This article examines the experience of the Canada Pension Plan (CPP) in investing its surplus funds in equities. The CPP investment policy is viewed by some experts as a possible model for increasing the investment income of Social Security. The article discusses the key features of this policy, its implementation, and results to date.

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The Canada Pension Plan's Experience with Investing Its Portfolio in Equities

*by Mark Sarney and Amy M. Preneta**

Summary

For the past few years, the Canada Pension Plan (CPP) has been investing some of its assets in equities. Without changes, an imbalance between revenues and outlays would exhaust the CPP reserve fund by 2015. Creating an entity that was independent of government was one of several changes the federal and provincial governments enacted to achieve fuller funding. The governments created an independent Investment Board (the CPP Investment Board, or "CPPIB") to oversee the new investments. Because the plan already owned a large government bond portfolio, the CPPIB decided to invest new CPP funds in broad equity indices in March 1999. In 2000, the CPPIB began actively investing a portion of the CPP funds.

Key features of that policy and some observations about its implementation include the following:

- *In addition to investing CPP revenues in equities, reform also included contribution rate increases, benefit reductions, and a financing stabilizer.* The new investment policy accounted for 25 percent of the total effect of all the reforms.
- *It is premature to know if the investments will achieve their long-term performance objective.* The new equity investments are projected by the Chief Actuary, in his most recent Actuarial Report, to earn a 4.5 percent real rate of return on Canadian equity and 5.0 percent real return on foreign equity for a blended real return of 4.65 percent based on an equity mix of 70 percent Canadian and 30 percent non-Canadian. However, it is too early to tell if the equity investments will achieve that goal over the long run.
- *The Investment Board's mandate is to maximize returns.* The Investment Board, which oversees the CPP's new investments, has broad discretion to pursue maximum returns on its assets without incurring undue risk of loss while keeping in mind the financial obligations and other assets of the CPP. Furthermore, it has developed into a professional investment organization staffed with private-sector experts in finance and investment.
- *The board is designed to be independent of government.* The federal and provincial governments

designed the board to operate at arm's length from themselves. The process for selecting directors includes public- and private-sector participation, and the board is in compliance with several sets of governance guidelines for corporations. CPPIB management, with the support of its board of directors, has decided to implement a virtual corporation model involving a small team of senior executives setting strategies for implementation primarily by external professional firms. Consequently, as a virtual corporation, the board currently relies on external fund managers to make investments and vote proxies.

- *Several measures are designed to ensure accountability to the public.* The investment legislation subjects the board to overlapping layers of oversight to ensure accountability to the public. The features of this oversight include public meetings in each province as well as quarterly statements and annual reports to Parliament, the federal and provincial finance ministers, and the public. The 10 finance ministers review the CPPIB's mandate and regulations every 3 years, and the CPPIB is subject to a special examination every 6 years by an auditor appointed by the Federal Minister of Finance.

Introduction

This article examines the experience of the Canada Pension Plan (CPP), the Canadian counterpart to Social Security, in adopting equity investment of its portfolio as one means of ensuring the long-term sustainability of the plan. The new investment policy was designed to help move the system to fuller funding. Before the changes, the CPP reserve had equaled about 2 years of benefits; the reform made 5 years the new target. The government's goals for the new investment policy were to invest CPP funds in the best interest of plan participants, maintain a proper balance between risks and returns, and ensure sound fund management (Canada Pension Plan 1997, Annex II, 3-4).

To achieve its goal of ensuring a basic, minimum income for all seniors, the Canadian government also manages the Old Age Security (OAS) and Guaranteed Income Supplement (GIS) programs. The OAS program, funded through general tax revenues, provides a monthly, flat-rate benefit payable at age 65. The OAS benefit amount is determined by how long the beneficiary has lived in Canada. The benefit is taxable, and there are some residence requirements for eligibility. OAS benefits are subject to a "claw back," or reduction, but approximately 95 percent of pensioners keep their full benefit. OAS benefits are price-indexed and represent approximately 16 percent of the average wage.

The GIS program provides a monthly, income-tested benefit to residents who receive an OAS benefit and have little or no other income. GIS benefits are payable at age 65 and are nontaxable. GIS benefits are also price-indexed. Approximately 37 percent of OAS beneficiaries also receive GIS benefits. When combined, the OAS and GIS benefits represent approximately 35 percent of the average wage.

The Canada Pension Plan and Components of Reform

An examination of the CPP's financing problem and the entire package of reforms—including contribution rate increases, benefit reductions, and a financing stabilizer—is vital to understanding the role that equity investment is expected to play. The CPP is a mandatory, contributory, social insurance program that provides earnings-related retirement, disability, and survivors' benefits to Canadian workers and their families. Employee and employer contributions fund the plan, which is estimated to cost C$20 billion (US$13.5 billion) in 2001-2002, about 1.9 percent of Canada's gross domestic product (Human Resources Development Canada 2001). Unlike Social Security, the CPP is a federal provincial program that applies throughout Canada except in the province of Quebec. Quebec has the parallel Quebec Pension Plan (QPP), which has a much longer history with equity investment. (For more information about the QPP, see Appendix A. For more information about CPP benefits and how they compare with U.S. Social Security benefits, see Appendix B.)

In the mid-1990s, the actuaries who reviewed the CPP found that without changes, the imbalance of income and benefit payments would exhaust the CPP reserve fund by 2015. The funding problem was attributable in large part to the fact that the percentage of Canadians over age 65 will almost double, from 12 percent in 1995 to 23 percent, by 2030. The result will be a decreasing worker-to-retiree ratio, from the current five workers to each retiree to only three workers to each retiree by 2030 (Canada Pension Plan 1996). The federal and provincial governments would have to almost triple payroll taxes by 2030 to maintain program solvency—from a combined employer/employee contribution rate of 5.6 percent in 1996 to 14.2 percent in 2030 (Canada Pension Plan 1997, 4).

The governments adopted steady-state financing as a measure of the CPP's long-term financial sustainability. The measure of steady-state financing is the lowest contribution rate that is sufficient to sustain the plan without further increase (Office of the Superintendent of

Financial Institutions 2000, 10). The steady-state contribution rate is estimated by independent government actuaries and may vary over time as economic and demographic conditions change. The entire set of reforms reduced that rate by 4 percentage points, from about 13.9 percent to 9.9 percent. A financing problem will develop again if the steady-state rate grows larger than the actual rate. According to the CPP 18th Actuarial Report, the steady-state contribution rate will be 9.8 percent beginning in 2003, a drop of 0.1 percentage points from the currently scheduled rate of 9.9 percent (Office of the Superintendent of Financial Institutions 2000).

Equity investments accounted for just over 25 percent of the package that achieved steady-state financing. The accelerated increase in contributions brought more money in sooner than previously projected, boosting the effect of the equity investments.[1] Benefit reductions accounted for 28 percent of forgone contribution rate increases, and increases in the payroll tax accounted for 13 percent of the package. Freezing the *annual taxable earnings exemption* had the largest effect, accounting for 34 percent. Although the equity investment did not provide a majority of the financing needed to achieve steady-state financing, the government expects it to play a significant role (Office of the Superintendent of Financial Institutions 1997).

Increases in Contributions

In addition to adopting an equity investment policy, the federal and provincial finance ministers made other changes to raise the CPP's income, build the reserve fund, and move the system to fuller funding. One change was to accelerate the increase in the contribution rates from a combined 7.8 percent evenly split between employers and employees in 2000 to 9.8 percent in 2003 and hold them constant at 9.8 percent thereafter (Canada Pension Plan 1999b). Although this change accelerated the payroll contributions increase relative to prior law, the rate will remain lower than what it would have been without the reforms (10.1 percent by 2016 and 14.2 percent by 2030).

Another change was to freeze the annual taxable earnings exemption at C$3,500 (US$2,371) while allowing taxable maximum earnings to increase annually with inflation. This change effectively expanded the amount of earnings subject to the payroll tax. All workers are exempt from the payroll tax on earnings under the exemption amount or above the taxable maximum.

Benefit Reductions and Tighter Eligibility Requirements

The federal and provincial governments also reduced expenditures by decreasing benefits and tightening eligibility requirements. Current beneficiaries and persons already age 65 when the reforms were enacted were exempted from these changes. New beneficiaries who receive the maximum CPP pension will see a reduction in monthly benefits of about 1.7 percent compared with the prereform law (Canada Pension Plan 1997, 7-8; Government of Canada 1998, 14-15). The reductions include (Canada Pension Plan 1997, 7-10):

- *Using a 5-year average of the taxable maximum earnings to index career earnings.* The change from the original 3-year average reduces the value of earlier earnings, thus reducing benefit amounts.
- *Increasing the number of work years required for eligibility for disability benefits to 4 of the last 6 years.* This change from the earlier 2 of the last 3 years, or 5 of the last 10, tightens disability eligibility.
- *Changing the basis for calculating retirement benefits for disability beneficiaries by using maximum taxable earnings at the time disability occurs and then indexing the benefit to age 65 by price growth.* The CPP would no longer use earnings from the year a disabled beneficiary turns age 65 and would substitute price growth for wage growth in indexing, thus lowering disability benefits.
- *Limiting the extent to which a person can receive two benefits in combination—such as survivor and disability benefits or survivor and retirement benefits.* The lowered ceiling on the combined total of the benefits that a dually entitled beneficiary can receive reduces benefits.
- *Capping the death benefit at C$2,500 (US$ 1,700) and not indexing it.* Previously the death benefit was 10 percent of the taxable maximum (C$3,580, US$2,425 in 1997), and it was indexed to wage growth.

Automatic Stabilizer

A failsafe provision increases the contribution rate over 3 years and stops indexing benefits if the Triennial Review finds that the 9.8 percent contribution rate will not maintain steady-state funding and Parliament and the provincial legislatures take no action (Canada Pension Plan 1997). The failsafe provision thus ensures steady-state financing and creates built-in pressure for action by the federal and provincial governments.

Status of Reform Efforts

The success of the reforms in maintaining the steady-state contribution rate depends in part on the equity investments' earning their projected return. Based on conservative assumptions, the total fund (bonds and equities) is projected to generate an average real rate of

return of around 4.25 percent per year, assuming a 50 percent allocation to equity and a 50 percent allocation to fixed income.[2] Using a 100 percent equity assumption and an equity mix of approximately 70 percent domestic/30 percent foreign, the Chief Actuary's long-term assumption is a real rate of 4.65 percent.[3]

However, at this point it is premature to tell if the equity investments will achieve that goal over the long run, especially since the existing investment performance data cover less than 3 years. In March 1999, the Investment Board began investing all new funds in broad equity indices to diversify the CPP's portfolio. At the end of December 2001, the board was managing net assets of C$13.8 billion (US$9.35 billion). The board estimates that total assets will grow to C$155 billion (US$105 billion) by 2011 (Office of the Superintendent of Financial Institutions 2000, 35).

The returns on CPP equity investment greatly exceeded the actuarial projection for the first year. In its first full fiscal year of investing, which ended in March 2000, the domestic equity fund earned a 45 percent return and the international equity funds earned 16 percent. The combined return of all CPP equity investments was 40 percent. The Toronto Stock Exchange (TSE), where all domestic equities were invested until August 2000, has achieved a 40 percent return on only three other occasions since the CPP was created in 1966 (Canada Pension Plan Investment Board 2000, 7).

In August 2000, the federal and provincial governments allowed actively managed investing of up to half the domestic equities held by the CPP. The board's first active investment decision was to reduce the CPP's exposure to Nortel Networks, which represented 35 percent of the Toronto Stock Exchange 300 Composite Index (TSE 300) and 28 percent of the CPP's domestic equity portfolio at the time. On September 15, 2000, the Investment Board divided the domestic equities between the TSE 300 and a fund of the TSE 300 excluding Nortel Networks ("TSE 299.") Making this move reduced their largest holdings in a single security from 28 percent to 4 percent. The "TSE 299" declined by 8 percent for the year compared with a 31 percent decline for the TSE 300. Taking advantage of the opportunity to actively manage some of the domestic equity holdings saved the CPP C$535 million (US$362 million) in losses during the fiscal year that otherwise would have been almost C$1.4 billion (US$949 million), or 63 percent, higher than they actually were (Canada Pension Plan Investment Board 2001, 5).

In its second full fiscal year of investing, which ended March 2001, the CPP's total portfolio had a rate of return of –9.4 percent. The market value of investments was C$7.2 billion (US$4.9 billion), of which C$5 billion (US$3.3 billion) was invested in domestic markets and the remainder in foreign markets. The net loss from operations was C$852 million (US$577 million), compared with net income of C$460 million ($US312 million) in the prior year. More than 90 percent of the fiscal year (FY) 2001 loss occurred in the fourth quarter (January to March) (Canada Pension Plan Investment Board 2001, 18). The loss would have been much greater if the board had not been granted the ability to actively manage funds as described above.

By December 31, 2001 (9 months into the third fiscal year), the CPPIB had C$13.8 billion under management. For those first 9 months of FY 2002, it had a portfolio return of 1.5 percent compared with 0.6 percent for the benchmark portfolio. The CPPIB's domestic equities earned a 3.7 percent return compared with a 2.3 percent return for the TSE 300. The CPPIB's foreign equities had a –2.6 percent return compared with a –3.1 percent return for the benchmark (Canada Pension Plan Investment Board 2002)

Characteristics of the CPP Investment Board

The 12-member board of directors of the CPP Investment Board oversees the senior management team (hired from the private sector) that recommends the investment strategy and makes the actual investment decisions (Canada Pension Plan Investment Board 1999c). The CPPIB has no responsibility for administering the CPP. According to the legislation that established the Investment Board, the CPPIB's objectives are to:

- Manage assets under its control in the best interests of CPP contributors and beneficiaries, and
- Invest those assets to maximize the rate of return without undue risk of loss, while taking into account CPP funding and the ability of the CPP to meet its obligations (Canada Pension Plan Investment Board Act, section 5).

The legislation states that the CPPIB shall not directly or indirectly carry on any business or activity, or exercise any power, that is inconsistent with these objectives.

Broad Discretion

The statute that established the Investment Board gave the organization a clear purpose and imposed few restrictions on how it could invest the incoming CPP funds. The Chief Executive Officer (CEO), John MacNaughton, feels that the Investment Board needs to invest in a wide range of vehicles to properly diversify risk and maximize returns. He plans to invest eventually in debt, private equities, merchant banking, real estate, infrastructure projects, and venture capital (McQueen 2000).

The governments did impose a restriction on investment to give the Investment Board time to get organized and bring in professional investment staff. Until the federal government completed its first Triennial Review of the CPP, federal regulations required CPP domestic equity investments to replicate broad market indices (Canada Pension Plan Investment Board 1999b, 2).[4] Currently, the domestic investments replicate the TSE 300 and the "TSE 299." The board decided to replicate the MSCI (Morgan Stanley Capital International) World Index for foreign investments by purchasing a Standard & Poor's 500 Index fund and an EAFE (Europe, Australasia, and the Far East) Index fund of about 1,000 overseas companies, minus Canada (Canada Pension Plan Investment Board 1999a, 28). The Investment Board chose those indices as a cost-efficient way to invest in domestic and foreign markets and to diversify investment risk among different global economies (Canada Pension Plan Investment Board 1999d).

A second restriction on the CPP is a pension regulation that caps investment in foreign securities for all pension plans in Canada. The cap was 20 percent of assets at book value in 1999, the board's first year of operation, and it was increased to 25 percent in 2000 and to 30 percent in 2001 (Canada Pension Plan Investment Board 2000, 12).

In 2002, the board expanded into private-market investments, which can include private equity, infrastructure projects, income-producing real estate and developable land, and energy and natural resource assets. The board currently participates in private markets through limited partnerships or pooled funds. The board may commit up to 10 percent of total assets to private equities to be invested over 5 years (Canada Pension Plan Investment Board 2001, 7) and had committed C$2 billion (US $1.36 billion) by December 31, 2001. Its target for private equity returns is to exceed the rate of inflation by 8 percentage points over a 10-year period. The board's first priority is to invest in venture capital and buyout/acquisition opportunities. It will consider real estate and infrastructure investments later in 2002 and direct investments in natural resources in 2003 (Canada Pension Plan Investment Board 2001, 13).

Intergovernmental Oversight and Private-Sector Participation

The focus on maximizing returns led the members of the Investment Board to build their organization in the image of a private-sector investment management firm. The directors on the board are almost all drawn from the fields of finance and investment rather than government. All but one of the directors has had extensive experience in banking, corporate finance, investments, and pensions as economists, financial analysts, actuaries, bankers, or executives.[5] The law prohibits government officials from serving on the board, a provision that moves the selection process toward private-sector nominees who have professional experience related to managing investments. Investment staff are drawn from the private sector. The CEO, John MacNaughton, has had a long career in the investment field and is a past chairman of the Investment Dealers Association of Canada.[6] His other senior and middle management investment professionals have experience with leading U.S. and Canadian investment firms as well as Canadian pension funds. As a result, the Investment Board resembles a private investment firm.

The federal and provincial governments designed the investment policy to minimize the opportunity for external interference. The private sector participates in selecting the board directors.

Stewardship of the CPP and the Investment Board rests with 10 separate governments: the federal Canadian government and the nine participating provinces. Changes to the CPP law require passage by the federal government and two-thirds of the participating provinces that represent two-thirds of the population.

All 10 of these governments, which are usually represented by a variety of political parties, share the responsibility of selecting the committee that nominates candidates for directorships and have responsibility for overseeing the board's performance. The federal and provincial finance ministers work together in their oversight of the board.

Selection and Composition of the Board of Directors

The CPP relies on a joint federal/provincial process in selecting board directors. The federal and provincial governments send one representative each to form a nominating committee that is chaired by a private-sector executive. The nominating committee then produces a list of candidates for the board. The federal Minister of Finance appoints the board directors from that list to staggered 3-year terms in consultation with the provincial finance ministers.[7] As of the 1999 Triennial Review, board directors will be limited to three terms and the chair will be limited to four terms (Canada Pension Plan 1999a). The Minister also selects the board's chair from among the 12 directors in consultation with the provincial finance ministers and the board directors. Factors that the Minister of Finance must consider include:

- Ensuring regional representation on the board,

- Having a sufficient number of directors with proven financial ability or relevant work experience, and
- Limiting board directors to Canadian citizens who are not bankrupt, are not connected with the government, and have no potential conflicts of interest.[8]

Compliance with Fiduciary Standard and Governance Guidelines

The legislation that established the CPP Investment Board includes a "duty of care" fiduciary standard. The standard states that board directors shall "exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances." The standard also requires board directors with a special level of relevant knowledge or skills to use their knowledge or skills in discharging those duties (Canada Pension Plan Investment Board 1997, Section 14).

In addition to complying with the governance requirements of the CPP Investment Board Act, the board also complies with 13 of the 14 governance guidelines of the Toronto Stock Exchange. The TSE's guidelines are for publicly traded corporations and are commonly accepted standards for measuring performance. These guidelines include:

- The board must be independent.
- The directors must assume active stewardship of the organization.
- The directors must be responsible for strategic planning, risk management policies, planning for senior management succession, and communications policy.

The only guideline with which the board does not comply is one that requires a board nominating committee. That responsibility belongs to the committee appointed by the federal and provincial finance ministers and is not relevant to the board's mandate (Canada Pension Plan Investment Board 2000, 18).

The Investment Board also complies with five of the six governance principles developed by a joint task force of the Association of Canadian Pension Management, the Pension Investment Association of Canada, and the Office of the Superintendent of Financial Institutions. Those guidelines are meant to apply to all pension plans in Canada. The six principles state that pension plans:

- Should have a clear mission,
- Have a fiduciary duty to plan beneficiaries,
- Should clearly allocate responsibilities and accountabilities to identify stakeholders and define roles,
- Should measure performance and report results to stakeholders,
- Should have a pension plan administrator who is qualified and knowledgeable, and
- Should review and modify the governance process to ensure its effectiveness (*Recommendations* 1999).

The board does not comply with the principle regarding a pension plan administrator because the board does not have that responsibility (Canada Pension Plan Investment Board 2000, 18).

Reliance on External Fund Managers

The board and its CEO have chosen to use external organizations rather than a large in-house organization for most operations (Canada Pension Plan Investment Board 2000, 6). A team of senior executives works on developing the investment and operational strategies and is accountable for the investment performance. The board expects that this type of organization will be able to take advantage of more specialized resources and achieve better results at a lower cost. However, the board retains the option of developing internal expertise to implement some of the investment strategies whenever it feels that this approach can achieve equal or better results at a lower cost (Canada Pension Plan Investment Board 2000, 6).

The board already retains two external fund managers for its publicly traded investments—one to invest in a Canadian stock index fund and a second to invest in foreign stock index funds. For now, the external asset managers are also responsible for voting the shares and for drafting the proxy voting policy, subject to board approval. That responsibility will be brought back to the board at some point (Canada Pension Plan Investment Board 2000, 11).

The use of external asset managers to handle the equity investments could provide a degree of insulation from interference in investment decisions by keeping those responsibilities separate from the board. If the board continues to use external asset managers for its investments, the degree of insulation from interference depends on what criteria the board uses to select those asset managers and how much discretion the board gives them in making the investments.

Measures to Ensure Accountability to the Public

The governments built several accountability measures into the structure of the Investment Board to ensure that the board is held publicly accountable:

- It is subject to special examination at least every 6 years by the federal finance minister in consultation with the participating provinces.
- It must provide quarterly financial statements and annual reports on the performance of the CPP Investment Fund to the federal and provincial finance ministers and the federal Parliament. The CPPIB also issues quarterly statements to the public, though it is not required to do so by legislation.
- It undergoes a performance evaluation as part of the Triennial Review, a required review of the financial status of the CPP that includes issuing an actuarial report on the CPP.
- It must hold public meetings to discuss its performance at least every 2 years in each participating province (Human Resources Development Canada 1997, 10-11).

The result of having these accountability measures is that the board's activities and finances are overseen by several entities: the government's Chief Actuary, the federal Parliament and the legislatures of the participating provinces, the 10 finance ministers, and the public. In addition, the board has an outside firm conduct an audit of its finances for its annual report.

Appendix A. Equity Investment Experience of the Quebec Pension Plan

The Quebec government established an investment agency, the Caisse de dépôt et placement du Québec, to handle the allocation of the Quebec Pension Plan's (QPP's) assets in 1966. The Caisse invests QPP funds along with the funds of a number of other Quebec pension systems for provincial and municipal employees and some nonpublic organizations.

The Caisse consists of several investment companies that each handle different types of financial instruments. It includes subsidiaries for real estate holdings and private investments. Financial experts, business experts, and directors of the Caisse's senior management sit on the board of each company. The group that handles private investment consists of several companies that handle corporate equity and bond investments for firms of various sizes and for industries, including communications, telecommunications, innovative technologies, and real estate.[9]

The Caisse managed about C$125 billion (US$85 billion) in assets in 2000. Almost half of these assets were in Canadian, U.S., or foreign equities; about 40 percent were in bonds; and the rest were in mortgages, real estate, or short-term investments. The QPP funds account for about 21 percent of all holdings managed by the Caisse in 2000, and the Government and Public

Appendix B.
Comparison of the Canada Pension Plan and U.S. Social Security

Plan feature	Canada Pension Plan	U.S. Social Security
Retirement ages		
Early	60	62
Normal	65	Currently 65, increasing to 67 for those born in 1960 and later
Late	70	70
Contribution rate	9.4% in 2002, rising to 9.8% by 2003	12.4%
Employer	4.7%	6.2%
Worker	4.7%	6.2%
Percentage of workers covered	Over 90% (9.7 million workers in 1996)	96% (153 million workers in 2000)
Covered earnings	Between C$3,500 and C$39,100 in 2002	Up to US$84,900 in 2002
Funding	Pay-as-you-go with partial prefunding	Pay-as-you-go with partial prefunding
Fund assets (reserves)	C$36 billion (growing to 4-5 years of benefits)	US$1,073.0 billion (about 2 years of benefits)[a]

Continued

Appendix B.
Continued

Plan feature	Canada Pension Plan	U.S. Social Security
Investment policy	Before reforms, invested entirely in federal and provincial bonds	All funds invested in special issue Treasury certificates (government bonds)
	Some receipts invested in passively managed stock index funds (80% domestic, 20% foreign, including TSE 300 Composite Index, S&P 500 Index, EAFE Index) and some in actively managed investments	
	Investments managed by an independent Investment Board	
Taxation of benefits	Benefits are taxable as income	Up to 85% of benefits are taxable as income if income is greater than $25,000 for individuals or $32,000 for joint filers
Benefit indexing	All benefits indexed to inflation	All benefits indexed to inflation
Retirement benefits	Any person who has made at least one valid contribution to CPP is eligible for benefits after age 60	A retired worker is eligible for benefits at age 62 and upon meeting work-quarter requirements (minimum of 40 quarters)
	Full benefits equal 25% of average monthly pensionable earnings between ages 18 and 70	Benefits are a percentage of the primary insurance amount, which is based on the average indexed monthly earnings.
	Dropout years: up to 15% of contributory period	Dropout years: 5 out of 40
	Benefit indexed to inflation	Benefit indexed to inflation
	No additional spouse/divorced spouse or children's benefit	Additional spouse/divorced spouse benefit up to 50% of worker's benefit
	Credit splitting between spouses upon divorce or legal annulment	No credit-splitting provision
	Benefit splitting between married and common-law spouses	No benefit splitting (but spouse/divorced spouse can receive up to 50% of worker's benefit)
	Child-rearing dropout provision allows 7 more dropout years	No child-rearing dropout provision
	Benefits are not reduced by earnings from employment for retirees under age 65	Benefits may be reduced by earnings from employment for retirees under age 65

Continued

Appendix B.
Continued

Plan feature	Canada Pension Plan	U.S. Social Security
Survivors benefits	Deceased must have contributed to CPP for at least 3 to 10 years, depending on length of contributory period	Deceased must meet work-quarter requirements for eligibility; must have 6 quarters out of a 13-quarter period ending in the quarter of death or be receiving or eligible to receive retired-worker benefit
	Benefits available for surviving spouse or dependent child	Benefits available for surviving spouse/divorced spouse or dependent child
	Benefits for surviving spouse may be flat, earnings related, or both	Benefits are a percentage of the deceased worker's/retiree's primary insurance amount, subject to a family maximum
	Child's benefit is flat amount not dependent on deceased parent's past earnings	Not applicable
	One-time lump-sum death benefit equals up to six times the value of actual or imputed monthly retirement pension, up to C$2,500	One-time lump-sum death benefit of $255 is also available
Disability benefits	Worker must work and contribute in 4 of last 6 years	Worker must work in covered employment 1.5 to 5 years depending on age of worker
	Benefits available to disabled worker and qualified dependent child	Benefits available to disabled worker, dependent child, and spouse/divorced spouse who qualify
	Disabled worker benefit is flat amount, and an earnings-related portion is worth 75% of retirement pension	Benefits are a percentage of disabled worker's primary insurance amount, subject to a family maximum
	Child's benefit is flat amount not dependent on disabled parent's past earnings	n.a.
	Retirement pensions for disabled are based on earnings when recipient was disabled, then indexed to consumer price index in year worker turns age 65	Retirement benefits for disabled based on earnings at time of disability, then indexed to consumer price index in year worker turns age 65

NOTE: n.a. = not applicable

a. Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, 2001, *2001 Annual Report,* Washington, D.C.: U.S. Government Printing Office.

Appendix C.
Comparison of Canada's Old Age Security system and U.S. Supplemental Security Income program for the aged

Plan feature	Canada Old Age Security (does not include Canada Pension Plan benefits)	U.S. Supplemental Security Income's aged benefits
Funding source	General revenues from income taxes	General revenues, primarily from income taxes
Taxation of benefits	Benefits are taxed as income	Benefits are *not* taxed as income
Eligibility age	OAS pension: 65 GIS: 65 Allowance: 60-64	65
Benefits	OAS pension: Flat benefit based on years of residency, repaid in part or in full by high-income recipients Received by 98% of Canadians aged 65 or older	Eligibility for aged benefits based on age, income, financial resources, and citizenship Flat benefit that is reduced or eliminated by earnings or income Maximum monthly benefit in 2001: $531 for individual, $796 for couple
	GIS: Benefit based on total family income Received by 35% of Canadians 65 or older	Received by 5% of Americans aged 65 or older in 1998
	Allowance: Benefit based on total family income Received by 8% of persons aged 60-64	
Average	OAS pension is C$420 (US$285)	C$447 (US$303)
Monthly benefit in July 2001	GIS is C$360 (US$244) Allowance is C$462 (US$313)	
Income thresholds	OAS pension is C$55,309 (US$37,471); full repayment is C$90,195 (US$61,107)	C$1,505 (US$1,020) Assumes person earns up to the monthly limit of $85, or $65 if receiving Social Security
	GIS is C$12,648 (US$8,569) for a single person and C$16,464 (US$11,154) if married to a pensioner	
	Allowance is C$23,568 (US$15,967) for spouse and C$17,304 (US$11,723) for a widow(er)	

NOTE: OAS = Old Age Security; GIS = guaranteed income supplement.

Employees Retirement Plan is the depositor with the largest holdings.[10]

The Caisse does not invest passively in broad market indices and actively promotes economic development in Quebec. Its Web site advertises each investment company's ability to help businesses grow and actively seeks out firms for investment.[11]

The average return on Caisse investments outpaced that of other pension funds from 1995 to 2000 (Chipello 2000). In 2000, the overall return on Caisse investments was 6.2 percent.[12]

Notes

[1] The equity investment and accelerated increase in contributions interact with one another: the effect of the increase in contributions is larger if the equity investment is accounted for first, and the effect of the equity investment is larger if the contribution increase is accounted for first. Since reform was framed in the context of reducing the size of the tax increase, the percentages given in this section present the latter approach.

[2] These are the long-term assumptions of the Chief Actuary. The CPPIB has not articulated its long-term policy on asset mix.

[3] The rate reflects a 4.5 percent real return on Canadian equities and 5 percent on foreign equities (see Office of the Superintendent of Financial Institutions 2000, 76).

[4] The board also invests in short-term securities such as Treasury bills and derivatives, which replicate direct investments in the relevant stock indices. See CPP Investment Board (1999a, 17; 1999b, 2) for further details.

[5] The one exception is a former Director of Parliament who was Parliamentary Secretary to the Finance Minister and is a political scientist by training.

[6] See the CPP Investment Board Web site, www.cppib.ca, for further details.

[7] Half of the current board directors were appointed to 2-year terms that end late this year.

[8] See the CPP Investment Board Web site, www.cppib.ca, for further details.

[9] See the CDP Capital Web site, www.cdpcapital.com, for further details.

[10] Ibid.

[11] Ibid.

[12] Ibid.

References

Canada Pension Plan. 1996. *The Canadian Pension Plan: Basic Facts, 1996*. Available at www.cpp-rpc.gc.ca/fact/facte.htm.

________. 1997. *Securing the Canada Pension Plan: Agreement on Proposed Changes to the CPP*. Available at www.cpp-rpc.gc.ca/sec/secure.html.

________. 1999a. *Federal-Provincial Review of the Canada Pension Plan* (December 9). Available at www.cpp-rpc.gc.ca/news/19991209_e.html.

________. 1999b. *Schedule of Canada Pension Plan Contribution Rates* (December). Available at www.cpp-rpc.gc.ca/rates/1999 e.html.

Canada Pension Plan Investment Board. 1997. *Canada Pension Plan Investment Board Act* (1997, c.40). Available at lois.justice.gc.ca/en/C-8.3/.)

________. 1999a. *1999 Annual Report of the Canada Pension Plan Investment Board*.

________. 1999b. *CPPIB Investment Policies*. Available at www.cppib.ca/investment/investment.htm.

________. 1999c. *Duties and Mandate* (November). Available at www.cppib.ca/duties/duties.htm.

________. 1999d. *Notice to Stakeholders*, *November 15, 1999*. Available at www.cppib.ca/media/111599_LS.htm.

________. 2000. *2000 Annual Report of the Canada Pension Plan Investment Board*. Available at www.cppib.ca/info/annual/index.html.

________. 2001. *2001. Annual Report of the Canada Pension Plan Investment Board*. Available at www.cppib.ca/info/annual/index.html.

________. 2002. "CPP Assets Gain Value as Equity Investments Recover." Press release, February 11. Available at www.CPPIB.ca.

Chipello, Christopher. 2000. "O Canada! Quebec Agency Wields Clout—Big Pension Fund Plays Activist Role in Cable-TV Battle," *Wall Street Journal,* June 6, A18.

Government of Canada. 1998. *Annual Report of the Canadian Pension Plan 1996-1997* (February).

Human Resources Development Canada. 1997. *Canada Pension Plan: Facts About the Proposed Changes to the Canada Pension Plan*. Brochure No. ISPB-231-09-97E. Available at www.hrdc-drhc.gc.ca/common/news/isp/fact.html.

________. 2001. ISP-Information Card. October-December 2001. Available at www.hrdc-drhc.gc.ca/isp/studies/trends/infocard/infocard4q01_e.pdf.

McQueen, Rod. 2000. "New pension chief 'flunked retirement'", *National Post*, *Financial Post,* July 29. Available at www.nationalpost.com.

Office of the Superintendent of Financial Institutions. 1997. *Canada Pension Plan 16th Actuarial Report* (September). Available at www.osfi-bsif.gc.ca/AndreE/actrepe.htm.

_________. 2000. *Canada Pension Plan 18th Actuarial Report*. Available at www.osfi-bsif.gc.ca/eng/office/actuarialreports/pdf/CPP1801.pdf. December.

Recommendations of the ACPM, PIAC, OSFI Joint Task Force on Pension Plan Governance and Self Assessment. 1999. Appendix 2: Pension Plan Governance Principles. Available at www.osfi-bsif.gc.ca/eng/pensions/otherdocuments/pdf/jfpen_e.pdf.