July 19, 2010

Foreign Investment in Canada's Telecom Sector will Enhance Canadian Prosperity

Walid Hejazi, Rotman School of Management
University of Toronto

Abstract

There is substantial evidence documenting the merits of foreign direct investment (FDI) into the Canadian economy. These benefits include increases in Canadian capital stocks, access to foreign capital, R&D intensity, and employment. At the same time, the evidence also shows that Canada's shares of inward FDI have been falling – that is, Canada is becoming less attractive to foreign investors, *relative to global trends*, and hence its FDI position is slipping. This trend has contributed to Canada's reductions in productivity, and hence to the increased prosperity gap with other countries, including the United States. The OECD has also ranked Canada as one of the more restrictive countries among all developed countries, in large part because of the heavy restrictions on foreign investment into three critical infrastructure sectors, which includes Telecom (OECD (2003,2006)), which is the focus of this paper. It must be highlighted that the Telecom sector is special: because all other sectors of the economy depend on the services provided by the Telecom sector, how efficiently it operate impacts the entire economy. Small business, which is the source of significant job growth, is particularly negatively impacted by poor performance in the Telecom sector. As such restrictions on foreign investment into the Telecom sector has hurt the productivity and competitiveness of that sector, and this has impacted the entire economy. As a result of these restrictions, the efficiency and global competitiveness of Canadian firms has been negatively impacted, and the prosperity of Canadians has suffered. Allowing more foreign participation in Canada's Telecom sector will deliver many benefits to the Canadian economy, including increased competition and investment in ICT, reduced service costs and improved service for users, thus enhancing Canadian productivity, incomes and prosperity. The removal of such restrictions will also impact the ability of the sector to attract foreign capital.

Walid Hejazi, Rotman School of Management, University of Toronto, 105 St. George St, Toronto, Ontario, M5S 3E6. 416.946.7042. (hejazi@rotman.utoronto.ca)

Introduction

I have researched issues related to FDI extensively. Although my research relates to the drivers and effects of both inward and outward FDI, I will focus my discussion here to the inward side. I have listed some of the studies I have written in Appendix 1 and noted their main results. I have written several studies for Federal Government: Industry Canada, DFAIT, Competition Policy Review Panel Secretariat, and the Bank of Canada. One result that essentially cuts across all of these studies is that for the most part, inward FDI results in positive outcomes for the Canadian economy. Furthermore, the results for Canada are in no way an anomaly: these results hold across countries, and underlie the policy position of most of the world's governments which welcome FDI, and in many cases, go further to court multinationals to invest in local economies. These welcoming policies towards inward FDI are driven by the benefits that accompany such FDI.

Notwithstanding this overwhelming evidence and openness to inward FDI globally, Canada remains quite restrictive: the OECD ranks Canada among the most restrictive countries in the developed world. This ranking is driven in large part by heavy restrictions in three sectors: telecom, transportation, and financial services.

The evidence demonstrates that restrictions on FDI result in reductions in competition in the domestic market, lower levels of R&D, innovation and hence productivity. Further reinforcing these negative effects is that foreign investment restrictions reduces the extent to which foreign capital will flow into the restricted sector. These negative impacts of foreign investment restrictions have worked to reduce the competitiveness of Canadian business, and hence the prosperity of Canadians.

What is especially important to note, however, is that the three heavily restricted sectors noted above, namely Telecom, Finance and Transportation, are critical infrastructure sectors. They are special. All sectors in the economy depend on these critical infrastructure sectors to varying degrees. As such, when these critical infrastructure sectors are operating inefficiently, the impact will be magnified across the entire economy: every sector that relies on these sectors will be made less productive. This is true across the entire economy, but perhaps most pronounced in the case of Telecom is its impact on small firms. The largest source of employment growth in Canada is from small business, and the internet and computer technology has reduced the costs of entry. For these businesses, the internet and related technologies are key – we must ensure that these firms have access to low cost yet internationally competitive technologies.

The empirical evidence supports the argument that allowing FDI into the Canadian telecom sector will enhance the efficiency and productivity of the industry and will attract much needed foreign capital. Investments in ICT and broadband access will be enhanced – currently Canada lags the US significantly in such investments on a per capita basis. The costs associated with using Telecom services will fall, and there will be enhanced use of such services. Furthermore the breadth and quality of services provided to Canadians will be enhanced.

My advice to government has consistently called for reductions in restrictions placed on FDI coming into Canada. This advice is even more pronounced in the case of a critical infrastructure sector such as Telecom. Restrictions on foreign participation in this sector have had a significantly negative impact on Canadian productivity and prosperity. The best strategy to protect Canadian companies is not through foreign investment restrictions, but rather by creating a business environment in Canada that will allow them to be as competitive as possible. This includes extensive competition, investments in ICT, and access to significant capital, both domestic and foreign. These goals can be achieved best by allowing foreign participation into the sector.

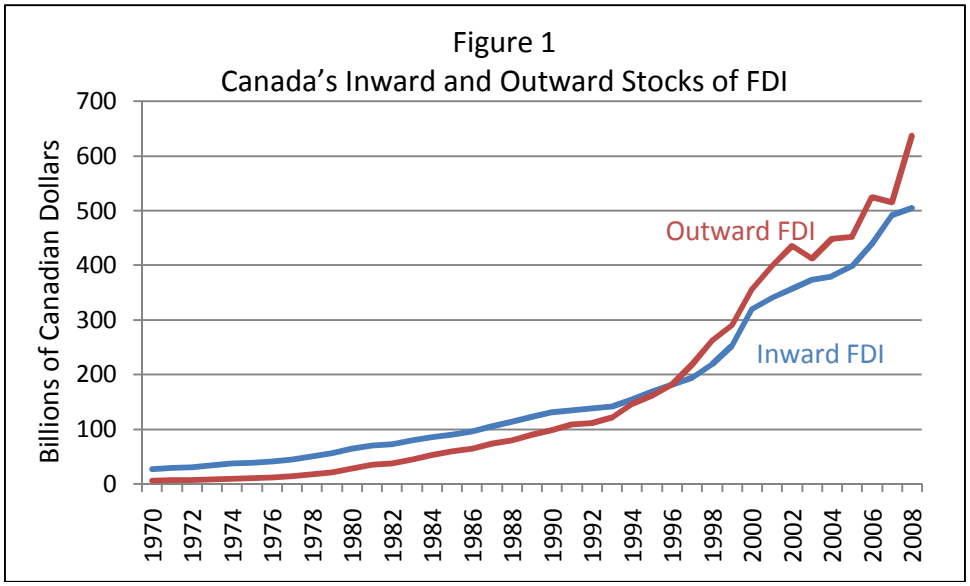
I will go further and argue also that most effective way to protect Canadian culture is not through protection of the sector in this way. This "blunt" method results in perhaps the most costly way to achieve an outcome. Creating policies that result in the efficient operation of the Telecom sector will result in enhanced incomes and profits for Canadians. With higher incomes and profits, the Canadian government will generate significantly higher tax revenue, which could then be used to achieve policy goals such as protecting Canadian culture. These tax revenues can also be used to ensure that rural and other potentially under serviced areas will be covered. In other words, allowing foreign participation into the Telecom sector will allow for a simultaneous enhancement in prosperity for Canadians and the ability of the government to protect Canadian culture.

The purpose of this report is to review the evidence underlying the conclusions made above. Section 2 reviews the trends in Canada's FDI patterns, noting particularly the reduction in Canada's attractiveness to FDI. Section 3 reviews the evidence refuting arguments that the Canadian economy is being hollowed out. Section 4 highlights the benefits that accompany FDI, and Section 5 highlights the benefits that would flow to Canada if restrictions on foreign entry into Telecom were lifted. Section 6 concludes.

1. Canada's experience with Foreign Direct Investment

FDI into Canada and Canadian FDI abroad continue to grow at quite rapid rates (Figure 1). Over the post 1970 period, outward FDI has grown at a compound annual rate of 13%, and inward at 8%, much faster than the growth rate in either international trade or GDP.

Figure 1
Canada's Inward and Outward Stocks of FDI



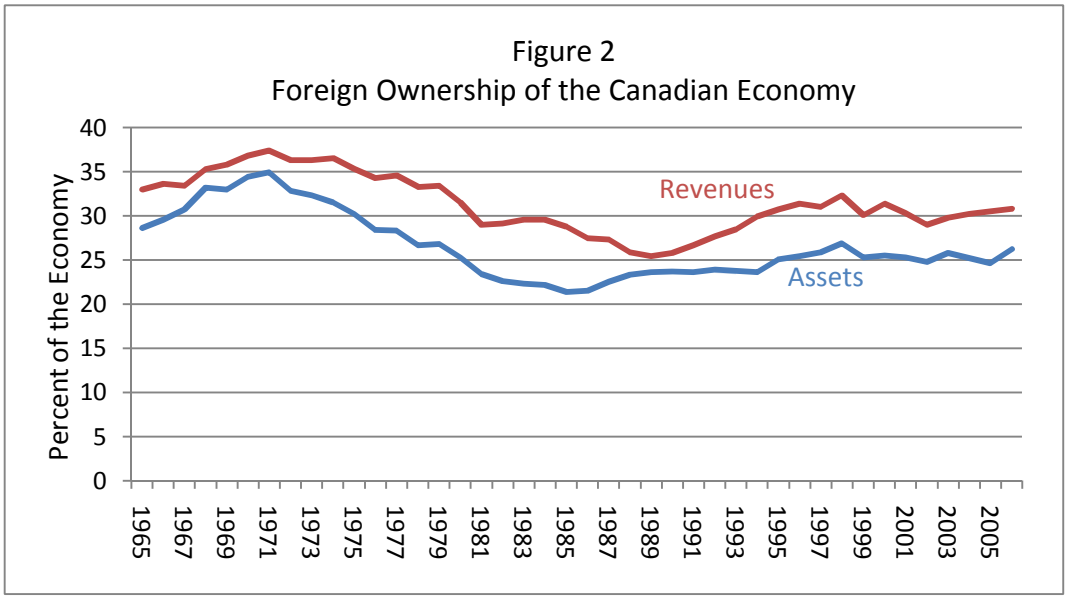
Source: Data underlying this figure obtained from Statistics Canada.
Reproduced from Hejazi (2010a)

The relatively rapid growth rate in Canada's outward FDI has resulted in it surpassing inward FDI into Canada by 1997. By 2008, Canadian firms had 25% more investment abroad than there was FDI in Canada. In 2008, there was $505 billion of FDI in Canada and $637 billion of Canadian FDI abroad.

This pattern seems to be lost in the media debate and for that matter debates among many policy makers. When there is a foreign takeover of a Canadian firm, the media often raises fears of a "hollowing out" or of a takeover of the Canadian economy. In fact Canadian firms have been expanding abroad far more rapidly than foreign firms are expanding here – and the Canadian firms that are expanding abroad are performing very well. In fact, in a recent study by Hejazi and Santor (2010), the evidence clearly shows that the move into global markets has improved significantly the performance of Canadian Banks. More broadly however, Statistics Canada (2005a) compared the performance of foreign controlled plants in Canada to the performance of Canadian owned plants. Although foreign controlled plants are more productive than Canadian owned plants, this is not the case when the performance of foreign controlled plants are compared to the performance of Canadian owned plants that have an international orientation – that is, to Canadian plants that have foreign operations. Their

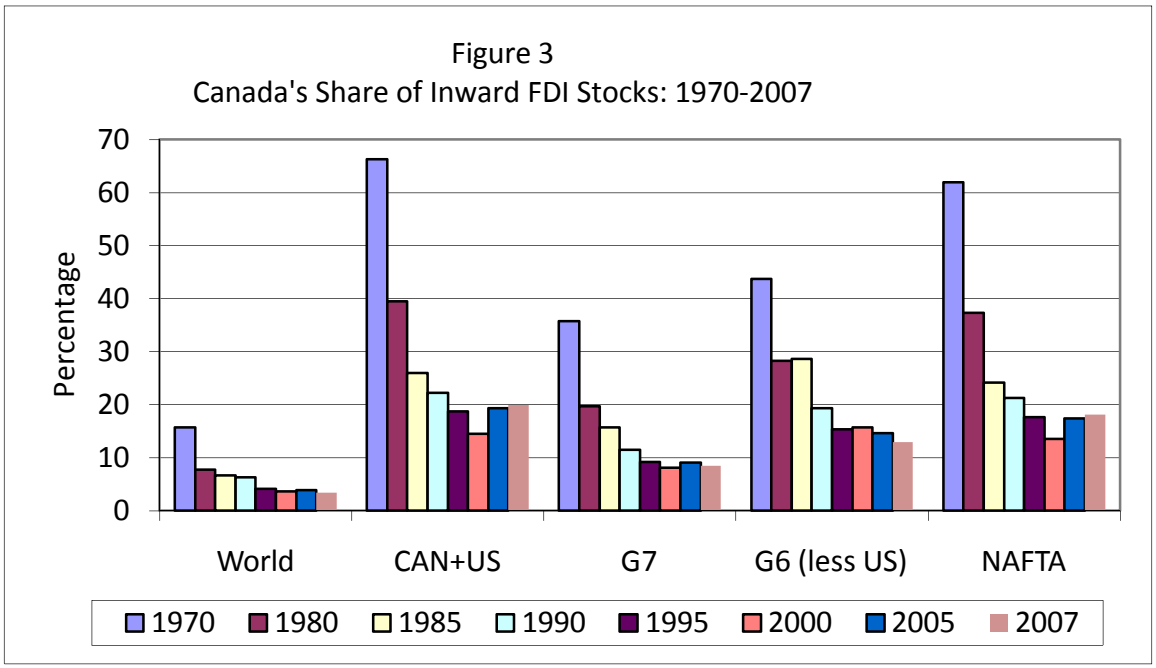
analysis finds "there is not much difference between foreign-controlled plants and domestic-controlled plants whose parent has an international orientation. For R&D and innovation, the results indicate that domestic producers with foreign operations (referred to as domestic MNEs) actually have a slightly better performance." Statistics Canada (2005a). That is, the exposure to international competition has forced these firms to enhance their performance. These results are consistent with studies on a large number of US firms across many sectors (see Bernard and Jensen (1999)).

Figure 1 above indicates that in dollar values, the amount of FDI in Canada continues to rise, but does not say anything about the extent of foreign ownership in Canadian industry. Figure 2 provides information on the extent of foreign ownership in the Canadian economy. Foreign ownership was highest in the early 1970s, when approximately 37% of revenues and 35% of assets were controlled by foreigners. These rates fell to about 25% in the late 1980s, but since the early 1990s, they have been relatively stable, with 30% of assets and 25% or revenues being controlled by foreigners. But there is certainly no upward trend in the extent of foreign control of the Canadian economy.



Source: Data underlying this figure obtained from Statistics Canada.
Reproduced from Hejazi (2010b)

Another important fact that must be highlighted and is not readily apparent from the two figures above, is that Canada has become less attractive as a destination for FDI, relative to global trends, over the past few decades (Figure 3).



Source: Data underlying this figure obtained from Statistics Canada.
Reproduced from Hejazi (2010a)

Canada has traditionally been an important host economy to FDI. In 1970, Canada received 15.7% of the world's stock for FDI. Over the subsequent 37 years, its share has fallen steadily, where in 2007 the share was 3.42%, represented by the bars above the World label in Figure 3. The share of all of the World's FDI locating in Canada is falling.

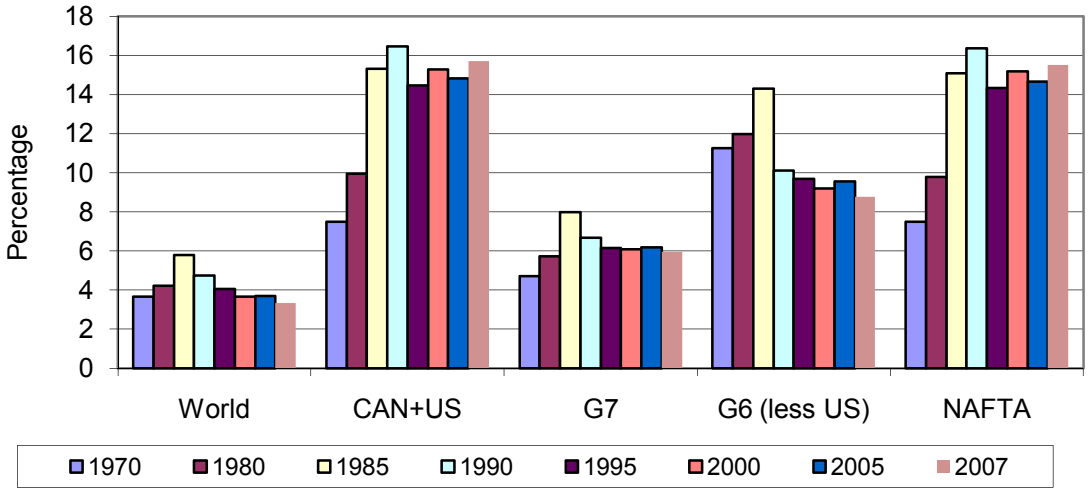
One may think that such a trend is obvious given the rise of emerging markets, particularly the BRIC countries and Eastern Europe. As these countries emerge and attract FDI to drive their growth, then perhaps Canada's share should fall. To address this, we consider Canada's share of FDI locating in Canada and the US, Canada's share of FDI locating in the G7 countries, Canada's share of FDI locating in the G7 countries less the US, and Canada's share of FDI locating in the NAFTA countries. By considering Canada's share of these other groups, we consider whether it is the emerging markets that are driving this result, or is it something about Canada. The patterns in Figure 3 are clear. Canada has experienced a reduced share of inward FDI whether we benchmark off of World FDI, Canada and US only, G7, G7 less the US, or NAFTA. That is, Canada's share of FDI has fallen, and this cannot be attributed to the increased importance of countries like China or India or those in Eastern Europe. Furthermore, it cannot be attributed to US FDI either.

This result of a reduction in the attractiveness of Canada as a destination for FDI has not been lost on the Federal Government in Canada, which has worked hard on both understanding the

factors that underlie this as well as the impact this has had on the Canadian economy, especially in terms of productivity and prosperity. This result, however, does seem to be lost on those who continue to argue that the Canadian economy is being hollowed out: the results here show this is not the case.

In contrast to the experience on the inward side, Canada has been able to maintain and perhaps increase its share of FDI on the outward side (Figure 4). That is Canadian businesses are aggressively expanding abroad, and have been able to keep up with the global surge in outward FDI. This is good news for Canada, and shows that when entering foreign markets, Canadian firms have been able to do very well.

Figure 4
Canada's Share of Outward FDI Stocks: 1970-2007

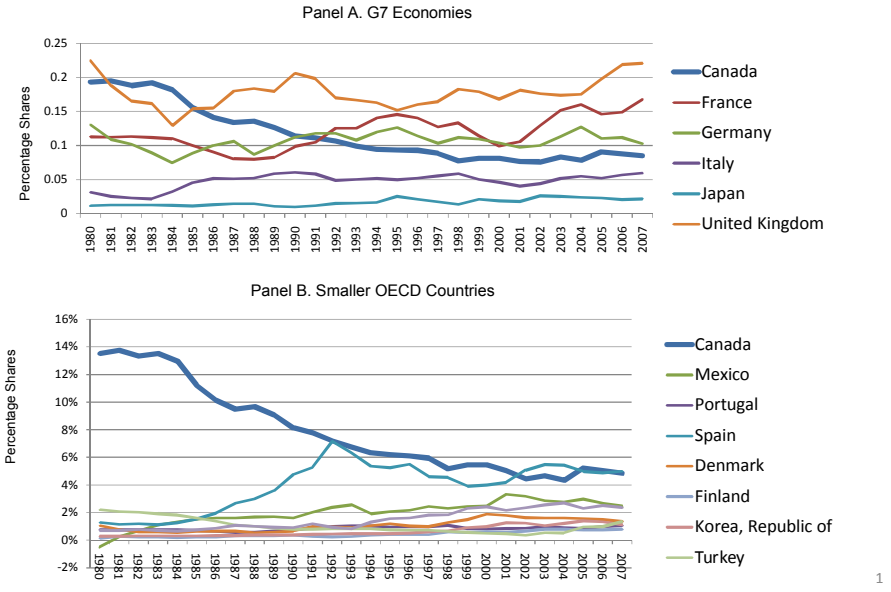


Source: Data underlying this figure obtained from Statistics Canada.
Reproduced from Hejazi (2010a)

These trends indicate therefore that although Canadian direct investment into the global economy has been able to keep up with the rapidly growing stocks of FDI in the world, Canada has not been able to attract FDI to the same degree it has been able to in the past. Furthermore, these patterns are not driven by Canada's special relationship with the United States, as is often the case, or the emergence of the BRIC and other economies. Whether we consider Canada's relationship with the US and emerging economies or not, these general trends hold. Canada is becoming a less attractive destination for multinationals, relative to global trends. In short, therefore Canada has been transformed from an important host economy for foreign investment to an important home economy.

One final comparison is necessary to fully understand Canada's changing FDI patterns. Figure 5 compares Canada's FDI shares to that of other developed countries. The figure truly highlights Canada's slipping attractiveness to FDI. Canada's falling share of FDI is anomalous among developed countries –virtually all other developed countries have at least been able to maintain their shares, or experienced slight increases or decreases – it is only Canada who has experienced a persistent reduction in its FDI share. Panel A considers the distribution of inward FDI stocks among G7 countries (I have excluded the US from the figure). Panel B considers the distribution of inward FDI among all OCED countries. Since Panel A uses G7 FDI as the basis of comparison and Panel B the OECD, the share for Canada is different in each graph.

Figure 5
Distribution of FDI Stocks Across Developed Economies



Source: Data underlying this figure obtained from the United Nations Centre on Trade and Development (UNCTAD).

The figure therefore drives home the point that Canada is becoming less attractive as a destination for FDI, and that Canada's FDI experience vis-à-vis inward FDI is quite different – no other developed economy has experienced such a persistent fall in its share of inward FDI. This highlights an important policy challenge facing the Canadian government. Given the benefits associated with inward FDI and Canada's slipping shares, how can the Canadian government reverse this trend? As I will argue below, an obvious and effective policy for Canada would be to lift restrictions on foreign participation into Canada's Telecom sector. Such a policy change would both allow more foreign investment into the Canadian economy and at the same time enhance its productivity and prosperity.

2. Is Canada being Hollowed Out?

The most common argument against inward FDI is related to the issue of head office activities, including R&D, but especially decision making. The argument is that when a Canadian company is purchased by a foreign interest, the decisions driving the Canadian operations will be moved to the foreign head office, thus implying that only a shell is left remaining, with the movement of the high value added activities to the head office location in the foreign jurisdiction. This assertion is not supported.

The first point here is to note what the theory would predict on this. Multinationals are driven by profit. It is the fiduciary responsibility of management to pursue this goal. As such, when a US multinational, for example, buys a Canadian company, it is not going to move the functions to the global head office in the US because it is an American company. To the contrary, it is going to locate those functions where it is most efficient to do so. It is only this approach that will yield maximum profits and hence shareholder value. Hence it is inappropriate to argue ex ante that a foreign takeover will result in a movement of the decision making and high value functions out of Canada.

The evidence provided by the Institute for Competitiveness and Prosperity and the Conference Board of Canada concludes that there is "no rigorous analysis" supporting the claims that the Canadian economy is being hollowed out. (Institute for Competitiveness and Prosperity (2008), Conference Board (2008)).

To consider whether there is a hollowing out of the Canadian economy, the Institute for Competitiveness and Prosperity uses a carefully constructed methodology to identify Canada's Global Leaders. They identify 33 global leaders in 1985, 86 in 2003, 84 in 2008, and 86 as of April of 2009. Quoting from the Institute's website, "While these takeovers have been highly visible, the Institute's research shows that, over the past two decades, the number of global leaders in Canada has actually increased. … These global leaders, like McCain, Open Text, and Research in Motion, have competed on the basis of innovation, globally significant capabilities, and global expansion to generate prosperity." This result is important also for our discussion on the Telecom sector because all of the evidence discussed below will enhance the innovative and hence global capacity of firms operating in the Canadian Telecom sector (Institute for Competitiveness and Prosperity (2008)).

The Conference Board too considered the issue of Hollowing out. The conclusions that flow from their analysis include the following. (1) Over the long term, the trend is favorable for Canada in the sense that there is larger outflow than inflow of M&A activity. (2) There is no long

term trend towards greater foreign ownership of the Canadian economy, noting that foreign control has been stable in the range of 30% (Conference Board (2008)).

In a 2006 Statistics Canada studied the issue of Hollowing Out and concluded that “despite continuing concerns that rising levels of foreign investment might lead to the hollowing out of corporate Canada, we find little evidence that this is occurring in terms of head office counts or employment. The number of head offices in Canada and the employment found therein continue to rise.” (Statistics Canada (2005b,2006)).

To quote Don Drummond, the then Chief Economist at TD Bank, summarized this evidence in an op-ed when he wrote "the facts don't warrant the hysteria that the Canadian economy is being sold out."

A careful review of the relevant evidence therefore refutes the claim of a hollowing out of the Canadian economy. In fact, the evidence indicates the contrary that Canadian firms are expanding globally faster than foreign firms are moving into Canada. Furthermore, the number of head offices in Canada and the employment found therein continue to rise. And finally, the number of Canadian firms that can be considered global leaders continues to rise, and innovation and global capabilities are key to their success. These conclusions add further evidence in support of lifting restrictions on foreign participation in Canada’s Telecom sector.

3. The benefits of inward FDI

The world has seen a surge in global trade and investment. The benefits that accompany openness have been documented extensively (see Coe and Helpman (1995), Dobson (2002), and Trefler (2004)). As noted in OECD (2005) and elsewhere, one cannot consider the trade side alone because a large share of the world’s trade occurs through multinational networks. As such, trade and FDI must be considered together. When a foreign multinational invests into a country like Canada, denoted inward FDI, the results have been shown to be positive. The benefits are as follows.

First, inward FDI is an important source of R&D diffusion (Coe and Helpman (1995), Hejazi and Safarian (1999a), Hejazi (2001), van Pottelsberghe and Lichtenberg (2001)). Canada has been shown to lag other OECD countries when it comes to R&D expenditures, as well as in the deployment of new technologies (see for example Expert Panel on Business Innovation (2009)). Much of the technologies that Canadian firms utilize are embedded in imports and inward FDI. When Canada imports goods and services, they too import the embedded technology. Similarly, when a foreign multinational invests in Canada, it brings with it foreign technology, which is

then deployed in the Canadian economy, not just by the foreign firm, but also by Canadian firms as they absorb that foreign technology. The papers noted above find that inward FDI is the dominant channel by which this happens, and the impact of technology that comes to Canada through FDI is up to three times more effective than technology gained through imports.

This argument must be extended in the current context. As noted here, inward FDI allows the Canadian economy to adopt foreign technology, and the evidence is clear – this technology has had a positive impact on the Canadian economy. In a detailed review of the literature, Globerman and Chen (2010) "highlights the importance of public policies that are conventionally associated with promoting productivity and real economic growth more broadly. Specifically, a reliable and transparent legal and regulatory regime, an educated and skilled workforce, good transportation and telecommunications infrastructure and an environment that encourages innovation activity, all make a location attractive to foreign investors. At the same time, such factors also contribute to greater spillover benefits from FDI." This is very important because it demonstrates that allowing inward FDI into the Telecom sector would deliver significant direct benefits, but also many indirect benefits, such as enhanced spillover benefits. These additional benefits cannot be underestimated.

Second, foreign firms are more productive than domestic firms (Statistics Canada (2001), Trefler (1999), Tang and Rao (2001)). In order to be globally competitive, foreign firms must have some competitive advantage, typically derived from R&D efforts and innovation. When the foreign firms enter another country, the enhanced competition forces domestic firms to improve their productivity substantially – and the evidence finds this to be the case. Since foreign firms are international and hence have met the global competiveness bar, and are also more trade intensive (they import and export more than domestic firms), their presence in a local economy generates significant productivity improvements. The domestic industry is forced to compete, and the enhanced global trade deepens the industry's penetration into global supply chains. Work by DFAIT has documented Canada's need to enhance the depth of its penetration into global supply chains because of the productivity benefits that would follow. More foreign investment into Canada would definitely aid in this objective. Of importance here also is the result noted in Statistics Canada (2005a), namely that "foreign-controlled plants account for most of labour productivity growth in Canadian manufacturing during the past three decades".

Third, inward FDI contributes to domestic capital formation (Hejazi and Pauly (2002,2003)). When foreign firms come into the Canadian market, they bring with them access to foreign capital and as such are able to undertake investments that otherwise would not have occurred

within the Canadian market. As such, industries which are more open to FDI have higher levels of investment and capital formation.

Fourth, many studies have found a complementarity between international trade and FDI (Brainard (1997), Graham (1993), Hejazi and Safarian (1999b,2001,2004,2005), Lipsey and Weiss (1981,1984), Rao et al (1996) and Safarian and Hejazi (2001)). This is an important result because it establishes that to enhance Canada's penetration into global markets, FDI – both inward and outward – is necessary. As Canada attracts more FDI and undertakes more FDI abroad, there is enhanced penetration into global trade networks, which has the benefits of exposing those Canadian firms to foreign competition, but also allowing Canadian firms to access foreign technologies. This is very important for a country like Canada given it undertakes relatively little R&D and lags on many measures of innovation.

Fifth , creating policies that attract inward FDI will also generate outward FDI. Quoting again from Globerman and Chen (2010), "it is clear that the framework policies that favour inward direct investment also encourage outward direct investment over the longer-term". I was asked during the Telecom hearings whether I believed increased competition and foreign investment into the Canadian Telecom would enhance the participation of Canadian Telecom companies abroad. The evidence both supports this conclusion and that such a development would be good for Canada.

Sixth, there is a discipline imposed on local managers by the risk of takeover by foreign firms. Financial markets impose a discipline on managers to perform well. When manager's performance is poor, shareholders sell shares and the stock price falls. In this case, the likelihood that investors will buy the company's stock at the low market value, takeover the company, and replace management. If the new management is more efficient, the value of the company increases. This risk of takeover imposes a discipline on managers to work to the standard in the relevant market. In the absence of the possibility of a foreign company to take over a domestic firm than the discipline imposed on management is to be the best in Canada, not the best globally. On the other hand, if there is the risk of a foreign takeover, the Canadian company is forced to the best globally, and hence the productivity and competitiveness of that firm is substantially enhanced.

In short, inward FDI has been shown to be important in many dimensions of the Canadian economy. The substantial benefits that come with inward FDI underlies the move globally by

governments to attract multinationals. Sectors that are more open to inward FDI and international trade are more competitive relative to those that are less open.

4. The Benefits of Lifting Restrictions on Inward FDI in the Canadian Telecom Sector

Restrictions on foreign ownership therefore limit the benefits noted above from accruing to Canadians. However, the impact of foreign ownership restrictions would be most pronounced in what are referred to as key infrastructure sectors, notably Finance, Transportation, and Telecom. The focus here is Telecom. When the telecom sector is not operating as efficiently as it could, the impacts are felt within the sector itself, but also across the economy as firms from all sectors and individuals interact with the Telecom sector. As a result of this dependence, any inefficiency in such a critical sector gets magnified throughout the economy. These negative effects are likely most pronounced for small business where access to Telecom and internet technology is critical to entry.

Allowing enhanced foreign participation and foreign investment into the telecom sector in Canada will deliver substantial benefits to that sector in terms of enhancing its productivity and competitiveness: its R&D and ICT investment will be enhanced, there will be increased foreign capital flowing into the sector. The increased competition that results from foreign participation will enhance the quality and reliability of services provided, and this will drive down the costs faced by consumers and businesses using Telecom services. Furthermore, the enhanced innovativeness in this sector and the improvements in its productivity and competitiveness will generate benefits across the economy – that is, the gains are not confined to the Telecom sector. All sectors in the economy that interact with the Telecom sector will benefit.

It is important to note the cost of protection in any policy discussion. If the Canadian government wishes to protect Canadian companies by maintaining restrictions of foreign investment, the impact is reductions in prosperity for Canadians. In light of the discussions above, there are several downsides that come with restricting FDI into the Telecom sector.

First, in the presence of such restrictions on foreign participation, managers in Canada's Telecom sector are not disciplined by financial markets to perform to a global standard. When there are restrictions placed on foreign participation into the sector, then the only firms that can discipline domestic managers are the other Canadian Telecom firms, in which case the list is short. In other words, in the presence of foreign ownership restrictions, there are no viable Canadian alternatives to local management. As such restrictions on foreign ownership eliminate the discipline that would be applied to managers of Canadian Telecom firms that would

accompany the threat of takeover from foreign companies. In the presence of such restrictions, the benchmark is to be the best in Canada, not the best globally. As such the performance in the industry will suffer. Lifting restrictions on foreign investment will enhance the discipline placed on local management and hence the performance of the sector.

Second, restrictions on foreign entry in the Canadian Telecom sector have restricted the amount of capital available to the Canadian Telecom sector, thus raising the cost of capital. There is significant evidence demonstrating that the amount of credit intermediation (ie. available credit) in Canada has lagged that in other G7 countries. Much domestic credit is sourced locally, but much of it comes from international sources, and comes in the form of FDI or mergers and acquisitions. Lifting restrictions on foreign investment would therefore result in enhanced capital flowing into the sector. As has been argued elsewhere, there is a need for significant foreign capital to allow the Telecom sector to enhance its investments in ICT and perform to a much higher standard than is currently the case, as noted in various international rankings.

It is important to note also that new entrants have a particularly more difficult time accessing capital, especially foreign, because they are unable to demonstrate existing established businesses. Existing companies in the Telecom sector can go to, for example, the Canadian and US debt markets and raise capital on a relatively cost effective basis. In sharp contrast, it would be far more difficult for a start-up such as Globalive to do so.

The corollary to this of course is that current incumbents have an enormous advantage in terms of acquiring both domestic and foreign capital. Stated differently, if new entrants were to gain access to start-up capital from foreign sources, incumbents will not unfairly suffer. In fact, allowing start up to access foreign capital would move the industry slightly in the direction of a more level playing field, but in no way fully. Even with access to foreign capital, the incumbents still hold an enormous advantage.

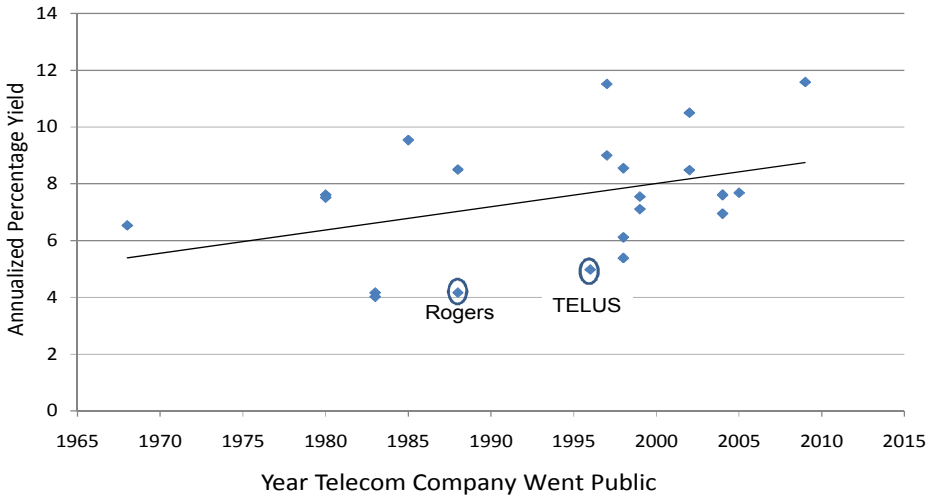
To get a sense of the advantage incumbents have vis-à-vis raising capital, I collected data on yields for companies in the Telecom sector in Canada and the US (Table 1). The methodology underlying the collection of these data is described in Appendix 2 of this report. These yields are reported in Table 1 and are yields on 10-year Callable bonds. For Canada, data are reported for 2 companies, and 20 for the US. The first column indicates the earliest date for which we have stock price data, and hence we call this the IPO year. The second and third columns provide stock ticker names and the company names. The fourth column is the yield on the 10-year callable bond.

Table 1. Canadian and US Bond Yields, 10 year maturities			
Est/ IPO year	**Ticker**	**Short Name**	**10-Year Callable Bond Yield**
		Canada	
1988	RCI/B CN Equity	ROGERS COMMUNICATIONS INC-B	4.161
1996	T CN Equity	TELUS CORP	4.972
		US	
1968	CTL US Equity	CENTURYLINK INC	6.529
1980	S US Equity	SPRINT NEXTEL CO	7.618
1980	LUK US Equity	LEUCADIA NATL	7.510
1983	VZ US Equity	VERIZON COMMUNIC	4.160
1983	T US Equity	AT&T INC	4.018
1985	CBB US Equity	CINCINNATI BELL	9.541
1988	FTR US Equity	FRONTIER COMMUNI	8.501
1997	LVLT US Equity	LEVEL 3 COMM INC	11.514
1997	Q US Equity	QWEST COMMUNICAT	9.000
1998	PAET US Equity	PAETEC HOLDING	8.552
1998	CCI US Equity	CROWN CASTLE INT	6.114
1998	AMT US Equity	AMERICAN TOWER-A	5.383
1999	TWTC US Equity	TW TELECOM INC	7.550
1999	SBAC US Equity	SBA COMM CORP-A	7.103
2002	ITCD US Equity	ITC DELTACOM INC	10.501
2002	NIHD US Equity	NII HOLDING INC	8.480
2004	LEAP US Equity	LEAP WIRELESS	6.952
2004	VMED US Equity	VIRGIN MEDIA INC	7.609
2005	WIN US Equity	WINDSTREAM CORP	7.679
2009	PMUG US Equity	PRIMUS TELECOMMU	11.582

Note: To measure the length of time the company was public, we consider the earliest date for which stock market data are available for each company. For the majority, this was straightforward. A few however, had data at the beginning of our data set, and hence their public trading pre-date the year used here. See Appendix 2 for full details.

To get a sense of the relationship between the ability to raise capital on a cost-effective basis and how long the company has been publically traded, I plot the IPO year and the yields on the 10-year bond as reported above (Figure 6). The figure shows clearly that in fact the relationship is positive - that is, the more recently the company went public the higher is the yield on its debt. In other words, older and more established companies have lower costs associated with raising debt in the long-term capital market (measured here as the yield on the 10-year Callable bond). I have also highlighted where Rogers and TELUS are in this graph, the two Canadian Telecom companies in the sample.

Figure 6
US and Canadian Telecom Bond Yields
10 Year Maturity



Two questions remain: are these relationships statistically significant and what are they capturing. I address each of these below.

Table 2 provides correlations between these 10-year company yields and company characteristics. This is done for the sample of US firms only and for the sample of both Canadian and US firms. Again, as the year of IPO increases, meaning the company has been in the market less time, the higher is the yield on its debt. However, the Table also shows that the larger is the company's market capitalization or its sales, the lower is the yield on its debt. This can be interpreted as evidence in support of the argument made above, namely that companies that are newer to the market do not have (as much) established business to go to the capital markets with in comparison to longer established firms that have relatively more.

Table 2 Correlations between 10-Year Bond Yields and Company Characteristics		
Correlation between 10-year Bond yield and	US Only	US and Canada
Year Company went public	0.40	0.39
Company Market Capitalization	-0.65	-0.59
Company Sales	-0.61	-0.53

Next I estimate a series of regressions to measure the relationship between bond yields for each company and several aspects of each company: the year the company went public, sales of the company, and market capitalization.

The results in the first column (1) indicate that there is a positive and statistically significant relationship between the newness of the company to the market and the yield required to hold its debt. That is the higher the year, the more recent the company has been in the market and the higher the yield. This average relationship is about 8.2 basis points per year.

In the second column (2), I add a variable for Canada. This is meant to test the extent to which the average relationship holds for Canada as distinct from the US. The results show that accounting for the 2 Canadian companies in the sample, the average yield required in Canada is 3.078% lower than those in the US, and there remains a 7.7 basis point discount associated with each additional year the company was public.

In column 3, the model is extended to take into account Sales of each company, and column 4 to include Market Capitalization. The results are clear. Once these measures of the companies size, or let me call it established business grows, the year variable becomes insignificant. The yields fall persistently with size. What is interesting to note is that even after accounting for year and size of the company, the yield required to hold Canadian Telecom bonds is more than 3% lower than those in the US. This is consistent with financing costs which are lower in Canada than in the US (see for example: Bloomberg, *Jun 11, 2010, "*Canadian Corporate Yield Gap to U.S. Is Widest Since March: Canada Credit**".**

Table 3. Regression Results: Drivers of Bond Yields				
	(1)	(2)	(3)	(4)
Year of IPO	0.082 (1.889)	0.077 (1.937)	0.036 (0.951)	0.036 (1.012)
Canada		-3.078 (-2.196)	-3.311 (-2.715)	-3.128 (-2.686)
Sales			-0.0316 (-2.687)	
Market Cap				-0.034 (-3.086)

Note: t-statistics in parentheses.

What all of this means is that new established companies pay a significant premium to raise capital. This is for many reasons, but especially the link to established business. Once firms have increased their sales and their market capitalization, the premium associated with how long the company has been in business goes away. Therefore, newly established companies such as Globalive will have to pay a significant premium to finance itself.

Third, restrictions on foreign ownership reduce the positive spillover benefits that accompany the presence of foreign companies. Recall from above that foreign multinationals have superior technological capacities in comparison to Canadian companies. The evidence is clear that Canada lags other G7 countries in R&D activities, innovation, and adoption of new technologies. When foreign firms enter Canada, they bring with them access to these advanced technologies, and they implement earlier and to a larger extent than do Canadian firms (Statistics Canada, 2005a). Allowing foreign firms to participate in Canada's Telecom sector will result in an increase in the amount of technologies deployed into the Canada Telecom sector. Together with enhanced availability to credit, there will be an increase in the amount of ICT spend in the sector, and hence a reduction in the substantial gap that currently exists between Canadian and US ICT spend per capita.

Fourth, the presence of foreign firms will enhance the extent of competitive forces that exist in the Telecom sector. There is significant evidence that foreign firms that would potentially enter the Canadian Telecom sector would be more productive than the Canadian Telecom firms. As a result, these competitive forces would raise the bar that would be necessary to profit in the

sector, thus resulting in enhanced performance in the sector. Canadian Telecom companies would be forced to improve their competitiveness, or face losing significant market share to new entrants to the industry.

There is a significant qualification that must be made here. In cases where Canadian firms are investing abroad, they tend to have productivity levels that are similar to those of the foreign companies coming into Canada. That is, Canadian multinationals (i.e. Canadian firms operating abroad) are as productive as foreign multinationals investing in Canada (Statistics Canada (2005a)). Of course, this admirable productivity performance underlies the trends noted above on the success of Canadian firms abroad.

In light of this qualification, there is a Fifth benefit that must be highlighted. There will be enhanced performance in the Telecom sector if the firms operating in this sector enhanced their foreign participation. Since much of Canada's FDI is intra-industry, foreign investment in Canada's telecom sector would very likely generate Canadian investment abroad in the Telecom sectors of other countries. As firms operating in the Canadian Telecom sector enhance their access to capital and technology, and are successful in competing with global players that enter the Canadian market, they too will be able to participate more aggressively in the Telecom sectors of other countries. All of these outcomes are positive for Canada, and would readily flow with a lifting of foreign ownership restrictions.

5. Conclusions and Recommendations

I appeared before the Standing Committee on Industry, Science and Technology on May 6, 2010 to give evidence on the merits of foreign direct investment (FDI) into Canada in general and in the Telecom sector specifically. Consistent with the research I have published, I argued that lifting restrictions on foreign participation into the Canadian Telecom sector would generate significant benefits for Canadian businesses and individuals. When asked what these benefits would be, I argued the following.

Lifting restrictions on foreign participation into Canada's Telecom sector would enhance significantly that sectors access to foreign capital and technology. The increased competition that would result from such entry would enhance the efficiency and the productivity of the sector. Since Telecom is a key infrastructure sector, the benefits of enhanced performance would be felt across the economy – every firm or individual that uses services from the Telecom sector would benefit. The benefits would therefore be an enhanced range and quality of services, and lower prices. This would be the direct effect. Perhaps more importantly, however are the indirect effects. As the competitiveness and prosperity of the Canadian economy

improves, the levels of incomes would rise. For the same tax rates, government tax revenue would rise. This would allow the government to allocate resources more directly to one of the motivations of the restrictive policy– protection of Canadian culture. The Institute for Prosperity and Competitiveness has estimated that substantial tax revenues would be generated if Canada could close its prosperity gap with the United States. Lifting restrictions on foreign ownership in Telecom would enhance Canadian prosperity and would result in enhanced tax revenues for the Canadian government. These additional tax revenues could then be directed to the protection of Canadian culture and in my opinion would be far more effective than the use of perhaps the most blunt policy option of restricting foreign investment.

\The importance of the Telecom sector for small business must also be highlighted. As has been documented elsewhere, the largest source of employment growth in Canada is from small business, and the internet and computer technology has reduced the costs of entry. For these businesses, the internet and related technologies are key – we must ensure that these firms have access to low cost yet internationally competitive technologies.

The objective of the Canadian government is to enhance the productivity and competitiveness of the Telecom sector, yet also protect Canadian culture. I believe these are exactly the right policies the government should pursue. I also believe that the current approach of restricting foreign investment is the wrong approach. The correct policy approach would not simply put restrictions on inward FDI, but rather would address the factors that explain the poor performance of the Telecom sector when compared to that in other countries. The answer has to do with limited capital, limited investments in ICT, and limited competition, especially from foreign companies. Lifting restrictions on foreign investment will deliver substantial productivity benefits to the Canadian economy and will enhance the ability of the Canadian government to protect Canadian culture. The additional tax revenues would also allow the Canadian government to ensure that potentially underserviced areas do receive services deemed necessary.

References

Bernard, Andrew B. and J. Bradford Jensen. 1999. "Exceptional Exporter Performance: Cause, Effect, or Both?." *Journal of International Economics,* Vol 47, No.1, 1-26.

Brainard, S. Lael. 1997. "An empirical assessment of the proximity-concentration trade-off between multinational sales and trade", *American Economic Review*, Vol 87, No. 4, 520-44.

Coe, D., and E. Helpman. 1995. "International R&D Spillovers." *European Economic Review,* May, 859-87.

Conference Board. 2008. "Hollowing Out: Myth and Reality." Presentation to the International Trade and Investment Centre, January 2008, Bloom, M. 2008. http://www.conferenceboard.ca/Libraries/ITIC_PUBLIC/HollowingOut_MichaelBloom.sflb See also Bloom, M., and M. Grant. 2008. *"Hollowing Out"— Myth and Reality: Corporate Takeovers in an Age of Transformation*. Ottawa: Conference Board of Canada.

Dobson, W. 2002. "Shaping the Future of the North American Economic Space: A Framework for Action." *C.D. Howe Institute Commentary* 162 (April).

Expert Panel on Business Innovation. 2009. *Innovation and Business Strategy: Why Canada Falls Short*. Ottawa: Council of Canadian Academies.

Globerman, Steven and Victor Zitian Chen. 2010. "Best Policy Practices for Promoting Inward and Outward Foreign Direct Investment", working paper.

Graham, Edward. (1993). "U.S. Outward Direct Investment and U.S Exports: Substitutes or Complements - With Implications for U.S. - Japan Policy", Institute for International Economics, Washington, D.C.

Hejazi, Walid. 2010a. "Dispelling Canadian Myths about Foreign Direct Investment." *IRPP Study*, No. 1

Hejazi, Walid. 2010b. "Foreign Control in the Canadian Economy", In *Introducing Microeconomic Analysis: Issues, Questions, and Competing Views* , Editors Hassan Bougrine, Ian Parker, Mario Seccareccia. Emond Montgomery Publications.

Hejazi, Walid. 2001. "Access to Foreign R&D Should Not Undermine Domestic R&D Efforts", *Policy Options,* October.

Hejazi, W., and P. Pauly. 2002. "Foreign Direct Investment and Domestic Capital Formation." Working paper no. 36, Industry Canada.

Hejazi, W., and P. Pauly. 2003. “Motivations for FDI and Domestic Capital Formation.” *Journal of International Business Studies, Vol* 34, 282-9.

Hejazi, Walid and A.E. Safarian (2005), ‘NAFTA Effects and the Level of Development’, *Journal of Business Research,* Vol 58, 12, December 2005, 1741-1749.

Hejazi, W., and A. E. Safarian. 2004. “Explaining Canada’s Changing FDI Patterns.” Working paper, University of Toronto.

Hejazi, W., and A. E. Safarian. 2001. “The Complementarity between U.S. FDI Stock and Trade.” *Atlantic Economic Journal,* Vol 29, 4, 420-37.

Hejazi, W., and A. E. Safarian. 1999a. “Trade, Foreign Direct Investment, and R&D Spillovers.” *Journal of International Business Studies,* Vol 30, 3, 491-511.

Hejazi, W., and A. E. Safarian. 1999b. “Modeling Links Between Canadian Trade and Foreign Direct Investment.” Perspectives on North American Free Trade, no. 2, Industry Canada.

Hejazi, Walid and Eric Santor. 2010. “DOI and Performance: What comes first? An Analysis of Canadian Banks”, joint with Eric Santor. *Journal of International Business Studies*, forthcoming. Earlier version published as Bank of Canada Working Paper.

Institute for Competitiveness and Prosperity. 2008. “Flourishing in the Global Competitiveness Game.” Working paper 11.

Lipsey, Robert E., and Merle Yahr Weiss. 1984. “Foreign Production and Exports of Individual Firms”, The Review of Economics and Statistics, 304-8.

Lipsey, Robert E., and Merle Yahr Weiss. 1981. “Foreign Production and Exports in Manufacturing Industries”, *The Review of Economic Statistics*, November, 488-494.

OECD (2005). Measuring Globalisation: OECD Economic Globalisation Indicators.

OECD 2006. OECD's FDI Regulatory Restrictiveness Index: Revision and Extension to more Economies.

OECD, 2003. “Measures of Restrictions on Inward Foreign Direct Investment for OECD Countries.”, Golub, S. S, OECD *Economic Studies No. 36.*

Rao, Someshwar, Ashfaq Ahmad, and Colleen Barnes. 1996. “Foreign Direct Investment and APEC Economic Integration”, Industry Canada Working Paper Series, #8, February.

Safarian, A. E., and W. Hejazi. 2001. *Canada and Foreign Direct Investment: A Study of Determinants*. Toronto, ON: Centre for Public Management, University of Toronto.

Statistics Canada. 2006. "Head Office Employment in Canada, 1999 to 2005." Insights on the Canadian Economy, Beckstead, D., and W. M. Brown. no. 014., cat. no. 11-624-MIE.

Statistics Canada. 2005a. *Global Links: Multinationals, Foreign Ownership and Productivity Growth in Canadian Manufacturing.* Canadian Economy in Transition Series, Baldwin, J.R., and W. Gu. cat. no. 11-622-MIE2005009. Statistics Canada.

Statistics Canada. 2005b. "Foreign Multinationals and Head Office Employment in Canadian Manufacturing Firms." Baldwin, J. R., and M. Brown, Economic Analysis Research Paper Series, no. 034, cat. No 11F0027MIE.

Statistics Canada. (2001), "Impact of the Adoption of Advanced Information and Communication Technologies on Firm Performance in the Canadian Manufacturing Sector", Baldwin, John and David Sabourin, Statistics Canada working paper.

Tang, J., and S. Rao. 2001. "R&D Propensity and Productivity Performance of Foreign-Controlled Firms in Canada." Working paper 33, Industry Canada.

Trefler, D. 2004. "The Long and Short of the Canada-U.S. Free Trade Agreement." *American Economic Review* 94 (4): 870-95.

Trefler, Daniel (1999), 'Does Canada Need A Productivity Budget?', *Policy Options,* July-August, 66-71.

van Pottelsberghe de la Potterie, B., and F. Lichtenberg. 2001. "Does Foreign Direct Investment Transfer Technology Across Borders?" *Review of Economics and Statistics,* Vol 83, 3, 490-7.

Appendix 1. List of Relevant Studies written by the Author.

Paper 1: "Trade, Foreign Direct Investment and R&D Spillovers", joint with A.E. Safarian, *Journal of International Business Studies*, 1999, Vol 30, 3, 491-511.

Result: Although the majority of the world's FDI is undertaken in developed countries, particularly in the United States, other countries gain access to these R&D stocks through international trade and FDI. This evidence shows that for the world's largest economies, FDI is the dominant channel of R&D diffusion. In other words, when a country imports goods and services, or attracts inward FDI, that country also accesses the R&D undertaken in the country where the imports and FDI originates. The paper demonstrates that the spillovers to local economies from inward FDI are significantly higher than spillovers which occur through trade.

Paper 2: "Access to Foreign R&D Does Not Undermine Domestic R&D Efforts", *Policy Options*, October, 2001, 43-48.

Result: This paper digs deeper into the importance of international trade and FDI as channels of R&D diffusion with a focus on Canada. Given Canada's relatively poor R&D performance, it is shown to rely heavily on foreign R&D – that is, rather than undertake its own R&D Canadian firms have opted to access the R&D undertaken in other countries. As noted above, inward FDI is shown to be the dominant channel of R&D diffusion. In other words, inward FDI is the most effective channel allowing the Canadian economy to access significant pools of R&D and technology from R&D intensive economies.

Paper 3: "Dispelling Canadian Myths about Foreign Direct Investment", IRPP, January, 2010. This paper summarizes and extends a report I prepared for the Competition Policy Review Panel Secretariat, Foreign Direct Investment and the Canadian Economy", Competition Policy Review Panel Secretariat, 2008. It was used as background for members of the Secretariat in preparation of the Red Wilson Report "Competing to Win", June 2008. http://www.ic.gc.ca/epic/site/cprp-gepmc.nsf/en/h_00040e.html

Result: This paper highlights several themes:

1) The benefits of inward and outward FDI to the Canadian economy
2) Documents an important trend: Canada's stock of FDI into the global economy has been growing far more rapidly than has foreign investment into the Canadian economy.
3) Despite claims in the media, there is little evidence to show that the Canadian economy is being hollowed out:
    a. The Institute for Competitiveness and Prosperity has identified among Canadian firms 33 global leaders in 1985, 86 in 2003, 84 in 2008, and 86 as of April of 2009. Quoting from the Institute's website, "While …. takeovers *(of Canadian firms)* have been highly visible, the Institute's research shows that, over the past two decades, the

number of global leaders in Canada has actually increased. … These global leaders, like McCain, Open Text, and Research in Motion, have competed on the basis of innovation, globally significant capabilities, and global expansion to generate prosperity."

b. The Conference Board too considered the issue of Hollowing out. The conclusions that flow from their analysis include the following. (1) Over the long term, the trend is favorable for Canada in the sense that there is larger outflow than inflow of M&A activity. (2) There is no long term trend towards great foreign ownership of the Canadian economy, noting that foreign control has been stable in the range of 30%.
c. In a 2006 Statistics Canada studied the issue of Hollowing Out and concluded that "despite continuing concerns that rising levels of foreign investment might lead to the hollowing out of corporate Canada, we find little evidence that this is occurring in terms of head office counts or employment. The number of head offices in Canada and the employment found therein continue to rise." (Statistics Canada, 2006, page 15).
d. To quote Don Drummond, then Chief Economist at TD Bank, summarized this evidence in an op-ed when he wrote "the facts don't warrant the hysteria that the Canadian economy is being sold out."

4) The Canadian economy is ranked among the most restrictive among developed countries by the OECD, in large part driven by stringent restrictions on inward FDI into Telecom, Finance and Transportation.
5) The theme that the best way to restrict Canadian business is not through restrictions on foreign investment – such a strategy results in reductions in productivity and reduced prosperity for Canadians. Rather, the most effective way to protect Canadian companies is to provide a productive and innovative environment that allows Canadian firms to be globally competitive. This requires that foreign investment be allowed, and Canadian companies be provided the resources and incentives to invest in technologies and deploy strategies to compete. As has been demonstrated clearly by the ICP (noted above), there are many Canadian companies that have in fact risen to this global challenge.

Paper 4 "The Myths about Foreign Investment", National Post Op-ed, January 27, 2010

Result: This is a short Op-Ed in the National Post, and not a paper. Nevertheless, I have included it here for the following reason. I have noted 5 myths around FDI, and provided evidence / arguments to demonstrate that they are in fact myths. The evidence demonstrates that FDI in fact delivers positive benefits to the Canadian economy, and that Canadians should have little to fear from such investment.

Paper 5 "Motivations for FDI and Domestic Capital Formation", with Peter Pauly, *Journal of International Business Studies*, 2003, Vol 34, 282-289. Also, "Foreign Direct Investment and Domestic Capital Formation", with Peter Pauly, Industry Canada working paper series, number 36, 2002, 66 pages.

Result: These papers document the complementary relationship that exists between FDI that comes into Canada and domestic capital formation. It demonstrates that inward FDI does not simply replace domestic capital, but rather results in enhancing the Canadian capital stock.

Paper 6: "DOI and Performance: What comes first? An Analysis of Canadian Banks", joint with Eric Santor. *Journal of International Business Studies,* forthcoming 2010. Earlier version published as Bank of Canada Working Paper.

Result: This is a very important paper because it shows, in a Canadian context that when Canadian banks operate globally their overall performance is enhanced. That is, moving into the global economy and competing with other firms results in an improvement in how efficiently these firms operate.

Appendix 2.
Methodology / Assumption underlying Collection of Yield Data on Telecom Company Debt

Initially, I screened for all active stocks in the US and Canada. I then selected the Sector as Telecommunications to generate a list of Telecom companies by country. That yielded 148 US companies and 24 Canadian Companies. I then imported the Standard and Poor's Credit Ratings for the companies. S&P was chosen because they have wider coverage than Moody's or Fitch. There were many companies that were not rated by S&P so I removed them from the list. The list was then narrowed down to about 7 Canadian companies and 30 US companies. Out of these, only 21 US companies issued bonds and 4 Canadian companies. I then imported Ticker, Name, Sales, Total Assets off of the last balance sheet, and the current market capitalization as of market close on July 15, 2010.

There was an issue with how long the company has been around since it is generally difficult to find reliable IPO data. Using Bloomberg, I imported IPO data for several of the securities. Several, however did not have IPO data. The way that I addressed this issue was by searching for historical pricing data (Bloomberg has historical prices going back to 1983). Then, I recorded the furthest month back that pricing data was available – this formed my estimate of the IPO date. If a company had pricing info for 1983, I assumed that it had traded before that date and I recorded it as "Pre-1983 or Pre-1980" under the IPO category. Although this does not tell us exactly what the date is, it gives us a general estimate. However, the majority of securities (almost all of them) had pricing data ending after 1983, and as such, this assumption should not impact any of our analysis.

With respect to the bonds, the ratings are the Standard and Poor's Long Term Local Issuer Currency Credit Ratings. Getting the credit ratings for the companies was straightforward. Bond yields and their respective maturity dates were retrieved. They are roughly organized in 1 year, 5 year, 10 year, 20 year, and 30 year categories, but they do not strictly align. For this reason, maturity dates were retrieved for each yield so we can reference exact dates if necessary. For consistency, the bonds analyzed in the paper are all 110-year callable bonds.