2005) also found that domestic firms in industries with larger market share of foreign producers or with higher FDI penetration tend to have better productivity performance, suggesting positive productivity spillovers from foreign-controlled firms to domestic firms within the same industry.

Third, foreign-controlled firms in one industry could also influence positively productivity performance of the supplier (upstream) and the user (downstream) industries in host countries via the inter-industry linkages. As discussed in Gu and Wang (2008), domestic firms in the downstream industries could benefit from FDI via improvements in variety and quality of intermediate inputs, lower input costs and better customer service. Similarly, domestic firms in the upstream industries might receive management training and technical assistance from the foreign-controlled firms and also demand higher product quality from their suppliers. Blomström and Kokko (1998) stated that productivity spillovers could also come from increased competition among local firms for becoming suppliers to the multinationals. Using data on Canadian manufacturing industries from 1973 to 1997, Gu and Wang (2008) reported strong and significant inter-industry productivity spillovers via both the forward (downstream) and the backward (upstream) production linkages. Lileeva (2006) also reported significant productivity spillovers from FDI in the Canadian manufacturing sector because of strong forward linkages.

Overall, the empirical literature on balance tends to support that FDI leads to increased productivity in host countries. However, there has been little emphasis on as to whether productivity impacts of inward FDI differ by the country of origin. A recent Canadian study by Ng and Souare (2009) found that only U.S.-originated FDI has a significantly positive impact on the TFP growth of Canadian industries. This is consistent with the findings in previous studies that the U.S.-owned MNEs tend to outperform non-U.S. MNEs' productivity in host countries, see Ng and Souare (2009) for a brief literature review.

The Economics of FDI: A Canadian Perspective

A possible negative impact of inward FDI on the host country's productivity might come from the takeover of more efficient domestic firms by foreign MNEs as well as the increased demand for imported inputs, forcing remaining domestic firms to move down the value chain. This issue is rarely explored empirically and there are no Canada-specific empirical studies.

Home countries may also receive productivity benefits from outward FDI. Have grown MNEs could improve their overall productivity performance by their more profitable investments abroad and their increased exposure to intensive global competition. Baldwin and Gu (2005) found no significant difference in the productivity performance of Canadian MNEs and foreign MNEs operating in Canada, indicating that Canadian firms with international orientation are as productive as foreign affiliates in Canada. The productivity advantage of home-based MNEs may spillover to domestic firms via the channels of technology spillovers, business model copying, enhanced domestic competition and increased inter-industry linkages. Empirical evidence on these issues is scarce. Rao and Tang (2005) found that domestic-oriented Canadian firms in a given industry do not get a productivity dividend advantage from Canada's outward FDI in that industry. Vertical outward FDI, by using more unskilled labour in low-wage host countries, could induce increased capital deepening and skills upgrading in home countries. No strong empirical evidence has been found in support of this argument either.

4.2. FDI and economic growth

Inward FDI could also impact the host country economic growth through capital deepening and increased investments in R&D, intangibles and human capital. This might be reinforced by increased technology diffusion and acquisition of new skills and better management practices, which are all conducive to growth, see De Mello (1997) and Romer (1993).

Inward FDI, especially "greenfield" investment, could increase capital stock in the host countries. To the extent that FDI does not crowd-out local investment on a one-for-one basis, it can add to the stock of capital and lead to higher output (Ries, 2002). Hejazi and Pauly (2002) showed that, on average, a one dollar increase in inward FDI raises domestic capital formation in Canada by about 45 cents in non-services industries, but found no significant impact on domestic capital formation in services industries. On the other hand, using data from 22 OECD countries for the years 1975 to 1995, Lipsey (2000) found that the ratio of inward FDI flows to GDP is only significantly related to the next year's capital formation in eight countries, including Canada. In six other countries, the relationship was negative – that is to say, inward FDI crowds-out more domestic investment than its positive contribution to capital formation.

Foreign MNEs play a major role in business R&D in many countries. For example, in 2005, 75% of Ireland's manufacturing business R&D was performed by foreign MNEs. In Canada, foreign affiliates accounted for about 38% of business R&D in the manufacturing sector and 35% in the total business sector in 2004. Baldwin and Gu (2005) reported that foreign-controlled firms are more likely to perform R&D on an ongoing basis, introduce product and process innovation, and to adopt new advanced technologies than domestic firms in Canada. Inward FDI is also an important source of new technologies in host countries. Countries with higher inward FDI tend to have higher technology payments, pointing to intra-firm technology transfer from foreign parent companies to their foreign subsidiaries. Baldwin and Sabourin (2001) found a positive relationship between technology payments and inward FDI stock across OECD countries, which is consistent with other Canadian micro evidence showing that foreign-controlled manufacturing plants use more advanced technologies than Canadian-controlled plants.

Empirical studies done at the economy level generally suggest that inward FDI plays a positive role in stimulating host countries' economic growth and the size of the growth effect depends on host countries' trade and investment policies, human capital, general business climate and the state of financial markets. Bhagwati (1978) suggested that the growth effect of inward FDI is positively related to export promotion policies and negatively related to import substitution policies of host countries. This prediction is supported by the tests done by Balasubramanyam, Salisu and Sapsford (1996). Blomström, Lipsey, and Zejan (1994) reported that the growth effect of inward FDI is positive in developing countries with high per-capita income, but insignificant in countries with low per-capita income. Borensztein, De Gregorio, and Lee (1995) argued that the growth effect of FDI is positively related to the education level of host country workforce. Xu (2000) also found that the positive growth effect of FDI occurs only when the host country has a minimum threshold level of human capital. Alfaro et al (2003), Durham (2004), and Hermes and Lensink (2003) reported that countries with well-developed financial markets gain significantly from FDI in terms of economic growth. On the other hand, Carkovic and Levine (2005) found that inward FDI does not exert an independent influence on economic growth, suggesting that there are interactions between FDI and other economic variables.

All studies mentioned above are mostly based on the experiences of developing countries. Studies explicitly based on the experiences of developed and other countries are rare. Using a panel data for 25 OECD countries over 1980-2004, Ghosh and Wang (2007) found a positive and significant growth effect of inward FDI.

Although there are a number of empirical studies on the impact of inward FDI on economic growth in host countries, empirical research on the impact of outward FDI on home country economic growth is scarce. Outward FDI may also impact positively economic growth by raising home countries' trend

The Economics of FDI: A Canadian Perspective

productivity growth. Ghosh and Wang (2007) linked directly the home country economic growth to outward FDI for 25 OECD countries, including Canada, over the period 1980-2004, and found no empirical support for the economic growth impact of outward FDI in home countries.

4.3. FDI and trade

The relationship between FDI and trade depends on the underlying motivations for FDI. They will be substitutes under the proximity-concentration hypothesis and complements under the factor-proportions hypothesis. As to the relationship between outward FDI and home country exports, some studies found that they are substitutes,² while more studies reported a complementary relationship.³ These two different relationships do not necessarily contradict each other, as explained by Head and Ries (2004) “studies with focus on narrow product lines can detect the substitutive relationship, while the complementarity can be found upstream products of home countries are still attractive to their downstream affiliates abroad”.

In Canada, outward FDI and exports are found to be complements, see Hejazi and Safarian (1999). Likewise, inward FDI and host country exports are more likely to be complements than substitutes as foreign affiliates add their production to host countries’ exports. For Canadian evidence, see Hejazi and Safarian (1999), Cameron and Cross (1999), Cross (2002), Baldwin, Beckstead and Caves (2002), and Baldwin, Caves and Gu (2005).

The impact of trade costs and barriers to FDI depends on the production structure of MNEs. When trade costs are high, firms might choose FDI as a substitute for exports and become horizontal multinationals. In this case, trade costs have a positive impact on FDI. On the other hand, vertical FDI induces more imports of intermediate inputs and increases exports of final goods in host countries. Hence, high trade costs in host countries would discourage FDI. The empirical evidence is mixed. A positive relationship is found in Ghosh, Syntetos and Wang (2007) and Golub et al (2003) for OECD countries and in Markusen and Maskus (2002) for the U.S. bilateral FDI; while a negative relationship is reported in Wang (2009) for Canada’s inward FDI.

5. Is corporate Canada hollowing out?

‘Hollowing out’ refers to the move-out of head offices from an economy. Head offices are important to an economy because of the concentration of key management functions and activities. These include: human

² See Head and Ries (2001) for some Japanese manufacturing firms over 1965-1989, Belderbos and Sleuwaegen (1998) for Japanese specific electronic products in Europe, and Blonigen (2001) Japanese specific auto parts in the U.S.

³ See Head and Ries (2004) for Japan, Lipsey and Weiss (1981, 1984), Brainard (1997), Brainard and Riker (1997) and Head, Ries and Spencer (2004) for the U.S., Blomström, Lipsey and Kulchicky (1988) for Sweden, and Fontagné and Pajot (2002) for France.

resource planning; marketing; R&D; financial management; international operations; and information acquisition and filtering. Concentration of these activities could raise the overall skill levels and wages of employees at head quarters, resulting in productivity spillovers in home countries.

There has been a great deal of public discussion and debate in Canada over the recent foreign takeovers of large and established Canadian companies, and their potential adverse impact on the Canadian economy. Therefore, empirical investigation of hollowing-out of corporate Canada has important policy implications.

As stated in Acharya and Rao (2007), the positive effects of head offices are expected to stem largely from the concentration of R&D activities and skilled workers associated with the head office functions. R&D activities generate and accumulate knowledge capital that benefits the local economy through knowledge transfer and knowledge spillovers. They also could attract other foreign firms to the country. Since the overall business climate is an important determinant of R&D activities of MNEs and R&D and skills are complements, the availability of skilled workers and competitive market framework policies in host countries are crucial for attracting and retaining R&D activities of foreign as well as domestic MNEs.

To understand well the extent and nature of hollowing-out in corporate Canada, empirical attempts are needed to investigate the long-term trends and dynamics of head office activities and head office employment in Canada. A number of recent Statistics Canada studies shed light on this important policy issue.

Baldwin, Beckstead and Brown (2003) found little evidence that head office functions were being scaled down during the late 1990s and early 2000s. The authors actually reported that the number of head office units increased from 3,936 to 3,969 between 1999 and 2002, and employment in head offices during the same period increased at an annual rate of about 1%. Baldwin and Brown (2005) examined the long-run trends in head office employment in the Canadian manufacturing sector over the last three decades and again found little evidence of hollowing-out. A more recent paper by Beckstead and Brown (2006) also came to the conclusion that hollowing-out of corporate Canada is not happening. Instead, the authors reported that, over 1999-2005, both the number of head offices and head office employment in Canada grew at an annual rate 4.2% and 11%, respectively.

Another interesting question is whether management functions of the Canadian firms that are taken over by foreign firms are moving abroad, resulting in the loss of head offices and head office employment. Beckstead and Brown (2006) investigated the dynamics of head offices in Canada and found that foreign-controlled firms are actually the main driving force behind the growth in the number of head offices and

The Economics of FDI: A Canadian Perspective

head office employment in Canada during 1999-2005, accounting for six out of ten new head-office jobs created during the period. In addition, over this period, the number of head offices of Canadian-controlled firms actually fell slightly, while counts of head offices in foreign-controlled firms rose; the head office employment of foreign-controlled firms increased by 21%, while the corresponding figure for Canadian-controlled firms grew by only 6%.

In short, the empirical evidence to date show that the foreign takeovers have reduced neither the number of head offices nor the head-office employment in Canada. On the contrary, more new head offices were created than lost and the overall head office employment was just as high after the takeovers, if not higher, as before the takeovers.

Using a detailed survey of senior managers of 62 MNEs operating in Canada during the post-NAFTA period, including foreign-owned as well as Canadian-owned firms, the Conference Board of Canada (2007) concluded that many foreign-owned subsidiaries in Canada have become strategic leaders in their company's global network. This result is contrary to the fear that foreign affiliates might move out of Canada and make Canada a "warehouse economy".

6. Concluding remarks

The available empirical Canadian evidence suggests the following: inward FDI expands Canadian exports and the impact increases with reductions in trade and investment barriers worldwide; foreign-controlled firms, on average, have higher productivity levels than Canadian-owned firms, mainly because of the difference in outward orientation; intra- and inter-industry productivity spillovers from FDI are also significant; and inward FDI also raises economic growth in Canada through increased investments in physical and knowledge capital and skills upgrading, technology transfer and knowledge spillovers.

An important recent policy concern has been the hollowing-out of corporate Canada. A number of studies examined this issue and found no evidence in support of the hollowing-out of corporate headquarter functions. Instead, these studies showed that the head office functions in Canada have actually increased in recent years.

On balance, all the empirical evidences indicate that FDI provides significant net economic benefits to Canada. The policy implication of these findings is that Canada would benefit further by liberalizing its regulatory regime relating to FDI and foreign ownership. For instance, research done at the OECD (Golub et al (2003)) and Industry Canada (Ghosh, Syntetos and Wang (2007)) suggest that by reducing its foreign ownership restrictions to the low levels in the U.K., Canada could increase its inward FDI stock by as

much as 50% and raise its aggregate total factor productivity by between 3% to 5% over a 5 to 10 year period.

Although there is ample empirical research on the positive impact of inward FDI on trade, capital formation, R&D, productivity and economic growth in Canada, the evidence on the impact of outward FDI on the Canadian economy is very scarce. Future research efforts need to concentrate in closing this important knowledge gap.

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