Managing Public Pension Reserve Funds: The Case of the Government Pension Investment Fund (GPIF) of Japan

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Japan's Government Pension Investment Fund (GPIF) has US$1.4 trillion in assets and is the world's largest pension fund. The institutional structure and the investment style of GPIF differ from those of other Public Pension Reserve Funds (PPRF). This article describes how GPIF is structured and how it works, then compares it with Canadian and American PPRF approaches. Perspectives include the discretion exercised in investment decisions, information asymmetry, and accompanying agency and governance problems.

Keywords: Agency Costs; Information Asymmetry; Institutional Structure; Investment Costs; Pension Fund; Public Pension Reserve Funds

GPIF's Origins

The Government Pension Investment Fund (GPIF) was established by the government of Japan in 2001 as the investment arm of the public pension system. This system consists of Employees' Pension and National Pension Programs, which are sponsored by the national government of Japan. Together with the mutual aid associations for government employees, these two programs served 68 million participants of working age and 38 million pensioners as of the end of 2010. Annual benefit payments in 2010 reached ¥51 trillion (US$662 billion), amounting to a little more than 10% of GDP.

Until 2000, the assets of the Pension Programs were required by law to be deposited with the Ministry of Finance (MOF) for a seven- to eight-year term to finance the Fiscal Investment and Loan Program, a portfolio of investments and loans to public-sector entities and local governments for public-policy purposes. This arrangement was drastically changed in 2001. The funds deposited with MOF were returned to the Pension Programs over the period from 2001 to March 2009 and were entrusted to GPIF to be invested in the markets. GPIF has thus emerged as the world's largest pension fund investing in investment markets. As of the end of 2011, GPIF manages ¥108 trillion (US$1.4 trillion) in assets.

GPIF's Institutional Structure

The GPIF's market investment of US$1.4 trillion has become an important component of Japanese pension policy. The GPIF Act stipulates that the Minister of Health, Labor and Welfare appoints the President of GPIF, who is its sole decision maker. The Minister also appoints the members of the Investment Committee, a GPIF advisory and monitoring body. The Act stipulates that members are to be chosen "from among persons with relevant knowledge and experience including experts on the economy or finance." This language is identical, word for word, with that in the Bank of Japan Act for the appointment of members of the Bank's Policy Board, where sophisticated expertise is most needed.

In making important decisions such as changing the policy asset mix, or "Basic Portfolio," the President is required by the Act to consult the Investment Committee. With its strong expertise, the Committee plays a significant role in advising the President and in monitoring GPIF's conduct of business, including hiring and evaluating external managers and diversifying into new financial products. The Committee met 11 times in 2009 and 10 times in 2010. The minutes of each meeting are published, usually just after the next meeting, and have covered topics such as investment in alternative assets and the methodology of rebalancing the portfolio.

Three Different Investment Perspectives

GPIF's investment program can be viewed from three different perspectives. The first is asset allocation and performance. Table 1 sets out the policy asset mix and the actual allocations at the end of 2011. This policy asset mix is expected to provide, over the long horizon, a rate of return that is "1.1% above the

Table 1: Asset Allocation of GPIF (end of December 2011)

	Domestic Bonds	Domestic Stocks	International Bonds	International Stocks	Short-term Assets
Policy asset mix, %	67	11	8	9	5
Actual outstanding, ¥ trillion (%)	72.8 (67.4)	12.0 (11.1)	9.1 (8.4)	10.9 (10.1)	3.3 (3.0)

rate of change in nominal wages," as is assumed in the 2004 actuarial valuation of the Pension Programs. In the last 10 years (2001–2010), the average nominal rate of return was 1.57% per annum, versus an average rate of change in nominal wages of -0.58% per annum; thus, the actual excess return was 2.16%. This excess return method is consistent with the structure of the Pension Programs, in which future benefits are closely related to the nominal wage level. In recent years, nominal benefits have been reduced in light of Japan's deflationary environment.

The second perspective is the extensive use of external managers. GPIF is a tiny institution in relation to its asset size, with fewer than 80 employees. Most of the fund is managed by 28 external managers, operating with 77 mandates as of the end of March 2011. Because of competition among the external managers and the large scale of each contract, investment management fees are kept very low, ranging from an average of 0.01% for domestic bond funds to an average of 0.06% for international bond funds (GPIF 2011).

The third perspective is investment style. Approximately four-fifths of the assets are invested passively, following predetermined market indices. The important factor here is the fund size in relation to the size of the market of respective asset classes. For example, GPIF had ¥12.0 trillion in domestic stocks at the end of 2011, which is approximately 7.5% of the total capitalization of stocks in the TOPIX index; this would make it very challenging to beat the market by actively choosing stocks.

GPIF's assets consist mostly of investment-grade bonds and publicly traded stocks. In contrast to other large public pension reserve funds (PPRFs) such as Canada Pension Plan Investment Board (CPPIB), GPIF has no exposure to private equity, hedge funds, real estate, commodity, or infrastructure. Below I examine a number of factors that, in my view, explain the differences in investment approaches.

Comparing GPIF to CPPIB

A very important difference is asset size: in this respect, GPIF is 10 times as large as CPPIB. In order for GPIF to obtain a meaningful increase in its rate of return and in diversification for the total fund of US$1.4 trillion, the absolute dollar allocation to alternative assets will be much larger than for smaller funds such as CPPIB. In a liquid market such as American Treasury debt, it is unlikely that the marginal rate of return will fall significantly as passive investment increases, which means that fund size does not matter. In an illiquid market such as private equity, however, the marginal rate of return is likely to fall as investment increases, since one must then invest in less promising deals. In other words, the law of diminishing rate of returns works more strongly against a large investor in a more illiquid market, where fund size does matter.

Cost is another factor. Compared to GPIF's investment costs in conventional asset classes, monetary expenses incurred by investing in alternative investments could well be at least 10 times greater. In addition to monetary expenses, public sensitivity to unavoidable short-term losses may represent another form of cost. If GPIF were to allocate 5% to alternative assets, the volume would be US$70 billion; through an economic cycle, GPIF might well lose 10%, or US$7 billion, on this investment in a quarter. For a US$1.4 trillion diversified fund, such a short-term loss is an expected element of long-term portfolio management. However, Japanese citizens might be more sensitive to a loss from these assets than from conventional ones, particularly if they find alternative investments "opaque." While "alternative" does not have to mean "opaque," it should nevertheless be considered that a negative surprise from unfamiliar investments may reduce people's tolerance for volatility. Paper losses are variable and proportional to the investment exposure, and they can be controlled by setting the exposure at an appropriate level. However, the cost of paper losses in terms of public sensitivity is less controllable.

While these factors should make GPIF duly cautious, GPIF has not categorically ruled out the possibility of further diversification in the future. In 2009, for example, the Investment Committee discussed alternative investments, and a consensus was reached that the Basic Portfolio, which was being reviewed, would not include alternative asset classes in the immediate future.

Dealing with Information Asymmetry and Agency Issues

GPIF's investment strategy is not the only way in which it differs from other PPRFs; its institutional structure is another. For example, GPIF is closer to the government than CPPIB, whose governance structure is carefully designed so that it is at arm's length from government to prevent misalignment of interest and partisan politics from distorting commercial decisions.

Is GPIF more susceptible to the risk of misalignment of interests and partisan politics? Any answer to this question should take into account the amount of discretion a PPRF has. Discretion exercised within a PPRF inevitably involves information asymmetry between inside and outside, which can lead to an agency problem between the principal (e.g., the government or citizenry) and the agent (PPRF). CPPIB exercises a much higher degree of discretion than GPIF does: CPPIB actively manages portfolios, deciding which stocks to buy and sell, determining with whom to form a limited partnership to invest in real estate overseas, and so on. These discretionary decisions could cause misalignment of interests and invite intervention from partisan politics or bureaucratic encroachment. It is this risk that makes the CPPIB model of governance structure necessary.

At GPIF, on the other hand, securities are publicly traded, the investment style is mainly passive, and investment decisions on individual transactions are left to external managers. Thus, discretion inside GPIF is limited. This difference in the degree of discretion between CPPIB and GPIF produces two different sets of information asymmetry and agency problems. In general, a greater degree of discretion within a PPRF creates greater information asymmetry, and thus the potential for greater agency problems. Logically, there should be two different governance structures, one for CPPIB and the other for GPIF, to cope with differing potentials for agency problems.

Barriers to Political Intervention and Bureaucratic Encroachment

Clark and Monk (2011, 21) provide a theoretical basis and insights for comparing the governance structures of CPPIB and GPIF: "In sum, governance structures should be conceived in relation to the costs of political intervention and bureaucratic encroachment rather than to some absolute conception of institutional independence." Canada has made this cost prohibitively high by making CPPIB highly autonomous and transparent. To distort or intervene in an investment decision by CPPIB, one must breach at least two lines of defense: a Board of Directors chosen for merit and a management that is professionally motivated.

Institutional independence *per se*, however, does not necessarily guarantee that the costs of political intervention and bureaucratic encroachment are sufficiently high. The independence must be backed by a legitimate, clearly stated purpose and mission for the institution, which will strengthen institutional resistance to intruders. Just as importantly, for institutional independence to be sustainable in a democracy, the people's eyes must be kept on the PPRF.

Japan has taken a different route. It has pushed up the costs of political intervention and bureaucratic encroachment by making the GPIF's style of investment simple, transparent, and less discretionary. Further, the GPIF Act does not allow GPIF to buy or sell stocks itself, and thus all equity investments by GPIF are made through external managers. So GPIF itself does not exercise voting rights and cannot intervene in the business of individual corporations. This provision eliminates the risk of stock ownership's working as a conduit for political intervention.

Turning to the United States for another basis of comparison, we find a different combination of investment, accompanying information asymmetry, and corresponding governance structure. The Social Security Act of 1935 requires that investment of the Social Security Trust Fund (SSTF) should be entirely in "interest-bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States," leaving very little room for discretion. SSTF operates within the government; the Secretary of the Treasury is responsible for investment. Thus, the United States offers another governance structure in which discretion, resulting agency problems, and institutional independence are all minimal.

Three Governance Challenges

In addition to the risks relating to partisan politics, PPRFs also face governance challenges, including the following three. The first relates to the consideration of goals other than long-term financial return. Can a PPRF consider such matters as environment, social, and governance (ESG) issues in making investment decisions? Clark and Monk (2011, 22) argue that, from the viewpoint of securing mission clarity, "political and social investment objectives (which tend to have a negative impact on returns) should be formally rejected." The question is not whether ESG-related issues need to be tackled but, rather, the allocation of duty, clarity of mission, and accountability of government ministries and a PPRF. When a PPRF makes an investment decision considering, for example, the environment, who will be accountable to the public for that consideration? Is it the Minister of Environment? Or is it the Minister responsible for pension policy who is the sponsor of the PPRF? We need to be highly vigilant so that the mission clarity of both the ministries and the PPRF is not dimmed.

The second governance challenge relates to *force majeure*. In the recent global financial crisis, Ireland's National Pensions Reserve Fund (NPRF), known for "strictly commercial investment," saw a sizable portion of its portfolio diverted by the government to inject capital into two major Irish banks. This step was taken in order to avoid a total meltdown of the country's financial system and was ordered by the Minister of Finance, who was given the power to direct NPRF by new legislation. Was this is an extreme case of unwarranted political intervention? Or was it a necessary and appropriate policy response to a very fragile macroeconomic situation, in light of which the independence of NPRF became a less compelling national need? Arguably, emergencies such as a major financial crisis are rare; the lesson is that as PPRFs grow in size and importance in national economies, it will be increasingly necessary to develop a set of principles to guide PPRF operations in times of emergency.

The third governance challenge is how a PPRF can operate sustainably as a long-term investor. Former CPPIB CEO David Denison (2010) points out that a PPRF needs "tolerance for volatility" and the "ability to endure" market cycles in order to be a long-term investor. However, the institutional structure of PPRFs must be conducive to withstanding spikes in market volatility. It remains to be seen how many PPRFs have such institutional structures.

In the end, PPRFs are still a relatively new breed of public-sector entity with mandates to be fulfilled in the markets through financial transactions. Their governance structures must continue to be innovatively developed so as to make best use of financial markets to achieve their goals as investors working for the public good.

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