

THE FOREIGN PROPERTY RULE: A COST-BENEFIT ANALYSIS

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About the Sponsors of the Paper

The Association of Canadian Pension Management (ACPM/ACARR) represents over 700 professionals involved in the management of, and service delivery to a wide variety of Canadian registered pension plans (RPPs) and registered retirement savings plans (RRSPs). Collectively these plans serve the bulk of the 12 million working Canadians covered by RPPs and RRSPs. ACPM's mission is "to promote the growth and health of Canada's retirement income system".

The Pension Investment Association of Canada (PIAC/ACGFR) represents over 135 Canadian pension funds with combined assets in excess of \$500 billion and over 6 million Canadians as beneficiaries. Its mission is "to promote the financial security of pension fund beneficiaries through sound investment policy and practices".

Executive Summary

The Foreign Property Rule (FPR) in the Income Tax Act effectively places a ceiling on the proportion of assets that Canadian Registered Pension Plans (RPPs) and Registered Retirement Savings Plans (RRSPs) can invest outside Canada. The original 10% limit was set in 1971. It was raised to 20% in 2% increments between 1990 and 1994, and further raised to 30% in 5% increments between 2000 and 2001.* These changes in foreign property limits provide an excellent source of evidence with which to assess the costs and benefits of this regulation.

The purposes of this study are three-fold:

1. To assess whether the process of raising the ceiling to 30% has had any negative impact on the value of the Canadian dollar or on the cost of equity capital in Canada.
2. To assess what the costs and benefits might be from completely eliminating the FPR.
3. To assess the degree to which even a 30% FPR limit could compromise the intent of Canadian Pension Plan (CPP) reform to provide Canadians with a more secure financial future.

The study of these three questions has led to the following six key conclusions:

1. The primary motivation for raising the FPR ceiling from 10% to 30% over the 1990-2001 period was to permit Canadians to diversify their retirement savings more efficiently by achieving better risk/reward trade-offs in their RPPs and RRSPs. Indeed, we estimate that the increase in the FPR from 20% to 30% may have added as much as \$1 billion annually to the value of Canadian retirement-related savings.
2. The FPR certainly disadvantaged most of those savers who did not have access to sophisticated and expensive accounting techniques or financial derivatives at both the 20% and the 30% levels. This is evidenced by the fact that when the FPR was at 20%, more than 80% of a sample of approximately 150 large Canadian pension funds had foreign exposure greater than that amount. That proportion dropped substantially when the restriction was raised to 30%, but even at that level at the end of 2001 more than 35% of the funds had foreign exposure above that 30% limit.
3. Meanwhile, we believe that no measurable costs were incurred in moving the FPR ceiling from 10% to 30%. For example, using the Bank of Canada's own model to predict the CDN\$/US\$ exchange rate, we found that the model's predictive power was not improved when the FPR limit was added as an additional explanatory variable. This should not be surprising, given that the increase in FPR-related foreign securities purchases due to the ceiling increase from 20% to 30% amounted to roughly one day's C\$ trading in the foreign exchange markets over the 2000-2001 period. Similarly, the easing of the FPR did not raise the cost of Canadian equity capital. Relative to other major world stock markets, the TSX ranked third in performance over this 2-year period, compared to thirteenth in the two years prior.

* The FPR limit is related to book value of assets rather than market value. Also foreign exposure via financial derivatives is not considered foreign property under the rule.

4. However, while the benefit/cost ratio due to raising the FPR ceiling from 10% to 30% was clearly very favourable, that does not mean it could not be improved even more by eliminating the ceiling completely. We estimate that even at 30%, the cost of the FPR to Canadians remains at between \$1.5 billion and \$3 billion annually. This cost is ultimately borne by the millions of Canadians who are members of employer pension plans, or who save for their own retirement through RRSPs. In total, through their RPP, their RRSP, or both, close to three-quarters of Canadian families continue to be negatively affected by the continued existence of the FPR. Eliminating the FPR completely would be equivalent to giving Canadians a further tax cut worth between \$1.5 billion and \$3 billion per year.
5. Is there a downside to completely eliminating the FPR? We have already shown that such a move is unlikely to have a material impact on the C\$ exchange rate, and it may even have a positive impact on the Canadian equity markets if the move is seen as the final step in the removal of Canadian capital controls. Other arguments in favour of maintaining a FPR that we have heard include (a) that it creates jobs in Canada, and (b) that the beneficiaries of the tax-deferral embodied in RPPs and RRSPs “owe” it to Canadians to “give something back”. We have already noted that the beneficiaries of RPPs and RRSPs are not some small, select, privileged group, but in fact the vast majority of the Canadian labour force. What about the argument that the FPR creates Canadian jobs? Not if it raises, rather than lowers the cost of Canadian equity capital, which we believe, and which the empirical evidence suggests is in fact the case. Furthermore, by effectively lowering the efficiency of pension savings, the FPR is equivalent to a tax on real labour income, and hence a deterrent to higher levels of employment.
6. The corner stone of recent reforms to the Canada Pension Plan is the development of a significant financial reserve in the hundreds of billions of dollars, to be managed by the arms-length CPP Investment Board. If the 30% FPR ceiling continues to hold, the CPP could hold a significant stake in virtually all companies traded on the TSX. Such a situation could be viewed with concern by private investors and would likely compromise the CPP Investment Board’s arms-length relationship with the government. Furthermore, basic investment theory (as well as common sense) suggests that the minimum-risk strategy for this reserve would be to invest it 100% outside Canada. This would eliminate the ‘double jeopardy’ for the CPP of having both future CPP contributions and CPP investment returns tied to the same economy. Norway, when faced with a similar decision a few years ago regarding its National Petroleum Fund (also in the hundreds of billions of dollars), got it right. Its Parliament passed a law requiring 100% of the Fund to be invested outside Norway. Right now, the CPP Investment Board is subject to the strict application of the 30% FPR. Even the World Bank, in its recent review of national pension plans around the world, while praising Canada for the establishment of the arms-length CPP Investment Board, was critical of Canada’s 30% FPR.

In conclusion, since 1990, Canada has adopted a gradual approach to easing its FPR limit upward. This easing has provided material benefits to millions of Canadians without imposing material costs on any constituency. Even without CPP reform, the complete elimination of the FPR now would bring significant additional financial benefits to these millions of Canadians. However, with CPP reform, and the creation of a massive new reserve fund for the future benefit security of all Canadians, the elimination of the FPR takes on an even higher level of urgency. Its elimination now will certainly make ordinary Canadians better off.

The Foreign Property Rule: A Cost – Benefit Analysis

1. Introduction

Canada's income tax act contains a provision known as the foreign property rule (FPR) that restricts the amount of foreign property¹ that can be held in tax deferred savings plans such as Registered Pension Plans (RPPs) and Registered Retirement Savings Plans (RRSPs).² There have been limits on the foreign content of tax deferred savings plans at least since RRSPs began in 1957. At that time no more than 10% of the income from a RPP or RRSP could come from foreign sources. Since 1971 the FPR has been defined in terms of the maximum proportion of assets, measured at book value, which could be foreign property. In 1971 the limit was set at 10%.

This was raised in stages of 2 percentage points per year to a maximum of 20% over the period 1990 to 1994, and subsequently raised to a maximum of 30% in two stages over the period 2000 and 2001. Despite the recognition that the FPR forced savers to take on more risk to achieve any given expected return, or to accept a lower expected return for any risk tolerance, defenders of the FPR have argued that there are substantial benefits if the FPR remains in place. Given this apparent conflict between benefits and costs, the government has taken a cautious approach by altering the existing regulation in stages to ensure that they do not move to a position where the net benefits become negative.

However, between the early 1970s and the 1990s, capital markets -- and economies -- have become more integrated worldwide and these costs and benefits have themselves changed. As a result, the easing of the FPR in the 1990/94 and 2000/01 periods provides us considerable insight into what the actual costs and benefits of this regulation now are. The work of Fried and Wirick (1999) addressed the costs and benefits of the FPR when it was raised from 10% to 20%.³ The current paper updates that work by examining these same aspects as a consequence of the increase from 20% to 30%.

Our research indicates that concerns about the negative effects of relaxing the rule have simply not materialized nor, we believe, will they if the FPR is completely eliminated. Furthermore, the regulation continues to be costly. In 1999, Fried and Wirick (FW) estimated that the cost to Canadians was between two and four billion dollars annually. At 30 % we estimate that this cost has been reduced by between \$500 million and one billion dollars annually, but we find that it still remains substantially more than a billion dollars annually. In this paper we will review the arguments against the elimination of the FPR and use the evidence of the last two years to show that the concerns expressed about raising the limit to 30% from 20% have been unfounded.

In the next section we review the arguments that have been put forward for retaining the FPR. Here we have been more comprehensive than in past studies. This is because some defend the FPR on account of its impact on other government policies such as the level of tax expenditures or foreign investment. In the third section we reexamine the benefits to Canadians of retaining the FPR in light of the information from the most recent increase to 30%. We also address the possible impact of the regulation on other government programs, most notably on the recently established CPP Investment Board and the CPP. We then, in the fourth section, provide an updated estimate of the expected portfolio costs of the FPR at 30%. The final section provides a brief summary and conclusion.

2. The case supporting the retention of the FPR

The defense of the FPR can be broadly summarized by the homily that the tax deferral privilege provided to retirement savings plans represents a subsidy, and those who take advantage of it should, in return, give something back to Canada. The FPR is the mechanism by which this "*quid pro quo*" is assured. Such arguments presume first, that these retirement savings plans do represent a subsidy to some group that is not deserving of it, or that the tax deferral privilege is so generous that normal tax payments are insufficient, in some ethical sense, to compensate the government for this particular subsidy. Second, it supposes that the FPR actually does provide some *net* benefit to Canadians as a whole, or at least to the most deserving among us. This second assertion is critical in defending the FPR since, without it, the regulation can be removed and policy makers can address directly the distributional issues linked to tax deferral plans. Consider first what the benefits of the FPR are supposed to be.

There are two. The first is that it protects our exchange rate and balance of payments. One argument along this line is that if the FPR were to be removed, or at least relaxed, there would be an outflow of capital as Canadians sought to increase their foreign security holdings. This would put downward pressure on the Canadian dollar. Because the Canadian dollar is already "too low", this additional effect would have negative consequences for Canadians in general⁴. A somewhat more sophisticated argument is that the FPR limits capital outflows and thereby limits capital flows in both directions. This is desirable because capital flows are the principal source of instability in the currency. Maintaining the FPR therefore keeps the dollar higher than it otherwise would be, and reduces its volatility.

The second presumed benefit of the FPR is that it provides an assured source of capital to Canadian firms so the cost of capital is lower than it otherwise would be. This in turn means greater investment and higher real wages and/or increased employment. Without the FPR, it is argued, the capital would go abroad and we would, as a nation, be poorer for it.

Some proponents of the FPR also argue that a less tangible, but just as real, benefit of the FPR is a more equal distribution of income. In particular, they argue that tax deferred savings

plans are inherently unfair because the major beneficiaries are the wealthy, and not ordinary Canadians. According to this view the FPR is important from the standpoint of fairness because it imposes a cost on the relatively well off users of these plans. As a result, they will make less use of them⁵ and there is less erosion of the tax base so the government has more resources to devote to the needs of the relatively poor non-users.

Next, there appear to be a number of ideological arguments that have been made that we cannot help but believe lie behind some of opposition to the removal of the FPR. One that continues to have some currency among a sector of the population is that *any* increase in foreign ownership of Canadian companies is undesirable. If the FPR is removed, then there will be at least some outflow of capital by pension funds and RRSP savers. If Canadians are net sellers of Canadian equities then foreigners must be net buyers, and this increase in foreign ownership is to be avoided at all costs. A somewhat different argument, also linked to the role of the state, is that Canadians do not know enough about foreign markets to make wise investments there, and the state should intervene to protect Canadians from the potentially bad decisions they might make in foreign markets.

Finally, proponents of the FPR recognize that there are some costs. The most apparent of these is that the return on pension savings may be less than it otherwise would be and/or that pension assets are not as well diversified as they might otherwise be. The argument is that these costs are small, first because many plans hold significantly less than the maximum allowable foreign content, and second because diversification costs can be mitigated by using futures contracts on foreign stock market indexes.⁶ Thus an individual or pension fund that wants additional international diversification is actually not constrained by the FPR; foreign exposure can be increased without increasing the amount of foreign property held. In effect, the resources stay within the country, and simultaneously pension funds obtain the necessary diversification. Thus the costs of the FPR are small relative to the above-mentioned benefits.

As best we can tell, the above set of particulars spans the arguments that have been put forward, explicitly or implicitly, to defend the FPR. It is our view that the arguments are not consistent with the evidence amassed from 1990 to the present. We now proceed to the task of documenting our view.

3. Re-examining the benefits of the FPR

3.1. The Exchange Rate

There are two parts to the argument that removal of the FPR would have a negative impact on the Canadian dollar: first, the dollar would have a lower value; and second, it would be more volatile. Neither of these is consistent with the evidence. First of all, the magnitude of the shift toward foreign assets that occurred over the period 2000/02 when the limit was raised from 20%

to 30% was too small to credibly suggest that the FPR had any measurable impact on the exchange rate. Second, evidence from other countries' experience with the removal of capital controls suggests that if there were to be any effect it is just as likely to be to increase the value of the dollar as to decrease it.

To see that the magnitudes of the capital flows would be too small relative to the foreign exchange markets, first note that the Bank of Canada estimated that the Canadian foreign exchange market had an average daily volume of over 50 billion dollars⁷. Using the PIAC survey of the largest Canadian pension funds that, together, accounted for roughly 500 billion dollars of assets, foreign exposure⁸ increased over these two years by 4.8% of assets.⁹ The value of monies in tax deferred savings plans that are subject to the FPR is estimated to be approximately \$1.1 trillion at the end of 2000.¹⁰ If the behaviour of all holders of these assets is similar to that of the members participating in the PIAC survey, the increase in foreign exposure in total would be in the neighbourhood of 53 billion dollars over two years. Thus the portfolio adjustment due to the revision of the FPR amounted to approximately *one day's trading* on the foreign exchange market over a two-year interval. It strains belief that this potential capital flow could have more than a trivial impact on either the level or the volatility of the exchange rate.

To provide further evidence that the FPR did not impact the exchange rate, we re-examined the Bank of Canada's exchange rate equation that is used to explain the dollar's movement over the period 1973 to the present¹¹. This equation uses real effects – the ratio of the price of a representative bundle of non-energy commodities exported by Canada to the price of U.S. output (as measured by the U.S. GDP deflator), the ratio of the price of a representative bundle of energy goods exported by Canada to the U.S. GDP deflator, and the short term interest rate differential between Canada and the U.S. – to explain movements of the *real* exchange rate, defined as the nominal exchange rate times the ratio of the price levels in Canada and the United States. If the easing of the FPR over the periods 1990-94 and 2000-01 had any influence on the real exchange rate, changes in the FPR limit would be statistically significant in the regression equation. They were not¹².

Third, Bartolini and Drazen (1997) provide evidence suggesting that when a nation removes capital controls on its own citizens, it actually leads to a net capital *inflow* rather than the anticipated outflow. Why? Because non-residents see such a policy change as a signal that if the government is willing to treat its own citizens better it is likely to treat non residents' international financial transactions better as well. The FPR is just such a capital control on citizens and its total removal would likely lead to the same result documented by Bartolini and Drazen.

Fourth, the FPR does not, in itself, have any direct bearing on the exchange rate. In particular, as we have shown elsewhere (Burgess and Fried (1999)), the use of the futures markets to obtain foreign exposure has *precisely the same effect on the exchange rate* as would a

(hedged) purchase of the underlying securities. What matters is not the ownership of foreign property *per se*, but whether or not that asset is hedged into Canadian dollars. If it is, there will be *no* impact on *net* capital flows; if it is not, there may be¹³. As a result, the impact of pension contributions on the exchange rate depends upon expectations about real factors and the future course of monetary policy and its impact on inflation and interest rates, *not* on the amount of foreign equity exposure desired by Canadian savers.

The above information relates to the move from 20% to 30% foreign property. What does that suggest about the consequences of a complete removal of the FPR? We maintain that there would be no significant impact on either the level or volatility of the exchange rate. First, after any period when the FPR limit has been raised, pension funds in the aggregate did not increase their foreign exposure by as much as they were permitted to in any given year. In effect, portfolio managers for pension plans act slowly in making changes in portfolio direction. Indeed, given that the diversification gains from going from 20% to 25% to 30% are, at the margin, greater than for increasing foreign exposure an equal amount above that level, there is even less likelihood that the rate of increase will be more rapid than in the earlier periods. Thus the magnitudes involved in portfolio shifts would have even less potential for affecting the exchange rate.

Second, savers, and pension managers, already have the opportunity to hold as much foreign currency as they wish in their pension assets through their ability to take unhedged positions in foreign currency. There is no reason why these positions would increase significantly simply because there is a new, added mechanism that allows for unhedged positions. Finally, the complete removal of the FPR sends an even stronger signal that the Canadian government is sufficiently confident about the underlying conditions of the economy - low inflation, a declining debt/GDP ratio, a positive climate for investment etc. – that it is willing to let the rule of law govern international transactions between its citizens and those in other countries. As a result those forces that could cause a capital inflow will be much stronger than in the case of the partial easing undertaken in the 2000/01 period.

Relaxing the FPR over the past decade has given Canadians increased opportunity to diversify their pension savings. Fears about adverse effects on the exchange rate have proved to be unfounded. Exchange rate concerns can no longer be used as a reason for maintaining the FPR.

3.2. The Cost of Capital

There are two parts to the argument that the FPR helps to increase investment and employment in Canada. The first part is that the FPR increases the pool of capital available to Canadian firms and therefore decreases their cost of capital. The second part is that the subsequent increase in investment will increase wages and/or employment. Fried and Wirick (1999)

addressed the issue of the FPR's potential impact on the cost of capital. To have any impact Canadian financial markets must be segmented from, and/or at least be large relative to the rest of the world. Neither of these conditions holds for Canada.

Canada's financial markets constitute less than 3% of world markets. Roughly half of the TSX's 100 largest firms are also listed on US markets ensuring that prices of these securities are explicitly determined internationally. But these, in turn, are substitutes for those Canadian securities that are not inter-listed. As a consequence, the hypothesis that the prices of Canadian securities are set internationally continues to be a reasonable description of the data¹⁴. It was also pointed out that, to the extent that there is any market segmentation, the removal of a regulation such as the FPR could actually lead to a net capital inflow and a decrease in the cost of capital.

What evidence is there that the easing of the FPR from 20% to 30% raised the cost of capital in Canada? Looked at naively, some might argue that the Canadian stock market performed less well in 2000 and 2001 than in the prior two years. However, to link the FPR to this decline requires that the Canadian markets, indeed the Canadian economy itself, be completely segmented from the rest of the world. This clearly is not the case. Given that linkages exist, the proper measure is how well the Canadian market performed relative to financial markets in other countries. Among the 15 developed markets tracked by *The Economist*, Canada ranked thirteenth over the 1998/99 period, and ranked third over the 2000/01 period.¹⁵ While there are many other factors at play, such a record is hardly consistent with the view that there was a flight from Canadian equities because of the easing of the foreign property rule.¹⁶

What about the yield on bonds? Did the easing of the FPR cause bond yields to increase? In fact, the yields on long-term bonds were, on average, lower in 2000/01 than in the preceding two years. However, the yield spread between Canadian and US long-term bonds did rise by roughly 25 basis points, from -3 basis points in December 1999 to 22 basis points in December 2001.¹⁷ Nonetheless, it is unlikely that this had anything to do with the easing of the FPR. First of all, the share of domestic bonds in pension portfolios effectively remained unchanged between the end of 1999 and the end of 2001, which hardly suggests that these portfolio shifts caused the Canadian – US bond yield spread to increase.¹⁸ Second, to the extent that savers chose to hedge their overseas investments into Canadian dollars, there would be an offsetting capital inflow into Canadian bonds and bills that is not recorded in the portfolios of pension funds and RRSPs.¹⁹ In effect, the impact of the easing of the FPR suggests a net increase in the demand for Canadian debt instruments, not a decrease.

That the easing of the FPR had little if any effect should also come as no surprise given the magnitude of the portfolio shifts. Our best estimate of the shift to foreign assets is that over 2000/01, increased foreign exposure was under 5 % of total assets.²⁰ Thus we are talking about a shift of roughly \$53 billion. Even assuming that there was no increase in foreign demand this

is trivial relative to the market capitalization of more than \$2 trillion in the combined Canadian equity and debt markets. Assertions that the increase in the FPR limit was the cause of any increase in the cost of capital – to the extent that there was any – suggests a very small tail wagging a very large dog.

There is a further point that can be seen in the capital markets that bears on the FPR. The absence of diversification opportunities was especially acute over the last two years because of what has been called, in Canada, the Nortel effect²¹. Not only were holders of RRSPs and RPPs required to place much of their money in one market, but also placing it in Canadian equity meant, on average, making a very large bet on one specific security, Nortel, that, at one point, represented over one third of the market capitalization of the TSE300. The impact of the bursting of the tech bubble no doubt hit these RRSPs especially hard since Nortel was one of the few ways that Canadians could use their pension savings to participate in a diversified portfolio that had a representative amount of technology. When the bubble burst, world technology markets, as represented by the NASDAQ, fell by roughly 75%. Nortel fell more than 99% and Canadians, who would have preferred to invest over a variety of technology companies, were subject to the consequences of taking this diversifiable single firm risk. The Nortel effect reflects the consequences of the FPR in forcing pension managers to act imprudently.

There is a final point that may, under current rules, cause problems in the future. In 1999 the CPP Investment Board was established and began accumulating both Canadian and foreign equities using either new contributions or proceeds from coupons and principal of federal and provincial bonds to make those purchases. At the end of June 2002 the Board held \$17 billion in these securities. Securities under management by the Board are expected to increase to roughly \$300 billion over the next two decades. If the Board has a portfolio allocation similar to the pension industry as a whole, then under the current FPR regulation, the demand for Canadian equity by that organization would be well over \$100 billion.

Given the expected growth in the Canadian equity markets, this amount would represent roughly 5% of the market capitalization of the TSX. It would seem that the CPP Investment Board would then hold a sufficient amount to be seen as a/the major shareholder in virtually every security traded on the exchange. Many in the Canadian economy would view this as counter to the best interests of the country and an inappropriate concentration of power in the hands of a government corporation. Indeed, the political independence the CPP Board now enjoys could easily be lost²². The obvious way to avoid this is to permit a greater proportion of the CPP portfolio to be in foreign securities.

In summary then, changes, if any, in the cost of capital in Canada over the past few years cannot be attributable to the easing in the FPR: the magnitude of the capital flow has been too small to have exerted an influence on it. The integration of the Canadian and world capital

markets suggests that it would not have an influence even if the capital flows were substantially larger. Justifying the FPR by asserting that doing so decreases the cost of capital is inconsistent with both theory and the data obtained from the recent change in the FPR from 20% to 30%.

3.3. Redistribution: a subsidy to the wealthy?

The reason why policy makers want to decrease the cost of capital is to encourage investment and thereby increase employment and/or wages. However, the discussion in 3.2 suggests that, if anything, the FPR kept the cost of capital higher than it otherwise would have been. But *even if* the FPR had lowered the cost of capital, the net effect would likely have been to *lower* employment and/or real wages rather than increase them. This is because first and foremost the FPR is a tax on the firm's use of labour, causing firms to substitute capital for labour in the production process.

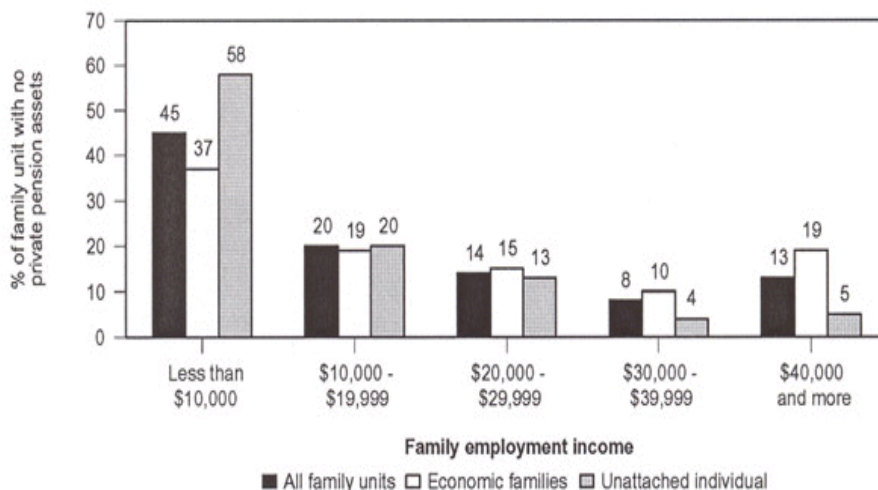
To see this, note first that eligibility for RRSPs depends directly on wage income. Anything that detracts from the return on the savings in these plans impinges directly on the benefits one receives from that wage income. Because the FPR reduces the returns on these plans, it is a tax on those entitled to them, namely workers. Consequently the FPR can be treated as a tax on wage income broadly defined to include benefits as well as money wages, and those "taxed" are the primary losers from the FPR.²³ Indeed the FPR operates in an almost identical fashion as "Employment Insurance" (EI) premiums in creating a disincentive to employment. Both of these initiatives increase the *effective* wage that employers must pay to provide a given *net* wage and benefits package to the worker. Note further that because the CPP is also subject to the FPR, the regulation negatively affects the effective real wage of all working Canadians whether or not they are members of an RPP or hold an RRSP.

By taxing wage income, the FPR is not likely to be successful in redistributing income from the wealthy, and indeed, it is not. But it is the "subsidy" implicit in tax deferred savings plans, not the FPR, that some perceive as redistributing income *to* the wealthy. So, do tax deferred savings plans represent programs designed specifically for the rich? The most recent survey of the wealth of Canadians (Statistics Canada (2001a)) determined that 71% of Canadian family units held some private pension savings²⁴. Indeed this is one of the most broadly based of government programs.

Who does not participate in these plans? There are effectively two characteristics that affect that decision, income and age. There are good reasons for this. Low income will lead to less use of the private pension system for two reasons. The first is that the support for seniors in Canada is quite generous. With income from OAS and GIS, a couple could receive roughly 55% of a \$30,000 salary or, for a single individual, a \$20,000 salary.²⁵ A rule of thumb in the pension industry is that a retired family unit requires 60% to 70% of its pre-retirement income to maintain the same life style after retirement.²⁶ In effect, therefore, those with average incomes

below these levels will receive from government transfers sufficient support to maintain their pre-retirement consumption levels without the need for personal savings. Indeed, as Figure 1 shows, the bulk of those individuals without a private pension plan have incomes under \$30,000.

Figure 1: Most family units aged 25 to 64 with no private pension assets had earnings of less than \$30,000

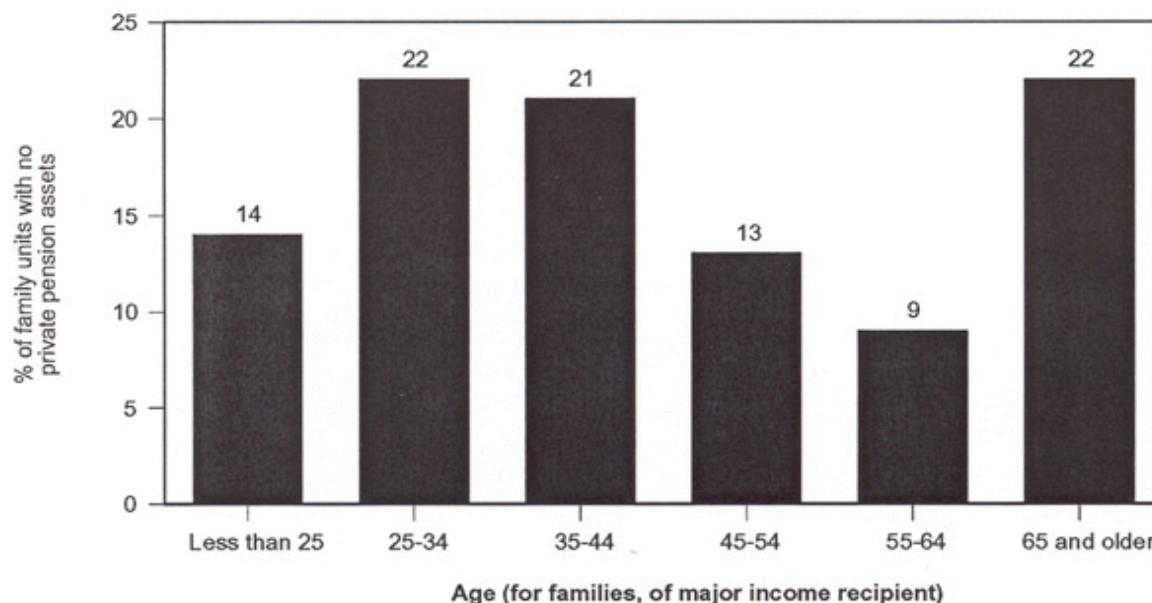


Reproduced from Statistics Canada (2001a), Chart 5.1, p. 20.

Furthermore, the figure shows that the group that uses these plans the most is in the \$30,000 to \$40,000 income range, hardly the wealthiest of Canadians. In fact, given the contribution cap of \$13,500, (restricting those with incomes over \$75,000 from the proportional potential benefits received by those with lower incomes) it would appear that the program is focussed on, and used most by, the Canadian middle class – the ordinary Canadian.

The second reason income matters is linked to the issue of age: younger Canadians are less likely to have private pension assets because their current income is below their average expected lifetime income. Deferred tax savings plans act as a means of tax averaging, taking the deferral when income and the marginal tax rates are high and, to the extent possible, withdrawing funds when income and marginal tax rates are low so as to smooth one’s consumption expenditures. It makes little sense to save when you are young, raising a family and most need to use the money and then pay taxes on those savings at a higher tax rate in the future. Figure 2 confirms that it is the relatively young, with temporarily low annual incomes, that are less likely to have these private pension assets.²⁷

Figure 2: The majority of family units with no private pension assets were under 45



Reproduced from Statistics Canada (2001a), Chart 5.2, p. 20.

Who uses the private pension plans only addresses part of the question of who benefits the most from them. It also matters how much is held in these plans. Here it is true that the higher income groups have more private pension assets, both absolutely and as a proportion of their after tax income.²⁸ However, *even if* these programs benefit better off Canadians disproportionately, the use of the FPR is a completely inappropriate instrument to use to compensate for this. If the distribution of gains is regarded as not politically desirable, policy makers should redesign the program to address that specific issue. To address the “problem” by deliberately making it a poorly run program is certainly counterproductive. Using the FPR to reduce the benefits to the wealthy is akin to establishing a program with a fixed budget and then destroying a portion of the money allocated to it so that the beneficiaries don’t get “too many” benefits. Surely efforts by the government to design sensible programs directed at redistribution would be preferable.

Irrespective of whether or not the distribution of benefits from deferred savings plans is “proper”, it is the middle class that would most benefit from the removal of the FPR, with no loss of benefits to any other income group. High-income groups have a greater ability to diversify their *total* asset holdings into foreign assets because a greater proportion of their financial assets are held outside these tax-deferred plans.²⁹ They are free to invest these assets however they wish. Lower income groups have a reduced ability to do so, largely because they have been unable to accumulate financial assets outside these plans.³⁰

Finally, it should be stressed that CPP/QPP are subject to the same foreign property restrictions that RPPs and RRSPs face. Because the FPR reduces the return on contributions to all three of these programs, and CPP/QPP is expected to become partially funded at a targeted 25%, it follows that either contributions will ultimately have to be greater and/or benefits smaller with the FPR than if it were eliminated. Thus, all working Canadians are negatively affected by the continued existence of this rule.

3.4. Tax Expenditure: A Costly Program?

The argument in Section 3.3 addressed the question: all else equal, who receives the benefits from tax deferred savings plans? There is an implicit cost as well, *viz.* the foregone taxes that might otherwise have been collected in the absence of the tax deferred savings plans. These are called tax expenditures and are tracked annually by the Department of Finance (2001). Presumably, revenue that is uncollected cannot be used for other purposes, so the tax expenditure can be treated as the cost of the program that is administered in a somewhat different manner than usually done with government expenditures.

RPPs and RRSPs combined, constitute one of the largest measured tax expenditures recorded by the government. However, as before, *even if* this tax expenditure is regarded as too large, or one holds the view that tax deferral programs represent poor public policy, that is no justification for imposing the foreign property rule. Policy makers could contract the program and/or alter the eligibility requirements rather than embrace poor program design such as the FPR *if*, indeed, policy makers take these revenue and distribution criticisms seriously. Nonetheless, given that the tax expenditure argument has been used to support the FPR, at least some remarks are called for.

First of all, last year the Department of Finance finally took to heart the criticism that its methodology in measuring the tax expenditure of deferred tax plans was seriously flawed and provided new estimates that took many of these criticisms into account. The corrected measures of the tax expenditure ranged from 44% to 53% of the old measures used by those that criticized these programs. For instance, in 2000 the tax expenditure under the old cash flow measure amounted to \$14.25 billion whereas the corrected, present value calculation for that year was \$7.29 billion.³¹

While it is gratifying that massively overstated magnitudes will no longer be used to assess the costs of these private pension plans, it remains the case, acknowledged even by the Department of Finance, that the new values still overstate the increase in revenue if the tax expenditure were removed. This is because the measures calculated assume that behaviour does not change if the program is eliminated. Not only will behaviour change because relative, after tax, prices will be altered, but also because there will be changes in tax law in an attempt to provide at least some of the services that citizens expect from these programs.

Further, there is nothing in the measurement of tax expenditures that presumes that the existing tax structure, excluding the tax expenditure program under consideration, is optimal in any sense. Those tax expenditures were put in place precisely because there was a political consensus that without them the existing structure would not be optimal. The use of tax deferral for retirement plans has been in place for over 50 years and, indeed, virtually all OECD countries provide some form of tax relief for pension savings, either in the form of tax deferral on contributions, as is done in Canada, or in the form of tax relief on the withdrawals from such accounts upon retirement. Something must be desirable about such plans if they have persisted for so long and have achieved such universality.

Besides providing an incentive for citizens to plan ahead for their retirement, we would argue that such plans are essential for an income tax system. In particular they play an important role in providing a progressive and administratively simple mechanism to transform the tax base from that of current income to one of *lifetime* average income and/or consumption. In its absence some other tax averaging mechanism that is less simple would take its place. RRSPs are especially well suited to serve this purpose because they can be cashed at any time in response to short term fluctuations in taxable income. RPPs are less capable of handling these fluctuations in income because of locking in regulations, but most members of these plans generally have some opportunity to hold RRSPs as well.³² Canada should be justifiably proud of the comprehensive nature of its two basic plans. Their full integration provides equitable opportunities for all working Canadians.

In summary, then, the use of the FPR to address distribution and/or cost issues linked to tax deferred savings plans can be seen as an extremely inefficient use of scarce government resources. It effectively builds in a program design flaw that wastes resources as a means of limiting a program's attractiveness. The benefits that come from this use of the FPR are essentially negative relative to alternative means of obtaining a similar result by directly restructuring the size and/or eligibility of the program itself.³³

We would further question the implicit assumption that deferred tax plans favour the rich or that they are too expensive in terms of the government revenue foregone. Their persistence in Canada, and their almost universal application among OECD countries, strongly suggests they provide a progressive and cost effective method of providing desirable services to the citizens of the country. Finally, our reading of the data suggests that it is ordinary Canadians rather than the wealthy that would receive the bulk of the benefits from the removal of the FPR. We can find no net benefits related to income distribution or program costs that can be obtained by retaining the FPR on the assets in these plans.

3.5. Appearances and the State

It is difficult to respond to arguments based on poorly articulated assumptions about the role of the state. Yet a number of arguments in support of the FPR appear to be based on just such assumptions. The two arguments mentioned in Section 2, paternalism and foreign ownership, are just such examples. The statement that the government has imposed this constraint for investors' own well being appears to rest on the assumption that savers do not have the ability to choose good foreign investments, and our regulators cannot protect them if those investments go sour.

But Canadian investors have access to professional portfolio managers who have a solid understanding of both the foreign regulatory environments and the firms that trade in those markets. Furthermore, it is in the interests of these mutual fund and/or institutional portfolio managers to keep the interest of their clients foremost if they wish to maintain the clients' business. Indeed, part of their fiduciary duty is to ensure that the portfolios provided are sufficiently diversified. Such a practice does not appear to be part of the government's mandate in protecting the investor; otherwise the FPR would have been removed years ago. The FPR restricts the ability of the saver to fully diversify and, as all of the previous arguments made for its retention attest, it was not established with the individual investor's best interest in mind.

The argument against foreign purchases of domestically issued assets is also an argument that does not ring true today. Restrictions on the flow of goods, services and capital are falling throughout the world because governments find that removing these barriers leads to an improvement in standards of living. Those who argue for constraints on foreign ownership like the FPR need to show the rest of us why we should pay for their particular prejudices through a diminished level of retirement income. Not only does the Canadian government encourage foreign investment, there are more than sufficient institutions and regulations in place in Canada that address the issue of foreign *control*. Limiting Canadians' ability to own foreign securities hardly seems like an efficient and focussed way to address that question.

There is a third issue regarding the relationship between the state and its citizens that is not often remarked on by defenders of the FPR. This is the level of respect for the statutes of the country. In the case of the FPR this is brought into focus by the use of derivatives to obtain the diversification denied by the FPR.³⁴ As we have noted before, the impact on the exchange rate and net capital flows of the purchase of currency hedged foreign assets directly in the spot market or indirectly through the futures market is identical. Consequently, in a very real sense, insistence on the maintenance of the FPR is only one of appearance rather than substance except insofar as the cost of operating in the two markets differs. Indeed, the extent that pension funds are exposed to foreign markets averaged 30.7% at the end of 2001 as opposed to the 21.9% value of foreign property that Statistics Canada reports for trustee pension funds.³⁵

But these are averages. Given that different pension boards have different objectives, face different constraints and are willing to undertake different levels of risk bearing, not all faced the same degree of foreign exposure. Indeed, in 1999 more than 80% of the largest 150 pension funds in Canada had foreign exposure *greater than* the 20% foreign property limit. None of these firms violated the letter of the law, but if that 20% had any meaning, then these 80% were certainly violating the spirit of the regulation. The increase in the limit to 30% at least brought half of these funds “morally” on side, as only 35.7% of the funds had more than 30% foreign exposure at the end of 2001.

It is heartening to see that, with Canadian inventiveness, pension funds have found methods to mitigate at least some of the costs imposed by the FPR. It is disheartening to recognize that regulations are in place where so many must violate the spirit, if not the letter, of those regulations in order to do their fiduciary duty. It does not increase one’s respect for either the law or the lawmakers.

4. Costs of the FPR

To this point we have argued that there is no evidence to suggest that the FPR provides any benefit in respect to the exchange rate, the cost of capital or the level of employment. We have also indicated that it is an inappropriate instrument to either compensate for any distributional issues linked to tax deferred savings plans, or to address foreign control. In this section we would like to reassess the question of the cost of the FPR to those Canadians that make use of these tax deferred plans. We take as our point of departure the estimates of Fried and Wirick that were made when the FPR constraint was set at 20%. These estimates put the cost of the FPR in the range of two billion and four billion dollars annually. These costs were composed of two types, the opportunity cost of insufficient diversification and the increased level of transactions and administrative costs linked to operating under that regulatory regime. We consider these in turn.

FW estimated that the opportunity cost of the regulation due to the inability to fully diversify was between one and three billion dollars annually, or alternatively, between 8 and 23 basis points on the total assets in tax deferred savings plans. To obtain that estimate they first calculate the risk and expected return on a portfolio roughly corresponding to a representative portfolio held in these plans. Next they generate the expected return on an efficient portfolio that has the same level of risk as the representative portfolio and is not subject to the FPR. The difference between the two expected returns represents the maximum expected gain that could come from removing the FPR and consists of two parts.

The first part is the change in expected return between the unconstrained efficient portfolio and an efficient portfolio that is constrained to have no more than 20% foreign property. The second part is the difference in expected return between the constrained portfolio and the actual portfolio held in

tax-deferred accounts.³⁶ They argued that this latter amount did not necessarily represent an inefficient allocation, but was the result of some well-recognized offsets. These included home country bias, the use of derivatives, and the foreign content in individuals' total portfolios that are not in tax-deferred plans.³⁷ The estimate is the result after taking these elements into account.

Rather than go through that entire exercise now that the FPR is 30% instead of 20% we will instead ask what proportion of the difference between the unconstrained efficient portfolio and the efficient portfolio when constrained to 20% was removed by the move to 30% foreign property. We then reduce the FW's estimate of the diversification cost of the FPR at 20% by that proportion to get the cost of the FPR if it remains at 30%.

For our calculations we used data on the quarterly returns on the TSE300 Index, the S&P 500 Index, the MSCI EAFE Index, the SM Universe Bond Index and the SM T-bill Index over the period 1976 Q4 to 2002 Q2. All returns are in Canadian dollars and all investments in foreign property are unhedged. This differs somewhat from that used in FW. First the SM Universe bond index was used instead of the long bond rate. We also suppressed the holding of foreign bonds in the portfolio in recognition of their virtual absence in pension plan portfolios and their absence in the efficient portfolios generated by FW. We also used the historical returns on these asset classes in addition to the expected returns used by FW. Finally, we used 3 sets of portfolio weights to obtain reference risk levels of the portfolios Canadians held. The "most risky" held 70% equity and 30% bonds and the "least risky" held 30% equity and 70% bonds. The third represented the average portfolio held by pension funds reporting in the PIAC survey at the end of 2001.

The results indicate that between 20% and 50% of the expected diversification gains from removing the 20% FPR were realized in moving to the 30% constraint. The greater realization from the move to 30% was the low risk (70% bonds) portfolio. This is not surprising, since if these portfolios continued to hold only 30% equity there would not be a need to hold more foreign equity. However, in the process of diversifying under the 30% FPR, total risk falls for a given level of equity. Thus the pension fund is able to hold greater levels of equity without increasing its risk level above what it undertook previously with a 20% FPR limit. For the representative pension fund reporting in the PIAC survey, the proportion of the expected gains from going to 30% from 20% foreign property was roughly 33% of the possible gain from full elimination of the regulation. Thus the cost of not removing the FPR completely is roughly two thirds of the FW estimate. In other words the average diversification gains available from removing the FPR now is in the range of 670 million dollars to 2 billion dollars annually.

The second cost that FW include in their analysis is the regulatory and administrative cost of the FPR, which they conservatively estimate at 8 basis points. The principal cost here relates to the management expenses charged by mutual funds in Canada relative to the level of fees in the United States. The only significant regulatory difference between the two countries that applies

to pension and mutual funds appears to be the FPR, and indeed, one can argue that the regulation acts as a barrier to entry in that industry. In particular, it reduces the demand for those types of portfolios in which foreign suppliers have a comparative advantage. The lack of competition that arises can in no small part be a cause of the extra 75 basis points in management expenses Canadians pay relative to their US counterparts. So long as the FPR remains we have no reason to believe that these costs are significantly less now than when the FPR was at 20%.

When we combine the regulatory cost with the cost of less than full diversification, our estimate of the cost of the FPR remaining at 30% is between \$1.5 billion and \$3 billion annually. That is a heavy price to pay for the benefits that the FPR is supposed to provide. Indeed, one way to gauge the magnitude of this cost to users is to compare it to the tax expenditure of \$7.25 billion they are assumed to have received from these plans in 2000. If we accept this estimate of the budgetary cost, the added benefit to users of these plans if the FPR was eliminated would be between 20% and 40% of the existing governmental budgetary cost³⁸. This can occur with virtually no increase in the cost of the programs to the government. That would be an impressive increase in the efficiency of a government delivered program used, directly or indirectly, by virtually every working Canadian.

Before concluding, there is one other cost of the FPR related to diversification that we have not quantified. The investment arm of the CPP is expected to accumulate several hundred billion dollars over the next two decades and these funds are also subject to the FPR. However, the proper diversification strategy for that institution is to invest virtually 100% of those assets *outside* of Canada³⁹. To see this, note that the plan has two basic sources of income: that earned from investments and that from contributions from working men and women. The level of contributions depends on the state of the Canadian economy. If investments are also restricted to domestic sources, they too will depend upon the state of the Canadian economy. If the Canadian economy has difficulty then both income sources will decline; if it does well, both sources do well. In effect, investing domestically increases the volatility of the income flows to meet the stable payments to Canadian retirees. This hardly serves as a good diversification policy and is akin to requiring a pension plan to invest the bulk of its assets in the stocks and debt of the plan sponsor. Indeed, the law forbids private pension plans from acting in that manner⁴⁰.

To require the CPP to act contrary to what regulators consider prudent for private companies is indeed puzzling and compromises the CPP Board's mandate to act in the best interests of CPP contributors and beneficiaries, and to ultimately establish a financially sound pension plan for all Canadian workers. Norway, for one, has got it right. They require that all the investments of its National Petroleum Fund (also amounting to several hundreds of billions of dollars) be invested outside Norway to avoid having the beneficiaries of the fund have both their wages and the return on investments dependent on the same events. Recently the World Bank⁴¹ has had high

praise for the Canadian pension system relative to other plans throughout the world with the exception of the continued use of the FPR. It would indeed appear that the FPR is an anachronistic relic whose time has passed.

5. Concluding Remarks: What do savers “have to give back?”

This brings us to the overarching defence of the FPR: “The government has provided Canadians a special subsidy in the form of tax deferred savings plans. We should therefore give something back to Canada. The FPR is the mechanism to ensure that we do so.” In light of the evidence we fail to see the logic of this position.

It is true that tax deferred savings plans are preferred by virtually all Canadians, but we have argued that this is not a “special subsidy”. Rather it is an integral part of a progressive and efficient tax system that recognizes that lifetime income is a preferred tax base compared to annual income. These tax deferred plans are an efficient way of providing that base, as evidenced by the almost universal use of such systems by member nations in the OECD. Furthermore, these plans provide benefits across the entire spectrum of Canadian society and are seen to be particularly attractive to the ordinary Canadian rather than a special benefit to high income Canadians. Not only that, new evidence from the Department of Finance makes it clear that the “budgetary cost” of such plans is no more than *half* of what has previously been reported. It was, in part, the high budgetary cost estimates that proponents of the FPR used to justify making these programs less efficient than they could otherwise be.

What do Canadians “pay”, in the form of the FPR, to have access to these programs? *We do pay* by a decrease in real wages, broadly defined to include benefits, and likely some decline in employment. *We do pay* in the form of less competitive and efficient capital markets, increased costs of regulation and bearing more risk, all of which lead to lower retirement incomes because of the decreased ability to diversify at reasonable cost. We estimate that this cost is in the range of \$1.5 billion to \$3 billion annually.

What do we, as Canadians, get in return for these payments? *We do not get* a higher or more stable exchange rate. *We do not get* more domestic investment or employment. *We do not get* a more equitable distribution of resources, because the FPR constrains the middle class to a much greater degree than the wealthy. *We do get* a greater familiarity with derivative securities. *We do get less* respect for lawmakers and bureaucrats who maintain and enforce laws that continue to cost Canadians an expected \$1.5 billion to \$3 billion a year.

The cautious approach used by past governments of easing the FPR first from 10% to 20% and later from 20% to 30% now has the potential to pay off. We now have a large body of evidence and theory that confirms that the FPR has been a very costly regulation that provides little if any benefits. It would be a tragedy if that information were not acted upon. Ordinary Canadians will certainly gain with the complete removal of the Foreign Property Rule.

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Endnotes

¹ Foreign property is defined as foreign real property, foreign cash, foreign bonds and equities issued by firms or other organizations not domiciled in Canada. The liabilities of certain International bodies are exempt presumably because the Government of Canada, among others, guarantees the debt of those institutions.

² Two smaller programs, Deferred Profit Sharing Plans and Registered Retirement Income Funds (RRIFs) are also subject to the FPR. RRIFs are the larger of the two and were estimated at \$60 billion in 1999 by Fried and Wirick (1999).

³ Indeed there have been a number of past studies that have addressed the issue of the costs and benefits of the FPR. In addition to FW, work by Ambachtsheer (1995) and by Burgess and Fried (1999) examine the cost of the FPR remaining at 20%, and Ambachtsheer (1984) looks at the costs and benefits when it was set at 10%.

⁴ To paraphrase, even if it was desirable to remove the FPR, now is certainly the wrong time to do so.

⁵ Even if the FPR does not cause RRSP and RPP contributions to fall, it does reduce the investment returns and if the beneficiaries are the relatively well off this improves the distribution of income.

⁶ Derivatives are regarded as foreign property but have a net asset value of zero because they are promises to purchase foreign assets some time in the future. Managers roll over the futures contract before maturity so that they never take delivery of the underlying assets. The Canadian content is retained because the assets backing the contracts are generally short term paper issued by Canadian governments or firms and are therefore Canadian property.

⁷ Bank of Canada (1999), p. 49.

⁸ Foreign exposure is the sum of foreign property plus the market value of the assets backing derivative contracts for foreign securities. The PIAC survey includes these latter amounts whereas the data from Statistics Canada does not. As we note later, the value of these derivatives and their backing amounts to approximately 8% of the portfolios of these pension funds.

⁹ Foreign *exposure* rose from 25.9% at the end of 1999 to 30.7% at the end of 2001. The market value of foreign *property* for trustee RPPs reported by Statistics Canada (2001b) rose 1.7%, from 20.2% to 21.9%, over this same interval.

¹⁰ Statistics Canada (2001b), p. 4, estimated that RPP assets amounted to \$818 billion, RRSP assets excluding self-administered RRSPs were \$285 billion, and CPP/QPP assets were \$57 billion. Investor Economics has estimated that self administered RRSPs were \$152 billion at the end of 2000. Roughly \$211 billion of the RPPs were not subject to the FPR – Insurance company contracts, consolidated revenue funds, and Government of Canada Annuities. This gives an estimate of \$1.1 trillion that was subject to the FPR at the end of 2000.

¹¹ Laidler and Aba (2001, 2002).

¹² We included a dummy variable in the Bank of Canada Equation for the periods that the FPR was relaxed and found that it was statistically insignificant. We conclude that relaxing the FPR had no effect on the exchange rate. The econometric results are available from the authors.

¹³ Holding a futures contract backed by Canadian bills is a hedged position as changes in the value of the Canadian dollar will not affect the Canadian dollar return on the position. To unhedge the position requires a purchase of a foreign currency futures contract. That purchase exposes the counterparty, which would then sell Canadian dollar assets for foreign currency in order to maintain their previous foreign currency

exposure. This unhedged position is equivalent to buying foreign property directly. To hedge a foreign property purchase requires a forward/futures purchase of Canadian dollars, which would require the counterparty to buy Canadian dollar assets to maintain their previous currency exposure.

¹⁴ See Fried and Wirick (1999), pp5 – 8. They also present a convincing case that it is not an absence of funds that limits venture capital projects in Canada.

¹⁵ These numbers are based on the MSCI index returns, all measured in US dollars.

¹⁶ If the Toronto stock exchange index less Nortel were to be used instead of the full 300 securities, the relative performance would be even more dramatically in favour of Canada in 2000/01 relative to 1998/99 because Nortel outperformed the overall market in 98/99 and under performed in 2000/01.

¹⁷ Bank of Canada, (1998-02), Table F1.

¹⁸ Statistics Canada (2001b) indicates that the share of domestic bonds in pension plan portfolios decreased by 1.1% whereas the PIAC survey indicates an increase of .75%.

¹⁹ See footnote 11. The inflow is the result of the foreign exchange contract as the counterparty attempts to rebalance their currency exposure.

²⁰ From the Statistics Canada (2001b) data the increase in foreign property was less than 2%.

²¹ It is equally the Nokia effect in Finland, the Ericsson effect in Sweden, etc.

²² The imposition of the FPR on the CPP puts that institution in much the same position that the Caisse de Dépôt et Placement has found itself in the past with the dual mandate of working for the beneficiaries of the plan and simultaneously “developing the Quebec economy”.

²³ The losses to labour can occur in one of two ways. For an individual who has no company pension plan at all and who saves for retirement using an RRSP, the worker's choice of how she allocates her savings is directly limited by the FPR. She will have a lower return on her savings and/or must undertake greater risks. In effect, the FPR reduces the *real value* of her wage income relative to what it would be if the FPR had been removed. (Workers in companies with defined contribution pension plans, or group RRSPs, will be affected in a similar fashion.) For those workers who have company provided defined benefit pension plans, the tax burden is less transparent but just as real. Here it costs the firm sponsoring the pension plan more to provide a given level of retirement income if the FPR is in place. The firm will therefore respond by reducing the benefits package it offers its workers, offering a lower money wage, and/or hiring fewer workers. In short, by increasing the effective cost of employing a worker, the FPR can lead to an increase in unemployment.

²⁴ This includes RPPs, RRSPs and registered retirement income funds (RIFs). It excludes claims on CPP/QPP and any other means tested sources of retirement income such as OAS and GIS.

²⁵ C.f. Statistics Canada, (2001a), p19.

²⁶ But see Hamilton (2000) who argues that even 60% will, in most cases, continue to maintain a higher standard of living post retirement than was enjoyed pre-retirement.

²⁷ The over 65 age group are less likely to hold these because the pension assets they accumulated while working often have gone to purchase an annuity including an annuity paid out of a defined benefit pension plan. The assets backing these annuities are not counted as private pension assets.

²⁸ Statistics Canada (2001a), Table 2, p.14.

²⁹ This is in no small part because of the regulatory cap on total contributions.

³⁰ There is, of course nothing that precludes those with lower incomes from saving outside these plans. Indeed some who have chosen not to have a private pension plan may have done so because they believe the expected benefit from properly diversifying exceeds any tax benefits available through these pension plans.

³¹ Department of Finance, (2001), Table 7, p.57.

³² These locking in regulations can explain why many firms choose group RRSPs over RPPs despite the higher costs in terms of management expenses. Apparently workers find that the additional flexibility and ability to smooth taxable income of RRSPs is worth the increased cost.

³³ Two other examples where the FPR is used instead of more direct programs are with Labor Sponsored Funds and with partnership units. To encourage the former, for every dollar invested in the fund in a tax deferred plan, the saver may invest twice the allowable maximum amount in foreign property. For tax purposes, partnership units (except for Gaz Metropolitan) are treated as foreign property even if the assets are located in Canada and they are listed on a Canadian exchange. Apparently the Department of Finance believes that if a firm uses these units instead of income trust units tax revenue will fall. Subjecting them, but not income units, to the FPR is meant to decrease the demand for them in an attempt to boost tax revenue.

³⁴ See footnote 7.

³⁵ Statistics Canada (2001) table 5, p.12. The numbers for foreign exposure are from the PIAC survey. At the end of 1999 the amounts were 25.9% and 20.2% respectively.

³⁶ FW calculated the total amount to be 67 basis points. The difference between the unconstrained and the 20% constrained portfolios amounted to 28 basis points, while that between the constrained "efficient" and actual portfolios amounted to 39 basis points.

³⁷ See FW, pages 19-23, for an extended discussion of these offsets and the determination of the resulting measure of cost.

³⁸ As we made clear in section 3.4, our view is that the true budgetary cost is substantially less than the Finance Department's estimate used here.

³⁹ See Baxter and Jermann (1997) for an extended analysis of this point.

⁴⁰ For private pension plans, no more than 10% of the portfolio can be held in the debt and equity of any single company.

⁴¹ See Palacios (2002).