Investment of Social Security Reserves in Three Countries

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The current buildup of the U.S. Social Security Trust Fund has caused speculation about both the potential consequences of the buildup under different policy objectives and the fund's management. As is often the case, the search for precedents under similar circumstances abroad has been quite extensive on the part of legislators and U.S. experts in the field of financial policy. This article summarizes the experiences of Canada, Japan, and Sweden—all of whom have accumulated large trust fund reserves—with a focus on their investment policies. Trust fund investments in the three countries are similar as to types of investments, but the pattern of distribution of these investments varies widely from one country to another.

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On the basis of the 1983 amendments to restore the financial soundness of the Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) program into the next century, the U.S. Social Security OASDI Trust Fund (OASI and DI combined) is projected to accumulate reserves that will peak at 2018 at about 30 percent of the gross national product (GNP). After the fund peaks, the buildup will continue until 2030, but at a lower rate than the GNP, and then rapidly decline. The continual deficits will be related to the retirement of the "baby-boom" generation, longer life spans, and lower fertility rates. As a consequence, the previous 3 to 1 ratio of workers to beneficiaries will decrease to 2 to 1 around 2030. By about 2046, the trust fund assets will be exhausted.[1]

The accumulation of reserves in the OASDI Trust Fund has stimulated discussion about potential consequences of the buildup under different policy objectives. It has been pointed out, for example, that the projected buildup may provide partial funding for the retirement of the baby-boom generation—in other words, a chance for that generation to pay part of the cost of its own retirement benefits, as funds are accumulated for the future. If the buildup does not take place, however, or if it is used to pay for current Federal Government expenditures, this cost will be shifted to future taxpayers. Others see the trust fund buildup as an opportunity to increase the national savings rate, both by accumulating assets in the OASDI Trust Fund and by altering the pattern of Government spending and taxing (Hambor 1987; Munnell 1988).

Precedents exist abroad regarding fund accumulation. Discussion has frequently focused on Canada, Japan, and Sweden: These countries have accumulated large social security (public pension) reserves. Sweden and Japan have been successful in prefunding their social security system through increased investment. In Canada, however, evidence suggests that the Provinces (with funds borrowed from the Canada Pension Plan (CPP) at favorable interest rates) allocate a considerable proportion of CPP surpluses to current consumption expeditures (Munnell 1988).

The present interest in looking at trust fund investment policies abroad continues the century-old U.S. tradition of examining the experiences of social security systems in other countries. This article summarizes the experiences of Canada, Japan, and Sweden regarding the accumulation of trust fund reserves and the investment of those reserves. Table 1 recapitulates the discussion in this article on the pattern of investment in these three countries.

Canada

Canada has a double-decker social security system—a universal pension program (Old-Age Security (OAS) that provides coverage for all residents and an employment-related pension program (the Canada Pension Plan (CPP)). In the Province of Quebec, the Quebec Pension Plan (QPP) provides additional coverage for employed and self-employed persons. The Government of Canada administers the general-revenue financed OAS program in all Provinces. The Government also administers the earnings-related CPP program—financed by employed and self-employed persons and providing old-age, disability, and survivor benefits—in all Provinces, except Quebec.

The Canadian constitution provides that any of the 10 Provinces may opt out of the CPP program, if the Province sets up a comparable program. Quebec, which operates the QPP, is the only Province to have chosen this option. Financing for both programs is based on employer and employee contributions of 2.2 percent of payroll and earnings, respectively.

[1] Based on alternative II-B in the 1989 annual report of the Trustees of the Social Security Trust Fund: 4 percent inflation; 1.9 fertility rate; and a 5.3 percent average annual wage increase.

Any changes in CPP contribution rates (or benefit levels) must be submitted to Parliament and agreed to by at least 7 of the 10 Provinces.

The CPP and QPP are partially funded systems. When the pension plans were implemented in 1966, several Provinces favored a national public pension program that would funnel contributions to the Provinces to use in financing capital investment projects while maintaining a constant contribution rate over a relatively long period of time. With respect to the last point, the approach and intent of the Canadian program were similar to those of the Swedish earnings-related program—namely, to provide a rapid buildup of funds while keeping the contribution rate relatively stable.

Recent Developments

Contribution rates under the Canada Pension Plan remained unchanged from the start of the plan in 1966 through 1986. In 1985, for the first time, contributions to the CPP Fund fell short of benefit expenditures (although the deficit was more than covered by interest income). Subsequently, amendments to the CPP were implemented in January 1987 to prevent future deficits by gradually increasing the contribution rate on payroll/earnings to be split equally between employers and employees: 0.2 percent for each year 1987-91, and 0.15 percent for each year 1992-2011. During the current 25-year period (1987-2011), the financial status of the CPP Fund will be reviewed at least every 5 years, extending the 25-year period with each review. Thus, the next review, scheduled for 1990, would extend the 25-year period to 2015. Future contribution rates will be set so that the fund maintains the equivalent of 2 years of benefit payments to allow for short-term economic and demographic factors.

Table 1.—Investment of social security trust fund reserves in three countries

Types of investments in—		
Canada	Japan	Sweden
Government		
Provincial bonds; funds held by Canada Pension Plan may be invested in 20-year Provincial bonds to finance school construction.	Government bonds; about 40 percent of reserve funds are invested in local government bonds (see Hospitals below).	Government bonds; one of two major investment targets.
Business		
Quebec Pension Plan only—corporate bonds, stocks, real estate.	No	Yes
Housing		
Quebec Pension Plan	Yes; accounts for about 60 percent of reserve fund investments.	Yes; one of two major investment targets; accounted for 49 percent of all 1987 investments (through lending institutions).
Hospitals		
Canada Pension Plan and Quebec Pension Plan. Funds held by Canada Pension Plan may be invested in 20-year Provincial bonds to finance hospital construction.	Yes; about 40 percent of reserve funds invested in local government bonds (see Government above).	Hospital construction and operation are county responsibility; county has taxing power. Investments of social security reserve funds would be reflected under "Local Government," and accounts for a modest 4 percent of investments.

Investment Policies

Since the pension plans' inception, both programs have accumulated large reserve fund balances. By 1988, the account balances of the CPP and QPP (after deduction of program expenditures) were Can$35 billion and Can$13 billion (US$27.7 billion and US$10.3 billion), respectively (or 6.2 percent and 2.3 percent of the average GNP during the first 2 quarters of 1988). The investment policies of the funds, however, are very different.

Canada Pension Plan.—The Provinces may borrow from the CPP Fund monies in excess of the amount needed to pay 3 months' benefits and administrative costs, in proportion to the contributions collected from each Province. The CPP invests any remaining funds in 20-year Federal bonds. The Provinces borrow from the CPP Fund at the same rate as the Government borrows in the open market—that is, a rate lower than the commercial rate. This lower borrowing rate has been a boon to the poorer Provinces, in particular, because of their lower credit ratings.

The Provinces use borrowed monies like general revenues to finance projects such as school, hospital, and road construction; for loans to Provincially guaranteed borrowers such as Crown Corporations (Provincial government enterprises);[2] and for general Provincial operating expenses.

Quebec Pension Plan.—The Canada Pension Plan chooses to invest in Provincial bonds; the QPP invests its surplus funds in both the private and public sectors with an eye toward the highest possible return. A board, specifically created for this purpose—the Caisse de depot et placement du Quebec (the Quebec Deposit and Investment Fund)—manages the QPP surplus funds. The investment portfolio contains the following:

- Government of Quebec bonds (such as Hydro-Quebec) and corporate, hospital, municipal, university, and school bonds.
- Stock holdings not exceeding 10 percent of common shares issued by large corporations and up to the 30-percent maximum in a limited number of medium-sized companies.
- Real estate and mortgages for the financing of large-scale residential, industrial, and commercial developments.
- Short-term securities.

[2] Examples of Crown Corporations are the Alberta Municipal Financing Corporation; British Columbia: Hydro & Power Authority, School Financing Authority, and Hospital Authority; Manitoba: Water Supply Board, Financing Authority, and Development Corporation; and Saskatchewan: Power Corporation, Land Bank Commission, and Telecommunication.

Of the QPP investment package, bonds constitute 68 percent; short-term securities, 13 percent; stocks, 11 percent; and real estate and mortgages, 8 percent.

Effects of Borrowing

Total per capita borrowing from the CPP Trust Fund appears to have increased more rapidly in the poorer Atlantic Provinces than elsewhere in Canada. This increased borrowing may be due to the fact that credit ratings are generally lower in the Atlantic region and, therefore, these Provinces have the most to gain from the availability of below-market interest rates. It has been suggested that without this advantage the Provinces in the Atlantic region would not have borrowed from other sources to the extent they have from the CPP reserve funds, overall expenditures would have been reduced, and "own-source revenue" would have increased. In addition, it is suggested that borrowing might not have increased in the wealthier non-Atlantic regions if CPP funds had not been available.

A similar effect has not been observed concerning QPP Fund borrowing. The QPP does not lend to the other Provinces. Instead, its assets, as well as the assets of other Quebec public employee pension funds, are invested by the Caisse de depot et placement. As stated above, the Caisse invests its assets in regional businesses, Crown Corporations, and in private corporate equities (up to 40 percent of the voting stock in any one company). By placing its funds in regional businesses, the QPP augments private sector investment and receives a higher rate of return on investments than does the CPP.

The Provinces may use borrowed funds for operating expenses. Perhaps because the cost of borrowing is lower than in the open market, the Provinces not only have increased spending, but most of the increase has been allotted to current consumption—that is, government spending that does not add to existing capital (for example, parks and recreation, police and fire protection, and the justice system).

When the bonds were first issued in 1966-67, considerable speculation was expressed regarding the Provinces' ability to make full repayment of Federal funds. These doubts ended in 1986-87, when the bonds matured and were redeemed.

Japan

In 1985, the two major social security programs in Japan (the EPI—Employees' Pension Insurance and the NPI—National Pension Insurance) were combined in one system, although separate recordkeeping is still maintained. This merger brought major changes in Japanese social security. The NPI, until then providing benefits only to adults not covered by other social security programs, was converted to a universal program and became the first layer in a double-decker system. Similarly, the EPI (together with several smaller programs), until now providing a social security benefit related to the earnings of employed persons, became a second (earnings related) layer in a double-decker social security system. The EPI Fund, the larger of the two, accounted for 16 percent of the gross national product in 1987, compared with approximately 0.8 percent for the NPI Fund.

Investment Policies

Investments of surplus social security reserves are made through Japan's capital budget. Initially, surplus monies are placed with the Trust Fund Bureau, which manages a special fund for this purpose. This fund also includes deposits from other social security special accounts and postal savings accounts.

Subsequently, assets of the Trust Fund Bureau's fund, other pension funds, and special accounts[3] are made available to the Investment Loan Program (Japan's Capital Budget). The redemption terms of the purchased bonds (usually 7 years) and interest rates (6.05 percent in 1986; 5.20 percent in 1987, for example) are negotiated for each new issue.

An analysis of the distribution of fund investments shows that about two-thirds of the invested amount is directed toward the Pension Welfare Service Corporation. This corporation funds programs that benefit the EPI- and NPI-covered population exclusively. The Pension Welfare Service Corporation invests primarily in housing (60 percent) and special local government bonds (28 percent). Most of the latter bonds benefit hospitals and social welfare facilities.

Sweden

The social security program in Sweden, which is similar to but predates the Canadian program, also has a basic and a supplementary earnings-related component. The employer pays 75 percent of basic program costs; the remaining 25 percent is paid from the Government's general revenues. Employer contributions cover the entire cost of the earnings-related program. The Government does not participate. Total employer contributions exceed 30 percent of payroll. The insured person does not contribute to the social security program.

[3] Special accounts such as the Industrial Investment Special Account, Postal Life Insurance Fund, and Government Guaranteed Bonds and Borrowing.

The Swedish National Pension Insurance Fund (the Allmanna Pensionsfonden (AP Fund)) was established in 1960 to partially fund the then new supplementary earnings-related pension program.[4] Initially, the AP Fund was divided into three subfunds for investment and management purposes; it has since expanded to nine subfunds.

The contribution rate, relatively modest at the outset, rose steeply early in the program to assure a rapid buildup of reserves. The high contribution rate served two purposes: Equalize the burden on present and future contributors and accumulate investment capital. Not only would this approach increase total savings in the economy, it would also provide a ready supply of funds for the Swedish long-term capital market.

The AP Fund was to provide a buffer whereby its investment income would cover occasional deficits when social security disbursements might exceed income from contributions. As a consequence of the high contribution rate early in the program, relatively modest changes were expected in the contribution rates while the program matured during the next three decades (1960-89).

[4] A supplementary (earnings-related) pension (Allman Tilleggspension), often referred to by the acronym ATP, was legislated by the Swedish Parliament in 1959, effective in 1960, when contributions to the program began. Because a minimum of 3 years' coverage is required under this program, disbursement of pensions did not start until 1963. The AP Fund (Allmanna Pensionsfonden) is part of the ATP program.

The need to accumulate investment capital must be viewed in terms of the persistent capital deficiency and chronic shortage of savings experienced in Sweden after World War II. Although the country was saved from destruction, shortages and restrictions during the war resulted in an investment demand far greater than could be accommodated by Sweden's gross savings. The importation of foreign capital was not a solution due to the country's precarious foreign trade position and the scarcity of international capital during the period of reconstruction. Therefore, by the late 1950's, Sweden still was experiencing a shortage of capital and it was feared that the establishment of a generous earnings-related program would further reduce the motivation for private savings. Thus, there was a perceived need for a large reserve fund to counteract the anticipated decline in personal and business savings.

Aware that the buildup of resources of this magnitude might eventually dominate Sweden's capital market, special safeguards were built into the program to prevent undue influence on fund investment by special interest groups. The AP Fund was therefore divided into three separate subfunds, each presided over by a nine-member tripartite board, and each representing government, employers, and employees:

- The first subfund consisted of contributions from the National Government, local authorities, and companies in which neither of these parties had a controlling interest.
- The second (and largest) subfund was based on contributions from employers with 20 employees or more.

- The third (and smallest) subfund was based on contributions from employers with less than 20 employees, as well as from the self-employed.

With the relatively small number of pensioners qualifying for earnings-related benefits during the program's initial years, the fund rapidly accumulated large reserves from excess contributions and the income from invested contributions. The AP Fund soon became the major source of capital accumulation in Sweden. By the mid-1970's, these reserves were about one-third of GNP—a ratio of reserves to GNP that is about the same today.

AP Fund Expansion

In 1974, a fourth subfund was set up by the Parliament (Riksdag). At the time, this extremely controversial subfund was to invest in Swedish shares in the stock market, thereby augmenting the supply of equity capital. The Fourth Fund Board is jointly controlled by the labor unions and the Government. Initial capital (SKr500 million—US$120 million in 1974 dollars) was provided by the three existing subfunds. With parliamentary approval, any additional funding would come from contributions from the earnings-related pension program. Parliament sets the limits. In the 1970's, the amount in the subfund was increased to 2.5 times its initial amount (SKr1,250 million). By the end of 1987, the market value of the fourth subfund's portfolio of securities was nearly SKr10.5 billion (US$1.7 billion in 1987 dollars, or 1 percent of the GNP).

In December 1983, the AP Fund system was again expanded when Parliament set up five new employee investment subfunds, in addition to the four that existed. Each subfund has a board of nine members appointed by the Government; at least five members represent employee interests. Parliament limits the amount of capital injected into the funds (until 1990, when the funds financial status presumably will be reevaluated). Monies are from two sources: A 0.2-percent increase in employer contributions to the earnings-related pension program and proceeds from a "profit-sharing" tax on large and profitable companies (up to a maximum of SKr400 million a year for each fund, or a total of SKr2.8 billion per fund for the 7-year period 1983-89).

Investment policies are essentially the same for the five employee subfunds and the fourth subfund. They invest in risk capital, primarily to purchase shares in Swedish companies to benefit production and employment. Each subfund may invest enough to acquire up to 8 percent of the voting right in a company (up to a maximum of 40 percent for the five employee investment funds combined). Up to one-half of the voting rights of a share holding may be transferred to local chapters of labor union organizations at the request of the unions. At the end of 1987, the market value of the combined holdings of the five subfunds amounted to SKr9.5 billion (US$1.5 billion), approximating the portfolio value of the fourth subfund.

Investment Policies

Initially, AP Fund reserves were to be invested only in securities issued by and through financial institutions. (The only exception was promissory note loans to the National Government, local authorities and similar entities, and mortgage institutions.)

As a result, the AP Fund invested primarily in bonds and debentures. Through commercial banks, the fund also refinanced loans to employers (who might borrow back up to 50 percent of contributions they had paid to the social security program during the previous year) and other loans through specialized intermediaries (such as Swedish Export Credit or Swedish Industrial Credit). The rationale for not lending directly to the borrower was that, given the magnitude of AP Fund reserves, fund administrators would have great control of the credit market and at least the possibility of credit rationing.

More recently, investment policies appear to have been relaxed. As of February 1988, the boards of the first three subfunds (those set up in 1960) of the AP Fund were permitted to make direct loans to companies or cooperative associations, without guarantees from the National or local governments. Total investments of this type may not exceed 5 percent of the acquisition (as opposed to market) value of the assets managed by each board. In addition, these boards may now acquire real estate for investment purposes, either through direct purchase or through the purchase of shares, again up to a 5-percent-of-acquisition-value limit. This direct loan policy not only broadens the scope of investments but provides a means of expanding their total value.

One of the most important (and, to policymakers, worrisome) developments in the Swedish earnings-related pension program is the growing importance of investment income. Since the mid-1970's, investment income has been relied on increasingly to make up for contribution shortages. Thus, even with an increase in the contribution rate in 1987 (from 10.2 percent in 1986 to 10.6 percent), an increase in the proportion of pension payments covered by investment income under this policy was expected. One reason for the relaxation of investment policy was to make the AP Fund more income oriented to increase the return on investments. Similarly, in anticipation of a relative decline in the importance of the basic (universal) part of the social security program vis-a-vis the earnings-related program, the three boards have brought up the idea of "exchanging premiums" (adjusting the contribution rates) between the basic and earnings-related programs, presumably to increase the flow of funds into the latter program.

The board of the fourth subfund, which may issue and acquire standard "put and call" options, may now also acquire a capital interest in Swedish partnerships, although without becoming an unlimited partner. In addition, the fourth subfund may still invest in securities associated with limited liability type of businesses (that is, where liability is limited to the amount of investment only).

Generally, the Swedish investment-of-trust-fund experience shows that more monies have been channeled into the housing sector than into any other area of investment. In the 1980's, investment in National Government bonds has taken on added importance as business investments, primarily in the industrial sector, have tapered off. Employee investment funds, established in the 1980's for the purpose of investing in risk capital, have played a relatively minor role in the overall investment picture in terms of value.

Summary

In Canada, Japan, and Sweden, social security trust fund investments are similar as to types of investments (housing, hospitals, and government bonds, for example). However, the pattern of distribution of fund investments among investment targets varies widely.

For example, the investment policies of the Canada Pension Plan (CPP) and the Quebec Pension Plan (QPP) are quite different. On the one hand, the CPP invests in Provincial bonds, which finances the construction of schools, hospitals, and roads. On the other hand, the QPP, although investing in hospital, municipal, university, and school bonds, also invests in the private sector (corporate bonds as well as stocks, real estate, and short-term securities).

In Japan, social security trust fund surpluses are allocated under tight National Government control through the capital budget. About 60 percent of reserve fund investments go into housing loans to insured persons; the remaining 40 percent is invested in special government bonds that benefit hospitals and "social welfare facilities."

The surplus reserves in Sweden's Allmanna Pensionsfonden (AP) Fund are distributed through nine investment funds whose board members represent labor, management, and government. Investment goals for each fund are specifically targeted. Generally, the investment pattern in the first, second, and third subfunds (which account for the bulk of the investment capital) depends on trends in the economy, including current government policies, activities in the business sector, interest rates, and demand for credit.

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