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## **Offshore Financial Centers and the Canadian Economy**

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### **Abstract**

The surge in Canadian direct investment abroad (CDIA) is an important component of Canada's competitive strategy, and has been shown to increase Canada's trade, capital formation and employment. A large share of CDIA moves through low-tax jurisdictions, also known as offshore financial centers, Barbados being the largest. These jurisdictions serve as conduits for Canadian multinationals to access the global economy. The analysis presented in this paper demonstrates that CDIA that moves through conduit jurisdictions results in broad-based increases in Canadian exports to the global economy. This evidence is linked to the literature which finds that these increases in trade result in higher levels of Canadian capital formation and employment. These effects must therefore be taken into account in any public discussion of the merits of the use of conduit jurisdictions by Canadian companies.

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## **Executive Summary (Major Findings)**

- Canada has been transformed from a host economy (destination for Foreign Direct Investment (FDI)) to an important home country for foreign investment (source of FDI). Canadian multinationals have significantly increased their presence abroad.
- As stated on the International Trade Canada website, in a 2006 Conference Board of Canada publication, and shown in many empirical studies discussed below, Canadian investments abroad have many “positive” effects on the Canadian economy.
- A closer look at the data on Canada’s FDI abroad (CDIA) indicates that approximately 20% moves through low-tax jurisdictions, of which Barbados is the largest.
- There is an important distinction between low-tax jurisdictions and tax havens: according to the OECD, low-tax jurisdictions in and of themselves do not amount to Harmful Tax Practices, whereas tax havens may. The distinction between the two relates to transparency and information sharing that comes with a low-tax jurisdiction and is absent in a tax haven. Barbados is an example of a low-tax jurisdiction and is not listed as a tax haven. As such, the OECD and its member governments are satisfied that Barbados’ level of transparency and information sharing does not allow for individuals and companies to use that jurisdiction to evade taxes.
- Most OECD countries have engaged in preferential tax treaties with low-tax jurisdictions. The reason for this is that such arrangements are critical for highly mobile and productive industries that are driving the global economy. That is, although available to firms in all industries, the use of these conduits is most useful for and hence concentrated among those firms engaged significantly in the global economy.
- These low-tax jurisdictions are also referred to as conduit jurisdictions because they serve as conduits for multinationals to access the global economy. That is, very little of the funds stay in the low-tax jurisdiction, but rather get invested in other regions of the world.
- There are many studies that measure the impact that CDIA has on the Canadian economy. However, this is the first study to provide formal empirical evidence of the effects that CDIA that moves through conduit jurisdictions have on the Canadian economy.
- The results indicate that CDIA that moves through low-tax jurisdictions result in significantly higher Canadian exports, not just with the OFC the CDIA moves

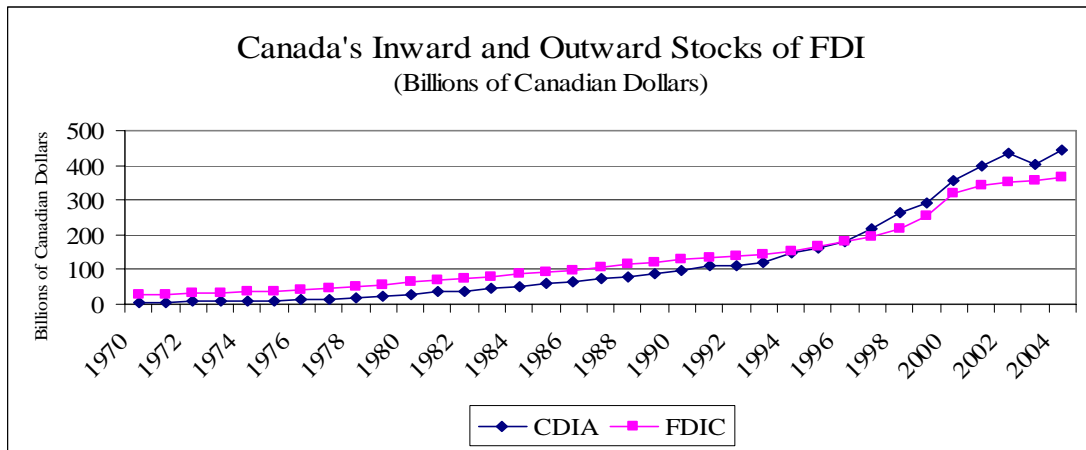
through, but rather globally. That is, the impact on Canada's trade is broadly based.

- There are many studies, reviewed below, which demonstrate that such increases in Canada's trade result in higher levels of Canadian capital formation and employment.
- This study is therefore the first to demonstrate that CDIA that moves through conduit jurisdictions result in higher levels of Canadian exports, employment and capital formation.
- There are two important limitations of this study.
  - There are other impacts the use of conduit jurisdictions may have on the Canadian economy that this paper has not measured, for example, the impact on Canadian tax revenues. It must be stated that the direct effect the use of conduits have on Canadian tax revenue is offset by the tax revenues that would be generated from higher amounts of Canadian trade, capital formation and employment. It is unclear ex ante what the net impact would be on government tax revenues. Another study would be required to measure that net impact.
  - According to Mintz, the availability of low-tax jurisdictions may be “encouraging” too many off shore investments from an efficiency perspective. As such, it is difficult to conclude that the increased outward FDI and the consequent increased amounts of trade, capital formation and employment are “good” for Canada. These efficiency and welfare considerations are left for further study.
- There is general understanding among the public that CDIA is good for Canada. The more recent public discussion has focused on CDIA through low-tax jurisdictions and whether this is “good” for Canada. The simplistic view is that Canadian Investment in low tax jurisdictions creates a tax revenue loss in Canada and therefore “hurts Canada” and only helps those investors. This paper demonstrates that this view is exactly that – simplistic. If policy makers are to make decisions that will benefit the Canadian economy, they must look beyond that simple view and take into account the additional effects that come with the use of low-tax jurisdictions on the Canadian economy. This paper shows that CDIA that moves through low-tax jurisdictions results in increased Canadian trade, and consequently increased Canadian capital formation and employment. It is argued here that these effects must be understood and considered in making policy with respect to the use of off-shore financial centers by Canadian multinationals. There is also a view that if tax regulations or treaty agreements were changed Canadian Investors would keep their investments in Canada and not invest via low tax jurisdictions as they do today. This will also be addressed in the second study, but our early research indicates that this view is also simplistic.

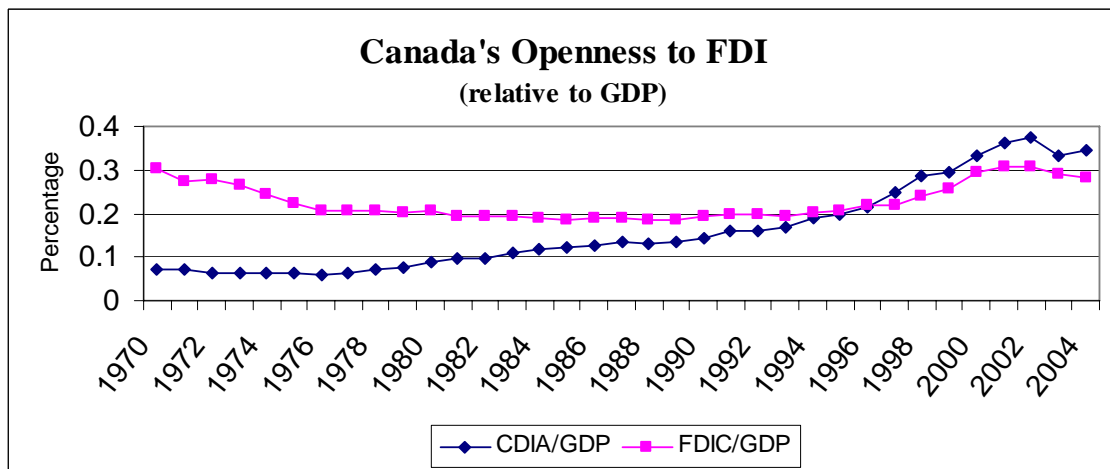
## 1. Introduction

Canada has traditionally been a host economy for foreign direct investment (FDI). In 1970, for every dollar of Canadian direct investment abroad (CDIA), there were four dollars of foreign direct investment in Canada (FDIC) (Figure 1). Over the subsequent period, both outward and inward FDI have grown at much faster rates than either trade or GDP. However, CDIA has grown at a faster rate than has FDIC. By 1997, CDIA surpassed FDIC. In 2004, there was 22% more CDIA than there was FDIC (Figure 2).

**Figure 1**



**Figure 2**



These figures clearly show that Canada has been transformed from a predominantly host economy for FDI to an import home country. In other words, Canada

has become a capital exporter, and hence a more serious player in the global economy. The traditional view of CDIA is that it is bad for the Canadian economy – it was argued that the movement of capital and production facilities abroad is tantamount to the export of production and jobs and reduced government tax revenue. This “simplistic” view is not supported by the available empirical evidence.

There are many studies available which demonstrate clearly that outward FDI (including CDIA) has many positive effects on both the host and home economies. That is, the surge in CDIA has many positive effects on the Canadian economy. These effects include increased market access that result from having a presence in the foreign market, leading to increased exports from Canada to the country where the CDIA is located. These increased exports lead to increased employment and capital formation in Canada (See Brainard (1997), Lipsey and Weiss (1981, 1984), Hejazi and Pauly (2002,2003), Hejazi and Safarian (1999a,b,2001,2005)).

There are other effects as well. The increase in domestic economic activity that results from CDIA contributes to increased tax revenue for the Canadian government. In addition, the exposure of Canadian firms to foreign competition improves the productivity of Canadian firms operating abroad, and results in the transfer of important knowledge and technologies to the Canadian firm operating abroad. These technologies are then transferred back to their Canadian operations. The evidence shows that domestic Canadian firms will be made better off as they too adopt the knowledge and technologies brought back to Canada by Canadian MNEs operating abroad.

Many of these effects are summarized nicely in a March 2006 Conference Board of Canada Executive Action report entitled “The Benefits of Foreign Direct Investment:

How Investment in Both Directions Drives Our Economy”. To quote from that report, “By investing abroad, multinational enterprises gain access to overseas markets, resources and opportunities to exploit their competitive advantage to the fullest.” Furthermore, “to build global supply chains linking their production processes, Canadian companies have invested in record amounts abroad.”

An Op Ed on this issue was recently published in the Globe and Mail and is reproduced in the Appendix to this paper. The Op Ed was written by Anne Golden, president and CEO of the Conference Board of Canada, and is entitled “We have nothing to fear from foreign investment”. What is especially relevant from that discussion for this study relates to fears about both inward and outward FDI that are based on simplistic views of the issue. The Op Ed argues for improved government policies that would make Canada more attractive for foreign multinationals to locate in, as well as stresses the importance of outward FDI for the Canadian economy.

This evidence therefore puts these changes in Canada’s FDI position from a host to a home country into a far more positive light – increased CDIA is a positive development for the Canadian economy. This view is entirely consistent with that of the Canadian government, as stated on the International Trade Canada Website (an excerpt is reproduced in the Appendix to this paper).

The evidence and discussions in the popular press clearly reflect the positive effects that outward and inward FDI have had on the Canadian economy. But what is missing is any discussion of Offshore Financial Centers (OFCs), and how the use of these conduits by Canadian multinationals affects the discussion. This paper is the first research that will work to fill this void.

Coinciding with this surge in CDIA has been the increased importance of Offshore Financial Centers” (OFCs). Since 1990, Canadian investments into OFCs have increased eightfold. This rapid growth has resulted in one fifth of all CDIA now locating in or moving through OFCs, doubling their share since 1990 (Lavoie (2005)). That is, CDIA into these OFCs has grown at twice the rate of Canada’s overall CDIA.

The OFCs represent conduits for Canadians to channel resources through in part to gain access to the OFC’s local and regional markets, but mainly they are used as conduits to access the global economy. That is, the funds are ultimately invested in a third country/region, such as the United States, Europe, Latin America, Asia, or elsewhere.

Mintz (2004) provides a rigorous discussion of this issue. He demonstrates that the tax advantages associated with the use of conduits reduces the cost of capital of the (Canadian) companies involved. Specifically, he demonstrates how the cost of capital associated with “direct” financing structures increases with tax rates, whereas this cost of capital falls with the tax rate when “indirect” financing structures are used – that is, when funds are channeled through conduit jurisdictions with low or zero tax rates. As a result, these conduits have large inward and outward flows, but low net flows. Mintz argues that these reductions in the cost of capital associated with the use of conduits may give rise to too many cross border transactions, and calls for more research that looks carefully into the efficiency and revenue considerations.

This paper complements the work of Mintz in recognizing the surge in importance of OFCs to the Canadian economy raises an important policy question. Although there is a good understanding of the effects that CDIA has on the Canadian economy, there is

little known about how CDIA that utilize these conduits (OFCs) impact the Canadian economy. That is, how does the fact that a Canadian company has used an OFC impact the effects that CDIA has on the Canadian economy? Examining this question is the focus of this study.

Although there is much theorizing about these effects, ranging from purely negative to purely positive, these arguments are rarely accompanied by empirical evidence. In the case of Canada, this is the first research paper to provide empirical evidence. The analysis presented in Section 5 measures the effect of CDIA on the Canadian economy, but unlike previous studies, it explicitly accounts for OFCs, and tests how the effects of CDIA are impacted by the use of these conduit jurisdictions. This analysis provides empirical conclusions and is therefore an important contribution into any policy debate regarding the role of OFCs vis-à-vis Canada.

The analysis presented below also involves the estimation of a popular international trade model. This model is extended to measure the impact CDIA has on Canada's exports, including those investments which use Conduits. The results indicate that Canada's trade with the global economy is enhanced as a result of CDIA – and these results hold whether the CDIA utilizes conduits or not. The increase in trade is broadly based – that is, Canada's trade with the US, Europe, East Asia and Latin American is enhanced when CDIA moves through conduit jurisdictions.

There are many that have drawn negative conclusions about Canadian companies that use these Conduits because of the associated tax benefits. However, the research findings presented here demonstrate clearly that the use of these conduits results in significantly higher levels of Canadian trade, which have been shown elsewhere to



increase Canadian capital formation and employment. These additional effects must be taken into account in any public discussion of the merits of the use of conduit jurisdictions by Canadian multinationals.

The format of this paper is as follows: Section 2 describes Canada's FDI position with OFCs. Section 3 explores the critical differences between low tax jurisdictions and tax havens – the average Canadian does not realize these differences. Section 4 reviews the small literature that considers the impact of such conduits. Section 5 presents the model used and provides several empirical tests of the effects these conduits have had on Canadian trade and their findings. Section 6 provides Conclusions and discusses issues and implications for policy makers.

## **2. Canadian FDI in Offshore Financial Centers<sup>1</sup>**

According to the International Monetary Fund (IMF), an OFC is a jurisdiction that

- has a large number of financial institutions
- most transactions are initiated abroad
- most institutions are controlled by non-residents
- has assets and liabilities out of proportion to the domestic economy
- has low or zero taxation, moderate or light financial regulation and bank secrecy

OFC's are attractive to international business as they facilitate international business and trade. Although the IMF identified 42 jurisdictions as OFCs in 2003, Canada had investments in 25 in that year. A list of these countries and the amount of CDIA for each country is reported in Table 1. What is remarkable is that 4 of the top 10 destinations for CDIA are OFCs. What is equally remarkable is the growth in the importance of these OFCs for Canadian international business success and global competitiveness.

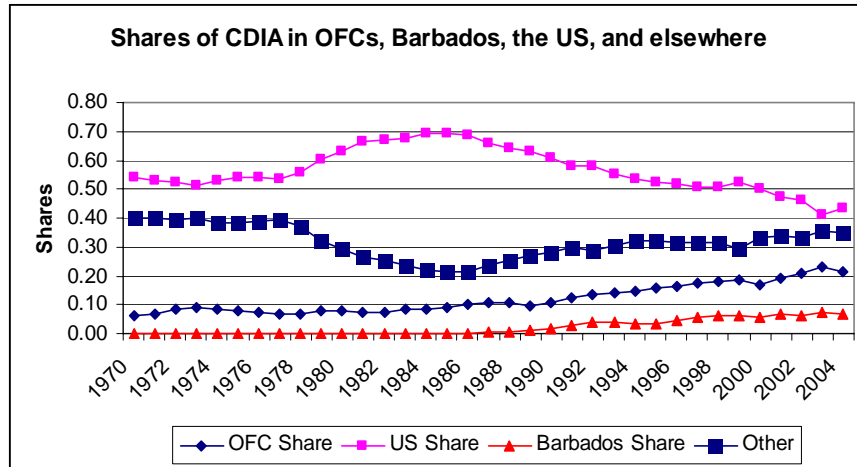
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<sup>1</sup> This section draws heavily from Lavoie (2005).

Country <sup>a</sup>	Canadian direct investment position (millions of Can \$)	Rank	Country <sup>a</sup>	Canadian direct investment position (millions of Can \$)	Rank
Barbados	24,690	3	Netherlands Antilles	107	69
Ireland (Dublin)	18,226	4	Costa Rica	94	74
Bermuda	10,845	6	Cyprus	92	76
Cayman Islands	10,619	8	Belize	X	x
Bahamas	8,802	11	Mauritius	X	x
Switzerland	4,044	18	Saint Lucia	X	x
Singapore	3,735	19	Antigua and Barbuda	X	x
Hong Kong	2,535	22	Malta	X	x
Channel Islands <sup>b</sup>	x	x	Aruba	X	x
Malaysia (Labuan)	716	32	Seychelles	X	x
Luxembourg	683	33	Bahrain	X	x
British Virgin Islands	307	45	Macao	X	x
Panama	131	64			
<p>x Data are confidential under the Statistics Act.</p> <p>a. Canadian enterprises had no assets invested in the following OFCs in 2003: Andorra, Anguilla, Cook Islands, Gibraltar (U.K.), Marshall Islands, Liechtenstein, Lebanon, Monaco, Nauru, Niue, Samoa, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Turks and Caicos Islands, Vanuatu.</p> <p>b. The IMF distinguishes the jurisdictions of Guernsey, Isle of Man and Jersey.</p>					
<p>This Table reproduced from: Lavoie, Francois. (2005). "Canadian Direct Investment in 'Offshore Financial Centers'", Statistics Canada, Catalogue Number 11-621-MIE2005021.</p>					

Figure 3 shows the share of CDIA locating in the US, OFCs, Barbados, and elsewhere. The share of CDIA locating in the US has fallen steadily from a high in the mid 1980s of 70% to well below 50% in 2004. In contrast, the share locating in OFCs has doubled, from 10% in 1990 to 20% in 2004. Barbados is the largest OFC destination for CDIA, attracting 7% of CDIA.

Figure 3



Note: The shares for the US, OFCs, and Other add to 100%. Barbados is listed separately, and is also part of the OFC share.

Although the OFC share has increased steadily over the 1990s, not all OFCs have experienced the same growth in CDIA. Figures 4 and 5 graph the stocks of CDIA into each of 16 OFCs for which time series data is available.

Figure 4

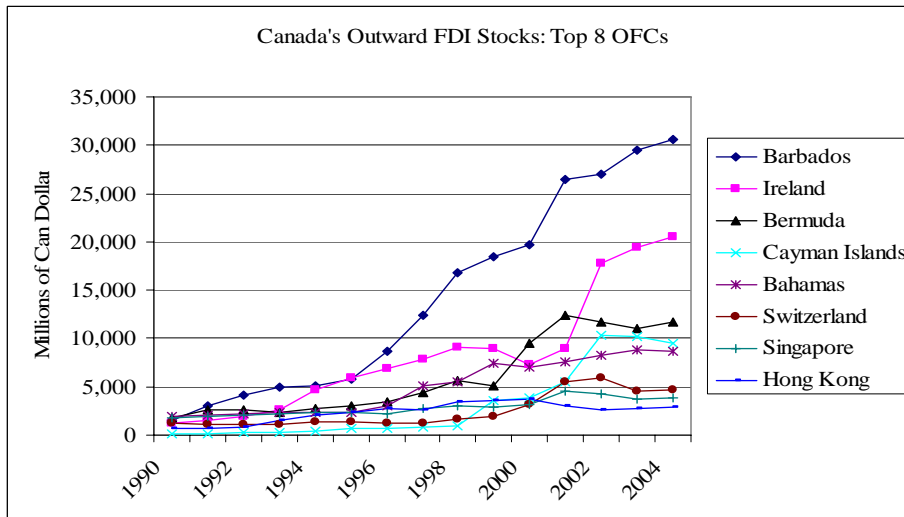
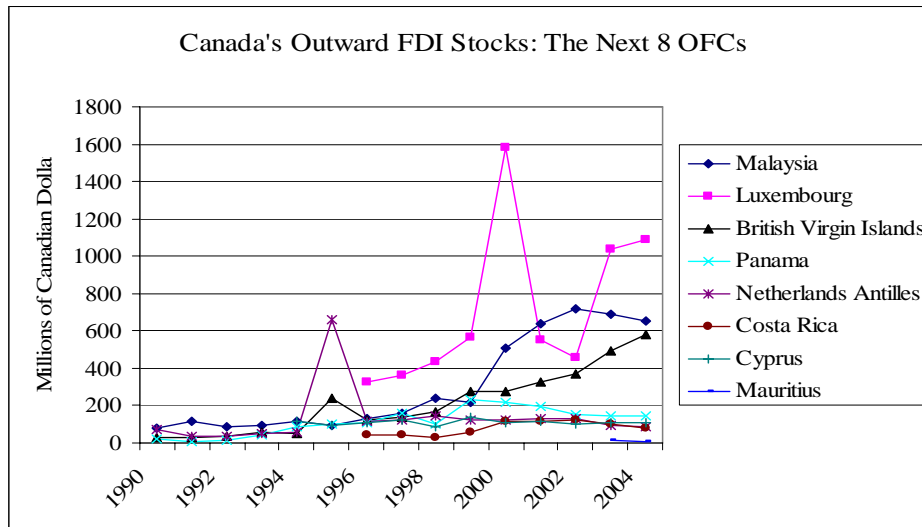


Figure 5



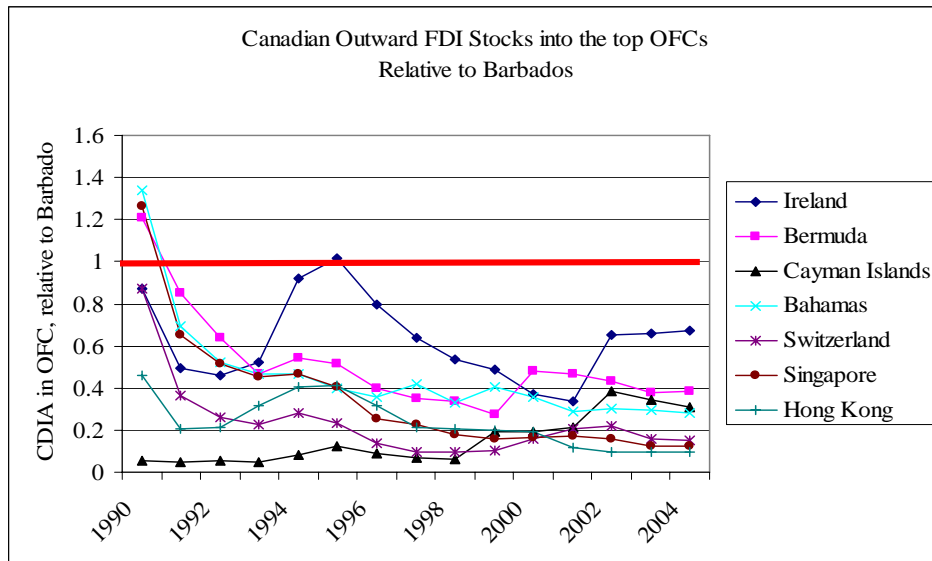
What is clear from these figures is that some OFCs have seen the amount of CDIA locating there grow much more quickly than others. For example, Barbados emerged as the largest OFC destination for Canada in 1991. It has remained the largest single destination for the entire period 1991 through 2004, with the exception of 1995 when Ireland was the largest destination. Ireland has also seen the amount of CDIA locating there rise quickly as well, and to a lesser extent Bermuda. Although Luxembourg has experienced significant growth, the level of CDIA locating there remains low, at just over \$1 billion.

Following Barbados, in 2003, the most important OFCs for Canada were Ireland, Bermuda, the Cayman Islands, the Bahamas, Switzerland, Singapore and Hong Kong. In 2003, the total amount of Canadian FDI locating in (or moving through) these OFCs was \$88 billion, up from \$11 billion in 1990. That is, CDIA into these OFCs has outstripped the growth of CDIA to other destinations.

It is instructive also to look at the importance of these OFCs relative to Barbados (see Figure 6). This figure measures the relative importance of the top 9 OFCs relative to

Barbados. The flat line in the graph at 1.0 is Barbados. The other 8 countries are therefore benchmarked against Barbados. We can see clearly how in 1991, all countries fell below Barbados in relative importance. Only in 1995 did the amount of CDIA in Ireland surpass the amount in Barbados. But what is instructive is that Ireland's importance for CDIA relative to Barbados's has fallen significantly since 1995: in 2001 Ireland received 34% the amount of CDIA that Barbados did, but rebounded to 65% in 2002 and has been flat since. Bermuda too saw its share fall over the post 1990 period, and currently remains below 40% of the amount of CDIA locating in Barbados.

Figure 6



### 3. Low Tax Jurisdictions are not Tax Havens<sup>2</sup>

A report on harmful tax competition was published by the OECD in 1998. In response to a request by the OECD countries, the OECD has worked to “develop measures to counter the distorting effects of harmful tax competition on investment and financing decisions and the consequences for national tax bases.” It is very important to

<sup>2</sup> This section draws heavily from The OECD Observer, January, 1999, “Taxation: Curbing Harmful Tax Practices”, Jeffery Owen.

note, however that the OECD does not consider a jurisdiction with low or no taxes in and of itself engaged in harmful tax competition. It is not that at all. A jurisdiction would be considered to be involved in harmful tax competition when low or no taxes are combined with, for example, minimum business presence requirements, a lack of transparency and the absence of the exchange of information – it is in this environment when low or no tax jurisdictions are considered harmful. The harmful nature of tax havens has resulted in tremendous pressure being applied by the OECD on tax haven governments as well as on countries that have treaties with such havens.

The OECD does not classify Barbados as a tax haven:

Barbados will not be included in the list because it has longstanding information exchange arrangements with other countries, which are found by its treaty partners to operate in an effective manner. Barbados is also willing to enter into tax information exchange arrangements with those OECD Member countries with which it currently does not have such arrangements. Barbados has in place established procedures with respect to transparency. Moreover, recent legislative changes made by Barbados have enhanced the transparency of its tax and regulatory rules.

[http://www.oecd.org/document/19/0,2340,en\\_2649\\_37427\\_1903251\\_1\\_1\\_1\\_37427,00.html](http://www.oecd.org/document/19/0,2340,en_2649_37427_1903251_1_1_1_37427,00.html)

The stated objective of the OECD (in this regard) is not to make taxes equal across countries. The reason for this is that there are several industries that are internationally mobile and are highly sensitive to tax differentials. Furthermore these are exactly the sectors that drive much of the global economy. As such, countries are quite keen on ensuring that these specific industries are not driven away by tax rates that are applied nationally. Therefore, low tax jurisdictions are very important to all countries, and this explains why during the 1980s and 1990s, almost every OECD country has adopted some type of preferential tax treaty with a low-tax jurisdiction.

What this means is that the OECD is satisfied that CDIA that goes to or through Barbados and other similar low-tax jurisdictions (as distinct from Tax Havens) complies with OECD standards for transparency and exchange of information – standards which Barbados expects of all corporations active in its jurisdiction. Conduits like Barbados allow Canadian firms in those industries which drive the global economy to maintain their competitiveness in the global economy. The analysis below measures the impact of this enhanced competitiveness on the Canadian economy. Furthermore, as discussed in Mintz (2004), the use of these conduits reduces the cost of capital of affiliates operating abroad. This reduction in the cost of capital would therefore reinforce the competitive advantage of Canadian firms that use these conduits to access the global economy. To the extent Canadian firms are moving into high-risk environments, the reduction in the cost of capital offsets these higher risks.

What is actually quite remarkable and speaks to the culture of Canadian business is that given the choice to utilize many OFCs, it is Barbados that has emerged as the dominant conduit used by Canadian business – a jurisdiction which has high levels of transparency and information exchange. As indicated above, these characteristics of Barbados’ institutional infrastructure have resulted in it not being classified by the OECD as a tax haven – that is, Barbados does not engage in harmful tax practices. Barbados is a low-tax jurisdiction, and is quite distinct from tax havens.

#### **4. CDIA, Low-tax Jurisdictions, and Competitiveness: What does the existing evidence say?**

We know that outward FDI is an important component of a country’s competitive strategy. The evidence clearly shows that outward FDI increases the market for Canadian products abroad, resulting in increased Canadian exports, capital formation, and hence

employment in Canada. Operating abroad makes Canadian firms more productive – and this productivity spills over to firms operating in Canada. Much of the existing evidence however does not take into account the use of conduits, and hence it is unclear whether the effects associated with outward FDI in general extend to outward FDI that use conduit jurisdictions. The analysis below will test whether this is the case. This analysis is particularly important given that 20% of CDIA moves through conduit jurisdictions.

Before moving into the empirical analysis, we first review the papers that consider this issue. Hines (2004) discusses alternative views on the distribution of gains that flow from a tax treaty. At one extreme, there are those who argue that the gains achieved by the low tax jurisdiction come entirely at the expense of the high tax jurisdiction. At the other end, there are those who argue that low tax jurisdictions encourage further investments and economic activity, thus creating benefits to both parties. To quote Hines, “These arguments are not customarily accompanied by appeal to reliable empirical evidence, and since economic theory does not clearly indicate whether tax diversity contributes to economic welfare, it can be difficult to evaluate the impact of tax havens on economic outcomes with other countries.” As such, there is a void in the literature with respect to formally (statistically) quantifying the benefits that flow from such treaties.

There have recently emerged a few empirical studies that measure the impact of US tax treaties on the US economy. Desai, Foley and Hines (2004 and 2005) are two such studies. The evidence indicates that although there may be a reduction in tax revenue to the high tax jurisdiction (the US in this case), there are significant benefits as well. In these studies of the US economy and the use of tax havens by US corporations



they discovered that the use of tax havens results in higher growth in company level activity in non-tax haven countries. More specifically, “haven activity does not appear to divert activity from non-havens, as the estimates imply that firms establishing tax haven operations expand, rather than contract, their foreign activities in nearby countries other than tax havens” (Desai, Foley and Hines (2004)). It is interesting to point out that like the Canadian government Desai, Foley and Hines (2004) also interpret increased activity abroad by domestic multinationals as a positive development for the domestic economy.

This current study, like the Desai et al study, therefore have very important implications for the “simplistic” view that low tax jurisdictions are “bad” simply because there is a tax advantage associated with their use. Associated with the use of conduit jurisdictions, there are increased activities by the multinationals involved. In other words, the calculation of the impact of the use of conduits should not stop with the first transaction – there are many indirect impacts that result. Couple this with the fact that it is mainly those industries that are most internationally mobile who utilize these conduits and these are also the industries that drive the global economy, then it should also be clear that the indirect (*and perhaps positive*) impacts are likely to be significant.

The direct loss in tax revenue associated with the use of conduit jurisdictions is offset by higher profits and incomes for those in the high tax jurisdiction, and hence higher future tax revenues. In fact, Hines and Rice (1994) conclude that “American (and foreign) investment in tax havens has an uncertain effect on US tax revenue, but since low tax rates encourage American companies to shift profits out of high-tax foreign countries, it is possible that low foreign tax rates ultimately enhance US tax collections”.

It must be stated here also that it is unclear in the Canadian case what the impact will be on government tax revenue.

The evidence using US data therefore shows that there can be significant gains to the US that flow from US tax treaties with low tax jurisdictions. These results are therefore very important for policy makers considering policy that may affect the ability of domestic multinationals to utilize conduit jurisdictions. The evidence discussed above relates to the US, and there are no such empirical studies for Canada. This paper is the first in Canada to address this void.

## **5. Measuring the Impact of OFCs on the Canadian Economy**

The above discussion raises the following important questions:

- [1] What are the effects of CDIA that go through OFCs on the Canadian economy?
- [2] How do these effects differ from CDIA in general? That is, if a Canadian multinational uses an OFC as a conduit to make an investment into, say Latin America or Asia, how would the impacts of these investments on Canada be different than the situation where the funds flowed directly to the destination market?
- [3] Is Barbados any different than the other OFCs identified above vis-à-vis the impact on the Canadian economy? That is, given that Barbados is not involved in Harmful Tax Practices, and hence is not listed as a tax haven, then the investments that flow through there should be fundamentally different than those that flow through tax havens. If this is the case, then the likely impacts such investments would have on the Canadian economy should also be different.

These questions are the focus of this research. The tests will therefore measure the relationship between patterns of CDIA into OFCs on Canadian trade – and also to test whether Barbados is different than other OFCs. The motivation for this latter exercise is the fact that Barbados has a high level of transparency and is involved in a significant amount of information exchange, thus implying that the kinds of activities that are

financed by the use of this conduit *may be* fundamentally different than those which are financed using other OFCs.

It has been hypothesized that the ability of Canadian multinationals to use OFCs as conduits to access the global economy has results in

- them becoming more competitive on the global stage;
- and as a result, more successful globally than otherwise would have been the case.
- This success translates into increased market shares for Canadian exports,
- which results in increased capital formation and hence employment.

To the extent these hypotheses are confirmed then it is critical for Canadian policy makers to consider this evidence in reviewing any policies related to the use of OFCs by Canadian multinationals.

## **5.1 The Gravity Model for Trade**

A standard model for international trade is now introduced. The strategy will be to measure the factors that drive (explain) Canada's trade patterns with a large number of its trade partners. After controlling for the standard determinants of trade, the analysis is extended to determine whether CDIA has any additional information – that is, does CDIA matter for Canada's trade patterns with the world. The contribution here, however, is to test whether CDIA into OFCs in general, and Barbados in particular, impact trade in the same way that CDIA in general does?

The model that will be used is referred to as the gravity model of international trade. The idea underlying this model for trade is that two countries' trade should be positively related to these countries' incomes (GDP), and countries that are close together and have similar languages will have smaller transactions costs of doing business and

correspondingly larger levels of bilateral trade. Trade flows are also sensitive to movements in the exchange rate. Variables are included to account for several regional groupings, and they measure persistent patterns of trade between Canada and these regional areas, which are not captured by the economic variables in the model.

It is well known that the gravity model explains trade flows well, but what is relatively less well known is that there are theoretical foundations for the gravity equation. The early contributions to these theoretical developments include Bergstrand (1985,1989,1990), Leamer (1974), Anderson (1979). Helpman (1987) interpreted the success of the gravity model as evidence in favor of the monopolistic competition model. This was based on the belief that the gravity model was consistent with that model and not with the Hechscher-Ohlin model. However, Deardorff (1998) established that the gravity model is indeed consistent with both the Hechscher-Ohlin and monopolistic competition models of international trade, but his result was restricted to a bilateral world. More recently, the approach of Head and Ries (2005) have provided additional theoretical underpinnings for a gravity-like model.

The gravity model has been used to explain bilateral trade flows among large groups of countries and over long periods of time (Feenstra, Markusen and Rose (2001), Hejazi and Trefler (1996), Frankel, Stein, and Wei (1995)). Following the international business literature, we use the gravity model to explain patterns of exports and outward FDI. The estimating equation for trade is written as follows:

$$\begin{aligned} \ln(\text{Exports}_{ijt}) = \alpha_0 & + \alpha_1 \ln(\text{GDP}_{jt}) + \alpha_2 \ln(\text{DISTANCE}_{ij}) \\ & + \alpha_3 (\text{LANGUAGE}_{ij}) + \alpha_4 \ln(\text{XRATE}_{ijt}) \\ & + \alpha_5 (\text{CDIA}_{ijt}) + \alpha_6 (\text{LA}_{jt}) + \alpha_7 (\text{EA}_{jt}) \\ & + \alpha_8 (\text{EUROPE}_{jt}) + \alpha_9 (\text{CUFTA}_{ijt}) + e_{ijt} \end{aligned} \quad (1)$$

where  $\ln$  is the natural logarithm.  $Exports_{ijt}$  represent exports from country  $i$  to country  $j$  in year  $t$ . In this case,  $i$  represents Canada. There are 40 countries in the sample, and hence  $j$  runs from 1 to 40. GDP measures real Gross Domestic Product. Distance is a measure of the physical distance between countries. LANGUAGE measures whether the country in question shares the same language as Canada (official languages). XRATE is the exchange rate between Canada and country  $j$  in year  $t$ . The model is extended to test whether, after controlling for these standard determinants of trade, there is any additional information contained in patterns of CDIA.

It is expected that  $\alpha_1$  will be positive indicating that Canada will have more exports with countries the larger is that country, as measured by GDP. It is expected that  $\alpha_2$  will be negative, indicating that Canada's trade with countries falls as the distance between them increases. The coefficient on the Language variable ( $\alpha_3$ ) is expected to be positive indicating that countries which speak the same language trade more with one another, due either to reduced transactions costs or similarities in culture. The coefficient on the exchange rate ( $\alpha_4$ ) is expected to be negative because as the Canadian dollar rises in value, the price of exports to foreigners rises and hence they would buy less. This coefficient is expected to be positive in the import regression which is discussed below.

In addition to these standard gravity model determinants of trade, we also add CDIA to the model. The coefficient here ( $\alpha_5$ ) is expected to be positive, indicating a complementary relationship between CDIA and exports. We also add regional grouping variables for Latin America ( $\alpha_6$ ), East Asia ( $\alpha_7$ ) and Europe ( $\alpha_8$ ) to test whether Canada's trade with these regions is consistent with the predictions of the model. It is not clear ex ante whether the signs for these regional groupings should be positive or negative.

Finally, it is well known that Canada's exports were significantly affected by the Canada-US Free Trade agreement, and this will be captured by the coefficient estimate ( $\alpha_9$ ).

The focus of our analysis, however, will be to test whether OFCs in general and Barbados in particular are different for Canada. As such, the standard model (1) is extended as demonstrated in equation (2):

$$\begin{aligned}
 \ln(\text{Exports}_{ijt}) = & \alpha_0 + \alpha_1 \ln(\text{GDP}_{jt}) + \alpha_2 \ln(\text{DISTANCE}_{ij}) \\
 & + \alpha_3 (\text{LANGUAGE}_{ij}) + \alpha_4 \ln(\text{XRATE}_{ijt}) \\
 & + \alpha_5 (\text{CDIA}_{ijt}) + \alpha_6 (\text{LA}_{jt}) + \alpha_7 (\text{EA}_{jt}) \\
 & + \alpha_8 (\text{EUROPE}_{jt}) + \alpha_9 (\text{CUFTA}_{ijt}) \\
 & + \beta_1 (\text{OFC}_j) + \beta_2 (\text{BARBADOS}_j) \\
 & + \beta_3 (\text{OFC}_j * \text{CDIA}_{ijt}) + \beta_4 (\text{BARBADOS}_j * \text{CDIA}_{ijt}) \\
 & + e_{ijt}
 \end{aligned} \tag{2}$$

Here, OFC and Barbados variables have been added to measure whether Canada's trade with OFCs and Barbados can be explained by the standard determinants of trade, or whether Canada's trade with these countries are somehow different: if  $\beta_1$  and  $\beta_2$  are equal to zero statistically, then that would mean that Canada's trade with these jurisdictions is in line with what would be expected given their characteristics as captured by the other variables in the model. On the other hand if these coefficients ( $\beta_1$  and  $\beta_2$ ) are positive that would indicate that Canada trades more with these jurisdictions – that is there is something different about them. If Barbados is similar to other OFCs vis-à-vis its trade with Canada, then  $\beta_2$  would equal  $\beta_1$ , otherwise they will differ. To the extent that different types of investments go through Barbados than through the other OFCs, then our hypothesis would indicate that  $\beta_2 > \beta_1$ .

Now we focus on the impact that CDIA has on Canada's trade. The values of  $\beta_3$  and  $\beta_4$  measure whether the impact of CDIA into OFCs in general ( $\beta_3$ ) and Barbados in particular ( $\beta_4$ ) on Canada's trade is somehow different. If CDIA has the same impact on

Canada's trade regardless of the use of a conduit, then  $\beta_3$  and  $\beta_4$  would both equal zero. On the other hand, if CDIA that move through conduits have a larger impact on Canada's trade than CDIA that does not use conduits, then these coefficients ( $\beta_3$  and  $\beta_4$ ) would be positive. Of course, it is possible for the CDIA that moves through Barbados to have a different impact than CDIA that goes through other OFCs, in which case  $\beta_3$  and  $\beta_4$  would have different values, and can be either positive or negative. The simplistic view which postulates that CDIA that moves through conduits are "bad" for Canada would suggest that  $\beta_3$  and  $\beta_4$  would be negative and statistically significant. We provide empirical tests of these below which measure these effects, thus providing insights into this important policy area.

## **5.2 Empirical Evidence**

The analysis is undertaken for Canadian exports, imports and total trade. That is, we estimate the model as described in equation (2) above, but in addition to having exports as the trade flow to be explained, we also do the analysis for imports, and total trade. The empirical results are provided below in Table 2.

The coefficients on the traditional variables are as expected: Canada trades more with larger countries and those that share the same official language as Canada as both  $\alpha_1$  and  $\alpha_3$  are positive and statistically significant. In contrast, Canada trades less with countries that are further away, as measured by distance, and this can be seen by noting that  $\alpha_2$  is negative and statistically significant. It should also be noted that this negative relationship is one of the most widely cited empirical results in international economics. These results for the size of economy, distance and language are the same for exports, imports and total trade.

Table 2. Gravity Model Estimates of the Impact CDIA has on Canada's Trade									
	Exports			Imports			Total Trade		
	1	2	3	1	2	3	1	2	3
GDP ( $\alpha_1$ )	0.752 (37.43)	0.727 (28.65)	0.710 (26.05)	0.783 (18.72)	0.908 (23.48)	0.902 (21.63)	0.686 (19.91)	0.785 (27.27)	0.770 (24.86)
Distance ( $\alpha_2$ )	-0.919 (-14.11)	-0.875 (-13.31)	-0.882 (-13.31)	-1.575 (-11.86)	-1.141 (-11.75)	-1.143 (-11.63)	-1.399 (-12.79)	-1.011 (-13.99)	-1.018 (-13.95)
Language ( $\alpha_3$ )	0.610 (8.32)	0.624 (8.16)	0.581 (7.25)	1.007 (6.99)	0.794 (7.29)	0.779 (6.81)	0.798 (6.73)	0.625 (7.71)	0.592 (6.96)
Exchange Rate ( $\alpha_4$ )	0.029 (4.02)	0.029 (4.02)	0.030 (4.14)	0.014 (1.01)	0.026 (2.49)	0.026 (2.51)	0.019 (1.60)	0.028 (3.68)	0.029 (3.76)
CDIA ( $\alpha_5$ )	0.177 (9.67)	0.192 (10.38)	0.215 (9.55)	0.011 (0.30)	0.038 (1.42)	0.046 (1.41)	0.097 (3.23)	0.123 (6.24)	0.141 (5.88)
Latin America ( $\alpha_6$ )	0.150 (1.62)	0.199 (2.13)	0.167 (1.74)	-0.230 (-1.26)	0.167 (1.26)	0.157 (1.15)	-0.215 (-1.43)	0.144 (1.46)	0.118 (1.17)
East Asia ( $\alpha_7$ )	0.776 (9.13)	0.843 (9.58)	0.833 (9.45)	1.081 (6.52)	1.136 (9.01)	1.134 (8.97)	0.897 (6.57)	0.970 (10.34)	0.964 (10.26)
Europe ( $\alpha_8$ )	-0.037 (-0.54)	-0.016 (-0.24)	-0.026 (-0.38)	-0.320 (-2.41)	-0.097 (-1.01)	-0.099 (-1.03)	-0.316 (-2.90)	-0.116 (-1.63)	-0.124 (-1.73)
Canada-US FTA ( $\alpha_9$ )	0.320 (4.81)	0.329 (4.96)	0.325 (4.90)	0.776 (5.96)	0.734 (7.79)	0.733 (7.77)	0.585 (5.45)	0.551 (7.86)	0.549 (7.84)
Offshore Financial Centers (OFC) ( $\beta_1$ )		-0.218 (-2.29)	-0.004 (-0.02)		-0.055 (-0.40)	0.007 (0.03)		-0.130 (-1.27)	0.031 (0.17)
Barbados ( $\beta_2$ )		0.652 (3.53)	0.875 (2.40)		9.483 (27.02)	9.880 (12.08)		8.542 (32.71)	9.083 (14.95)
OFC*DCIA ( $\beta_3$ )			-0.05 (-1.52)			-0.02 (-0.32)			-0.04 (-1.11)
Barbados*DCIA ( $\beta_4$ )			-0.103 (-1.03)			-0.104 (-0.56)			-0.146 (-1.07)
Constant ( $\alpha_0$ )	5.341 (9.07)	5.368 (7.96)	5.651 (7.98)	11.439 (8.75)	4.950 (4.57)	5.054 (4.44)	12.145 (11.28)	6.578 (8.15)	6.849 (8.10)
adj R 2	0.81	0.81	0.81	0.50	0.74	0.74	0.57	0.82	0.82

The results for the exchange rate are not entirely consistent with our expectations.

It is hypothesized that as the value of the Canadian dollar appreciates, Canadian exports should fall and Canadian imports should rise, with the effect on total trade depending on the relative importance of the export and import effects. The results here are positive and



statistically significant in the export, import and total trade regressions. The interpretation is that when the exchange rate appreciates, Canada's exports, imports and total trade increase. The expectation of course is that exports should fall.

Canada is shown to export more to Latin America and East Asia than is predicted by the model ( $\alpha_6$  and  $\alpha_7$  are positive and statistically significant) but not to Europe ( $\alpha_8$  is statistically insignificant). As for imports, Canada imports significantly more from East Asia than the model predicts ( $\alpha_7$  is positive and statistically significant), whereas Canada's imports from Latin America and Europe are in line with the model's predictions ( $\alpha_6$  and  $\alpha_8$  are statistically insignificant). For total trade, Canada trades more with East Asia than is predicted by the model ( $\alpha_7$  is positive and statistically significant), but less with Europe ( $\alpha_8$  is negative and statistically significant). Canada's trade with Latin America is in line with the model's predictions as ( $\alpha_6$  is statistically insignificant).

We next turn to the results for the Canada-US Free Trade Agreement. The evidence clearly indicates that that free trade agreement increased Canada's exports, imports, and hence total trade. This can be seen by noticing that  $\alpha_9$  is positive and statistically insignificant in all the regressions reported in Table 2.

The results that are of most interest however are the coefficient estimates on the OFC and Barbados variables. We first test whether Canada's trade with OFCs and Barbados are consistent with the model by considering the estimated values of  $\beta_1$  and  $\beta_2$ . We then turn to considering whether the impact of CDIA on Canada's trade depends on whether that CDIA went through an OFC by considering the estimated values of  $\beta_3$  and  $\beta_4$ .

The results indicate that the coefficient on the OFC variable ( $\beta_1$ ) is statistically insignificant, which indicates that Canada does not have any trade with OFCs above and beyond what would be expected given the factors accounted for in the model – size, distance, language similarities and so on. This however is not the case for Barbados: that coefficient ( $\beta_2$ ) is positive and highly significant. This means that Canada's trades more with Barbados than would be expected given the factors in the model. That is, after accounting for the characteristics of the economy, Canada has significantly higher exports to Barbados – which of course is a source of employment and capital formation for Canada.

The next set of results consider whether CDIA that use conduits (OFCs) have the same impact on Canada's trade as does CDIA in general. That is, there is significant evidence available showing a complementary relationship between a country's outward FDI and that country's exports. The question addressed here is whether this result continues to hold when the FDI is going to (or through) an OFC. The results are clear. The coefficient estimates on these interaction terms ( $\beta_3$  and  $\beta_4$ ) are statistically insignificant, clearly indicating that CDIA that moves through conduits have similarly positive impacts on Canada's trade that CDIA in general does.

In other words, when a Canadian multinational moves capital through a conduit, be it Barbados or any other, there will be a strong and positive impact on Canadian exports. This is the first evidence to demonstrate this – when Canadian companies use OFCs to access the global economy, there will be increases in Canada's trade, which have been shown elsewhere to increase Canada's employment and capital formation. Together these results indicate that Canada has more trade with Barbados than is

predicted by the model, a result that does not hold for the other OFCs. In this respect therefore, Barbados is different. More importantly however is the result that when CDIA goes through OFCs, including Barbados, there is a similarly positive impact on Canadian trade that obtains when the CDIA does not use these conduit jurisdictions.

### **5.3 Impact on Canada's Trade with the Global Economy**

Given that Canada's trade with Barbados is a small share of Canada's total trade, the potential benefits to Canada having more trade with Barbados than is predicted by the model are likely limited. In a final exercise, therefore, the analysis is extended to measure the impact that Canadian FDI into Barbados has had on Canada's trade, not with Barbados, but rather with the major regions of the world.

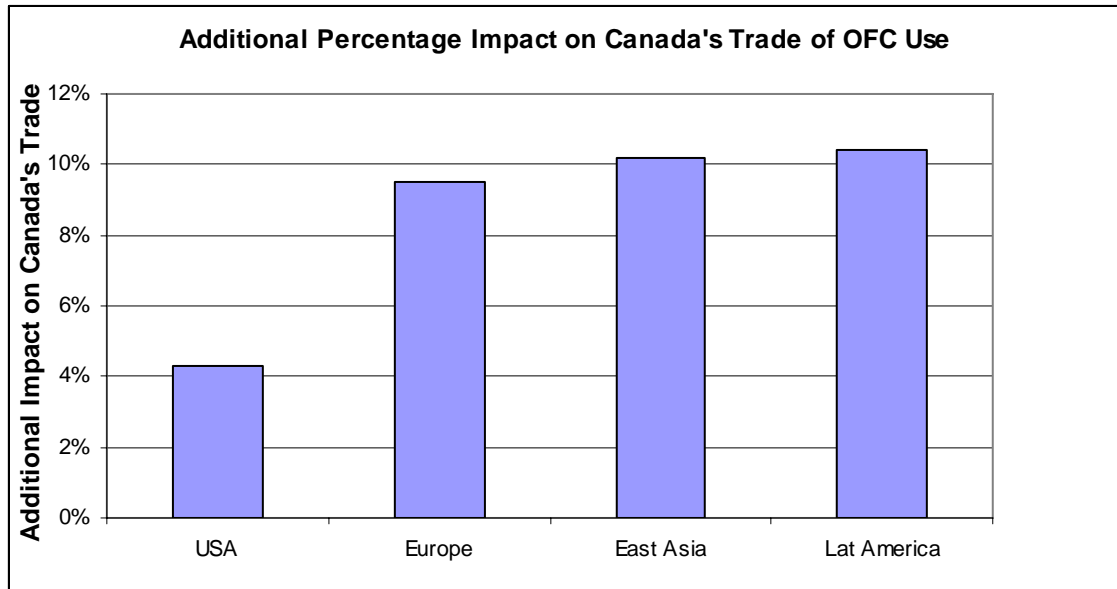
The intuition that underlies this exercise is as follows. The use of these conduits reduces the cost of capital for the Canadian multinational. Given the nature of the data, it is not known where the capital is destined – that is, the OFCs, including Barbados, are conduits for these firms to invest in other markets globally. Therefore, we expect that Canadian trade with these other markets should increase whenever Canadian MNEs use conduits. In addition, because of the reduced cost of capital these MNEs are made more competitive in the market they have invested in, as well as globally. As a result, the theory would predict an increase in Canada's trade with the global economy, with the effects varying by region. A more precise analysis could be undertaken if data were available on the ultimate destination of the investments. Such information will be forthcoming from the follow-up study currently underway and hence more precise estimates can be obtained.

This intuition implies therefore that the use of these conduits to access the global economy have a direct impact on Canada's exports to the market where the CDIA is destined as well as indirectly to all markets as the competitiveness of Canadian MNEs is improved as a result of the reduction in the cost of capital that comes with the use of the conduit jurisdiction. We estimate the sum of these two effects.

To measure these effects, the amount of CDIA that goes through Barbados is interacted with the regional dummies. The test is whether the amount of trade Canada undertakes with these regions is in any way related to the amount of CDIA that moves through Barbados, controlling for other factors. The results for these tests are summarized in Figure 7 below.

The empirical analysis indicates that CDIA that moves through Barbados impacts Canada's trade with the US, EU, East Asia, and Latin America. In addition to the direct effect of the CDIA – that is, the impact the CDIA would have had had they gone directly to the region in question – there are significant additional impacts on Canada's trade with these regions. These additional effects are smallest for the US, and this is consistent with the belief that the CDIA that goes to Barbados is not destined for the US. These indirect effects are larger for Europe, and largest for Latin America and East Asia. That is, CDIA through Barbados is helping Canadian firms access markets in Europe, East Asia and Latin America, and to a lesser extent the US. In short, therefore, these trade effects are broad based and hence are quite important for the Canadian economy.

Figure 7



## 6. Conclusions

The Canada-Barbados tax treaty of 1980 represents a treaty between a high tax and low tax country. A simple benchmarking exercise would establish that low tax jurisdictions benefit significantly from such tax treaties. What is less clear however, is the extent to which the benefits extend to the high tax jurisdiction. In the current context, to what extent does Canada benefit from its tax treaty with Barbados? This is the first empirical study to address this issue.

The explosion of Canadian investment abroad by Canadian multinationals has been a source of competitive advantage for Canada. This view is now widely understood and recognized. As discussed in this paper, Canadian Direct Investment Abroad (CDIA) through both low tax and high tax jurisdictions has been shown to increase Canadian exports, and hence employment and capital formation, all of which serve to enhance tax revenue in Canada.

This paper for the first time looks beyond the simplistic view often applied to the use of low tax jurisdictions or “conduits”. The results of the analysis concludes that outward FDI that flows through conduits such as Barbados results in higher Canadian trade (exports) than FDI that flows through high tax jurisdictions, and hence higher amounts of capital formation and employment. This is the first study for Canada to document this evidence. The paper has not considered whether the amount of cross-border transactions is optimal from an efficiency or welfare perspective, nor has it considered the impact that the use of OFCs have had on Canadian tax revenue. These questions are left for further study.

If there is to be an objective discussion about the use of conduits by Canadian multinationals in general and Barbados in particular, that discussion must weigh all of these factors – the analysis and understanding must go well beyond any simplistic view. The analysis presented here demonstrates statistically significant links between CDIA through Barbados and Canadian trade globally.

The message to take away from this analysis is that Canadian FDI that goes through conduits is not bad for the Canadian economy simply because a tax advantage might flow to the multinationals. The analysis presented here shows that as a result of having access to these conduits, Canadian multinationals are able to succeed internationally, and this has a direct – and significantly positive – impact on Canada and on Canadian trade. These conclusions must be taken into account in any public discussion of the merits of the use of conduits, and Canada’s ability to compete globally, to increase exports and trade in Canada and to become commercially connected to the rapidly expanding global economy. The discussion must go beyond Canada’s growing use of

conduits and any short term view on perceived reduction on Canadian tax revenue. The discussion must also recognize Canada's growing strength and success as an international competitor on the global stage as a result of Canadians and Canadian firms investing abroad and the resulting impacts on exports, jobs, capital growth and tax revenue in Canada as a result of this success.

## 7. Bibliography

Anderson, James E. (1979), 'A theoretical foundation for the gravity equation', American Economic Review, 69, 106-16.

Bergstrand, Jeffrey H. (1985), 'The gravity equation in international trade: some microeconomic foundations and empirical evidence,' Review of Economics and Statistics, 67, 474-81.

Bergstrand, Jeffrey H. (1989), 'The generalized gravity equation, monopolistic competition, and the factor proportions theory of international trade', Review of Economics and Statistics, 71, 143-53.

Bergstrand, Jeffrey H. (1990), 'The Heckscher-Ohlin-Samuelson model, the Linder hypothesis and the determinants of bilateral intraindustry trade', Economic Journal, 100 (403) pp.1216-29.

Blonigen , Bruce A., and Ronald B. Davies (2002). "Do Bilateral Tax Treaties Promote Foreign Direct Investment?", NBER Working Paper No. 8834.

Brainard, S. Lael (1997), 'An empirical assessment of the proximity-concentration trade-off between multinational sales and trade', *American Economic Review*, 87 (4), 520-44.

Conference Board of Canada publication 2006" *The Benefits of Foreign Direct Investment: How Investment in Both Directions Drives Our Economy*.

Daniels, Joseph P, Walid Hejazi and Marc von der Ruhr (2005). "Explaining U.S. MNE Financing Patterns: Do Tax Treaties Matter?", revise and resubmit to the Journal of International Business Studies.

Deardorff, Alan V. (1998), 'Determinants of bilateral trade: does gravity work in a neoclassical world', in Jeffrey A. Frankel (ed), The Regionalization of the World Economy, Chicago: University of Chicago Press.

Desai , Mihir A., C. Fritz Foley, and James R. Hines. (2004), "Economic Effects of Tax Havens, NBER Working Paper No. 10936 10806.

Desai , Mihir A., C. Fritz Foley, and James R. Hines. (2005), "The Demand for Tax Haven Operations, working paper.

Ethier, W. (1982), 'National and international returns to scale in the modern theory of international trade', American Economic Review, 72, 389-405.

Feenstra, Robert C., James R. Markusen, and Andrew K. Rose (2001), 'Using the gravity equation to differentiate among alternative theories of trade', Canadian Journal of Economics, 34, 2, 430-447.



Feldstein, M., 1995. The Effects of Outbound Foreign Direct Investment on the Domestic Capital Stock. National Bureau of Economic Research Working Paper: 3164, November.

Feldstein, M., Horioka, C. 1980. Domestic Savings and International Capital Flows. *Economic Journal* 90, 314-29.

Frankel, J. A., Ernesto Stein and Shang-Jin Wei (1995), 'APEC and regional trading arrangements in the Pacific', in Pacific Trade and Investment: Options for the 1990s. Edited by Wendy Dobson and Frank Flatters. Kingston, Ontario: John Deutsch Institute

George J. Georgopoulos and Walid Hejazi (2005), "Feldstein-Horioka meets a time trend", *Economics Letters* , vol. 86, issue 3, pages 353-357

Head, Keith and John Ries (2005), 'Judging Japan's FDI: the verdict from a dartboard model', University of British Columbia working paper.

Hejazi, Walid and Daniel Trefler (1996), 'Explaining Canada's Trade with the Asia-Pacific'. In The Asia Pacific Region and the Global Economy: A Canadian Perspective, edited by Richard Harris, University of Calgary Press, The Industry Canada Research Series.

Helpman, Elhanan (1987), 'Imperfect competition and international trade: evidence from fourteen industrial countries', Journal of the Japanese and International Economies, 1, pp. 62-81.

Hejazi, Walid (2005) "Canada's FDI Experience: How Different Are Services?", forthcoming in Richard Lipsey and Alice Nakamura, editors, *Service Based Industries in a Knowledge-Based Economy*, Ottawa: Industry Canada.

Hejazi, Walid and Peter Pauly (2003). "Motivations for FDI and Domestic Capital Formation", *Journal of International Business Studies*, (34), 282-289.

Hejazi, Walid and Peter Pauly, (2002). Foreign Direct Investment and Domestic Capital Formation, by, University of Toronto, April 2002. Industry Canada Working Paper.

Hejazi, Walid and A.E. Safarian (1999) "Modelling Links Between Canadian Trade and Foreign Direct Investment",. Published in the Industry Canada Research Publications series entitled *Perspectives on North American Free Trade*, April, 67 pages.

Hejazi, Walid and A.E. Safarian (2001). 'The complementarity between U.S. FDI stock and trade', *Atlantic Economic Journal* 29 (4).

Hejazi, Walid and A.E. Safarian (1999). 'Trade, Foreign Direct Investment, and R&D Spillovers', *Journal of International Business Studies*, 30 (3), Third Quarter, 491-511.

- Hines, James R. (2004). "Do Tax Havens Flourish", NBER Working Paper No. 10936
- Hines, James R. Jr. and Eric M. Rice (1994). "Fiscal Paradise: Foreign Tax Havens and American Business", *The Quarterly Journal of Economics*, Vol. 109, No. 1., Feb, pp.
- Lavoie, Francois. (2005). "Canadian Direct Investment in 'Offshore Financial Centers'", Statistics Canada, Catalogue Number 11-621-MIE2005021.
- Leamer, Edward E. (1974), 'The commodity composition of international trade in manufactures: an empirical analysis', Oxford Economic Papers 26, 350-74.
- 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.
- Mintz, Jack (2004). "Conduit Entities: Implications of Indirect Tax-Efficient Financing Structures for Real Investment", *International Taxation and Public Finance*, 11, 419-34.
- Mussa and Goldstein (1993)
- Owen, Jeffery. 1999. "Taxation: Curbing Harmful Tax Practices", The OECD Observer, January.

## Appendix 1 List of Tax Havens

### Note from the OECD

[http://www.oecd.org/document/19/0,2340,en\\_2649\\_37427\\_1903251\\_1\\_1\\_1\\_37427,00.html](http://www.oecd.org/document/19/0,2340,en_2649_37427_1903251_1_1_1_37427,00.html)

33 Jurisdictions Committed to Improving Transparency and Establishing Effective Exchange of Information in Tax Matters

The 33 committed jurisdictions are

<a href="#">Anguilla (1)</a>	<a href="#">Cook Islands (3)</a>	<a href="#">Malta</a>	<a href="#">San Marino</a>
<a href="#">Antigua and Barbuda</a>	<a href="#">Cyprus</a>	<a href="#">Mauritius</a>	<a href="#">Seychelles</a>
<a href="#">Aruba (2)</a>	<a href="#">Dominica</a>	<a href="#">Montserrat (1)</a>	<a href="#">St. Lucia</a>
<a href="#">Bahamas</a>	<a href="#">Gibraltar (1)</a>	<a href="#">Nauru</a>	<a href="#">St. Kitts &amp; Nevis</a>
<a href="#">Bahrain</a>	<a href="#">Grenada</a>	<a href="#">NetherlandsAntilles (2)</a>	<a href="#">St. Vincent and the Grenadines</a>
<a href="#">Bermuda (1)</a>	<a href="#">Guernsey (4)</a>	<a href="#">Niue (3)</a>	<a href="#">Turks &amp; Caicos Islands (1)</a>
<a href="#">Belize</a>	<a href="#">Isle of Man (4)</a>	<a href="#">Panama</a>	<a href="#">US Virgin Islands (5)</a>
<a href="#">British Virgin Islands (1)</a>	<a href="#">Jersey (4)</a>	<a href="#">Samoa</a>	<a href="#">Vanuatu</a>
<a href="#">Cayman Islands (1)</a>			
<a href="#">Letter from the OECD's Secretary General, Donald J. Johnston, to the Minister of Finance of Aruba, Dr. Robertico R. Croes.</a>			

1. Overseas Territory of the United Kingdom.
2. Aruba, the Netherlands Antilles and the Netherlands are the three countries of the Kingdom of the Netherlands.
3. Fully self-governing country in free association with New Zealand.
4. Dependency of the British Crown.
5. External Territory of the United States.

The OECD has determined that three other jurisdictions - [Barbados](#), [Maldives](#), and [Tonga](#) - identified in the 2000 Progress Report as tax havens should not be included in the List of Unco-operative Tax Havens.

- Barbados will not be included in the list because it has longstanding information exchange arrangements with other countries, which are found by its treaty partners to operate in an effective manner. Barbados is also willing to enter into tax information exchange arrangements with those OECD Member countries with which it currently does not have such arrangements. Barbados has in place established procedures with respect to transparency. Moreover, recent legislative changes made by Barbados have enhanced the transparency of its tax and regulatory rules.

The OECD has determined after careful review of the current laws and practices of Tonga and the Maldives that these jurisdictions do not meet the tax haven criteria.

## Appendix 2

### Box 1 Benefits to Canada of FDIC and CDIA (Government of Canada Website)

From International Trade Canada Website (the Federal Government)

Excerpts taken from:

(<http://www.dfait-maeci.gc.ca/tna-nac/doorsworld/03-en.asp>)

There is no doubt today that foreign direct investment (FDI) in Canada and Canadian investment abroad have joined the international trade in goods and services to become our principal engines of growth and job creation.

Foreign investment in Canada has over the years been an important source for jobs, especially high-skilled jobs, and has brought with it other advantages in research and development, technology and talented people. These have all made real and lasting contributions to our economic and social well-being.

An economic forecast prepared by Industry Canada and Foreign Affairs and International Trade estimates that each \$1-billion increase in new inward investment to Canada can generate up to 45,000 jobs and \$4.5 billion GDP over a five-year period. This study also postulates that one job in ten and approximately 50 percent of Canada's total exports derive from FDI. It should be further noted that a large proportion of profits from new investments is reinvested in Canada, contributing to a higher growth rate and a rise in Canadian living standards.

Direct investment abroad by Canadian business is part of its strategic effort to increase market share and stay competitive in foreign markets. Companies are increasingly using outward investment to strengthen their operations, penetrate new markets and acquire new technologies, resources and skills. Evidence suggests that this type of investment does not precipitate an "export of jobs" but rather results in increased sales and production from home facilities. For example, a study undertaken by the United Nations Conference on Trade and Development estimates that over one third of the global trade in manufactured goods is undertaken between parent firms and their foreign subsidiaries.

## Appendix 3

### Box 2

**Op-ed, Globe and Mail**  
**We have nothing to fear from foreign investment**  
**by Anne Golden**  
**Monday March 6, 2006.**

The purchase of the Hudson's Bay Co. and Fairmont Hotels & Resorts Inc. by foreigners has resurrected old fears about foreign direct investment (FDI) in Canada. These fears, ghosts from the 1970s, deserve to rest in peace.

The opening up of Canada to foreign investment in the 1980s did not "hollow out" our companies, or make Canada more of a "branch plant" of the U.S. economy, or diminish our global competitiveness, as some had warned.

On the contrary, Canada is home today to more head offices than ever before (the number continues to climb) and several of our companies have become global leaders with major foreign holdings. In fact, since the mid-1990s, Canadian firms have invested more abroad than foreigners have invested here.

The problem is not too much foreign investment in Canada or too much Canadian outward investment - rather, it's the fact that Canada is slipping in our ability to attract FDI and to capture new investment opportunities abroad.

Let's look at the numbers. Global FDI has grown dramatically in the past 20 years, significantly outpacing the growth of trade and GDP. And Canada has been very much part of this trend, seeing our stock of inward FDI rising over 250 per cent from 1990 to 2004 (to \$366-billion), while our outward FDI more than quadrupled (to \$445-billion).

But amid growing competition for foreign investment, Canada is falling behind, relative to the world's leading economies. From 1980 to 2002, Canada's share of global inward FDI stock declined from 7.7 per cent to 3.1 per cent. And while we attracted 24.1 per cent of the investment that flowed into the three NAFTA countries (Canada, the U.S. and Mexico) in 1985, by 2002 this percentage had fallen to 12.8 per cent. Our share of world outward FDI stock declined from 5.8 per cent to 3.7 per cent over that same period.

Why must Canada reverse this slippage? Because we live in a new era of global supply chains and markets. Production processes have been decentralized and divided up among different parts of the globe, with supply chains linking these locations. A critical challenge for both companies and countries is to strengthen their position in these supply chains - because doing so generates jobs, expertise and, ultimately, prosperity. And investment (both inward and outward) is the key to building and participating in global supply chains.

Inward investment injects new technologies and know-how into our economy, enabling Canadians to participate more extensively in global production processes. Recent research by Statistics Canada has demonstrated that foreign-owned plants have been the greatest single contributor to labour productivity gains in Canada's manufacturing sector, which everyone agrees

is crucial to our competitiveness and prosperity.

Canadian investment abroad also contributes to our prosperity - by creating and strengthening international supply chains and by multiplying our export potential. As research by the Organization for Economic Co-operation and Development has shown, each dollar of outward FDI generates roughly two dollars in new exports from the investing country to the recipient country.

So what should be done to capture more of these foreign investment benefits and build a stronger Canadian economy? For starters, we should make Canada a more attractive destination for foreign investors by:

- Producing more graduates with university degrees (especially in engineering and science) and expanding training programs for lower-skilled workers;
- Investing in physical infrastructure;
- Facilitating the efficient movement of people within Canada, as well as capital and goods;
- Reducing a host of tax barriers that discourages foreign capital investment;
- Cutting excessive regulatory red tape.

Furthermore, Canada's 20-year-old foreign ownership rules are in need of review and revision. We may choose to retain certain restrictions - for reasons of national security, cultural identity or foreign policy - but we should also focus on minimizing barriers to inward investment.

Part of the equation that is often forgotten is what we must do to enhance Canadian direct investment abroad, which is also vital to our prosperity. We should secure investment protection agreements that improve Canadian investors' access to and security in foreign markets.

Multilateral negotiations on investment protection have stalled. While Canada continues to press for a broad-based multilateral agreement, we should also pursue regional and bilateral protections for our investors.

The federal government and its agencies, such as Export Development Canada, should also be bolder in helping Canadian firms (particularly small- and medium-sized enterprises) "go global" as investors.

For Canada to continue competing on a global scale, we must not allow ourselves to be haunted by phantom fears, and we need to energetically reverse our slipping FDI performance. Of course, Hudson's Bay and the great railway hotels owned by Fairmont are national icons, and their sale represents a turned page in Canadian history. But we must not lose sight of the bigger picture: On the whole, such deals are worth it.

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