



4 The Foreign Property Rule

The Foreign Property Rule (FPR) limits the amount that an individual can hold as foreign assets in an RRSP or RPP account. Prior to 1990, the FPR limited foreign assets to 10 percent of the book value of a portfolio. Beginning in 1991, the limit was increased gradually, 2 percent per year over 5 years, to 20 percent. Since 1994, Canada has had a 20 percent foreign-property restriction, which limits the amount of foreign investments that may be held in tax-deductible pension and retirement savings plans to 20 percent of the portfolio's book value.

Foreign property defined

Subsection 206(1) of the Income Tax Act, coupled with Section 5000 of the Income Tax Regulations define foreign property as follows.

- (a) a share of a corporation other than a Canadian corporation (as defined in subsection 89(1)), notwithstanding that the share may be listed on a prescribed stock exchange in Canada (see 3(d) and (e) below);
- (b) a mortgage on property situated in Canada or elsewhere where the mortgagor is not a resident of Canada;
- (c) deposits in a bank or similar institution outside Canada whether or not they are payable in Canadian currency;
- (d) a right or warrant to acquire a share which would, if it were acquired, be foreign property;
- (e) a share of or debt obligation issued by a Canadian corporation if the corporation's shares may reasonably be considered to derive their value, directly or indirectly, primarily from foreign property which the corporation holds as portfolio investments;
- (f) for months after 1991, indebtedness of a non-resident person, other than indebtedness issued or guaranteed by:
 - (i) the International Bank for Reconstruction and Development;

- (ii) the International Finance Corporation;
 - (iii) the Inter-American Development Bank;
 - (iv) the Asian Development Bank;
 - (v) the Caribbean Development Bank; or
 - (vi) prescribed persons
- (g) a share of the capital stock of an investment corporation other than a registered investment or one prescribed by section 5000 of the Regulations (Revenue Canada, 1995).

Section (4), of the same section of the Income Tax Act explains what is not considered foreign property:

- (a) a bond, debenture or other debt obligation issued by a resident of Canada and expressed in a foreign currency, provided the issuer remains a resident of Canada;
- (b) Government of Canada treasury bills whether or not they are expressed in a currency other than Canadian;
- (c) commodity futures traded on a foreign exchange for a commodity which is situated in Canada;
- (d) other than a share described in 3(e) above, a share of a Canadian corporation listed on a prescribed stock exchange in Canada, notwithstanding that the share may be exchanged for a share that is foreign property;
- (e) foreign currency situated in Canada; and
- (f) a mortgage or other debt obligation issued by a resident of Canada and secured by real property situated outside Canada, provided the indebtedness does not provide the holder with an interest in, or right to acquire, a foreign property and is not convertible into or exchangeable for a foreign property (Revenue Canada 1995).

Maintenance of the 20 percent limit on foreign property is enforced by a penalty tax assessed on a portfolio's foreign content beyond the 20 percent limit. Specifically, the Act

places a tax of 1 percent per month on any foreign assets in a Canadian pension fund or RRSP in excess of 20 percent of the book value of the fund.

A stipulation of the Income Tax Act regarding RRSPs that is not often recognized is that previously defined Canadian property can be re-classified as foreign property. Section 206(7) states that:

Property may become foreign property after it is acquired. For example, if a Canadian corporation has a portfolio of investments in Canada and abroad and some or all of the Canadian investments are realized and the proceeds disbursed, then the shares of the Canadian corporation become foreign property since they will derive their value primarily from foreign property as described in 3(e) above (Revenue Canada 1995).

Thus, even investments that were once deemed to be Canadian content can be re-classified as foreign property.

Ambiguous definitions of “Canadian” and “foreign”

It is difficult to define effectively and fairly what constitutes “Canadian” or “foreign” property. Many flourishing Canadian firms have a global market presence. They market their goods and services and issue their stocks and bonds globally. The securities they issue are traded as part of an integrated global financial market. In other words, these securities are traded concurrently on both domestic and foreign markets.

Seagram Company, Thompson Corporation, the Potash Corporation of Saskatchewan and Northern Telecom are illustrative of this trend. It is certainly true that they all started as Canadian companies. They have grown into large global firms with dispersed manufacturing, distribution, and sales facilities around the world (Ambachtsheer 1995).

Seagram Company, for example, is the fourth largest firm in Canada in terms of assets. Ninety-seven percent of its sales, however, originate outside of Canada. Ninety-five percent of the sales of Thompson Corporation, the eighth largest firm in Canada in terms of assets, come from its foreign operations. While Seagram Company and Thompson Corporation both qualify as “Canadian” content under the Act, a bulk of their sales come from abroad.¹¹

Another interesting case that has received a great deal of media attention in the last few years, is Sherritt Interna-

tional Corporation, which exemplifies the ambiguity present in the definition of ‘foreign’ and ‘Canadian’ content. Sherritt’s assets are located in Canada (49 percent), the Bahamas (17 percent), Cuba (29 percent), and Europe (5 percent). Sherritt’s revenues are similarly distributed: Canada (28 percent), the Bahamas (37 percent), Cuba (31 percent), and Europe (4 percent). Sherritt International is however, deemed to be Canadian content even though a “majority,” (i.e., more than 50 percent) of its assets (or property) as well as a majority of its sales are located outside Canada.¹²

According to the Act, a company is deemed foreign content if a “majority” of the firm’s “value is derived from foreign property” (Revenue Canada 1995). The term “majority,” however, is not specifically defined in the Act and thus lends itself to flexible interpretation and ambiguity. The concern is not that Canadian companies are being defined as Canadian content even though they have substantial assets or sales in foreign countries. On the contrary, this type of indirect foreign exposure increases the level of diversification in an investor’s portfolio.

There is, however, concern that many companies that have a presence in Canada are not considered Canadian content and thus individuals are prohibited from investing in those companies due to the FPR restrictions. For instance, IBM, the seventeenth largest company in terms of income in Canada, with 15,383 employees, is considered foreign content. Ford Motor Company, the third largest in terms of revenue, with 24,402 employees in Canada, is also considered foreign content.¹³ A similar situation exists for such other prominent companies as Intel, Home Depot, Office Depot, Honda, and American Telephone and Telegraph (AT&T), among others.

Methods of increasing foreign exposure beyond the limits imposed by the Foreign Property Rule

The impetus to manoeuvre around the FPR is enormous. As discussed in the section on portfolio management and diversification, increasing the foreign content of an investor’s portfolio generally leads to reduced risk and greater long-term rates of return. As Garth Turner noted in a recent article, individuals who invested solely in the Canadian market over the last decade earned a cumulative rate of return of approximately 75 percent. Those who invested in global funds during the same period earned a rate of return of 500 percent or more (Turner 1999).

Further evidence of the adverse effects of the FPR is noted in a study commissioned from Ernst & Young Consultants by the Investment Funds Institute of Canada. It concluded that restricted Canadian portfolios were outperformed by globally diversified portfolios over the last 20 years by between 76 and 110 basis points per year (Ernst & Young 1997).

Another recent study, by the Bank of Nova Scotia, found that Canadian market returns were substantially outperformed by foreign markets. Between 1970 and 1998, the American, Japanese, French, German, British, and Hong Kong markets outperformed the Canadian market by 225.7 percent, 226.3 percent, 247.6 percent, 249.5 percent, 294.2 percent, and 715.0 percent, respectively (Corcoran 1999).

The innovative and entrepreneurial spirit that characterizes the financial markets has developed two methods for increasing foreign exposure: portfolio content and derivatives. Although both methods allow individuals to increase the amount of foreign exposure in their portfolio, and thus enable investors to increase the level of diversification, they should not be viewed as substitutes for the elimination of the FPR. Each of the methods, while furthering the foreign exposure of investors has limitations that would not exist outside the confines of the FPR. Thus, while the methods are beneficial given the presence of the FPR, they are not substitutes for its elimination.

Portfolio content (double-dipping)

The Act clearly stipulates that an individual's foreign assets in an RRP or RRSP account must be equal to or less than 20 percent of the book value of the total portfolio. The first method available to increase an investor's foreign exposure deals with the purchase of multiple portfolios.

Individuals are free to purchase investments that include mutual funds as well as to allocate their savings, or a portion thereof, to professional pension managers, as is the case with almost all employer-sponsored pensions. Each particular portfolio is limited to 20 percent foreign content. However, by purchasing a mix of portfolios, an individual investor can actually achieve 36 percent foreign content.

Suppose an individual has \$1,000 to invest in an RRSP. Under the reading of the FPR, the individual would be limited to \$200 in foreign assets. However, consider the scenario if the individual purchases \$200 (20 percent of portfolio) worth of foreign assets through a mutual fund, invests \$400 in a Canadian equity fund and the remaining \$400 in Canadian bond fund. At first glance, one would conclude that the individual maintains 20 percent foreign content.

The increase in foreign content is achieved by the fact that both of the "Canadian" funds can also hold up to 20 percent of their book value in foreign assets. The Canadian bond fund could have up to 20 percent of its holdings in foreign bonds. Similarly, the Canadian equity fund could have up to 20 percent of its holdings in foreign equities. Thus, the investor achieves 36 percent foreign content by purchasing multiple portfolios, e.g. mutual funds.

Derivatives

The other method available for increasing an investor's foreign exposure without exceeding the 20 percent foreign content limit is through the use of derivatives.¹⁴ A derivative is a financial instrument that derives its value, wholly or in part, from some underlying asset. It is essentially a contract whose returns are linked to the price—or, more precisely, the price movements—of an underlying asset, such as a commodity, a share in a traded company, or a currency. (For a more thorough discussion of derivatives, their use, risk profiles, and examples, please see Appendix C.)

The critical distinction between derivatives on, say, securities and the securities themselves is that stocks are assets, "physical pieces" of a company, while derivatives are contracts based on the securities. Derivatives enable investors to control foreign assets without actually owning the asset. A derivative strategy can therefore allow investors to mirror the performance of an underlying asset.¹⁵ For example, an investor purchasing certain types of derivatives in order to mirror the Standard & Poor 500 Index can effectively match the return performance of the underlying asset without actually owning the asset.

It is important to note that the use of derivatives is extremely complex and based on a host of sophisticated mathematical formulations (see Appendix C). The main point of derivatives is that their value is derived from another asset, specifically the contracted ability to sell or buy a particular asset at a predetermined price. That is, a derivative gains all of its value from the value of the underlying asset.

The losses associated with not being able to diversify one's portfolio beyond the 20 percent limit (or, effectively, 36 percent) have led to an interesting development in the Canadian mutual-fund market.¹⁶ A recent phenomenon, based on the use of derivatives and their eligibility for RRSP and pension inclusion, is the rise of parallel foreign products offered by financial and non-financial institutions. One of the two parallel funds is 100 percent RRSP-eligible while the other is restricted by the FPR (20 percent) even though both products effectively invest in the same underlying

assets. The difference is that the restricted product actually invests in the foreign assets while the unrestricted product utilizes derivatives to mirror the performance of the underlying assets.

The following section provides three brief examples of the development of parallel foreign products. Note that the funds are not restricted to any particular institution or category of assets. Each example illustrates a situation wherein a particular financial institution offers two products that are essentially the same, but where one is 100 percent RRSP-eligible and the other is restricted by the FPR to 20 percent of the portfolio value.

TD US Index Fund and US RSP Index Fund

The Toronto-Dominion Bank offers two American equity funds that track the Standard & Poor 500 (S&P 500), a broad market index.¹⁷ The fund replicates the S&P 500 by purchasing shares in the American companies in the weights used by the S&P 500. That is, the fund mirrors the index by purchasing the same stocks in the same ratios. The US Index Fund is restricted to 20 percent of an individual's portfolio because the fund actually purchases American assets. The Toronto-Dominion Bank also offers the TD US RSP Index Fund. This fund, rather than purchasing the specific equities that make up the S&P 500 Index, uses derivatives in such a way as to mirror the performance of the S&P 500. This particular fund, unlike the TD US Index Fund, is 100 percent RRSP-eligible because it does not actually purchase any foreign assets and provides, therefore, a means for investors to diversify their portfolio internationally beyond the limit imposed by the FPR.

There is also a material difference between the Management Expense Ratios (MER) assessed on each fund. The MER is the fee charged on funds by the providers to cover the costs associated with operating the fund and provide a reasonable return. The MER for TD US Index Fund (restricted RRSP-eligibility) is 0.66 percent of the fund's asset value while the MER charged on the derivative-based US RRSP Index Fund (full RRSP-eligibility) is 0.80. So, although the presence of the derivatives-based fund allows for greater international exposure outside of the FPR, it does so at a cost, namely a higher MER.

CIBC International Index Fund and CIBC International Index RRSP Fund

Two similar parallel international equity funds are offered by the Canadian Imperial Bank of Commerce (CIBC).¹⁸ Although both funds invest in the same assets, one is RRSP-eligible while the other is restricted. CIBC offers the International Index Fund that invests primarily in securities in Europe, Australia, and the Far East from the Morgan Stanley Capital International Index. The fund invests in broad indices in these regions either by purchasing the respective shares in the specified ratios or by simply purchasing specific index products. The fund is deemed to be foreign content since it actually purchases foreign assets. It is, therefore, restricted to 20 percent of an individual's total portfolio. The CIBC International Index RSP Fund is offered as a fully RRSP-eligible product. The description of the fund indicates that it *approximates* the performance of the indices of the countries included in the Morgan Stanley Capital International Index. This fund, however, is 100 percent RRSP-eligible because it uses derivatives to mirror the performance of the various indices.

CIBC US Equity Index Fund and CIBC US Index RRSP Fund

Another example of parallel foreign products offered by CIBC is its US Equity Funds. Again, one product actually purchases American stocks listed in the S&P 500 Index. The fund is considered foreign content because it actually purchases and holds the U.S. equities included in the S&P 500. CIBC also offers the US Index RRSP Fund, which *approximates* the performance of the Standard and Poor's 500 Index through the use of derivatives. The fund is 100 percent RRSP eligible because it technically does not hold any foreign assets.

The ability to increase the foreign content of an investor's portfolio has clear advantages in terms of diversification. Neither the purchasing of portfolios or the use of derivatives should be seen as an alternative to the elimination of the FPR. Rather, they are investment vehicles created within the context of the FPR to increase foreign exposure. There are costs associated with both methods, which would not otherwise be incurred if individuals were permitted to diversify their portfolios according to their investment preferences and individual risk tolerance.



5 Effects of the Foreign Property Rule

Provincial example

Let us imagine, for illustrative purposes, that each of the provinces instituted a FPR. Thus, individuals in each province could only hold a total of 20 percent of assets not deemed to be “provincial” content. This type of investment restriction by its nature reduces the level of diversification possible.

As tables 16 and 17 show, the economic structure of each province is unique, with certain provinces having greater economic diversity than other provinces. Due to this variance in the structure of the economies, any restrictions upon investment would materially affect the ability of investors to diversify, both geographically and industrially.

Let us examine the affect of a provincial FPR on an individual in Saskatchewan, who would be significantly more exposed to sectors such as Agriculture, Mining, and Transportation and Storage than investors in other provinces because of the structure of the Saskatchewan economy. On the other hand, the investor in Saskatchewan would be less exposed to sectors such as Fishing & Trapping, Manufacturing, and Business Industries than investors in other provinces. The introduction of a provincial foreign content limitation would reduce the ability of this investor to acquire a sufficiently diversified portfolio, thus leading to increased risk.

The scenario presented above is not restricted to Saskatchewan as each province has a distinct economic structure. Quebec and Ontario have a significantly larger Manufacturing component than the other provinces. Newfoundland, Prince Edward Island, and Nova Scotia have marginal Fishing & Trapping sectors while the remaining provinces have a statistically insignificant Fishing and Trapping sector. Saskatchewan and Alberta have a relatively large Mining sector.

The uniqueness of the provincial economies presents, in miniature, the differences between countries. The limitations of the FPR go far beyond those attached to location because of the differences in the economic structure of each region or country. The types of industries present in each

area will differ. Any limitation on the ability to invest in a particular region will reduce the ability to diversify on both a geographic and an industrial basis.

International example: export destinations

The FPR has real costs (see section 6). Table 18 shows the limitations and increased exposure to risk that they cause.

As international trade grows, interdependency between countries increases. Canada is affected by the economic health of its trading partners, namely the United States, certain countries in the Pacific Rim, and, to an increasing extent, Mexico. Because the FPR limits the ability of Canadians to diversify by investing outside of Canada, they cannot reduce geographical risk.

Any change in the economic performance of the United States or Mexico will have a tangible impact on Canada’s export performance, affecting Canada’s overall economic performance. This type of geographic risk can easily be reduced through geographic diversification.

For example, if Canadian investments in Japan were made exempt from the FPR, investors could reduce the geographic risk of their portfolio since their portfolios are now affected by a larger group of countries. The Japanese economy, through trade, is affected by the economic performance of countries like South Korea, Taiwan, and China (table 18). The inclusion of Japanese investments in the portfolio of a Canadian investor, therefore, would diversify the geographic risk across a larger number of countries and economic stagnation or recession in one country or region will affect the returns in the portfolio to a lesser extent.

The diversification results in reduced risks over the long-run, since any negative event in one country does not unduly affect the performance of the overall portfolio. The effect of the FPR in this example is to artificially increase the level of risk in the portfolio by restricting the regions and countries in which an individual can invest.

Table 16: Provincial GDP in Constant Prices (\$millions) by Industry (1997)

Industry	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF
All Industries	86027.1	84907.8	23199.3	24455.7	281574.1	147381.2	12943.6	16493.0	2409.0	8482.5
Goods Industries (Total)	22007.8	38003.7	9436.1	6784.2	94294.4	49033.0	3796.5	3867.5	668.5	2210.7
Agriculture	851.1	2675.4	2023.8	803.6	3080.9	2236.9	151.7	185.9	137.0	36.1
Fishing & Trapping	263.6	3.0	3.4	8.9	32.6	58.9	103.2	229.2	48.7	138.5
Logging	2029.0	233.1	64.8	55.4	479.4	896.9	191.1	86.8	11.6	73.6
Mining	2379.9	16465.1	3673.1	519.1	2351.2	1208.2	331.4	309.4	4.1	358.1
Manufacturing	8559.7	8559.1	1390.4	2996.9	66365.7	29896.4	1644.9	1725.9	272.3	566.7
Construction	5942.3	7091.2	1512.2	1372.7	12702.8	7665.0	799.9	889.3	133.0	578.4
Other Utilities	1982.1	2976.7	768.5	1027.5	9281.8	7070.8	574.1	440.9	61.8	459.4
Services Industries (Total)	64019.4	46904.0	13763.2	17671.5	187279.6	98348.2	9147.1	12625.5	1741.4	6271.8
Transportation & Storage	5064.3	4614.2	1420.4	1514.1	9189.0	5800.6	681.1	660.5	142.5	369.5
Communication	2983.8	2291.6	879.9	1529.7	9518.5	5544.1	606.1	874.4	102.1	442.1
Wholesale Trade	4753.7	4703.0	1192.7	1534.0	18529.1	7725.4	506.7	796.8	75.2	273.4
Retail Trade	5914.0	4498.2	1374.6	1423.6	14953.7	9392.3	923.4	1230.6	175.1	588.0
Finance & Insurance	4665.9	2908.0	954.9	1071.8	18422.8	6336.8	525.3	681.6	90.0	301.0
Real Estate & Insurance Agents	12810.3	7017.9	2032.7	2635.8	30070.5	14707.8	1385.3	2130.0	280.8	1007.5
Business Industries	4812.2	3985.9	666.8	947.1	18429.9	8457.8	496.8	590.4	56.9	282.5
Government Services	4443.2	3619.7	1185.7	1662.2	15737.3	9078.9	1124.4	1805.9	268.1	868.4
Educational Services	4891.1	3768.7	1165.5	1549.1	15934.0	9681.2	866.2	1206.6	165.5	728.1
Health & Social Services	6234.8	4048.3	1556.2	2266.6	18482.0	11785.9	1203.6	1616.6	215.7	890.1
Accommodation; Food & Beverage	3354.1	2409.1	661.7	670.5	6757.0	3290.8	358.3	480.0	76.8	213.3
Other Service Industries	4092.1	3039.4	671.9	867.0	11255.8	6546.5	469.9	552.2	92.5	307.9

Source: Statistics Canada, *Provincial Gross Domestic Product by Industry, 1984-1997*, Catalogue No. 15-203-XPB.

Table 17: Percent Components of Provincial GDP by Industry (1997)

Industry	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF
Goods Industries (Total)	25.6	44.8	40.7	27.7	33.5	33.3	29.3	23.4	27.8	26.1
Agriculture	1.0	3.2	8.7	3.3	1.1	1.5	1.2	1.1	5.7	0.4
Fishing & Trapping	0.3	0.0	0.0	0.0	0.0	0.0	0.8	1.4	2.0	1.6
Logging	2.4	0.3	0.3	0.2	0.2	0.6	1.5	0.5	0.5	0.9
Mining	2.8	19.4	15.8	2.1	0.8	0.8	2.6	1.9	0.2	4.2
Manufacturing	10.0	10.1	6.0	12.3	23.6	20.3	12.7	10.5	11.3	6.7
Construction	6.9	8.4	6.5	5.6	4.5	5.2	6.2	5.4	5.5	6.8
Other Utilities	2.3	3.5	3.3	4.2	3.3	4.8	4.4	2.7	2.6	5.4
Services Industries (Total)	74.4	55.2	59.3	72.3	66.5	66.7	70.7	76.6	72.3	73.9
Transportation & Storage	5.9	5.4	6.1	6.2	3.3	3.9	5.3	4.0	5.9	4.4
Communication	3.5	2.7	3.8	6.3	3.4	3.8	4.7	5.3	4.2	5.2
Wholesale Trade	5.5	5.5	5.1	6.3	6.6	5.2	3.9	4.8	3.1	3.2
Retail Trade	6.9	5.3	5.9	5.8	5.3	6.4	7.1	7.5	7.3	6.9
Finance & Insurance	5.4	3.4	4.1	4.4	6.5	4.3	4.1	4.1	3.7	3.5
Real Estate & Insurance Agents	14.9	8.3	8.8	10.8	10.7	10.0	10.7	12.9	11.7	11.9
Business Industries	5.6	4.7	2.9	3.9	6.5	5.7	3.8	3.6	2.4	3.3
Government Services	5.2	4.3	5.1	6.8	5.6	6.2	8.7	10.9	11.1	10.2
Educational Services	5.7	4.4	5.0	6.3	5.7	6.6	6.7	7.3	6.9	8.6
Health & Social Services	7.2	4.8	6.7	9.3	6.6	8.0	9.3	9.8	9.0	10.5
Accommodation; Food & Beverage	3.9	2.8	2.9	2.7	2.4	2.2	2.8	2.9	3.2	2.5
Other Service Industries	4.8	3.6	2.9	3.5	4.0	4.4	3.6	3.3	3.8	3.6

Source: Statistics Canada, *Provincial Gross Domestic Product by Industry, 1984-1997*, Catalogue No. 15-203-XPB. Calculations completed by the authors.

Table 18: Composition of Export Destination for Select Countries

Exporting Country	Destination Country							
	Canada	United States	Mexico	United Kingdom	Spain	Ireland	Germany	Japan
Canada	—	22.1%	2.5%	—	—	—	—	—
United States	77.5%	—	83.4%	11.8%	4.1%	8.3%	7.9%	27.3%
Mexico	—	9.0%	—	—	—	—	—	—
United Kingdom	1.9%	5.1%	—	—	8.0%	25.4%	8.0%	—
Spain	—	—	1.0%	—	—	—	—	—
Germany	1.5%	3.8%	—	13.1%	15.4%	14.5%	—	—
Switzerland	—	—	0.8%	—	—	—	—	—
France	—	—	—	9.9%	20.5%	9.5%	12.0%	—
Netherlands	—	—	—	8.0%	—	6.9%	7.5%	—
Belgium-Luxembourg	—	—	—	5.0%	—	4.4%	6.7%	—
Italy	—	—	—	—	9.1%	3.8%	7.6%	—
Japan	4.6%	11.1%	1.2%	—	1.4%	—	—	—
South Korea	0.9%	4.2%	—	—	—	—	—	7.0%
Taiwan	—	2.9%	—	—	—	—	—	6.5%
Hong Kong	—	—	—	—	—	—	—	6.3%
Singapore	—	—	—	—	—	—	—	5.2%
China	—	—	—	—	—	—	—	5.0%

Note: data is for years United States 1996; Mexico, United Kingdom, Spain, Ireland and Japan 1995; Germany 1994; Canada 1992.

Source: The Economist Intelligence Unit Limited, Country Reports, Years 1992, 1994, 1995, and 1996.

International example: resource trade

The limitations imposed upon investment by the FPR go far beyond geographic-based restrictions. As the number of jurisdictions and countries is limited, the sectors within which one can invest are also limited. Table 19 presents the balance of resource trade as a percentage of GDP for a number of the OECD countries.

There is tremendous variation in the balance of resource trade among countries at a similar level of development, indicating a varying level of dependence on natural resources. Ireland had the highest net trade balance (15.13) as a percent of GDP, while the United States was actually a net importer of resources. In fact, of the 17 countries profiled, three were net importers of resources (United States, United Kingdom, and Australia) and three maintained a resource balance near zero (Germany, New Zealand, and Spain). Canada falls in the middle of the 17 countries with a net resource balance of 2.48 percent of GDP.

The limitations on investment in one country, like the limitations on a provincial portfolio, will lead to either an

Table 19: Resource Balance (Percent of GDP)

Country	Percent of GDP (1995)
Australia	-0.117
Belgium	4.875
Canada	2.476
France	2.382
Germany	0.839
Ireland	15.134
Italy	4.207
Japan	1.475
Mexico	2.947
Netherlands	6.373
New Zealand	0.996
Norway	6.009
Spain	0.378
Sweden	6.315
Switzerland	3.918
United Kingdom	-0.786
United States	-1.542

Source: World Bank, World Development Indicators, 1998. CD-ROM Version.

over-exposure or under-exposure to a particular sector (in this example the resource sector) relative to other areas of the economy.

Example from equity markets

The concept of sector-dominance in particular countries can be further illustrated by viewing the stock exchanges present in Canada relative to one another and to the larger exchanges around the world.

Certain countries have developed certain industries to a much larger extent than other countries. This divergence in development is illustrated by the composition and, to a lesser extent, the size of the countries' respective stock exchanges. Tables 20 and 21 contain data for the volume and value of shares traded on the five Canadian stock exchanges.

The Toronto Stock Exchange dwarfs the other four Canadian stock exchanges both in volume of shares traded (table 20) and their value (table 21). The Toronto Stock Exchange represented 62.6 percent of all shares traded and 85.0 percent of the value of all shares traded in Canada in 1997 (Toronto Stock Exchange 1998). The Toronto Stock Exchange is clearly the dominant market for public shares in Canada and its composition is indicative of the development of the larger Canadian economy. Table 22 describes the composition of new shares listed on the Toronto Stock Exchange in 1997.

Thirty-six percent of all the new issues, representing 49.2 percent of the value of new issue capital, was based in the natural resource sector in 1997 (table 22; Toronto Stock Exchange 1998). The dominance of the natural resource sector is not surprising given Canada's large resource endowment. It should be noted, however, that the Vancouver Stock

Table 20: Volume Trading and Distribution on the Five Canadian Stock Exchanges

Exchange	1997 Volume	Percent of Total	1996 Volume	Percent of Total	Percent Change
Toronto	25,670,245,599	62.6%	22,341,148,377	57.7%	+ 14.9%
Montreal	4,320,908,296	10.5%	4,302,039,967	10.5%	+ 0.4%
Vancouver	7,116,014,952	17.3%	8,322,098,986	22.5%	-14.5%
Alberta	3,929,239,781	9.6%	4,102,207,152	9.3%	-4.2%
Winnipeg	4,221,242	< 1.0%	40,921	< 1.0%	+ 10,215.6%
Total	41,040,629,870	100.0%	39,067,535,403	100.0%	+ 5.1%

Source: Toronto Stock Exchange 1997: 36.

Table 21: Value of Trading and Distribution on the Five Canadian Stock Exchanges

Exchange	1997 Volume	Percent of Total	1996 Volume	Percent of Total	Percent Change
Toronto	423,169,614,970	85.0%	301,298,938,253	81.6%	+ 40.4%
Montreal	61,911,738,856	12.4%	50,166,612,916	13.6%	+ 23.4%
Vancouver	8,670,338,123	1.7%	12,003,512,473	3.2%	-27.8%
Alberta	3,870,669,295	0.8%	5,971,402,625	1.6%	-35.2%
Winnipeg	36,089,850	< 1.0%	555,788	< 1.0%	+ 6,393.5%
Total	497,658,451,094	100.0%	369,441,022,055	100.0%	+ 34.7%

Source: Toronto Stock Exchange 1997: 36.

Table 22: New Share Listing on the Toronto Stock Exchange (1997)

Sector	Number of Issues	Percent of Total	Value of Issued Capital (\$CDN thousands)	Percent of Total
Natural Resources	73	36.32%	\$2,108,674	49.18%
Technology (high-tech)	14	6.97%	\$210,631	4.91%
Financial Services	47	23.38%	\$595,751	13.89%
Other (Industrial)	67	33.33%	\$1,372,481	32.01%

Source: Toronto Stock Exchange 1997: 87-91, 115.

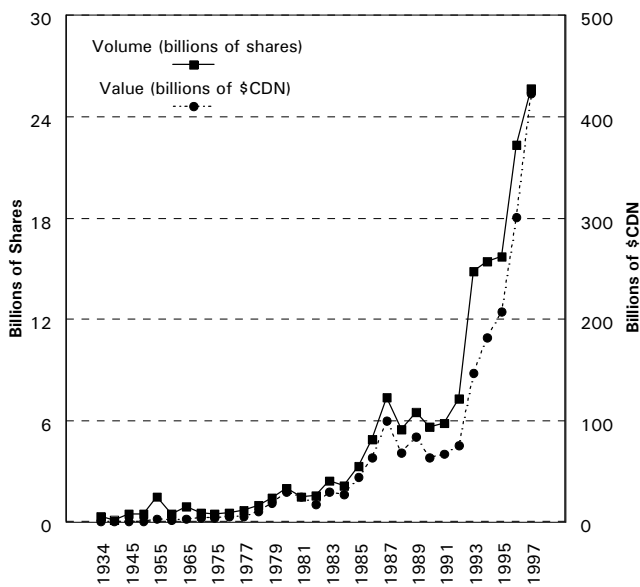
Exchange is largely committed to small, start-up firms operating in the resource sector, which must be added to the shares in the resource sector listed on the Toronto Stock Exchange.

The extent and dominance of the resource sector on the TSE is also supported by its dominance in the categories which make up the TSE 300 Composite Index, Canada's pre-eminent broad market index. Four of the 14 categories are resource-based sectors: (1) Metals & Minerals; (2) Gold & Precious Metals; (3) Oil & Gas; and (4) Paper & Forest Products. At least one other category, Pipelines, is directly related to the natural resource sector. Thus, between 28.6 and 35.7 percent of the broad barometer of market activity in Canada is measured by sectors related to natural resources.

Equally important is the recognition that there are sectors not as developed in Canada as in other countries. For instance, the broadly defined high-technology sector represented 6.97 percent of new issues, representing 4.91 percent of the value of issued capital, on the Toronto Stock Exchange in 1997 (table 22; Toronto Stock Exchange 1998).

The NASDAQ market in the United States, which recently merged with the American Exchange (AMEX), is dominated by the high-technology sector. Many of the companies that do not trade on the Canadian exchanges are listed solely on the NASDAQ. The FPR, therefore, inhibits individuals from participating in sectors not fully developed in the Canadian marketplace.

Figure 14: Equity History of the Toronto Stock Exchange, 1934–1997



Source: Toronto Stock Exchange, 1997.

Even though Canada's stock exchanges have flourished over the last two decades (see figure 14), they still appear small when compared to the largest exchanges in the world. Table 23 (page 38) presents data for the world's 20 largest stock exchanges.

Of the five Canadian exchanges, only the Toronto Stock Exchange ranks in the top 20 exchanges in the world, ranking twelfth. The FPR, by its very design, limits the ability of individuals to participate in these larger and more varied exchanges around the world.

Canadian securities make up only 2.4 percent of the global securities portfolio. Consequently, the FPR materially limits Canadians from access to 97.6 percent of the global securities market. As Keith Ambachtsheer points out:

This restriction will be of little consequence if foreign stocks and bonds correlated highly with their Canadian counterparts (i.e. had correlation coefficients of close to 1.0 and thus offered little diversification potential). This is in fact not the case. [Table 24] clearly shows that the correlation between the returns of Canadian stocks and bonds and non-Canadian stocks have been well below 1.0 during the last 25 years. (Ambachtsheer 1995).

Table 24: Correlation with Foreign Securities

	Canadian Bonds	American Stocks	British Stocks	Japanese Stocks
Canadian Stocks	0.3	0.7	0.5	0.3
Canadian Bonds	1.0	0.3	0.2	0.1

Source: Ambachtsheer 1995.

The difference in correlation rates illustrates the gains to be achieved through diversification, which is achieved by purchasing assets that are not perfectly correlated with one another. The differences in correlation between Canadian assets and foreign assets indicates an ability to further diversify using foreign assets. The presence of the FPR artificially increases the level of risk from geographic, asset, and sectoral factors present in a Canadian portfolio. The FPR clearly inhibits the ability of individual investors to diversify their portfolios adequately, leading to increased risk and its limitations affect investment not only geographically but also in terms of different industrial sectors.

Table 23: Top 20 World Exchanges

Exchange	Market Capitalisation (Domestic Shares Only)					Equity Trading				
	Rank	Percent of total	1997	1996	Change	Rank	Percent of total	1997v	1996	Change
New York (TSV)	(1)	35.65	8,879,630.6	6,841,987.6	29.8	(1)	27.89	5,777,604.5	4,063,654.6	42.2
Chicago (REV)	(2)	9.69	2,414,663.5	1,763,428.1	36.9	(16)	0.96	198,324.7	124,957.9	58.7
Tokyo (TSV)	(3)	8.37	2,085,370.3	3,011,161.4	-30.7	(7)	4.33	896,055.0	938,822.1	-4.6
London (REV)	(4)	8.30	2,068,245.8	1,642,582.4	25.9	(3)	9.60	1,989,498.3	1,413,236.3	40.8
Osaka (TSV)	(5)	6.99	1,741,645.5	N/A	N/A	(14)	1.07	221,989.9	253,118.7	-12.3
NASDAQ (REV)	(6)	6.98	1,737,509.7	1,511,824.4	14.9	(2)	21.64	4,481,682.1	3,301,776.1	35.7
Germany (REV)	(7)	3.31	825,232.9	664,913.2	24.1	(6)	5.15	1,067,688.4	811,626.0	31.5
Paris (REV)	(8)	2.71	674,404.8	586,873.0	14.9	(4)	6.83	1,414,135.7	982,172.0	44.0
Paris (TSV)	(8)	2.71	674,404.8	586,873.0	14.9	(11)	2.00	414,320.9	282,014.4	46.9
Switzerland (REV)	(10)	2.31	575,339.3	400,285.4	43.7	(8)	2.75	570,493.2	443,030.5	28.8
Toronto (TSV)	(11)	2.28	567,635.1	364,041.7	55.9	(12)	1.47	305,154.9	220,971.6	38.1
Amsterdam (REV)	(12)	1.88	468,630.7	375,357.2	24.8	(13)	1.35	279,688.1	191,101.9	46.4
Hong Kong (TSV)	(13)	1.66	413,322.6	449,218.8	-8.0	(9)	2.19	453,657.1	166,428.5	172.6
Italy (TSV)	(14)	1.38	344,664.2	256,595.3	34.3	(15)	0.98	203,279.7	101,568.0	100.1
Australia (TSV)	(15)	1.19	295,765.6	311,864.8	-5.2	(19)	0.83	171,004.4	146,235.5	16.9
Madrid (REV)	(16)	1.17	290,382.9	N/A	N/A	(10)	2.05	424,287.2	238,410.4	78.0
Taiwan (TSV)	(17)	1.16	287,813.1	273,607.7	5.2	(5)	6.32	1,308,633.5	478,355.7	173.6
Stockholm (REV)	(18)	1.06	264,710.0	240,382.1	10.1	(18)	0.85	175,821.9	136,741.0	28.6
Sao Paulo (TSV)	(19)	1.03	255,478.0	N/A	N/A	(17)	0.92	190,657.5	N/A	N/A
Korea (TSV)	(20)	0.17	41,881.4	139,121.7	-69.9	(20)	0.82	170,825.9	177,506.3	-3.8

Note: **TSV** refers to Trading System View: count only those transactions that pass through the trading systems of the exchange or that take place on the exchange's trading floor; **REV** refers to Regulated Environment View: include in the turnover figures all transactions subject to supervision by the market authority.

Source: Toronto Stock Exchange 1998. Calculations completed by the authors.

6 The Cost of the Foreign Property Rule

As we have seen, the inability to diversify an investment portfolio has real consequences—a reduced rate of return and higher risk. This section gives estimates of the capital accumulation foregone due to the limitations imposed upon RRSPs and pensions by the federal government’s Foreign Property Rule.

These estimates are often referred to as losses although they are, in fact, *foregone capital accumulation*. That is, they represent estimates of wealth not retained by Canadian investors due to the limitations imposed by the FPR

It should be noted that the analysis applies only to the earnings of those savings made within the tax-sheltered RRSP and RPP systems. It does not apply to private savings and investments that are not sheltered from taxes and thus made outside the parameters of the RRSP and RPP systems.

Methodology

As is consistent with financial literature, the assumptions used in the analyses were made as conservative as possible. Thus, any reasonable deviation from the assumptions would be expected to increase rather than reduce the estimates of loss. The objective of the analyses is to provide readers with conservative and realistic estimates of the foregone capital accumulation in RRSPs and RPPs due to the inability of investors to diversify their portfolios adequately. The tables are presented in such a way as to allow individuals to locate their individual circumstances and thus determine an approximate personal loss.

Assumptions

- 1 *Wages*: three levels of annual income are presented: \$20,000, \$40,000, and \$60,000.
- 2 *Wage Growth*: two growth rates were used: 0% and 1%.
- 3 *Inflation*: all estimates are made in real dollars (0% Inflation)
- 4 *Age*: 25, 35, and 45 years of age.

- 5 *Savings Period*: the savings periods are the difference between the age of retirement (65) and the individual’s current age. The three savings periods are: 40 years (25 years of age), 30 years (35 years of age), and 20 years (45 years of age). This is a critical assumption since the individuals profiled are assumed to save a certain percentage of their income annually.

- 6 *Rate of Savings*: In addition to the length of the savings period, the rate of savings¹⁹ is also an important determinant of the overall estimate of loss. The four savings rates are: 2 percent, 5 percent, 10 percent, and 15 percent of gross income.

- 7 *Portfolio*: Five separate portfolios were developed according to five profiles of risk tolerance ranging from extremely low to aggressive. The percentage of the portfolio dedicated to equities was assumed to increase, relative to other assets, such as fixed-income and cash, as the level of risk increased. A portfolio constructed on the basis of a low tolerance for risk would have very little equity while a more aggressive portfolio would obviously hold a greater percentage of equity.

The estimates of foregone capital accumulation are based on foreign equity holdings of between 10 and 50 percent of the total savings of an individual. The loss estimates are based on investments made in foreign equities beyond the 20 percent permitted under the FPR. Thus, a loss estimate based on a 10 percent equity portfolio would, in fact, refer to a portfolio holding 30 percent in foreign equity. The reason for the incremental approach of the analysis is to acknowledge the current ability of investors to hold 20 percent of their assets in foreign instruments.

- 8 *Rate of Return*: This is a critical assumption since it, in large part, determines the loss estimates. The rate of return assumptions are similar to those contained in *Analysis of the Impact of the FPR*, by Ernst & Young Consultants for the Investment Funds Institute of Canada.

Two separate rates of return are included in table 25. The first is the result of the Ernst & Young Consultants research paper, which concluded that Canada's broadest measure of equity performance, the Toronto Stock Exchange 300 Composite Index, performed below that of the Morgan Stanley Capital Investment World Stock Index, a broad index of world equity markets. Between 1970 and 1997, the TSE 300 Index achieved an average rate of return, in nominal terms, of 13.50 percent, while the MSCI World Index achieved an average rate of return of 16.59 percent.²⁰ The cost to RRSP investors, on an annual basis, is the difference between the two portfolios, namely, the 3.09 percent in foregone capital accumulation as a result of not being able to diversify their portfolio sufficiently.

9 Timing of Investment Returns: Investment returns are assumed to occur at the end of each year. Thus, contributions made to an RRSP account do not generate any investment return in the year of contribution.

10 Management Expense Ratios: The other component included in table 25 is the management expense ratio (MER),²¹ a fee assessed on mutual fund accounts. MERs are calculated as a percentage of the total asset value of a specific fund.

According to the study by Cerulli & Associates, *The Cerulli Report: Distribution Trends in the Canadian Mutual Fund Market* (Guillette, Gallant, and Cerulli 1997), there is a material difference between MERs in the United States and those in Canada. Table 26 summarizes the MER differentials. There is a material cost disadvantage present

in the Canadian mutual fund industry relative to the United States. Thus, if one were to assume that individuals invest a portion of their RRSPs in mutual funds, it is appropriate to include the cost differential as an additional factor. In fact, general estimates are that RRSPs constitute between 40 and 60 percent of the total \$326.6 billion worth of mutual funds in Canada.²²

The column 'MER' of table 25 indicates the particular MERs used to adjust the rates of return to illustrate the effect of cost differences in mutual funds. The MERs used assume that an investor purchases a domestic fund in Canada and a diversified portfolio in the United States. Including the MERs results in a domestic rate of return of 11.65 percent and a diversified world portfolio of 15.54 percent, a difference of 3.89 percent. The difference in the average rate of return, therefore, increases by 25.90 percent when the difference in mutual fund costs is included in the analysis.

Examples of capital accumulation foregone due to the FPR

The tables in Appendix D give estimates of foregone capital accumulation for representative individuals and can help readers determine personal loss due to FPR. Appendix E offers relative comparisons of the loss estimates. The following examples are presented to clarify the calculations used to estimate the capital accumulation foregone due to the FPR and thus make the tables in Appendix D more accessible.

Table 25: Rate of Return and MER Data

Index	20 Year Rate of Return	MER	Adjusted Rate of Return
Toronto Stock Exchange (TSE) 300	13.50%	1.85%	11.65%
Morgan Stanley Capital Investment (MCSI) World Stock Index	16.59%	1.05%	15.54%
Difference	3.09%		3.89%

Sources: Ernst & Young 1997; Guillette, Gallant, and Cerulli 1997.

Table 26: MERs in the United States and Canada

Type of Fund	MER in United States	MER in Canada	Difference
Retail Domestic Equity	0.93%	2.18%	1.25%
Retail International Equity	1.28%	2.29%	1.01%
No-Load Domestic Equity	0.72%	1.85%	1.13%
No-Load International Equity	1.05%	1.79%	0.74%

Sources: Ernst & Young 1997; Guillette, Gallant, and Cerulli 1997.

Regular Saver

Let us assume that the investor is age 35 and makes \$40,000 per year.²⁴ The individual would therefore have 30 years of savings available. The loss estimate tables for this particular individual are contained in table D(5). Table 27 replicates the first section of the first table included in Appendix D(5).

Let us assume in our example that an individual saved 5 percent of gross income and had an average risk tolerance. The cumulative capital accumulation foregone because of the diversification limits placed on RRSPs and RPPs by the FPR would be \$30,460 at retirement (age 65). The loss in dollars may seem minor but, in relative terms, it represents 49.1 percent of total savings and 2.5 percent of total income.

It is important to reiterate that diversification is a win-win situation. Diversification reduces risk while at the same time increasing the long-term rates of return available to the investor. Thus, the individual in our example has foregone \$30,460, with very little, if any, benefit.

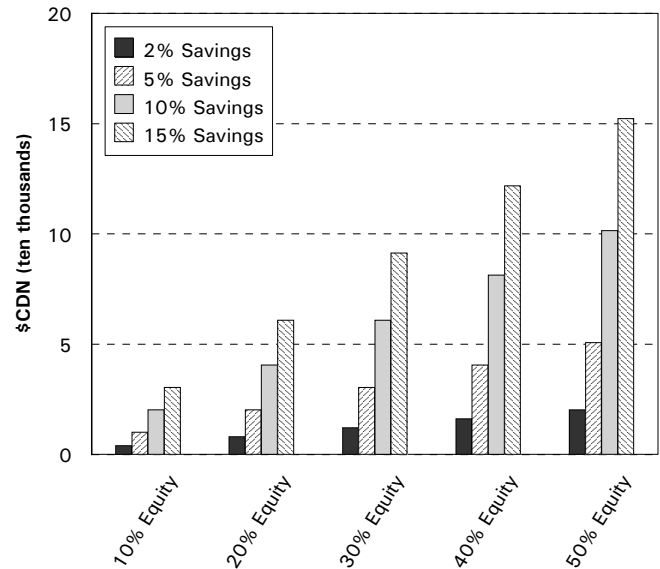
Figure 15 shows how the loss estimate increases or decreases as one assumes a higher or lower rate of savings or risk tolerance. For instance, the loss estimates increase substantially to between \$20,307 and \$101,534 if the rate of savings is increased to 10 percent. On the other hand, the loss estimates decrease to between \$4,061 and \$20,307 if the savings rate is decreased to 2 percent of gross income.

The second section of the first table in the Appendices is an estimate including the MER differential. Recall that according to Guillette, Gallant, and Cerulli 1997 there is a material cost difference between mutual funds fees (MER) in the United States and Canada. Assuming that individuals uti-

lize mutual funds as a vehicle for investment, it is entirely appropriate to estimate the added losses attributed to MER differentials. Table 28 summarizes the estimates of foregone capital accumulation for the same individual with 0 percent real wage growth but with MER differentials included.

The loss estimate, taking into account the MERs, for the same individual profiled previously, at age 35 with income of \$40,000, an average saver (5 percent) with average risk tolerance increases from \$30,460 to \$34,924, an increase of 14.66 percent. The loss as a percentage of total sav-

Figure 15: Estimates of Foregone Capital Accumulation



Source: Fraser Institute; calculations by authors.

Table 27: Estimates of Foregone Capital Accumulation for Individual with 0 Percent Wage Growth and No MER

Saving / Additional Foreign Equity	Low Risk (10% Equity)	Moderate Risk (20% Equity)	Average Risk (30% Equity)	High Risk (40% Equity)	Aggressive Risk (50% Equity)
Moderate (2%)	\$4,061	\$8,123	\$12,184	\$16,245	\$20,307
Average (5%)	\$10,153	\$20,307	\$30,460	\$40,613	\$50,767
High (10%)	\$20,307	\$40,613	\$60,920	\$81,277	\$101,534
Aggressive (15%)	\$30,460	\$60,920	\$91,380	\$121,840	\$152,301

Table 28: Estimates of Foregone Capital Accumulation for Individual with 0 Percent Wage Growth and MER Differential

Savings / Additional Foreign Equity	Low Risk (10% Equity)	Moderate Risk (20% Equity)	Average Risk (30% Equity)	High Risk (40% Equity)	Aggressive Risk (50% Equity)
Moderate (2%)	\$4,657	\$9,313	\$13,970	\$18,626	\$23,283
Average (5%)	\$11,641	\$23,283	\$34,924	\$46,566	\$58,207
High (10%)	\$23,283	\$46,566	\$69,849	\$93,132	\$116,415
Aggressive (15%)	\$34,924	\$69,849	\$104,773	\$139,698	\$174,622

ings also increases from 49.1 percent with no MER to 56.3 percent with the MER. The loss estimates increase for all levels of risk and savings as a result of the increased disparity in returns caused by the inclusion of the MER.

Table 29 presents the estimates of foregone capital accumulation excluding the MER differential but with 1 percent growth in real wages. That is, wages are allowed to increase, in real terms, by 1 percent per year to account for productivity increases.

The capital accumulation foregone by the profiled individual increases from \$30,460 with 0 percent wage growth to \$34,661 with 1 percent wage growth, an increase of 13.79 percent.

Table 30 maintains the assumption of 1 percent wage growth but includes the MER differential. It is the last of the four sections presented in each of the Appendices.

The inclusion of the wage growth increases the estimate of foregone capital accumulation from \$34,924 to \$39,507, an increase of 13.12 percent. The relative loss estimates similarly increase as a percentage of total savings from 48.0 percent with no MER to 54.7 percent with the MER.

Figure 16 shows clearly that the inclusion of wage growth and the MER differential have a material impact on the size of the loss estimate. Table 31 summarizes the four estimates of foregone capital accumulation as well as the relative comparisons with total savings for the individual profiled in this example. It is important to reiterate that the loss estimates will increase or decrease as the underlying assumptions are changed.

Table 31: Summary of Foregone Capital Accumulation

Wage Growth	Foregone Capital Accumulation	Percent of Total Savings
Without Management Expense Ratio		
0 percent	\$30,460	49.1 %
1 percent	\$34,661	48.0 %
With Management Expense Ratio		
0 percent	\$34,924	56.3 %
1 percent	\$39,507	54.7 %

Profile: Investor is 35 years of age with 30 years of savings, average risk tolerance, and a savings rate of 5% with a gross income of \$40,000 per year.

Each section in Appendix D presents both of the wage assumptions: 0 percent real wage growth and 1 percent real wage growth. Each section also presents estimates including and excluding the MER differential.

Foregone Capital Accumulation Relative to Savings

The dollar values contained in the previous five tables as well as those in the tables in Appendices D(1) through D(9) do not indicate the depth of the losses since they simply portray the nominal value of the losses. Tables 32 and 33 and Appendix E contain the loss estimates relative to total savings; that is, the percentages that they show indicate the size of the estimated losses in Appendices D(1) through D(9) relative to the total amount of savings accumulated.

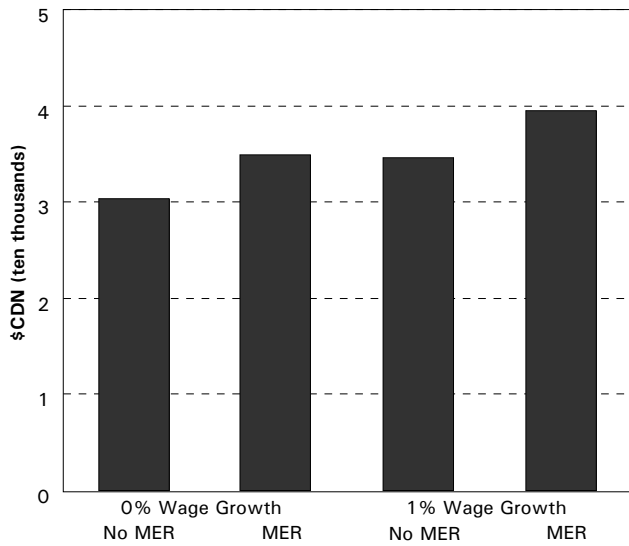
Table 29: Estimates of Foregone Capital Accumulation for Individual with 1 Percent Wage Growth and No MER

Savings / Additional Foreign Equity	Low Risk (10% Equity)	Moderate Risk (20% Equity)	Average Risk (30% Equity)	High Risk (40% Equity)	Aggressive Risk (50% Equity)
Moderate (2%)	\$4,622	\$9,243	\$13,865	\$18,486	\$23,108
Average (5%)	\$11,554	\$23,108	\$34,661	\$46,215	\$57,769
High (10%)	\$23,108	\$46,215	\$69,323	\$92,430	\$115,538
Aggressive (15%)	\$34,661	\$69,323	\$103,984	\$138,645	\$173,307

Table 30: Estimates of Foregone Capital Accumulation for Individual with 1 Percent Wage Growth and MER Differential

Savings / Additional Foreign Equity	Low Risk (10% Equity)	Moderate Risk (20% Equity)	Average Risk (30% Equity)	High Risk (40% Equity)	Aggressive Risk (50% Equity)
Moderate (2%)	\$5,268	\$10,535	\$15,803	\$21,071	\$26,338
Average (5%)	\$13,169	\$26,338	\$39,507	\$52,677	\$65,846
High (10%)	\$26,338	\$52,677	\$79,015	\$105,353	\$131,692
Aggressive (15%)	\$39,507	\$79,015	\$118,522	\$158,030	\$197,537

Figure 16: Specific Loss Estimates



Source: Fraser Institute; calculations by authors.

It is important to recognize that as a result of the methodology employed, the relative loss estimates are not affected by the level of savings. Thus, table 32 includes the

relative loss estimates for individuals at particular ages and with particular risk tolerance profiles.

It is clear that even the so-called modest losses of earnings are material in that they represent 13.6 percent or 13.8 percent of total savings, depending on whether the MER is included. In two cases, notably with individuals age 25 (40 years of savings) and a high risk tolerance, the losses, regardless of whether the MER is included, actually exceed the total amount of savings.

Inheritance

A valid criticism of the estimates presented above and included in Appendices D(1) through D(9) is that they are based on the assumption that individuals save a certain percentage of their income consistently over the course of their lifetime. It may be that certain periods require that the individual not only stop saving but actually draw down their investments, possibly to finance a period of unemployment or illness. Also, it is clear from evidence that individuals tend to save a greater portion of their income after the child-raising period.

This criticism does not, however, invalidate the analyses presented above and in Appendices D(1) through D(9). Rather, they indicate that there are an infinite number of

Table 32: Foregone Capital Accumulation Relative to Savings, 0 Percent Wage Growth

	Low Risk	Moderate Risk	Average Risk	High Risk	Aggressive Risk
Without Management Expense Ratio					
Age 25	18.8%	37.6%	56.4%	75.2%	94.0%
Age 35	16.0%	32.0%	48.0%	64.0%	79.9%
Age 45	13.6%	27.3%	40.9%	54.6%	68.2%
With Management Expense Ratio					
Age 25	22.5%	45.0%	67.5%	90.1%	112.6%
Age 35	18.2%	36.5%	54.7%	72.9%	91.1%
Age 45	14.8%	29.7%	44.5%	59.3%	74.2%

Table 33: Foregone Capital Accumulation Relative to Savings, 1 Percent Wage Growth

	Low Risk	Moderate Risk	Average Risk	High Risk	Aggressive Risk
Without Management Expense Ratio					
Age 25	19.6%	39.2%	58.8%	78.4%	98.0%
Age 35	16.4%	32.8%	49.1%	65.5%	81.9%
Age 45	13.8%	27.6%	41.4%	55.2%	68.9%
With Management Expense Ratio					
Age 25	23.7%	47.4%	71.1%	94.8%	118.5%
Age 35	18.8%	37.6%	56.3%	75.1%	93.9%
Age 45	15.0%	30.1%	45.1%	60.2%	75.2%

scenarios that could have been presented. The profiles presented were constructed for simplicity in order to facilitate their use and understanding by readers.

The following example presents estimates of the capital accumulation foregone by someone who inherits a lump-sum of money. This example, therefore, excludes the possibility of additional savings and focuses entirely on the losses generated by the reduced rate of return caused by the FPR.

Let us assume that the individual inherits \$5,000 and invests all of it. Table 34 summarizes the estimates of capital accumulation foregone in this scenario by for all three age categories: 25, 35, and 45.

Excluding any savings that would augment the inheritance, the earnings loss ranges between \$919 and \$11,505, representing between 18.38 percent and 230.10 percent of the original inheritance.

Recall that the portfolios are constructed to be conservative. For instance, the aggressive portfolio contains 50 percent diversified international equity in addition to the allowable 20 percent foreign content. The loss estimates would increase if the portfolios were constructed even more

aggressively. Table 35 contains the loss estimates assuming the individual invests 100 percent of the inheritance in a diversified international equity fund.

The loss estimates increase to between \$9,910 and \$23,010, representing between 183.79 percent and 460.20 percent of the original inheritance. The results from this example confirm the substantial amount of capital accumulation foregone first illustrated in the previous example. The clear effect of the FPR is to reduce the possible rate of return garnered from investments, regardless of the structure, consistency of contributions, or length of savings time.

Periodic contributions

The following example presents the estimates of capital accumulation foregone by a person who makes periodic contributions to an RRSP account. The contributions are assumed to remain constant and thus have no relationship to the individual's income. This example is meant to be a profile midway between the constant saver presented in the first example and the lump-sum saver in the example just considered.

Table 34: Estimates of Foregone Capital Accumulation for all three age groups from investment of \$5000

Additional Foreign Equity	Low Risk (10% Equity)	Moderate Risk (20% Equity)	Average Risk (30% Equity)	High Risk (40% Equity)	Aggressive Risk (50% Equity)
Without Management Expense Ratio					
Age 25	\$1,689	\$3,378	\$5,067	\$6,756	\$8,445
Age 35	\$1,246	\$2,492	\$3,738	\$4,983	\$6,229
Age 45	\$ 919	\$1,838	\$2,757	\$3,676	\$4,595
With Management Expense Ratio					
Age 25	\$2,301	\$4,602	\$6,903	\$9,204	\$11,505
Age 35	\$1,571	\$3,142	\$4,713	\$6,284	\$7,855
Age 45	\$1,073	\$2,145	\$3,218	\$4,290	\$5,363

Table 35: Estimates of Foregone Capital Accumulation from investment of \$5000, 100 Percent Equity Portfolio

	Foregone Capital Accumulation	Percent of Savings
Without Management Expense Ratio		
Age 25	\$16,890	337.8%
Age 35	\$12,459	249.2%
Age 45	\$9,190	183.8%
With Management Expense Ratio		
Age 25	\$23,010	460.2%
Age 35	\$15,710	314.2%
Age 45	\$10,726	214.5%
Note: Loss estimates assume 100 percent investment in a diversified portfolio.		

Let us assume that an individual is able to save \$1,000 every two years.²⁵ The total amount of cumulative savings generated by the three age profiles are: \$21,000 (age 25), \$16,000 (age 35), and \$11,000 (age 45). Table 36 summarizes the estimates for this particular scenario for all three age profiles.

The capital accumulation forgone by this individual ranges from \$1,519 to \$25,009, representing between 13.81 percent and 119.09 percent of the total amount invested.

It is again important to remember that the portfolios are constructed to be conservative. The loss estimates would increase if the portfolios were constructed even more

aggressively. For instance, let us assume that the individual invests 100 percent of the savings in a diversified equity fund. The resultant loss estimates for the revised portfolio are contained in table 37.

The loss estimates increase to between \$15,191 and \$50,017, representing between 138.1 percent and 238.2 percent of the total cumulative savings.

It is clear from all three examples as well as from the loss estimates contained in Appendices D(1) through D(9) and Appendix E that the capital accumulation foregone by Canadians are material and costly in terms of a reduced savings pool from which to draw from during retirement.

Table 36: Estimates of Foregone Capital Accumulation for periodic contributions, all three age groups

Additional Foreign equity	Low Risk (10% Equity)	Moderate Risk (20% Equity)	Average Risk (30% Equity)	High Risk (40% Equity)	Aggressive Risk (50% Equity)
Without Management Expense Ratio					
Age 25	\$4,127	\$8,254	\$12,382	\$16,509	\$20,636
Age 35	\$2,626	\$5,252	\$7,879	\$10,505	\$13,131
Age 45	\$1,519	\$3,038	\$4,557	\$6,076	\$7,595
With Management Expense Ratio					
Age 25	\$5,002	\$10,003	\$15,005	\$20,007	\$25,009
Age 35	\$3,015	\$6,030	\$9,045	\$12,060	\$15,075
Age 45	\$1,658	\$3,317	\$4,975	\$6,634	\$8,292

Table 37: Estimates of Foregone Capital Accumulation for periodic contributions, 100 Percent Equity Portfolio

	Foregone Capital Accumulation	Percent of Savings
Without Management Expense Ratio		
Age 25	\$41,272	196.5%
Age 35	\$26,262	164.1%
Age 45	\$15,191	138.1%
With Management Expense Ratio		
Age 25	\$50,017	238.2%
Age 35	\$30,149	188.4%
Age 45	\$16,585	150.8%
Note: Loss estimates assume 100 percent investment in a diversified portfolio.		



7 The Original Rationale for the Foreign Property Rule

The original rationale for establishing the FPR was to direct financial resources to specific sectors of the Canadian economy based loosely on an economic development strategy called “Import Substitution.” (For further information see Atkinson and Coleman 1989; Todaro 1989.)

The basic premise was that Canadian firms were “infants,” and therefore, needed protection and help from the government in order begin their walk to maturity. During the early part of this century and even as late as the 1950s and 1960s, Canadian governments were concerned about the availability of financial resources for Canadian firms. It was thought that these measures were necessary in order to promote Canadian industry and to encourage job creation.

The continuing existence of the FPR can only be indicative of Ottawa’s ongoing concern with the availability of capital for domestic firms. With the globalization of capital markets and freer trading environments, Canadian industry, by and large, has almost infinite access to the world’s capital markets. If the federal government insists on maintaining the FPR, it should at least conduct a back of the envelope calculation of cost and benefits to prove its case. A detailed study by David Burgess and Joel Fried of the University of Western Ontario concludes that:

Given the globalization of financial markets, the FPR does not protect what it is meant to protect—a pool of savings for investment in Canada. Instead, it distorts the allocation of credit among firms, and forces agents to use more costly instruments—derivatives—to achieve desired foreign risk exposure. Since the FPR lowers the return on registered savings without benefiting any identifiable group, removing it would be an unequivocal gain to Canadians (Burgess and Fried 1998: 1).

Moreover, if one examines Canada’s balance of payments, it is evident that Canada does not have a problem at-

tracting foreign investment. As table 38 illustrates, while Canadians do invest abroad, foreigners invest in Canada as well, reflecting the global nature of capital (MacKinnon 1999). In fact, the cumulative foreign direct investment in Canada between 1975 and 1996 totaled \$126,481 million. Contrary to the philosophy behind the FPR, these figures indicate that Canadian industry can attract sizable foreign investment.

Given the large pool of pension savings available and the small number of Canadian stocks, it is rather difficult for fund managers to find appropriate equity investments. Recent reports indicate that mutual fund and pension fund managers own shares in individual firms that add up to between 15 percent and 20 percent of the total shares of the company (Ernst & Young 1997; The Conference Board of Canada 1998). In addition, as the Ernst & Young point out:

We estimate that there are currently at least 20 mutual fund management companies in Canada with over C\$1 billion invested in Canadian equities. The largest have around \$10 billion invested in Canadian equities. A similar number of large institutional money managers and larger individual pension plans such as OMERS and the Caisse de Dépot also own multi-billion dollar portfolios of Canadian equities. The concentration of shares in a few hands reduces the liquidity for the company’s shares and makes it difficult for new buyers to obtain shares without bidding up the price substantially. (Ernst & Young 1997: 14).

In order to have an efficient stock market, fund managers need to be able to buy and sell stocks without having a major impact on the price of the shares being traded. The FPR, however, ensures that fund managers will have an undue influence on Canadian stock prices. If fund managers had greater access to foreign stocks, greater diversity of the investment pool would be achieved which would also mitigate any undue influence on Canadian stocks (Ernst & Young 1997).

Moreover, there are no theoretical or empirical reasons to conclude that the removal of the FPR will have a major impact on the real cost of capital in Canada, or induce flight of capital out of Canada. (For a detailed analysis, see Choudhri and Sharma 1996.) Obviously, there could be some short-term transitional impacts. Canada did liberalize its FPR

from 10 to 20 percent in 1991. The evidence from this period of liberalization suggests that investors adjusted progressively to the enhanced investment opportunities (The Conference Board of Canada 1998). Thus, there is no public-policy rationale for continuing with the 20 percent FPR. (For an incisive analysis, see Burgess and Fried 1998.)

Table 38: Canadian Balance of Payments, 1975–1996 (\$millions)

	Direct Investment in Canada	Canadian Stocks	Canadian Bonds	Direct Investment outside Canada	Foreign Stocks	Foreign Bonds
1975	3,445	87	4,404	-1,273	42	-60
1976	2,418	-56	8,790	-990	20	57
1977	3,528	-105	5,365	-1,735	244	-21
1978	4,238	-271	5,411	-2,599	75	-49
1979	6,214	523	3,665	-4,480	-613	31
1980	6,790	1,490	3,751	-4,792	-115	-68
1981	793	-629	11,926	-6,652	8	-31
1982	153	-308	12,970	-2,963	-309	-234
1983	2,467	912	5,075	-3,244	-825	-451
1984	6,156	152	8,260	-4,722	-714	-1,359
1985	1,874	1,551	12,094	-5,274	-1,170	-750
1986	3,964	1,876	23,236	-4,864	-2,738	-179
1987	10,760	6,640	8,067	-9,441	-2,065	-874
1988	7,538	-2,379	16,146	-7,661	-4,409	-74
1989	7,116	3,885	18,187	-6,235	-3,867	-1,602
1990	8,847	-1,735	14,678	-6,110	-2,521	-75
1991	3,301	-990	28,063	-6,685	-10,004	-1,661
1992	5,708	1,036	18,766	-4,339	-10,348	-1,401
1993	6,125	12,056	31,705	-7,570	-12,811	-5,071
1994	11,551	6,412	15,974	-12,453	-9,339	503
1995	14,769	-4,242	29,061	-15,296	-6,197	-997
1996	8,726	8,278	19,075	-11,593	-16,573	-1,878

Source: Statistics Canada 1997: 56.



8 Conclusion

It is clear that the original intent of the Foreign Property Rule, namely the capitalization of domestic firms, is already being achieved through direct foreign investment and increases in the competitiveness of Canadian firms through improved productivity. The ability to attract capital, therefore, has far more to do with the tax structure and productivity of Canadian industry than it does with the ability of individual Canadians to invest retirement savings abroad.

The FPR itself is fraught with operational difficulties such as the challenge of defining what is “Canadian” and what is “foreign” content. The FPR also contains sufficient ambiguity in its application that several methods of increasing foreign exposure beyond the limit imposed by the FPR have developed. The ability to purchase foreign content in “Canadian” funds and the use of derivatives effectively allows investors to increase their foreign exposure beyond the 20 percent limit permitted by the FPR. However, the ability to circumvent the FPR should not be viewed as a substitute for its elimination due to the costs associated with using these methods.

The public social-security system in Canada and, indeed, in most industrialized countries is under increasing pressure from the factors associated with a “greying” population as the proportion of retired Canadians has rises relative to the proportion of workers in the Canadian population. It is critical to understand that those who would prefer to reform the Canada Pension Plan and Quebec Pension Plan have very little room to maneuver. The tax constraints facing the programs indicate that the only remaining reform initiatives will be based on benefit reductions or restrictions in eligibility.

The pressures on the public system means that the private system of saving is of increasing importance. Canadians are relying more and more on private savings to save for their retirement. Unfortunately, the FPR restricts the ability of investors in Canada from receiving the highest rate of return possible while at the same time increasing the risks borne by investors.

As presented in Section 6 and in Appendix D, the cost to Canadian investors of the FPR is real and substantial. The capital accumulation foregone due to the presence of the FPR range from a modest \$1,158 to an extraordinary \$510,306, depending on the assumptions incorporated and the individual profile used.

More striking is the relative comparison of the foregone capital accumulation and the value of total savings. As a percent of total savings, the loss estimates range from a low of 13.6 percent to 118.5 percent, depending on the particular assumptions incorporated. The size of the relative losses are indicative of the substantial cumulative capital accumulation foregone due to the FPR.

Eliminating the FPR is a win-win situation for everyone and a costless decision for government. In fact, eliminating the FPR may increase government tax revenue since its elimination would increase the retirement earnings of retirees, which are subject to tax. At the same time, it would allow individuals to earn a greater rate of return while reducing their respective levels of risk through diversification. Eliminating the FPR means, therefore, greater income, flexibility, and dignity in retirement for Canadians, and the real prospect of increased tax revenues for government.