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Communiqué

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Split CPP: replace retirement benefits portion with mandatory RRSPs, says C.D. Howe Institute study

Many working Canadians see the federal government's recent proposal to sharply increase Canada Pension Plan (CPP) contributions simply as a tax grab, rather than as a guarantee of future pension benefits, says a C.D. Howe Institute Commentary released today. And although there is a compelling argument for increased funding of the CPP, on the basis of both economic efficiency and intergenerational equity, now may be an opportune moment to consider privatizing the CPP's future retirement entitlements and introducing mandatory registered retirement savings plans (RRSPs), the study concludes.

The study, From Tax Grab to Retirement Saving: Privatizing the CPP Premium Hike, was written by James E. Pesando, a Professor of Economics at the University of Toronto and a Research Associate of the Institute for Policy Analysis.

Under privatization, Pesando says, the additional contributions from the proposed rate hike would be directed to a system of mandatory retirement savings accounts. This increase represents most of the cost of fully funding future retirement benefits promised by the CPP. Existing CPP contributions would finance the disability, death, and survivors' benefits provided by the plan, and also service the plan's unfunded liability.

Privatizing these benefits would have several key advantages, Pesando says. First, working Canadians would perceive the higher contributions as purchasing a pension benefit, not simply as a tax increase. And, by providing an obvious link between contributions and benefits, privatization would increase Canadians' confidence in the plan, which is currently low, especially among the young; it would also reduce distortions otherwise associated with a payroll tax. Second, the more modest reserve fund of a scaled-down CPP would reduce concern about its possible encroachment on private sector activities. Third, privatization could serve as a catalyst to further reform, such as servicing the existing unfunded liability through general tax revenues.

Whether or not the plan is privatized, the federal government should move to fully fund it, Pesando says. This would require a significant rise in contribution rates, but the obvious link between contributions and benefits created by privatization would help mitigate any adverse effects such a rise could have on employment. The current unfunded liability of the CPP would need to be serviced as the move was made to full funding, a fact that creates concerns for intergenerational equity, since the transition generation would, in effect, have to "pay twice" — for its own benefits and for the liability. This inequity could be mitigated, Pesando argues, by a lengthy amortization period and by the overall higher prosperity that would result from the efficiency gains of full funding. Some retroactive reduction in benefits could also reduce the liability.

Pesando notes that several other countries have moved recently to privatize their pension plans fully or partly, most notably Chile, which has instituted a system of mandatory personal retirement accounts not unlike what might be put in place for Canada.

Benefits already accrued in the CPP could be paid out in the form of "recognition bonds" to mandatory RRSPs, Pesando argues, or they could continue to be paid separately during the transition period.

Under a privatized system, Pesando explains, the investment risk — and the control over risk-return decisions — would be transferred from the government to individuals, with the Seniors Benefit acting as a safety net for lower-income households. It would also become transparent to the public just who pays for what, providing a better atmosphere for informed debate on any future changes to the system.

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Communiqué

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Divisez le RPC : remplacez la portion des prestations de retraite par des REER obligatoires, conseille une étude de l'Institut C.D. Howe

Nombreux sont les Canadiens qui travaillent et qui perçoivent la récente proposition du gouvernement fédéral d'augmentation marquée des cotisations au Régime de pensions du Canada (RPC), non comme une garantie de prestations de retraite pour l'avenir, mais comme une nouvelle façon de s'accaparer plus d'impôts, affirme un *Commentaire de l'Institut C.D. Howe* publié aujourd'hui. Et bien qu'il existe des arguments probants pour un financement accru du RPC, tant pour des raisons d'efficience économique que d'équité entre les générations, le moment semble choisi pour envisager la privatisation des droits de retraite futurs du RPC, et pour introduire des régimes enregistrés d'épargne-retraite (REER) obligatoires. Telle est du moins la conclusion à laquelle parvient l'auteur de l'étude.

Intitulée *From Tax Grab to Retirement Saving: Privatizing the CPP Premium Hike (De l'impôt à l'épargne-retraite : la privatisation des cotisations accrues du RPC)*, l'étude est rédigée par James E. Pesando, professeur d'économique à l'Université de Toronto et attaché de recherches de l'Institute for Policy Analysis.

Pesando indique que dans un cadre de privatisation, les cotisations supplémentaires de la hausse proposée seraient versées à un régime de compte d'épargne-retraite obligatoire. Cette hausse équivaut à la majeure partie du coût du financement des prestations de retraite futures promises par le RPC. Les cotisations actuelles au RPC, quant à elles, serviraient à financer les prestations d'invalidité, de décès et de survivant offertes par le régime, ainsi que son passif non capitalisé.

La privatisation de ces prestations comporterait plusieurs avantages importants, affirme Pesando. En premier lieu, les Canadiens qui travaillent considéreraient la hausse des cotisations comme un achat de prestation de retraite et non comme une simple hausse d'impôt. Et en créant un lien évident entre les cotisations et les prestations, la privatisation s'attirerait la confiance des Canadiens envers le régime, confiance qui est plutôt chancelante actuellement, particulièrement chez les jeunes; elle diminuerait également les disparités autrement associées à des charges sociales. En second lieu, le fonds de réserve plus modeste d'un RPC à échelle réduite apaiserait les craintes touchant à son empiétement possible sur les activités du secteur public. En troisième lieu, la privatisation jouerait un rôle de catalyseur pour des réformes plus poussées, telles que le financement du passif non capitalisé par le biais des recettes fiscales d'ordre général.

Qu'il privatise le régime ou non, le gouvernement fédéral doit prendre des mesures pour atteindre une pleine capitalisation, affirme Pesando. Pour ce faire, il faudrait augmenter considérablement les taux de cotisation; cependant, en créant un lien évident entre les cotisations et les prestations grâce à la privatisation, on pourrait limiter les répercussions néfastes de cette augmentation sur l'emploi. Il faudra assurer le service du passif non capitalisé actuel du RPC lorsqu'on prendra les mesures nécessaires pour une pleine capitalisation; or, ce dernier point soulève des craintes pour l'équité entre les générations, puisque la génération qui se retrouve dans la période de transition devra « payer double » — soit pour ses propres prestations ainsi que pour le passif. Pesando affirme qu'il est possible de limiter cette iniquité en accordant une longue période d'amortissement et grâce à la prospérité accrue découlant des gains en efficience produits par la pleine capitalisation. Une diminution rétroactive des prestations permettrait également de diminuer cette obligation.

Pesando indique que plusieurs autres pays ont récemment privatisé leur régime de pensions, en partie ou en totalité; le Chili par exemple a introduit un régime de comptes personnels de retraite obligatoires similaire à ce qu'on pourrait mettre en place au Canada.

Les prestations déjà accumulées dans le cadre du RPC pourraient être versées sous forme de « bons de reconnaissance » aux REER obligatoires, précise Pesando, ou encore, on pourrait continuer à les verser séparément durant la phase de transition.

Dans le cadre d'un régime privatisé, explique Pesando, le risque d'investissement — ainsi que le contrôle des décisions risque-avantage — passerait du gouvernement aux individus, tandis que les Prestations aux aînés serviraient de filet de sécurité pour les ménages à faible revenu. Il deviendrait également clair pour le public qui paie pour quoi, favorisant ainsi un climat plus propice à un débat éclairé sur les futurs changements à apporter au régime.

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From Tax Grab to Retirement Saving:

Privatizing the CPP Premium Hike

by

James E. Pesando

The federal government has now tabled its proposed reforms of the Canada Pension Plan (CPP). The key ingredient is a large increase in the contribution rate, taking it in a series of steps from 5.85 percent in 1997 to 9.9 percent in 2003 and beyond.

The argument for increased funding for the CPP is compelling, on the basis of both economic efficiency and concern for intergenerational equity. Many working Canadians, however, see this sharp increase in contributions simply as a tax grab, rather than as a guarantee of future receipt of pension benefits.

It is thus an opportune time to consider a more ambitious reform: the privatization of the future retirement entitlements promised by the CPP. Under privatization, the increase in contributions would be directed to a system of mandatory retirement savings accounts. This increase represents most of the cost of fully funding the retirement benefits currently provided by the CPP. The existing CPP contributions would finance the disability, death, and survivors' benefits provided by the plan, and also service the unfunded liability.

Privatization would have several key advantages. Working Canadians would perceive the higher contributions as purchasing a pension benefit, not simply as a tax increase. This would reduce both the short- and long-term distortions otherwise associated with a payroll tax. The more modest reserve fund of a scaled-down CPP would reduce concern about its possible encroachment on private sector activities. Privatization could also serve as a catalyst to further reform, such as servicing the existing unfunded liability through general tax revenues.

Main Findings of the Commentary

- The federal government's February 1997 proposals for reform of the Canada Pension Plan (CPP) provide an opportune moment for revisiting the way retirement benefits are provided in Canada. Privatizing the future pension entitlements promised by the CPP would have many advantages.
- By providing an obvious link between contributions and benefits, privatizing future retirement entitlements would increase Canadians' confidence in the plan, which is currently low, especially among the young.
- Whether or not the plan is partly privatized, the federal government should move to fully fund it. This would require a significant rise in contribution rates; the obvious link between contributions and benefits created by privatization would help mitigate any adverse effects such a rise could have on employment.
- The current unfunded liability of the CPP would need to be serviced as the move was made to full funding. This fact creates concerns for intergenerational equity, since the transition generation would, in effect, have to "pay twice" — for its own benefits and for the liability. This inequity could be mitigated, however, by a lengthy amortization period and by the overall higher prosperity that would result from the efficiency gains of full funding. Some retroactive reduction in benefits is also an option for reducing the liability.
- Several other countries have moved recently to privatize their pension plans fully or partly, most notably Chile, which has instituted a system of mandatory personal retirement accounts not unlike what might be put in place for Canada.
- Benefits already accrued in the CPP could be paid out in the form of "recognition bonds" to the mandatory registered retirement savings plans (RRSPs), or they could continue to be paid separately during the transition period.
- The arithmetic of a privatized system would work out as follows, based on a real interest rate of 3.8 percent, and an entry-age normal rate for the CPP of about 7 percent: the mandatory RRSP contribution rate would be 4.8 percent, the contribution to service the unfunded liability would be 2.9 percent, and the continuing CPP contribution for death and disability insurance about 2.2 percent, for a steady-state contribution rate of 9.9 percent.
- Under a privatized system, the investment risk — and the control over risk-return decisions — would be transferred from the government to individuals, with the Seniors Benefit acting as a safety net for lower-income households. It would also become transparent to the public just who pays for what, providing a better atmosphere for informed debate on any future changes to the system.

In February 1996, the federal, provincial, and territorial governments jointly released An Information Paper for Consultations on the Canada Pension Plan. The primary focus of this discussion paper was the sharp escalation in Canada Pension Plan (CPP) contribution rates made necessary by pay-as-you-go financing, and the resulting concern for intergenerational fairness and the long-run sustainability of the CPP. The discussion paper set out several options for reform. These options focus on a possible reduction in CPP benefits and/or an increase in contribution rates. While the paper did not raise the possibility of privatizing the CPP, several commentators have proposed that the CPP be wound down and replaced by a system of mandatory contributions to individual registered retirement savings plans (RRSPs).1

In fall 1996, subsequent to public consultations, the relevant governments announced a series of principles to guide reform of the CPP. Three of these principles merit emphasis. First, a move toward fuller funding of the CPP is required. Second, "CPP funds must be invested in the best interest of plan members" and governance structures created to "ensure sound fund management." And third,

> the CPP is an earnings-related program. Its fundamental role is to help replace earnings upon retirement or disability, or the death of a spouse — not to redistribute income. The income redistribution role is the responsibility of the income tax system, the Old Age Security [OAS]/Guaranteed Income Supplement [GIS]/Seniors Benefit, and other income-tested programs paid from general tax revenues.2

It is, of course, necessary to consider reform of the CPP in the context of the overall design of Canada's retirement income system. For a brief discussion of the income redistribution aspects of the proposed Seniors Benefit, which is to replace the current OAS/GIS system beginning in 2001, see Box 1.

In February 1997, the federal government tabled its proposed reforms.3 The key proposal is a sharp rise in the contribution rate, from the current level of 5.85 percent to 9.9 percent in 2003. The latter is estimated to be the "steady-state" rate — that is, the contribution rate necessary to fully fund new benefits and to service the existing unfunded liability.

To contain the steady-state rate to 9.9 percent, the federal government proposes a series of benefit reductions and to freeze the year's basic exemption (YBE) at $3,500. The freeze on the YBE serves to expand the base of contributory earnings with the passage of time. The benefit reductions include:

- using a five-year rather than a three-year average of the year's maximum pensionable earnings (YMPE) to calculate retirement pensions (and the earnings-related portion of disability and survivors' benefits);
- freezing the maximum death benefit at $2,500; and
- tightening eligibility conditions, as well as reducing payments for disability benefits.

The much larger reserve fund that will result from the sharp increase in contribution rates — estimated to rise to about five years' worth of benefits — is to be invested in a diversified portfolio of public and private securities, and at arm's length from government.

Privatization: An Alternative to CPP Reform

The tabling of the proposed reforms provides an opportunity to assess the general case for replacing the retirement benefits provided by the CPP with a system of mandatory RRSPs. This partial privatization could be accomplished — in the main — by directing that the increase in contributions be allocated to individual RRSPs. The existing contributions would continue to finance the disability, death, and survivors' benefits provided by the CPP, as well as service its unfunded liability. (The full actuarial assessment of the proposed reforms is not currently available. Nonetheless, it is possible to approximate the contribution rates necessary to fully fund the retirement benefits to be delivered through the reformed CPP.)

Box 1: *Old Age Benefits and Income Distribution*

The proposed Seniors Benefit is designed to concentrate benefits in the hands of low-income seniors. The taxback rate embedded in the Seniors Benefit will vary from 50 percent to zero and then to 20 percent, depending on the level of household income. For couples, the taxback rate will depend on the spouses' combined income, as has always been the case with the GIS. Both the level of benefits and the threshold at which benefits begin to be reduced will be fully indexed to inflation.

The maximum Seniors Benefit will be $11,420 for singles and $18,440 for couples. The benefit will be reduced by 50 cents for each dollar of income until it reaches $5,150 per senior, which is equal to the level of current OAS payments adjusted for projected inflation to 2001. Beginning at an income level of $25,921 (in 2001 dollars), the benefit will be reduced by 20 cents for each dollar of additional income, and benefits will be entirely taxed back if annual income reaches $52,000.

These thresholds represent an increased targeting of public pension benefits to lower-income Canadians. Under present OAS provisions, the clawback of benefits does not begin for a single senior until income exceeds $53,000, and OAS benefits are not taxed back in their entirety until the individual's income reaches about $85,000.*

* For a discussion of the concerns raised by the proposed Seniors Benefit, together with reductions in the tax deferrals available through RRSPs, see D.W. Slater, The Pension Squeeze: The Impact of the March 1996 Federal Budget, C.D. Howe Institute Commentary 87 (Toronto: C.D. Howe Institute, February 1997).

Benefits of Privatization

The argument for a sharp increase in the CPP contribution rate — and thus its degree of funding — is compelling on the basis of efficiency considerations and concern for intergenerational equity. However, as evidenced by press reports subsequent to the announced reforms, many working Canadians see the proposed rise in CPP contribution rates simply as a further increase in payroll taxes — in other words, basically a tax grab. Skepticism is widespread among younger Canadians that CPP retirement benefits will not be available when they reach retirement age. Further, in spite of the federal government's announced intention to invest the CPP reserve fund at arm's length from government, many observers continue to express concern that investment decisions may be subject to political influence. A large public sector fund, in their view, remains a source of possible encroachment on private sector activities.

Privatizing the retirement benefits delivered through the CPP would address many of these concerns. In brief, the advantages to such a move are as follows:

- The economic case for using payroll taxes to finance social security benefits rests on the efficiency gains that occur when there is a close link between benefits and contributions. A close link reduces the (effective) marginal tax on labor supply and the attendant distortions. A close link also reduces the adverse impact on employer costs (and hence on employment) of higher payroll taxes during the transition period following the increase. Employees are more likely to grant concessions or to forgo wage increases if the employer directs increased contributions to the employee's own RRSP rather than to a largely unchanged CPP.

- Workers' confidence in the plan would increase. Polls indicate that many Canadians, especially younger ones, are not confident that they will receive CPP retirement benefits. It is not clear that the federal government's proposed sharp increase in the CPP contribution rate to a full-funding level plus an amount to service the unfunded liability would be perceived as "firming up" the link between benefits and contributions.[4] The close link between contributions and benefits is self-evident for an employee's own RRSP.

- By emphasizing the difference between the retirement benefits to be earned by active workers and the CPP contributions required to service the existing unfunded liability, the privatization of retirement benefits may focus debate on the attractiveness of using a tax base other than the payroll tax to service the unfunded liability (or to finance the payout of previously accrued CPP benefits).

- Privatization reduces the political risk associated with the creation of a large CPP fund (such as investing for social or other political objectives, or enriching benefits beyond sustainable levels in response to short-run political pressures) by reducing the size of this fund.

- The portfolio choices with regard to the retirement saving of households would be expanded.

This final point merits additional comment. Individual retirement accounts would be defined-contribution plans, like RRSPs. The pension that is ultimately provided would depend solely on the investment performance of the fund, together with the history of contributions.

To some observers, the fact that individuals would bear all of the investment risk associated with this form of institutionalized pension saving is quite unattractive. Others express concern that individuals would allocate too large a fraction of their new retirement accounts to fixed-income securities (bonds), at the expense of stocks.

These concerns are readily overstated (and, to some extent, contradictory). First, the safety net for the retirement income of the elderly will be the proposed Seniors Benefit, with its pronounced targeting of support for lower-income households. Second, individual retirement accounts — like RRSPs — enhance the flexibility of individuals to tailor the risk-return characteristics of this element of their retirement savings to their particular circumstances.[5]

How Privatization Would Work

The basics of privatizing the CPP's retirement benefits would be as follows. After an agreed-on date, new retirement benefits would cease to accrue to the plan. Instead, both employer and employee contributions necessary to fully fund the retirement benefits provided by the CPP would be directed to a locked-in RRSP for each employee. During the transition period, the payout of previously accrued retirement benefits would be financed either through a payroll tax (as at present) or through general tax revenues. In either case, the government would need to increase borrowing temporarily while it pays the bulk of previously accrued benefits. This debt would be retired later, when the contributions established to discharge these benefits began to exceed the necessary payments. The increase in explicit government debt would, in effect, reflect the implicit debt that currently exists in the form of the CPP's unfunded liability.

Outline of the Commentary

This Commentary is organized as follows. In the next section, I review the persuasive case for a higher degree of funding for the CPP, whether public or private, to reflect a changed economic and demographic climate. The third section focuses on the use of payroll taxes to finance mandatory retirement pensions, and concludes that the principle of linking contributions to perceived benefits provides a strong argument for privatization. In the fourth section, I discuss the transition to a privatized system in detail, including such topics as the treatment of the CPP's unfunded liability (or of its previously accrued benefits); the oft-stated concern that the next generation will be forced to pay twice — for its own benefits and for the benefits promised to prior generations; the need to balance the long-run efficiency gains against the problems posed for the transition generation; and a number of other issues. The fifth section briefly reviews recent international experience with privatization. The sixth and concluding section illustrates how the privatization of CPP retirement benefits could be integrated with the reforms the federal government has tabled.

The Case for Full Funding

Much of the public debate on reform of the CPP has focused on the issue of intergenerational equity and on the need for a rapid increase in the contribution rate in order to reduce this inequity. These concerns are important, particularly when viewed in the context of the large intergenerational transfers implicit in the pay-as-you-go financing of other public pension programs and of the health care system. But also in favor of a higher degree of funding are important efficiency considerations that focus on the relationship between the real interest rate and the rate of growth of aggregate real wages, and on the likelihood that higher CPP contribution rates will translate into a higher degree of domestic saving.

The security of public pensions is ultimately linked to the willingness of future generations to provide the pensions that are promised to today's workers. This willingness will depend on two considerations: first, the share of national income required to meet the pension obligations, which depends on the level of national income and on the ratio of pensioners to workers; and, second, the perceived likelihood that the pension system will be perpetuated, so that future generations of Canadians will be supported in turn during their own retirement. In other words, the viability of today's pensions depends on both long-term economic considerations and future generations' acceptance of the pension "rules of the game" established by the current generation.

In 1966, when the CPP was introduced, the economic environment was far different from that of today. The rate of growth of aggregate real wages (the sum of the rate of growth of employment and the rate of growth of real earnings per worker) was high. Real interest rates were low. During the decade ending in 1965, aggregate real wages in Canada grew at an average annual rate of 5.5 percent. Employment growth averaged 2.5 percent per year, while real wages per worker grew 3 percent per year. The real interest rate on industrial bonds averaged 3.3 percent. In sharp contrast, in the decade ending in 1995, aggregate real wages grew at an average annual rate of only 1.4 percent, while the real interest rate on industrial bonds averaged 7.6 percent. The rate of growth of the economy and the rate of growth of aggregate real wages are, of course, uncertain. For this reason, it is appropriate to compare the rate of growth of real wages with the real interest rate or real rate of return on an asset with a comparable degree of risk.

The likelihood that real interest rates will remain high by historical standards is supported by signals from the capital market. The real interest rate on traditional long-term bonds is not observable, since the inflation expectations of economic agents are not observable. However, in 1991 the federal government issued a price-indexed or "real return" bond whose real interest rate is readily observed. At present, the real return bond of 2021 is priced by the market to yield a real interest rate well in excess of 4 percent. Since the bond does not mature for 25 years, its yield indicates that market participants expect real interest rates to remain high over the long term.[7]

The relationship between aggregate real wage growth and the real interest rate is crucial to the decision as to whether to fully fund a public pension program or to finance the program on a pay-as-you-go basis. If future real wage growth is expected to exceed the real interest rate, then pay-as-you-go financing is preferred. For a fixed contribution rate, workers "earn" a rate of return on their pension contributions equal to the rate of growth of aggregate real wages, and rationally prefer to finance their public pensions on a pay-as-you-go basis. In contrast, if the real interest rate is expected to exceed the rate of growth of aggregate real wages, prefunding the public pension program is preferred.

In the current environment, economic factors clearly favor a more fully funded CPP. Real interest rates are high, while aggregate real wage growth is low. The fact that real interest rates are high indicates that the marginal productivity of capital is high. An increase in CPP contribution rates, with an unchanged (or reduced) level of CPP retirement benefits, should increase personal savings. This, in turn, should translate into an increase in the stock of real capital and, ultimately, in the size of the "economic pie" available to support public pensions (see Box 2).

There is thus a strong case for fully funding the CPP, whether or not it is privatized. Some see an enlarged CPP fund as too tempting a target for politicians.[8] At least in principle, however, an enlarged CPP fund with a governance structure designed to ensure arm's-length investing must be deemed comparable to a private sector alternative. A consideration of the role of payroll taxes, however, strongly favors privatization.

Payroll Tax Financing of Mandatory Pensions

The CPP is financed through payroll taxes. In 1997, members and their employers will contribute a total of 5.85 percent of earnings between the YBE of $3,500 and the YMPE of $35,800. The maximum employer and employee contributions will be $945 each.

The economic rationale for using payroll taxes to finance social security benefits depends on a close association between an individual's contributions and his or her benefits. Assume, for example, that an individual's contribution to a public pension plan pays for the pension benefit that the individual earns during the period. Assume, as well, that the individual is content to save this (or a larger) amount toward retirement. Then there should be no distorting impact on the individual's labor supply. The individual's contribution to the public pension plan is just the "price" of the pension benefit to which he or she becomes entitled during the period.

In contrast, consider the case of an individual who perceives there to be no benefit associated with the pension contribution. To this person, the contribution to the public pension plan is simply a tax on earned income. Like other such taxes, the pension contribution discourages work and thus adversely affects the long-run labor supply. For those with earnings less than the YMPE, contributions raise the marginal tax rate on income that is already subject to a high marginal rate, thus discouraging additional hours of work. For those with earnings above the YMPE, CPP contributions raise the average tax rate, which also adversely affects the long-run labor supply — for example, by encouraging work in the underground economy.

Economic studies suggest that, ultimately, the burden of employer payroll taxes falls to a large extent on employees.[9] If this is so, a close linkage between pension contributions and pension benefits will eliminate the disincentives to long-run labor supply associated with payroll taxes. This is an important consideration, as long as there is some long-run elasticity of labor supply with respect to the net-of-tax real wage. (The prevailing view among economists is that the long-run elasticity of labor supply is small, but not zero. In internal work at the federal Department of Finance, for example, it is assumed to equal 0.1.)

As shown in Table 1, many Canadians — especially younger ones — are skeptical about the likelihood of their receiving the benefits they have been promised from Canada's public sector pension plans. If the CPP contribution rate were at a level sufficient to fully fund future CPP benefits, younger Canadians might have more confidence in the CPP's ultimate benefit to them. It seems clear, however, that if individuals (or their employers) were required to make mandatory contributions to their own RRSPs, these contributions would be seen as the purchase price of a pension benefit, not simply as an increase in the payroll tax. In this case, the long-run disincentive

Box 2: *CPP Contribution Rates and Personal Savings*

In the standard life-cycle model of consumption, and as emphasized in a series of papers by Martin Feldstein, the existence of a pay-as-you-go public pension plan will depress personal savings and thus reduce the stock of domestic capital.* If there is an increase in CPP contributions, with no change (or a reduction) in retirement benefits, households will suffer a reduction in lifetime wealth. This will lead to a reduction in consumption, and thus to an increase in personal savings (public plus private).

There are two important caveats to these predictions of the standard life-cycle model. First, under a pay-as-you-go public pension plan, households may reduce their consumption and increase their savings (and ultimately their bequests) in order to offset the higher "tax burden" their children face. To the extent that the behavior of households conforms to the "Ricardian equivalence" model popularized by Barro,** the existence of a pay-as-you-go public pension plan will not depress personal savings, and the decision to increase the degree of funding of such a plan will not lead to an increase in personal savings.

Second, Canada is a small, open economy, and international capital flows are likely to limit the extent to which a higher domestic savings rate translates into an increase in the stock of domestic capital. In the extreme case of perfect capital mobility, there would be an increase in the ownership by residents of Canada of an unchanged domestic capital stock, as well as an increase in the ownership by residents of Canada of foreign assets. However, as noted in a recent contribution by Gordon and Bovenberg,† empirical studies confirm that there is a high correlation between domestic savings and investment — that is, that international capital is not perfectly mobile.

On balance, it seems appropriate to conclude that an increase in CPP contribution rates will yield an increase in personal savings and in the domestic capital stock. Both Ricardian equivalence and open economy considerations, however, make it difficult to offer a precise estimate of the extent to which higher CPP contribution rates will translate into higher savings and ultimately into a higher stock of real capital. To the extent that higher savings are used to acquire foreign assets (rather than to increase the domestic capital stock), consumption needs in retirement will be financed by imports — that is, by claims to goods and services produced in other countries.

The mirror image of the increase in personal savings associated with a significant increase in CPP contribution rates is a short-run reduction in aggregate demand. These transitional effects on aggregate demand may influence the timing of the rise in CPP contribution rates to their higher levels.

* See, for example, M. Feldstein, "Social Security, Induced Retirement and Aggregate Capital Accumulation," Journal of Political Economy 82 (5, 1974): 905–926.

** R.J. Barro, "Are Government Bonds Net Wealth?" Journal of Political Economy 82 (6, 1974): 1095–1118.

† R.H. Gordon and A.L. Bovenberg, "Why Is Capital So Immobile Internationally? Possible Explanations and Implications for Capital Income Taxation," American Economic Review 86 (5, 1996): 1057–1075.

effects of required contributions to mandatory RRSPs would be small or nonexistent, unlike similar contributions to a reformed CPP. The World Bank and Kesselman, among others, emphasize the importance of this tax-benefit linkage.[10]

The principle of linking benefits to contributions to minimize the distorting impact and resulting efficiency losses of payroll taxes relative to other forms of taxation has a further implication. Once the contribution rate necessary to fund the CPP has been identified, it is straightforward to divide the total contribution rate into its two components: the rate required to fully fund new benefits, and the rate required to service the existing unfunded liability. (Note that the reforms tabled by the federal government, which focus on a steady-state contribution rate of 9.9 percent, would not allow for the full amortization of the unfunded liability.) For active workers, the contribution rate required to service the existing unfunded liability bears no relationship to future benefits — hence there is no economic reason to rely on a payroll tax to discharge this unfunded liability.

Table 1: *Canadians' Confidence in Future OAS/CPP Benefits, October 1994*

Age	Those Confident They Will Receive Benefits
	(%)
18 to 29	29
30 to 39	23
40 to 49	29
50 to 64	47
65 and over	85

Source: Gallup Poll (October 1994), cited in Canadian Institute of Actuaries, Troubled Tomorrows: The Report of the Canadian Institute of Actuaries' Task Force on Retirement Savings (Ottawa, January 1995), p. 18.

Although the ultimate incidence of employer contributions to the CPP will fall largely on employees, an increase in required employer and employee contributions is likely to affect output and employment adversely, particularly in the short run. This result reflects the increase in the total compensation paid to workers — and thus higher costs paid by employers — during the period in which employer contributions are being shifted back to employees. This potential loss of output and employment has played a prominent role in the public debate on reforming the CPP.[11]

If mandatory contributions to the CPP were replaced by mandatory contributions to an employee's RRSP, the shifting of the employer's contribution to the employee likely would be more rapid and more complete. It is reasonable to assume that, in formal or informal wage bargaining, employees are more likely to grant concessions or forgo wage increases during the period of rising employer contributions if the employer contributes directly to workers' locked- in RRSPs than if the employer makes higher contributions to a largely unchanged CPP.

As a result, the adverse output and employment effects during the transition period following an increase in payroll taxes would be less severe.[12] (In the case where employees value the employer's contributions to their RRSPs on a dollar-for-dollar basis, the supply schedule for labor — with cash wages on the vertical axis — would shift downward by the full amount of the employer's contributions.) Further, it might become politically feasible simply to require that employees pay the full amount of the mandatory RRSP contributions. If so, employers would not face an increase in costs, even in the short run, and there need be no adverse effects on output and employment on this account.

The Transition to Privatization

If the decision were made to switch retirement benefits from the current CPP to a fully funded privatized system of mandatory RRSPs, several issues would need to be dealt with:

- the problem of the CPP's current unfunded liability;
- the distributional consequences of eliminating that liability for the "transition" generation; and
- the actual nuts-and-bolts mechanics of winding down the CPP and starting up the new system.

A number of other items, such as the impact of the change on other features of the retirement income system, would also need to be addressed. Below, I discuss each of these areas of concern, none of which poses an insurmountable barrier to privatization as I have described it.

The CPP's Unfunded Liability

The unfunded liability of the CPP is equal to the present value of future benefits to be paid under the various provisions of the plan, less the sum of the current reserve fund and the current value of future contributions when the contribution rate is set at the full-cost rate for new entrants. At year-end 1995, the plan's unfunded liability stood at $556 billion.[13] To put this sum into perspective, consider that the federal government's net debt, at $545.7 billion at the end of fiscal year 1994/95, was slightly lower.[14]

The full-cost or fully funded rate — also called the entry-age normal rate — is the level percentage of contributory earnings that would be paid over their work lives by a cohort of new entrants (aged 18) in order to finance the CPP benefits to which they and their dependents would ultimately become entitled. Under the reforms tabled by the federal government, and at an assumed real interest of 3.8 percent, the full-cost rate is about 7 percent of covered earnings.

If the option were available to them, new entrants to the CPP would elect to withdraw from the plan if the required contribution rate exceeded the full-cost rate. This is the case under the federal government's proposed reform. With a steady-state rate of 9.9 percent and a full-cost rate of about 7 percent, workers are contributing almost 2.9 percent of covered earnings to pay for previously accrued benefits in excess of contributions. This fact provides an important perspective on the debate about CPP reform. It also serves as a reminder that both those currently receiving benefits and older workers with past service credits have paid far less than the true cost of the benefits they have accrued.[15]

It is true that, if the contribution rate for the CPP were quickly increased to its full-cost level, active workers would "pay twice": for their own benefits and for the amortization of the unfunded liability. Workers would also pay twice under privatization, assuming that all previously accrued benefits under the CPP would be honored.

This problem could be mitigated, however, by making the amortization period for the unfunded liability quite lengthy — say, 75 years or so — thereby reducing its impact on today's workers. For such a long amortization period, the contribution rate to pay interest (only) on the unfunded liability is quite close to the contribution rate necessary to eliminate it.

Two other factors discussed earlier would help to balance out the price of amortizing the unfunded liability.

First, under a fully funded or privatized CPP, higher contribution rates would lead to an increase in personal savings. This savings increase, in turn, would lead to a higher level of real investment and ultimately to a higher level of output, which is the primary source of the efficiency gains to be derived from full funding.

Second, as outlined in the previous section, under privatization the closer link between contributions and benefits should provide additional efficiency gains by eliminating the distorting impact of the payroll tax on the long-run supply of labor. The distortions to labor supply rise with the square of the total effective marginal tax rate.

Distributional Consequences for the "Transition" Generation

In a US study, Feldstein and Samwick conclude that, if that country's social security were replaced by individual retirement accounts, the required contribution rate would ultimately decline from the present 12.4 percent of covered earnings to 3.3 percent.[16] This dramatic decline reflects the fact that the net-of-tax rate of return on private saving — estimated at 5.4 percent — is far higher than the 2.5 percent implicit rate of return that workers receive in the present pay-as-you-go system (that is, the real rate of growth of aggregate wages and salaries in the United States).

The difficulty, of course, is that the long-run or steady-state gains from any change must be weighed against the costs of the transition. The major transition costs in this case stem from the fact that current contributors would be required to pay for their own benefits (at a long-run contribution rate of 3.3 percent if individual retirement accounts earn the net-of-tax real return of 5.4 percent) and pay the current payroll tax to finance the previously accrued benefits now due under the pay-as-you-go system.

Feldstein and Samwick estimate that the combined contribution rate needed in the above scenario would rise from the current 12.4 percent rate to a maximum of 14.8 percent after 14 years, then decline, falling below 12.4 percent after a total of 28 years. This calculation illustrates the magnitude of the additional burden imposed on the transition generation. Feldstein and Samwick emphasize that workers who are still young at the date of the transition would be net gainers from the privatization initiative. Older workers would suffer losses, although these would be more than offset by the gains that would accrue to their children.

Simulations analogous to those worked out by Feldstein and Samwick have not been performed for Canada. The basic message, however, would be similar.

The extra burden placed on the transition generation could be alleviated by reducing the cost of previously accrued CPP benefits. Although the federal government has indicated that those currently receiving CPP benefits would suffer no reduction as the result of reform, the proposed package does contain an element of retroactivity for active contributors — namely, the de-indexation of the death benefit and the movement from three- to five-year averaging in the determination of earnings-based benefits. Other potential reforms with an element of retroactivity were not pursued. But the fact that current recipients can anticipate receiving CPP benefits well in excess of their contributions, escalated by a market rate of return, provides a logical basis for at least considering selective reductions in benefits that have a retroactive component. For example, the indexing formula could have been adjusted so that benefits in pay would be escalated at a rate slightly less than that of inflation (say, half a percentage point less); the logic of this particular initiative is further supported by the fact that the consumer price index overstates the true rise in the cost of living.[17]

It also merits note that older members of the transition generation will have accrued pension credits under the CPP based on contributions that, if augmented by a market rate of interest, are not sufficient to pay for the benefits to which the system entitles them. From this perspective, the additional cost burden imposed on older but still active workers can be seen in part as a retroactive increase in the contributions required to pay for previously accrued benefits.[18]

The Mechanics of Winding Down the CPP

If the decision is made to wind down the retirement benefits provided by the CPP, then no new retirement benefits would accrue after the transition date. For the purposes of this discussion, assume the transition date is January 1998. Benefits currently being paid would be honored in full, and active workers would receive full credit for CPP retirement benefits earned prior to 1998.

For the basic retirement benefit, which is linked solely to the lifetime earnings of the contributor, the CPP wind-up could be accomplished by setting pensionable earnings for 1998 and all subsequent years equal to nil in the formula governing earnings-related benefits. Contributors' retirement pensions would then continue to be determined by the usual formula. This approach ensures that there are no discontinuities in the calculation of past service credits earned by existing contributors.[19]

All CPP benefits currently being paid (retirement, death, and disability) would continue until the last beneficiary dies. Still-active workers would have two basic options. Under the first, workers with CPP retirement credits earned prior to 1998 would not receive a retirement benefit from the CPP. Instead, the present value of the accrued benefits would be calculated and a "recognition bond" — that is, a bond in recognition of past contributions — equal to this amount (or a lesser amount, if promised benefits are viewed as uncertain) would be credited to each participant's individual retirement account. The recognition bond would pay a market rate of interest, and become due either on the date of the individual's retirement or the date at which the proceeds of the retirement account were annuitized.

Under the second option, retirement benefits would commence on the individual's retirement at the level implied by the existing formula with pensionable earnings set to nil commencing in 1998. The benefits to be paid during the phase-out period could be financed by a payroll tax or a charge on general tax revenues. (Since there would be no link between an individual's contributions and his or her accruing benefits, the case for relying on a payroll tax is weak.) If the CPP retirement benefits payable in the phase-out period were financed by a payroll tax as a fixed percentage of covered earnings, or by a special consumption tax, there would have to be additional borrowing at the beginning of the phase-out period — when benefits are the largest — to be repaid in the latter portion of the phase-out period when benefits being paid would be small.

For a breakdown of the arithmetic of a privatized pension plan, see Box 3.

Other Issues

Several other features of the switch to privatization merit comment.

First, the administrative cost of individual retirement accounts is large relative to that of operating the CPP. Mitchell and Zeldes, for example, observe that administrative costs for social security are only about one-fourth of those for private pension systems, per active contributor. They also note that private plans provide money management and other investor services that have no counterpart in the government.[20]

It would be advantageous to design the individual retirement accounts so that, for administrative and investment purposes, they could be consolidated with existing individual RRSPs. In this event, the marginal administrative cost of these new accounts should be relatively small for those who already had RRSPs. In 1993, about one-third of taxfilers aged 25 to 64 who were eligible to contribute to an RRSP made RRSP contributions. It might also be efficient to have the federal government collect the required contributions, as it now does for the CPP.

The concern that the administrative costs of mandatory individual retirement accounts

Box 3: *The Arithmetic of Pension Privatization*

If pension benefits were privatized (with death and disability insurance remaining in the CPP), the arithmetic of reform would be as follows. The entry-age normal rate for the reformed CPP, at a real interest rate of 3.8 percent, is about 7 percent. Based on the steady-state rate of 9.9 percent, the contribution required to service the existing unfunded liability would be about 2.9 percent. Assume that retirement benefits represent 68 percent of total benefits.* Then the entry-age normal contribution rate for the retirement benefit would be 68 percent of 7 percent, or 4.76 percent; for death and disability benefits, the rate would be 2.24 percent. The breakdown of the required contribution rate under privatization would thus be as follows:

mandatory RRSP contribution:	4.76%
CPP contribution for death and disability insurance:	2.24%
CPP contribution to service unfunded liability:	2.90%
Total	*9.90%*

The mandatory RRSP contribution needed to finance the retirement benefit would be 4.76 percent — somewhat larger that the 4.05 percentage point increase in the total contribution rate in the federal government's proposed reform. All of the increase in required contribution rates would be targeted exclusively to individual employee RRSPs. After the phase-in period (which would see mandatory RRSP contributions rise from zero to 4.76 percent) was complete, the current CPP contribution rate of 5.85 percent could be reduced to 5.14 percent (that is, 2.24 plus 2.90), with the difference also targeted to individual RRSPs.

* Based on Canada, Canada Pension Plan, Fifteenth Actuarial Report as at 31 December 1993 (Ottawa, 1994), for benefit payments (before reform) projected for 2020.

would exceed the corresponding costs for retirement benefits delivered through the CPP is fair and important. However, the accelerated growth of the retirement accounts, in conjunction (at present) with a lower nominal return on investments, may result in downward pressure on administration and investment management fees through competitive pressures. The disciplinary role of competition may be enhanced by initiatives designed to educate investors to examine critically the link between fees and recent mutual fund performance. It may also prove feasible to "bundle" individual accounts to exploit economies of scale.

The second issue of importance is that most employer-sponsored pension plans are integrated with the CPP. In particular, members of career-average and final-earnings plans typically contribute a lower percentage of their earnings beneath the YMPE and a higher percentage of their earnings in excess of this amount. Similarly, members receive a lower benefit on earnings beneath the YMPE, and a larger benefit on earnings in excess of this amount. If the CPP (and hence the YMPE) were phased out, the contribution and benefit formulas in these plans would have to be adjusted. Since the target replacement rate of the individual retirement accounts would be the same as that of the CPP,[21] the required changes may be largely cosmetic. The federal government could simply announce the "shadow" value of the YMPE each year, based (as it is now) on the nominal growth in the average wage. Employers and their employees could choose to use this shadow YMPE in determining member contributions and benefits.

Third, it seems reasonable to treat the employee contributions to the retirement accounts as a tax deduction (as RRSP contributions are currently treated), rather than as attracting a tax credit (as do present employee contributions to the CPP). Under the credit treatment, older workers may be effectively taxed on their capital contributions to the CPP in addition to the investment return on these contributions. The case for replacing the tax credit with a deduction is made more persuasive by the combination of higher contribution rates and the high tax-back rates implicit in the proposed Seniors Benefit.

Recent International Experience

Recently, several countries have taken steps to privatize, fully or in part, their retirement income systems. To provide perspective on privatizing retirement benefits currently delivered through the CPP, it is instructive to highlight some of this international experience.

The World Bank's Recommendations

The World Bank recommends that the first tier of the retirement system, which is designed to be redistributive and to place a floor under the retirement incomes of the elderly, should continue to be financed on a pay-as-you-go basis from general tax revenues.[22] In Canada, this first tier consists of OAS / GIS and the Seniors Benefit proposed in the March 1996 federal budget. The World Bank also recommends that the second (mandatory) pillar of the retirement system should be nonredistributive and fully funded, with decentralized control of the associated savings.[23] This second tier could consist of mandatory occupational pension plans, individual retirement accounts, or a combination of the two. In Canada, this second tier currently consists of the CPP.

The option of requiring all employers to provide defined-benefit pension plans is far more complicated than the option of requiring mandatory contributions to individual retirement accounts. Defined-benefit plans link a member's pension at retirement to a percentage (such as 2 percent) of the member's accumulated earnings or to a flat amount (such as $20 per month) for each year of service. In a system of mandatory occupational pension plans, regulations would be required to set minimum standards, to ensure portability, and to maintain full funding — and individual retirement accounts would still be required for the self-employed. For this reason, the debate

— and most of the experience elsewhere — focuses primarily on the introduction of individual retirement accounts.

The Chilean Experience

Discussions of the international experience with privatization inevitably begin with the case of Chile. In 1981, Chile replaced its pay-as-you-go social security system with a system of individual retirement accounts. The most salient features of the market-oriented reforms in Chile are as follows:[24]

- The pay-as-you-go defined-benefit plan has been replaced by individual defined-contribution plans. Workers bear the investment risk associated with their pension savings, and can presently select from 20 or so pension fund managers.

- Workers, not their employers, make the required contributions to individual retirement accounts. (In Canada, contributions to the CPP have been split between the worker and the employer, and most discussions of reform presume that this division will also apply to any increase in required contributions.)

- Workers are required to contribute 10 percent of their earnings to finance retirement benefits. In addition, workers are required to purchase disability and survivors' insurance from the pension fund managers and to contribute to administrative expenses, including profit. At present, the market-determined total charge is equal to about 13 percent of covered wages.

- The Chilean government provides a guaranteed minimum pension financed from general tax revenues to those with sufficient years of coverage. In addition, the regulations ensure that none of the funds can perform significantly worse than the average of all funds. The guaranteed minimum return of each fund is either one-half the average return or the average return less 2 percent, whichever is higher.

- Workers, on reaching retirement age, can either arrange for a series of phased withdrawals from their retirement accounts or purchase a price-indexed annuity from an insurance company.

- During the transition to the new system, Chile converted its implicit social security debt into explicit debt. The accumulated pension credits of those who opted to join the new system (the majority of active workers) were paid off by the issuance of recognition bonds. These bonds provide a real interest rate of 4 percent, and are redeemable on retirement for a lump-sum payment into the worker's individual retirement account. The pensions of retired workers and the future pensions of still-active workers who opted to remain in the old system are financed from general tax revenues.25

- Administrative costs under the new system are, to date, relatively large.26

Several features of the Chilean economy, including a much younger population and a government that has been running large surpluses, have facilitated the transition from a pay-as-you-go public pension system to a fully funded privatized alternative. Nonetheless, Chile's experience provides a useful benchmark against which policy initiatives in Canada can be evaluated.

For example, while workers in Chile contribute the entire amount of the plan while in Canada employers and employees split CPP costs, the Chilean approach is not likely to yield a significantly different outcome in the long run since employers' contributions to the CPP are ultimately shifted in the main to workers. The comparison also invites the question, however, of whether, in order to minimize short- run employment consequences in Canada, any additional contributions should be paid only by workers. Compare also Chile's mandatory individual disability and survivor plans — these benefits are, at present, delivered in Canada by the CPP. In 1995, Canada's Chief Actuary estimated that disability, survivors', and death benefits constituted 35.9 of the pay-as-you-go contribution rate for the CPP.[27]

The Australian Experience

In Australia, employers have been required since July 1992 to provide minimum pensions for their employees. Initially, "small" employers were required to contribute 3 percent of the employee's earnings (beneath a maximum), while "large" employers were required to contribute 4 percent. The required employer contributions are scheduled to rise to 9 percent by 2002. These mandated private pensions will reduce the Australian government's expenditures on public pensions by reducing the number of retirees who qualify for earnings- and asset-tested public pensions. The latter consist of a flat benefit that is financed on a pay-as-you-go basis from general tax revenues. As the mandatory private pension system matures, the claims on the public pension system should decline.

Unlike Chile, Australia requires employers, not employees, to make the required contributions and investment decisions. As I observed earlier, however, if most of the employer contributions are ultimately shifted to workers, the question of whether workers or their employers actually "pay" the required contributions is of relatively little importance in the long run.

The US Options

In the United States, the January 1997 release of the report of the Social Security Administration Advisory Council has served as a catalyst to the debate about privatization. Three options are under consideration, all of which seek to increase the ratio of discounted benefits to discounted contributions for younger cohorts by engineering an increase in the national savings rate and by directing some of this saving into the equity markets, where historical real returns have been high.[28] The options are:

- to maintain social security in its present form, but invest up to 40 percent of social security funds in the stock market;
- to reduce benefits by gradually raising the retirement age and reducing the replacement rates received by high-income earners, while increasing the contribution rate by 1.6 percent (from 12.4 to 14 percent) of covered payroll in order to finance mandatory individual retirement accounts; and
- to reduce the workers' contribution from 6.2 percent to 1.2 percent of covered earnings, with the difference of 5.0 percent invested in a personal security account. Employers would continue to contribute 6.2 percent of covered earnings, which, together with the 1.2 percent contributed by employees, would finance disability and

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survivors' benefits, as well as a flat benefit that would be about 60 percent of the poverty line.

Kotlikoff, and Feldstein and Samwick, among others, have proposed that US social security be privatized in the manner pioneered by Chile.[29] Kotlikoff would follow that country in replacing the retirement benefits provided by US social security with individual retirement accounts, while continuing to require social security contributions to finance survivors' and disability benefits. The goal is to realize the long-run efficiency gains of privatization, while minimizing the costs borne by the transition generation.

Concluding Observations

High real interest rates, together with the prospect of modest growth in aggregate real wages, clearly favor a more fully funded CPP. So, too, do considerations of intergenerational equity. From this perspective, the sharp increase in funding implied by the reforms tabled by the federal government is entirely appropriate.

The federal government's approach to reform has several shortcomings, however. Many young Canadians believe that the CPP will not be around to deliver pension benefits when they reach retirement age. It is not clear that this sentiment will change in response to the proposed sharp increase in contribution rates designed to achieve full funding, which many people see simply as a tax grab. As a result, the rise in contribution rates will adversely affect employment and output for the transition period during which employer costs are (largely) shifted back to workers. The higher payroll taxes, in addition, will continue to adversely affect work incentives in the long run.

Many commentators have noted the large political risks associated with a fully funded CPP. The existence of a large reserve fund could give rise to political pressure to enrich benefits, and it could prove difficult to insulate the investment strategies of the fund from social or political objectives. If the investment decisions for a fully funded CPP are to be made in the private sector, one might ask why the CPP itself should remain in the public sector.

For the above reasons, the more dramatic option of replacing the retirement benefits delivered through the CPP with a system of mandatory RRSPs merits serious consideration. These new accounts would have a target replacement rate equal to 25 percent of the average industrial wage (that is, the same as the CPP). Like a fully funded CPP, the system of RRSPs would increase personal savings and thereby facilitate the future payment of pensions by increasing the stock of capital and, ultimately, the size of the economic pie. The consumption needs of retirees must, of course, be met from current production and imports. For pay-as-you-go public pensions, these needs are financed by taxing workers. For fully funded individual retirement accounts, these needs would be financed by the sale of assets, either to domestic workers (who must then reduce consumption) or to foreigners (which can finance imports). In general, therefore, it is the expansion in national income and output occasioned by full funding that would relieve the burden on workers, especially when the baby boom generation retires.

An important advantage of privatization would be that working Canadians would associate the higher contribution rates directed to individual RRSPs with an increase in their receipt of pension benefits. Providing a close link between contributions and benefits would reduce the distorting impact of the payroll tax on the long-run supply of labor. For the same reason, privatization would reduce the adverse impact on output and employment of higher employer costs during the transitional period in which the increase in employer contributions is shifted back to employees. This is an especially important consideration, since the impact of an increase in a payroll tax on output and employment is quite different from that of an existing payroll tax.

It seems clear that employees would view contributions made by employers to individual RRSPs as purchasing a retirement benefit on their behalf. For this reason, the employer portion of the mandatory RRSP contributions would probably be shifted relatively quickly to workers, through lower wage increases or other concessions in formal or informal bargaining. This is far less likely to be the case if, instead, employer contributions were simply directed to a (modestly) reformed CPP. As a result, the privatization of retirement benefits should prove less disruptive to jobs, in both the short and medium term. Further, the mandatory RRSP alternative would eliminate the long-run work disincentives that would accompany an increase in payroll taxes.

Either fully funding the CPP or replacing it with a privatized alternative would have a final important advantage: each potential enrichment of the CPP would require a corresponding and immediate increase in the contribution rate. Canadians would thus be forced to confront the true cost of potential enrichments of their pension benefits. If a potential enrichment were made retroactive, the unfunded liability so created would be identified and an amortization schedule set in place. In short, it would be clear who was paying for what. In the current public debate, in which older Canadians continue to insist they are entitled to the CPP pension benefits they have "paid for" and younger Canadians are dubious about the plan's ability to offer them anything at all, this clarity is sadly lacking.

Notes

I am indebted to the Donner Canadian Foundation for financial support, and to Bill Robson of the C.D. Howe Institute for several editorial suggestions.

1 For example, W.B.P. Robson, Putting Some Gold in the Golden Years: Reforming the Canada Pension Plan, C.D. Howe Institute Commentary 76 (Toronto: C.D. Howe Institute, January 1996).

2 Canada, "Principles to Guide Federal-Provincial Decisions on the Canada Pension Plan," press release (Ottawa, n.d.).

3 See Canada, Securing the Canada Pension Plan: Agreement on Proposed Changes to the CPP (Ottawa, February 1997).

4 The federal government, in its proposed reform, focuses on the steady-state contribution rate, which can be viewed as the sum of the rate necessary for full funding and the additional amount — in perpetuity — required to service the existing unfunded liability.

5 By way of contrast, most members of defined-benefit plans in the private sector receive pensions that have little or no contractual protection from inflation. Their pension benefits, in effect, have the investment characteristics of long-term bonds, which are a very risky investment in an economy characterized by uncertainty regarding the future rate of inflation. Further, it is likely that members of defined-benefit pension plans do, in fact, bear some of the investment risk, the formal terms of the plan notwithstanding. See D. Hyatt and J. Pesando, "The Distribution of Investment Risk in Defined Benefit Pension Plans," Industrial Relations 51 (1, 1996): 136–155.

6 See, for example, the analysis in A. Abel et al., "Accessing Dynamic Efficiency: Theory and Evidence," Review of Economic Studies 56 (1, 1989): 1–19. M. Feldstein ("The Missing Piece in Policy Analysis: Social Security Reform," American Economic Review 86 [2, 1996]: 1–14) argues that it is the pretax rate of return on capital that should be compared with the annual rate of growth of real wages and salaries. Feldstein notes that, from 1960 to 1994, real wages and salaries in the United States grew at an annual rate of 2.6 percent, while the pretax real return on nonfinancial corporate capital averaged 9.3 percent. The net-of-tax real return to corporate capital averaged 5.4 percent, still well in excess of the rate of growth of real wages and salaries.

7 The Institute for Policy Analysis at the University of Toronto, in a representative forecast, predicts that the real interest rate on long-term industrial bonds will average 5.5 percent during the 2011–20 period, while aggregate real wages will rise by only 1.5 percent. (The aggregate growth in real wages consists of employment growth of 0.55 percent per year and real wage growth per worker equal to 0.95 percent per year.)

8 For a recent review of these oft-stated concerns, see J.C. Emery, "Designing the Emperor's New Clothes: Fuller Funding and the Sustainability of the Canada Pension Plan," Canadian Business Economics 4 (4, 1996): 48–64, especially 52–55.

9 See, for example, the review of the recent literature by J.R. Kesselman, "Payroll Taxes in the Finance of Social Security," Canadian Public Policy 22 (2, 1996): 166–168). B. Dahlby ("Payroll Taxes," in A.M. Maslove, ed., Business Taxation in Ontario [Toronto: University of Toronto Press, 1993]) suggests that 80 percent or more of employer payroll taxes are ultimately shifted to employees.

10 See World Bank, Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth (New York: Oxford University Press, 1994), p. 121; and Kesselman, "Payroll Taxes in the Finance of Social Security," pp. 166–168.

11 Critics of the federal government's reforms, including the Ontario government, have argued that a significant increase in required CPP contributions should be accompanied by a significant reduction in unemployment insurance premiums, so as to minimize the net increase in payroll taxes. As Kesselman ("Payroll Taxes in the Finance of Social Security") emphasizes, however, it is necessary to distinguish between an increase in payroll taxes, which may have such adverse effects, and the level of payroll taxes, which is likely to have already been shifted (in the main) to workers.

12 An empirical assessment of this issue is currently in progress at the Institute for Policy Analysis at the University of Toronto.

13 Canada, An Information Paper for Consultations on the Canada Pension Plan (Ottawa, February 1996), annex D, p. 61. The unfunded liability would be less if it were calculated on the basis of a real rate of return of 3.8 percent, the rate used to determine the entry-age normal contribution rate for the proposed reforms to the CPP.

14 Canada, Budget Plan (Ottawa, March 6, 1996), p. 20, table 1.5.

15 Emery ("Designing the Emperor's New Clothes"), among others, draws attention to the fact that the next generation of workers is likely to be substantially better off than the current generation. If so, intergenerational equity may, in fact, be served by requiring the next generation to pay higher CPP contribution rates. W.B.P. Robson ("Ponzi's Pawns: Young Canadians and the Canada Pension Plan," in J.B. Burbidge et al., When We're 65: Reforming Canada's Retirement Income System, The Social Policy Challenge 13 [Toronto: C.D. Howe Institute, 1996]) analyzes the incentives for younger Canadians to opt out of the CPP, and the political tensions that might ultimately be created if they do so in large numbers.

16 M. Feldstein and A. Samwick, "The Transition Path in Privatizing Social Security," NBER Working Paper 5761

(Cambridge, Mass.: National Bureau of Economic Research, 1996).

17 In the United States, the expert committee appointed by the Senate Finance Committee and chaired by Professor Michael Boskin recently reported that the consumer price index overstates the rise in the US inflation rate by 1.1 percent per year. Of this amount, 0.6 percent reflects the understatement of quality improvements and 0.4 percent the inadequate attention to the substitution of goods that occurs when relative prices change. It is generally agreed that the degree of overstatement of inflation by the consumer price index is smaller in Canada.

18 The issue of intergenerational equity, especially as it pertains to the transitional generation, is readily expanded. For example, it seems likely that Canada's health care system will be shifted (in part) to a user-pay basis as the population ages. If so, the transitional generation may be the last to receive "free" health care benefits. For an analysis of the importance of the totality of these intergenerational transfers, see L.J. Kotlikoff, "Privatizing Social Security at Home and Abroad," American Economic Review 86 (2, 1996): 368–372.

19 The survivors' and disability benefits provided by the CPP have a flat component (that is, not dependent on the contributor's earnings) as well as an earnings-related component. If the government were to opt for full privatization, the transition could be accomplished by requiring all contributors to purchase death and disability insurance in the private market as of January 1998; no new CPP survivors' or disability benefits would be paid.

20 O.S. Mitchell and S.P. Zeldes, "Social Security Privatization: A Structure for Analysis," American Economic Review 86 (2, 1996): 363–367.

21 This will be the case if the anticipated real return on the RRSP is the same as the real interest rate used to identify the entry-age normal contribution rate for the CPP, and if the wage growth of the individual mirrors that assumed for contributors to the CPP.

22 World Bank, Averting the Old Age Crisis.

23 The World Bank (ibid., p. 247) suggests that the target replacement rate for these two pillars should be about 40 percent of the worker's final earnings. For an unattached individual, public retirement pensions in Canada (CPP / OAS / GIS) currently replace 41.6 percent of pre-retirement earnings if the individual earns the average industrial wage ($35,800 per year in 1997). This fraction is much higher for lower-income workers (76.9 percent for those who earn one-half of the average industrial wage) and much lower for higher-income workers (19.0 percent for those who earn twice the average industrial wage).

24 For a more detailed review of the pension reforms in Chile, see S.J. Schieber and J.B. Shoven, "Social Security Reform: Around the World in 80 Days," American Economic Review 86 (2, 1996): 373–377; and S. Edwards, "The Chilean Pension Reform: A Pioneering Program," NBER Working Paper 5811 (Cambridge, Mass.: National Bureau of Economic Research, 1996).

25 For a more detailed discussion of these transitional measures, see World Bank, Averting the Old Age Crisis, especially pp. 267–268. Recognition bonds are also redeemable on death or disability. Until 1995, these bonds could not be traded in the secondary market.

26 See, for example, Mitchell and Zeldes, "Social Security Privatization." In Canada, a more developed financial structure should permit administrative fees to be lower.

27 See Canada, Canada Pension Plan, Fifteenth Actuarial Report as at 31 December 1993 (Ottawa, 1994), p. 8, main table 3.

28 The chair of the advisory council, E.M. Gramlich, reviews the three options in "Different Approaches for Dealing with Social Security," American Economic Review 86 (2, 1996): 358–362.

29 Kotlikoff, "Privatizing Social Security at Home and Abroad; and Feldstein and Samwick, "The Transition Path in Privatizing Social Security."

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