

The Sovereign Wealth Fund Initiative March 2012

Drivers of Strategic Asset Allocation Decisions for Sovereign Wealth Funds

By [Shuvam Dutta](#), CEME Research Assistant

Introduction

Sovereign wealth funds emerged as early as the 1950s, and expanded in number in the 1970s especially in oil-producing emirates, such as Abu Dhabi, as a way to accumulate current account and budget surpluses during the oil boom. Now, Abu Dhabi boasts the largest fund, sized at USD 600-700 billion, and other countries have followed its lead. Today, such funds hold as much as USD 2.5 trillion in assets.¹ In this article, I first discuss the theoretical underpinnings that have guided the investment philosophy of sovereign wealth and then go on to compare how those investment mandates have informed actual asset allocation decisions. I close with commentary on some special circumstances posed by funds established in the last ten years.

Theoretical Considerations Driving SWFs' Strategic Asset Allocation

Policy purpose: SWFs are formed for different policy purposes and can typically be categorized as macro-stabilization funds, savings funds, pension reserve funds, or reserve investment corporations. The different types of SWFs have important differences in their investment objectives and behavior. A reserve investment corporation, for example, will need to consider the possible repercussions of balance of payments risks, and will want to hold a portion of its portfolio in liquid assets.

Investment Horizon: The SWF's type and its objectives will also influence its investment horizon. A long investment horizon is traditionally associated with the ability to take more risk and invest in illiquid assets to enjoy the illiquidity premium. For many asset classes, such as infrastructure, real estate, and private equity, it may take a long time and a lot of planning to exit the investment without unduly affecting that asset's price. Conversely, investors with short or very uncertain investment horizons would be expected to have a larger share of their investment portfolios in cash and relatively liquid bonds to be able to meet potential and sometimes unexpected outflows without incurring large losses in the process.

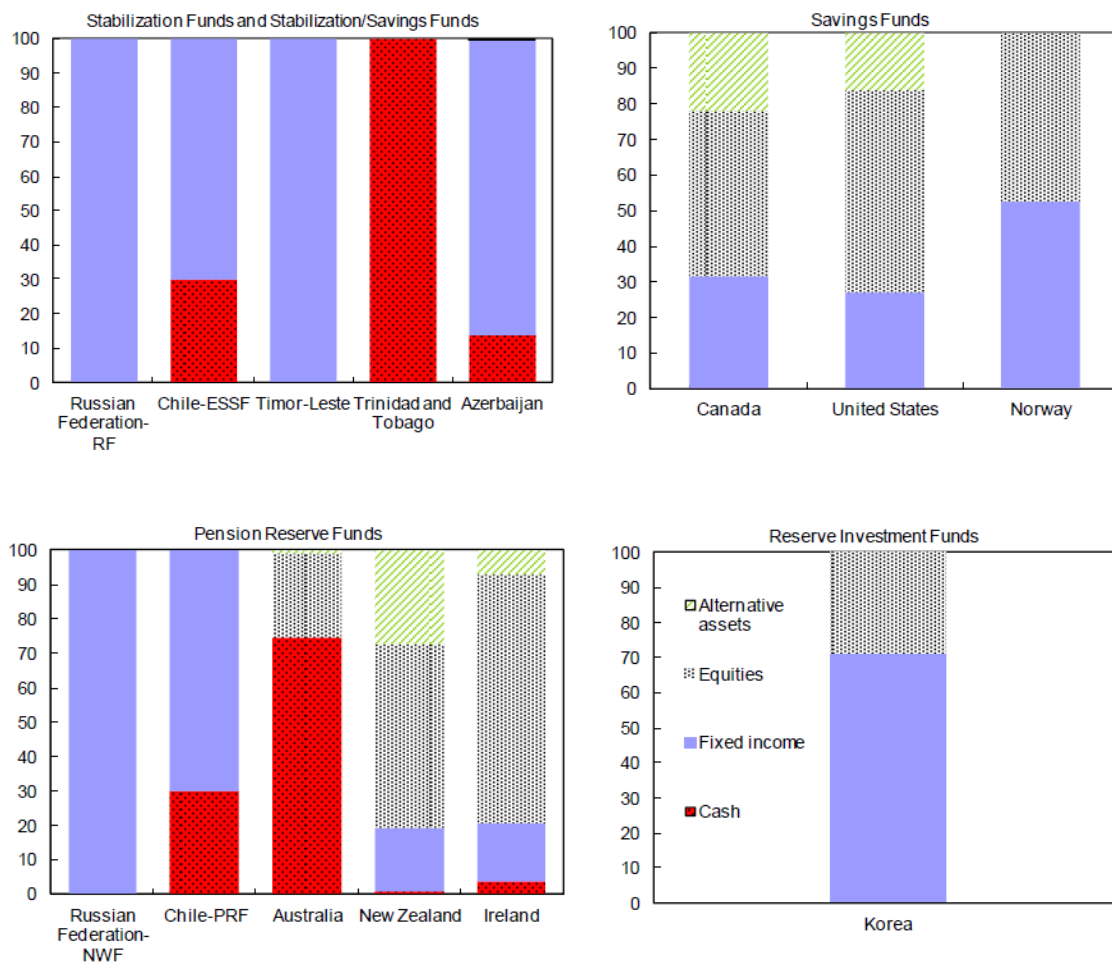
Funding Source: The source of funds flowing into a SWF will affect its strategic asset allocation. For instance, if a country's income is dependent on one real asset (for instance a commodity), it would be natural, according to portfolio theory, to diversify this dependency by investing in financial assets that have a negative or low correlation with the real asset. In general, if SWF funds are sourced from fiscal surpluses, its investment objectives are likely to be influenced by the dynamics of the government budget.

¹ Financial Dynamics, 2009, "Sovereign Wealth Fund Survey" (London and New York: Financial Dynamics).

Analysis of SWF's Actual Strategic Asset Allocations

In 2010, the IMF conducted a detailed analysis of asset allocation decisions among SWF with a particular focus on the period since the subprime crisis.² Several patterns and theme emerge form that analysis. Some notable patterns in the asset allocations of different types of SWFs emerge, broadly along the lines discussed in the previous section. For instance, whereas savings funds have varying proportions of equities in their portfolios, debt (fixed income) and cash figure prominently in SWFs with stabilization objectives. SWFs with stabilization objectives usually do not invest in alternative assets. Most pension reserve funds also have some equity exposure due to their longer investment horizons, as do reserve investment corporations.

SWF Asset Allocations 2010



Source: International Monetary Fund

² Peter Kunzel, Yinqiu Lu, Iva Petrova, and Jukka Pihlman, "Investment Objectives of Sovereign Wealth Funds—A Shifting Paradigm", IMF Working Paper 2010

At the same time, notable differences can be detected in observed asset allocations of SWFs with the same types of objectives. Varying views on relative performance of asset classes over different horizons are likely to be one reason for the differences. Another important consideration is the SWF's ability to tolerate large unrealized losses within the investment horizon, which could depend on institutional factors and the financial literacy of the owner and the public. SWFs with fewer assets under management or funding inflows—relative to potential withdrawals—need to have a larger share of liquid assets to accommodate liquidity needs.³ Other factors matter as well. For example, the age or maturity of the fund and its level of sophistication may also drive differences in asset allocations. (I will return to this point below.)

Hence, even though SWFs may appear to be similar with regard to their type and funding, some notable patterns can be discerned between different types of SWFs, and intrinsic fund allocations may be quite different even among similar funds.

Specific circumstances and market developments should affect the basic underlying asset allocations of these funds, and under certain circumstances force a fundamental realignment of their investment portfolios. The next section explores this in the context of the subprime crisis.

Impact of the Subprime Crisis on SWF Asset Allocations

The global financial crisis affected SWFs worldwide. The sharp downturn in asset prices, particularly prices for equity and alternative investments, resulted in large losses for many SWFs (Figure 2) especially those with longer investment horizons. In some cases, the losses reached 30 percent of the portfolio values for 2008, thereby impairing SWFs' long-term returns as well.⁴ Moreover, the crisis led some SWFs to take prominent roles in financing government operations, as per their mandate. Some SWFs have also taken on new roles, beyond their original mandates. For example, several countries have used SWF resources to support domestic banks or corporations through the banking system. The heavy demands on SWF resources and the uncertainty in the economic environment have also forced many SWFs to take a more cautious approach toward investing.⁵ Similarly these developments are reflected in the dynamics of SWFs' assets under management during the crisis.

The value of stabilization fund assets remained on a steady growth path until the end of 2008, when it became evident that the implications of the crisis for domestic liquidity and fiscal conditions would be greater than originally anticipated. These funds declined by about 50 percent between the end-2008 and end-2009 after withdrawals. Pension reserve funds and savings funds suffered equity valuation losses during the period September 2008 through March 2009, but have since recovered. Finally, SWFs with both stabilization and savings objectives—which are mostly invested in fixed-income assets—have weathered the crisis relatively unscathed.⁶

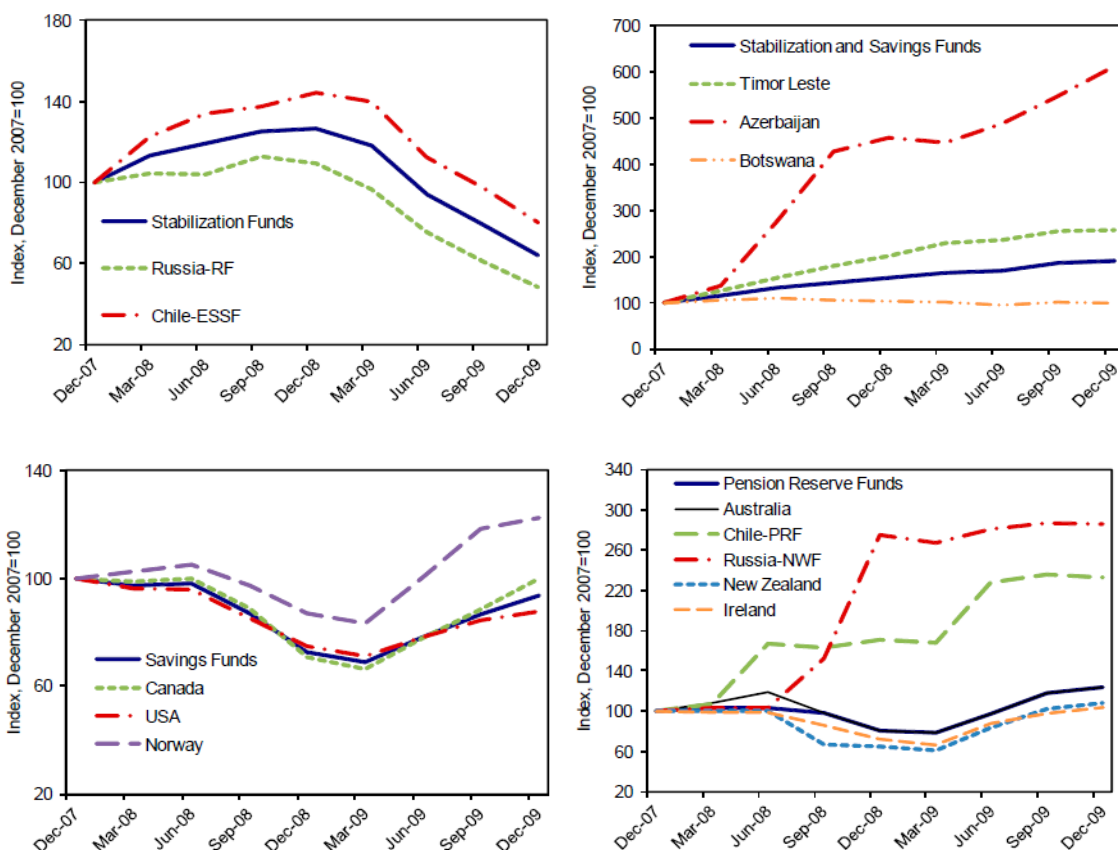
³ Scherer, B., and A. Gintschel, 2008, "Optimal Asset Allocation for Sovereign Wealth Funds," *Journal of Asset Management*, Vol. 9, No. 3, pp. 215–238.

⁴ Kalter, Eliot, 2012, "Re-defining Political Risk Management: The SWF Dimension", *The Sovereign Wealth Fund Initiative*

⁵ Das, Udaibir S., Yinqiu Lu, Christian Mulder, and Amadou Sy, 2009, "Setting up a Sovereign Wealth Fund: Some Policy and Operational Considerations," IMF Working Paper WP/09/179 (Washington: International Monetary Fund).

⁶ Peter Kunzel, Yinqiu Lu, Iva Petrova, and Jukka Pihlman, "Investment Objectives of Sovereign Wealth Funds—A Shifting Paradigm", IMF Working Paper 2010

SWF Assets under Management, Dec 2007 – Dec 2009



Source: International Monetary Fund

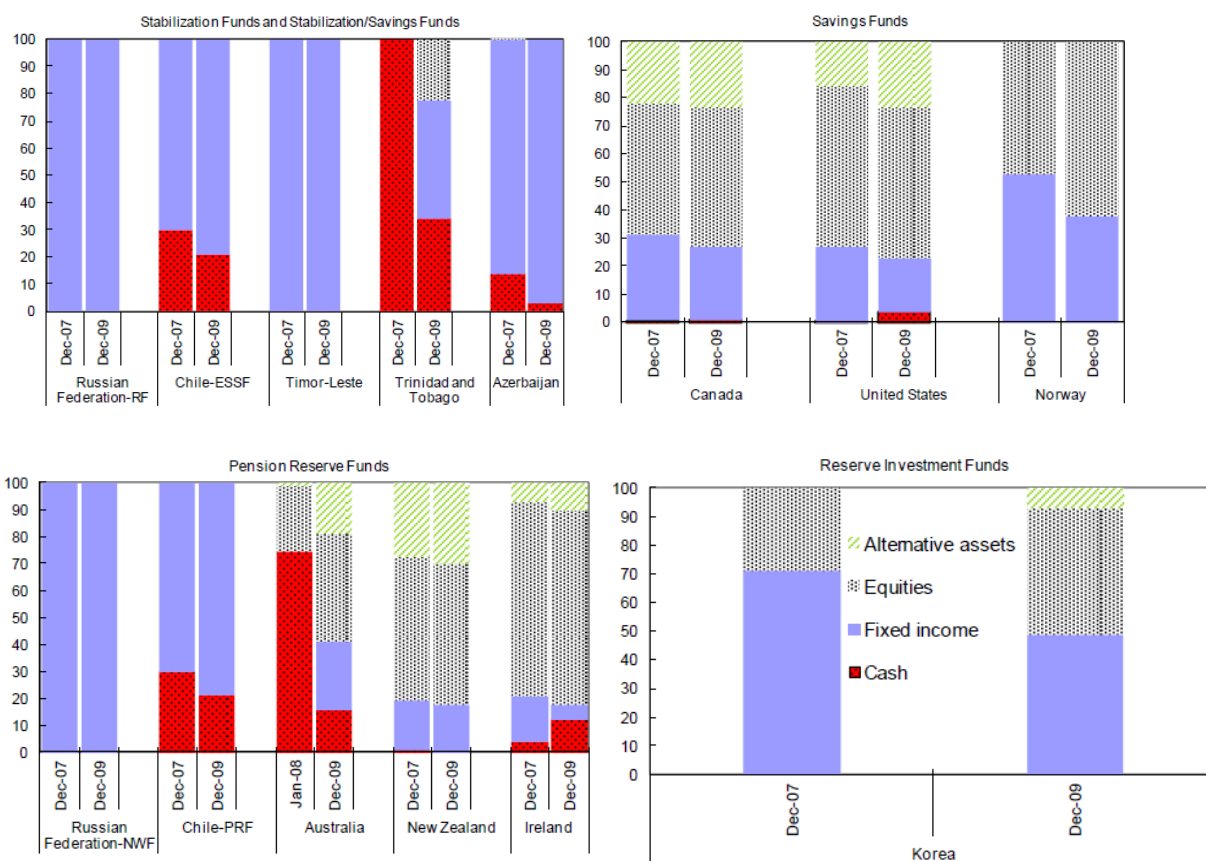
Changes to Strategic Allocations Post the Sub-Prime Crisis

The crisis affected SWFs' asset allocations in different ways. Several SWFs with stabilization objectives reduced their shares of cash holdings either because of the use of cash resources (Chile-ESSF), or because of moving to fixed income (Trinidad and Tobago). Alaska Permanent Fund and Ireland National Pension Reserve Fund increased the share of their cash holdings. SWFs with previous investment in alternative assets increased their investments in such assets, presumably with a view to further diversifying their portfolios. In Korea, the KIC introduced alternative assets investment and increased their equity shares.

Geographic reallocation also seems to have occurred. Confidence in emerging markets' recovery prospects, along with concerns about advanced economies, has prompted some SWFs to tilt their investments toward these markets. For example, Singapore's Temasek reportedly plans to focus on emerging markets in Asia, Brazil, and the Russian Federation and reduce emphasis on OECD countries (from one-third to one-fifth of assets).

In some cases, SWFs with longer-term mandates encountered unexpected liquidity needs, thereby effectively shortening their investment horizons. In other cases, increased scrutiny and pressure to minimize future losses may have contributed to shifts to relatively more conservative investment positions.

SWF Asset Allocation: 2007 vs. 2009

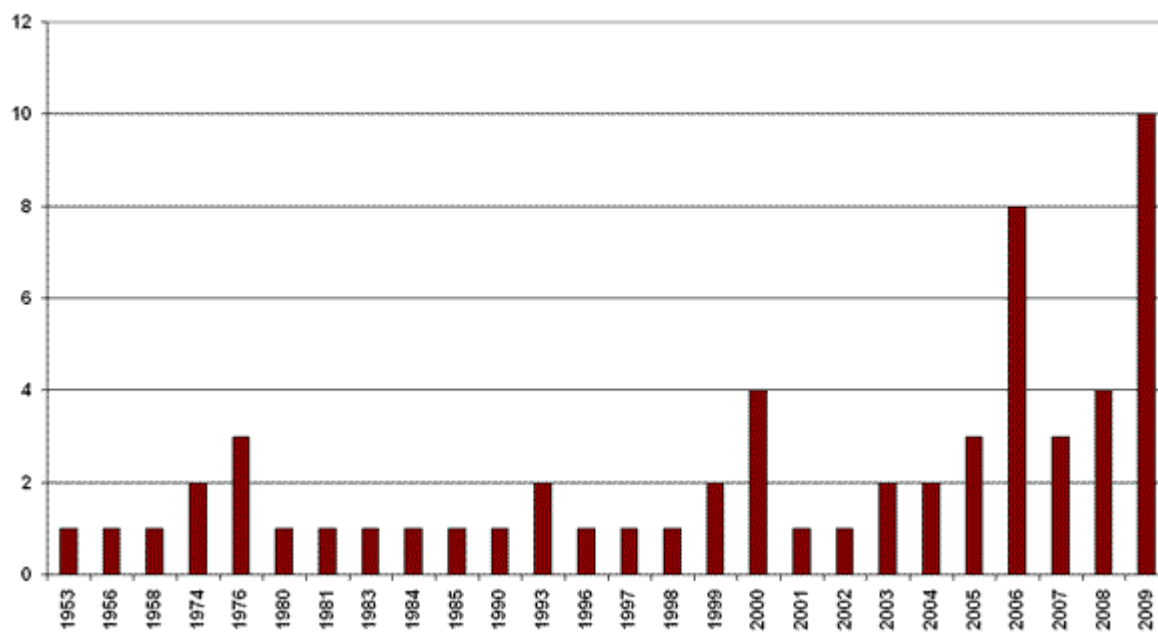


Source: International Monetary Fund,

Impacts and Implications for Newly Established SWFs

The number of new SWFs has increased dramatically in the last ten years. This growth is largely attributable to the expansion of resource wealth and foreign exchange earnings of emerging market countries. Not to be outdone, France and Italy too have announced new SWF's though, as developed economies, their goals in establishing new funds have taken on a defense mandate to protect and develop domestic industry. Just as the Asian financial crisis in 1997-98 revealed the risk of dependence on external sources of capital, so has the sub-prime crisis more recently accented that risk. Without coincidence, over 25 SWF's were announced between 2006 and 2006 alone. Their missions offer economic stabilization, wealth preservation, and intergeneration wealth transfer to asset owners and citizens.

Number of SWFs set up, by year



Source: FT.com⁷

In the broader context of strategic asset allocation, recently established SWFs—such as Australia’s Future Fund, Chile’s SWFs, and China’s CIC— may pose special cases. Specifically, these institutions may be in the early stages of building portfolios and so may not yet have optimized allocations. Similarly, funds undergoing legal or institutional change also may not be able to efficiently deploy assets under volatile market conditions. In such cases, actual allocations may diverge from model portfolios only to evolve and approach optimum levels as funding stabilizes and new funds scale.

In terms of geographic distribution, new SWFs in Asia have been among the most active investors in North American and European companies. This has been especially true in the financial sector in the 3 years since the financial crisis..⁸ Notable examples are investments by the KIC and CIC, established in 2005 and 2007 respectively.

As global finance continues to recover from both the sub-prime and Euro crises, these strategic investment decisions have experienced significant losses forcing certain adjustments, China, for example, has shifted its overseas investment focus from finance to natural resources. Similarly, though not newly-formed, Singapore’s Temasek, is expected to refocus its investment efforts on top performing commodities. Other SWFs have adopted more risk-averse strategies, including the reduction of equity investment allocations in favor of investments in U.S. Treasury securities, gold, cash and fixed-income deposits.⁹

⁷ See <http://blogs.ft.com/money-supply/?s=new+sovereign+wealth++funds>, accessed 1/15/2011,

⁸ Brown, Aaron, Michael Papaioannou, and Iva Petrova, 2010, “Macrofinancial Linkages of the Strategic Asset Allocation of Commodity-Based Sovereign Wealth Funds”, IMF Working Paper WP/10/9 (Washington: International Monetary Fund).

⁹ Alaska Permanent Fund Corporation, 2009, “Asset Allocation.” Available via the Internet: <http://www.apfc.org/home/Content/investments/assetAllocation2009.cfm>.

The increased political pressure applied by domestic stakeholders to allocation decisions, especially those of selected new SWFs, has forced greater scrutiny of both fund liquidity and the role of national SWFs to provide both liquidity and capital to support domestic banks and markets. Recently, both the China Investment Corporation and the Qatar Investment Authority have bought shares in their respective domestic banks, while France's strategic investment fund has already made a number of investments in domestic companies in an effort to bolster their finances.¹⁰

¹⁰ International Forum of Sovereign Wealth Funds, 2010, "Sydney Statement." Available via the Internet: <http://www.ifswf.org/pr/pr4.htm>.