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GOOD GOVERNANCE DESIGNS OF SOVEREIGN WEALTH FUND

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Abstract

In the last decade, Sovereign Wealth Funds (SWFs) have been rising and became important players in the world financial markets. However, SWFs governance is a quite under-researched area and the research works on the topic are mostly descriptive. This thesis makes a general survey of SWF governance, reviews the existing governance principles and suggests some effective strategies and practices which help to design or redesign a SWF and avoid corruption and misappropriation.

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Introduction

In the last decade, Sovereign Wealth Funds (SWFs) have been rising and became important players in the world financial markets due to soaring commodity prices and global current account imbalance. Although total size of SWFs is much less than the pension funds, insurance assets, or foreign reserves in all central banks it is bigger than the sum of the hedge and private equity funds in the world that is growing rapidly (Aizenman and Glick 2008). According to the International Monetary Fund, in 2007, the total size of SWFs was estimated between 1.9 trillion and 2.9 trillion USD, and is expected to reach 6 to 10 trillion USD by 2013 (IMF 2007). Although many SWFs suffered big losses during the recent global financial crisis, their size is increasing dramatically as the global economy recovers. SWFs invest in almost all developed countries and hold positions in about one-fifth of the companies worldwide. The Sovereign Wealth Fund Institute[1] estimates that, as of May 2012, the total size of SWFs reaches 5 trillion USD. According to the estimation, in the world, there are at least 60 SWFs are operating, out of which the 25 SWFs have been created since 2005. In short, the statistics show the return of the SWFs. As a result, political and academic concerns/interest is returning in this direction.

Although SWFs define themselves as politically independent and commercially-driven entities, they are considered as a "relatively unexamined class of international investors" with possible non-commercial investment goals. Even some governments of developed countries such as Germany and France are publicly worried about SWF activities (Weiss 2008). The reason for the concern is mainly due to the lack of transparency of the most SWFs' governance and investment strategies. In order to respond to the concern, in 2008, The IMF and the International Working Group of Sovereign Wealth Funds, which was replaced by the International Forum of Sovereign Wealth Funds,[2] jointly proposed appropriate governance and accountability arrangements that were finalized in the Generally Agreed Principles and Practices (or Santiago Principles). However, the SWF governance design is still a very critical topic that needs further research and detailed scrutiny. Even though private

[1] SWF Institute is an organization that studies sovereign wealth funds and their global impact, and its web site: http://www.swfinstitute.org/

[2] IFSWF is a voluntary group of SWFs, which will meet, exchange views on issues of common interest, and facilitate an understanding of the Santiago Principles and SWF activities. Its web site: http://www.ifswf.org/

research groups such as the SWF Institute, Peterson Institute of International Economics[3] and Oxford SWF projects[4] have contributed to the field, the designing and the setting up of SWFs, especially in the countries with weak governance, are only a development of a new policy research area. This is the general motivation of this thesis.

Many of the interests and concerns on SWFs have been from the recipient countries and world financial markets. However, this thesis will mainly take the perspective of the countries controlling SWFs due to my secondary reasoning of my thesis. My motivation came from the idea that the establishment of SWF is supposed to help many countries that are poorly developed yet contains great natural resource. It is tempting to assume that richly resourced countries develop faster than the others since they are clearly at advantage. However, according to many studies, the natural resource isn't directly proportional to the country's development. The data reveals that the resource rich countries actually grow slower economically in the long run compare to the other average countries (Sachs and Warner 2001). There are many examples that prove the claim. Abundant oil resources did not made Nigeria a rich country. Diamonds have not delivered prosperity to Angola. This is called the 'curse of natural resource'. The causes of this failure are: vulnerability to external shock; increased risk of 'Dutch disease'; challenge of governance and institution building; increased rent seeking and corruption; and weakness of human capital. Besides negative economic effects, it leads to many social problems such as corruption, political authoritarianism, or ecological degradation (Sayed 2007).

To avoid wasting non-renewable resource revenue in inefficient ways, many resource rich countries have developed (or tried to develop) institutions that aim to improve public finance, to manage windfall revenue wisely and to help high-quality growth. Of these institutions, SWFs are supposed to be an important in resolving the 'curse'. To keep away from the 'curse', for example, in 2011 the Parliament of Mongolia decided to establish the Fiscal Stability Fund for the purpose of ensuring medium and long term fiscal stability. For preparing to set up the fund, the debate on the

[3] a private, nonprofit, nonpartisan research institution devoted to the study of international economic policy and its web page: http://www.piie.com

[4] a project of Professor Gordon L. Clark and Dr.Ashby Monk of the School of Geography and the Environment at the University of Oxford and its web page: http://oxfordswfproject.com/

governance and design of the fund currently gets heated among Mongolian policy makers and politicians.

The decision on whether to establish a SWF should consider many factors that will be discussed in the next chapter. Once a country decides to have a wealth fund, it is not enough only to establish SWF. The additional institutional, policy, and governance framework is necessary to succeed. Strong commitment to good governance lies at the heart of responsible management of the natural resource wealth, and good governance helps ensure that commodity revenues can benefit all in society (Monk 2010). In the thesis, therefore, I make a general survey of SWF governance, review the existing governance principles and suggest strategies and practices which help to design or redesign a SWF and avoid corruption and misappropriation.

The main problems are the quite under-researched area of SWFs governance and the availability of detailed data. The research works on governance of SWFs are mostly descriptive and, are based on anecdotal facts. On the one hand, there are many forms of SWFs - from stabilization fund to future pension fund, and the differences between them reflect individual government decisions. Therefore, it is difficult to generalize and directly compare SWFs. On the other hand, the SWFs information is very limited because countries that have SWFs are not so many that one can draw statistically valid inferences, and the most of the SWFs have been established only very recently so that it is too early to judge them. Moreover, it is supposed that there is a lack of transparency and, for many SWFs, the disclosure to the public of any information related to the funds is prohibited even by law. Nevertheless, to obtain greater understanding of the SWFs governance, I try to include available relevant sources and researches as much as possible.

The remainder of the thesis is structured as follows. Chapter 1 provides an overview of SWFs: their distinct forms, benefits, and criticisms. Then, Chapter 2 discusses corporate governance mechanisms. Here, the quantitative assessment works were compared, SWF governance practices were analyzed. Basing on the analysis, Chapter 3 suggests some ranks for existing SWFs and then provides the best practices of SWF governance and effective strategies for protecting the assets from corruption and political interference. At the end, the thesis suggests some policy recommendations on the setting up or redesigning of SWFs.

Chapter 1. Overview of SWFs

This chapter defines what is understood by Sovereign Wealth Fund, and discusses its types, benefits, and drawbacks. It also reviews the literature on general topic of SWFs.

While the first SWF, Kuwait Investment Authority, dates back to 1953, the term 'sovereign wealth fund' dates back only to 2005 (Rozanov 2005). There are many different definitions of SWF and scholars have not reached universally accepted one. The IMF defines that SWFs are special investment funds created or owned by governments to hold foreign assets for long-term purposes (IMF 2007). The SWF Institute defines SWF as a state-owned investment entity funded by balance of payments surpluses, official foreign currency operations, privatization incomes, governmental transfer payments, fiscal surpluses, and/or receipts resulting from natural resource exports. SWFs usually manage these assets separately from foreign currency reserve assets held by monetary authorities. They also differ from state-owned enterprises, government pension funds, or assets managed for the benefit of individuals. However, in reality, there is a very blurry distinction between those funds' aim and composition. For example, some SWFs (e.g. Russia's Reserve Fund or Chile's Economic Stabilization Fund) hold highly liquid instruments similar to the central bank reserve.

According to the SWF Institute, having a long term horizon, SWFs tend to prefer returns over liquidity and invest the funds into more risky assets like stocks, corporate bonds, and real estate. SWFs typically minimize utilization of leverage, while hedge funds and private equity funds usually manage highly leveraged transactions. Having no explicit liabilities to their owners, SWFs also differ from government pension funds that are responsible for worker pensions. It is the reason for SWFs having less incentive to disclose the information about their investment and management practices for the public.

The exact number and size of SWFs is difficult to say because of the SWFs definitions and the secret information of some funds' holdings. However, there are some estimates. According to the IMF, as of February 2008, the total assets of SWFs were in the range between 2.093 trillion and 2.968

trillion USD (IMF 2008). Another estimate says that SWFs managed assets more than US$5 trillion as of the end of 2007, although many incurred losses of 30%-40% during the 2008 crisis (Lauder Institute 2010). Since then, SWFs have been growing quickly, and the SWF institute estimates the current total of SWFs size is already US$ 5.022 trillion as of April 2012.

A most recent list of the largest SWFs is shown in Table 1. The list excludes those which have smaller capital than one billion USD like one of the oldest SWF, Kiribati's Revenue Equalization Reserve Fund, and those of which have unknown size like Emirate's Investment Authority, United Arab Emirate-Federal. However, the list includes Saudi Arabian Monetary Authority (SAMA)'s Foreign Holdings which is not counted as a SWF by the definition of the US Treasury due to not having separate management from official reserves. It also includes National Social Security Fund of China which is counted as a pension fund by other authors.

Table 1. The Largest Sovereign Wealth Funds

Country	Fund name	Est. size (bln)	Inception	Source
UAE – Abu Dhabi	Abu Dhabi Investment Authority	$627	1976	Oil
Norway	Government Pension Fund – Global	$611	1990	Oil
China	SAFE Investment Company	$567.90	1997	Non-Commodity
Saudi Arabia	SAMA Foreign Holdings	$532.80	n/a	Oil
China	China Investment Corporation	$439.60	2007	Non-Commodity
Kuwait	Kuwait Investment Authority	$296	1953	Oil
China – Hong Kong	Hong Kong Monetary Authority Investment Portfolio	$293.30	1993	Non-Commodity
Singapore	Government of Singapore Investment Corporation	$247.50	1981	Non-Commodity
Singapore	Temasek Holdings	$157.20	1974	Non-Commodity
Russia	National Welfare Fund	$149.70	2008	Oil
China	National Social Security Fund	$134.50	2000	Non-Commodity
Qatar	Qatar Investment Authority	$100	2005	Oil
Australia	Australian Future Fund	$80	2006	Non-Commodity
UAE – Dubai	Investment Corporation of Dubai	$70	2006	Oil
Libya	Libyan Investment Authority	$65	2006	Oil
Kazakhstan	Kazakhstan National Fund	$58.20	2000	Oil
UAE – Abu Dhabi	International Petroleum Investment Company	$58	1984	Oil
Algeria	Revenue Regulation Fund	$56.70	2000	Oil
UAE – Abu Dhabi	Mubadala Development Company	$48.20	2002	Oil
South Korea	Korea Investment Corporation	$43	2005	Non-Commodity
US – Alaska	Alaska Permanent Fund	$40.30	1976	Oil

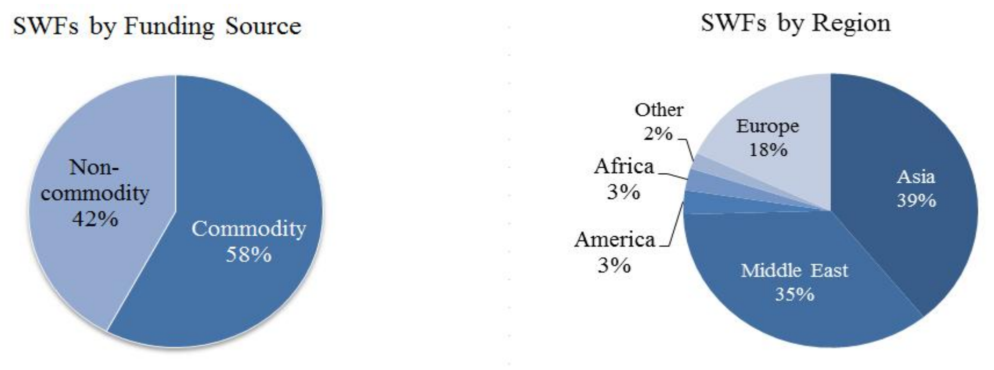
Country	Fund name	Est. size (bln)	Inception	Source
Malaysia	Khazanah Nasional	$36.80	1993	Non-Commodity
Azerbaijan	State Oil Fund	$30.20	1999	Oil
Brunei	Brunei Investment Agency	$30	1983	Oil
Ireland	National Pensions Reserve Fund	$30	2001	Non-Commodity
France	Strategic Investment Fund	$28	2008	Non-Commodity
US – Texas	Texas Permanent School Fund	$24.40	1854	Oil & Other
Iran	Oil Stabilisation Fund	$23	1999	Oil
New Zealand	New Zealand Superannuation Fund	$15.90	2003	Non-Commodity
Canada	Alberta's Heritage Fund	$15.10	1976	Oil
Chile	Social and Economic Stabilization Fund	$15	2007	Copper
US – New Mexico	New Mexico State Investment Council	$14.30	1958	Non-Commodity
Brazil	Sovereign Fund of Brazil	$11.30	2008	Non-Commodity
East Timor	Timor-Leste Petroleum Fund	$9.90	2005	Oil & Gas
Bahrain	Mumtalakat Holding Company	$9.10	2006	Non-Commodity
Oman	State General Reserve Fund	$8.20	1980	Oil & Gas
Botswana	Pula Fund	$6.90	1994	Diamonds & Minerals
Mexico	Oil Revenues Stabilization Fund	$6.00	2000	Oil
Saudi Arabia	Public Investment Fund	$5.30	2008	Oil
China	China-Africa Development Fund	$5.00	2007	Non-Commodity
US – Wyoming	Permanent Wyoming Mineral Trust Fund	$4.70	1974	Minerals
Chile	Pension Reserve Fund	$4.40	2006	Copper
Trinidad & Tobago	Heritage and Stabilization Fund	$2.90	2000	Oil
US – Alabama	Alabama Trust Fund	$2.50	1985	Oil & Gas
Italy	Italian Strategic Fund	$1.40	2011	Non-Commodity
UAE – Ras Al Khaimah	RAK Investment Authority	$1.20	2004	Oil
Nigeria	Sovereign Investment Authority	$1	2011	Oil

Source: SWF Institute fund rankings, http://www.swfinstitute.org/fund-rankings/

SWFs can be divided into several categories based on their funding source and regions as well. SWFs are usually funded by receipts resulting from natural resource exports and current account surpluses. Using Table 1 and other related data, Figure 1 shows the share of SWFs by funding source and the region. Most of the SWFs are funded by oil, gas, and other commodity revenues. The commodity funds are slightly different from non-commodity funds. According to Blackburn et al. (2008), the non-commodity funds are usually funded by the purchase of massive inflow of foreign currency to prevent domestic currency appreciation, but this measure leads to inflationary pressure. In order to offset it, the government or central bank needs to issue a bond, which means that the issuer have to pay an interest rates. In contrast, commodity funds do not incur this cost of a capital.

Three quarters of the total SWF capital comes from Asia and Middle East regions. Table 1 also shows that all Middle East SWFs, except Bahrain's Mumtalakat Holding Company, have been funded by oil revenue while all Asian SWFs, except Brunei Investment Agency, have been funded by non-commodity sources like official reserves and fiscal surpluses.

Figure 1. The source and region of SWFs



Source: http://www.swfinstitute.org/fund-rankings/

SWFs are designed to achieve a variety of objectives. According to the IMF's taxonomy, there can be the following five types of SWFs regarding their objective (IMF 2008):

i. *fiscal stabilization funds*, which aim to keep the balance of the budget and the economy against volatile commodity prices;

ii. *fiscal savings funds* for future generations which aim to convert non-renewable assets into a more diversified portfolio of assets and mitigate the effects of 'Dutch disease';

iii. *reserve investment corporations* that aim to enhance returns on reserves;

iv. *development funds*, funds that aim to invest returns for development purposes;

v. *contingent pension reserve funds*, which aim to provide (from sources other than individual pension contribution) for contingent unspecified pension liabilities on the government's balance sheet.

Some scholars debate that establishing independent SWFs, especially the stabilization funds for non-renewable resources, is not necessary because (i) if the conditions that are required for the successful functioning of these funds exist, then resource revenues or fiscal surpluses can be managed without them within the budgetary process; (ii) an effective governance of such funds is hard to implement in real practice and in budgetary (Davis, et al. 2005). Nigerian Petroleum Trust Fund and Venezuelan Investment Fund are the supportive example of the problematic funds. Other researchers suggest that even if it is impossible to create ideal conditions, the wealth funds could prevent excessive spending. Alaska Permanent Fund and Norway's Government Pension Fund-Global are supportive example of this argument (Fasano 2000, Birdsall and Subramania 2004).

Based on the SWF objectives above mentioned and its macroeconomic impact, SWFs have some of the following economic benefits to home countries (Monk 2010, Sen 2011):

- **Stabilization.** By putting a part of budget revenues above a certain threshold into a fund, and then drawing on the fund when revenues are down, the government can smooth volatile commodity market prices and its spending over the long term.
- **Savings.** By transferring fiscal surpluses and privatization income into the future, SWFs go for generational equality. Especially resource rich countries can transmit their underground wealth to their future generations in the form financial assets.
- **Yield.** SWF can be also a greater portfolio diversification tool and focus more on returns than currency reserve assets at the central bank, thereby reducing the opportunity costs of reserves holdings.
- **Sterilization.** Limiting the negative domestic effects of capital inflows, the SWFs help to prevent 'Dutch Disease' – a situation in which, due to a heavy dependence on natural resources, an overvalued currency impedes non-primary exports. By setting up a SWF, resource rich countries hope to manage their competitive position in the global economy.
- **Combating inflation.** Trade surpluses cause an inflow of currency, thus raise both money supply and inflation. SWFs remove excess funds from the current budget, absorb excess liquidity and reduce inflation.
- **Development.** Having specific goals such as education, health, pension, infrastructure, and banking development, SWFs contribute to the development of home countries. By removing

reserves and reducing the pressure for foreign currency appreciation, SWF can also support competitiveness of domestic industries.

- **Debt management.** Excess funds can pay down debt and upgrade country's credit rating.

However, it does not necessarily mean that funds with exactly same goals and type provide the same benefits for each home country because their governance quality, investment decisions as well as institutional and macroeconomic frameworks can be very different. On top of that, there are also some general criticisms for SWFs (Sen 2011, Blackburn, et al. 2008):

- **Excessive government ownership and management.** Generally, the government may be worse in managing such funds than the private sector because of potential scope of mismanagement and corruption. So, SWFs should be managed by private entities or just return the budget surpluses to all citizens, or make investments in infrastructure, such as roads, airports and public parks which may have more returns than SWFs.
- **One size doesn't fit all.** Many countries can be just not prepared for SWFs. Having sufficient amount of external reserves is not the only reason for establishing a SWF. The country should meet, at first, its immediate needs like unemployment, poverty, and foreign debt.
- **Creates policy conflicts.** The policies of a country's SWF may interfere with the policies of the country's central bank. For example, SWF policy on stable exchange rate during excessive inflow of foreign currency can be the pressure of increasing domestic price which contradicts the policy of the central bank.

To decide establishing a wealth fund, the country takes into an account not only its above mentioned benefits and costs but also can pursue its own political strategies directed to the target countries. It is easier to place their political power objectives higher than the economic costs and the international norms for the ambitious nations like China. On the other hand, for the underdeveloped countries such as Papua New Guinea and East Timor, losses caused by corruption and asset mismanagement can erase all the benefits (E. M. Truman 2011).

However, for any country, the quality of governance of sovereign fund has been the most important issue which is covered in next chapter.

Chapter 2. Good governance of SWFs

As a special policy tool, SWF tend to reduce the risk of corruption and the conflict of interest on national wealth, reinforce the coordination of fiscal and monetary policies, and increase citizen participation and transparency of public budgets if the report on the fund's revenue and expenditure is regularly published (OSI 2010). Once a country decides to have a wealth fund, just setting up the fund is not sufficient. Having better quality governance is the main condition for successful practice. For designing good governance, corporate governance principles can be applied at a general level, but at a practical level clearly defined and performance-related criteria is needed.

2.1. The application of corporate governance principles to SWFs

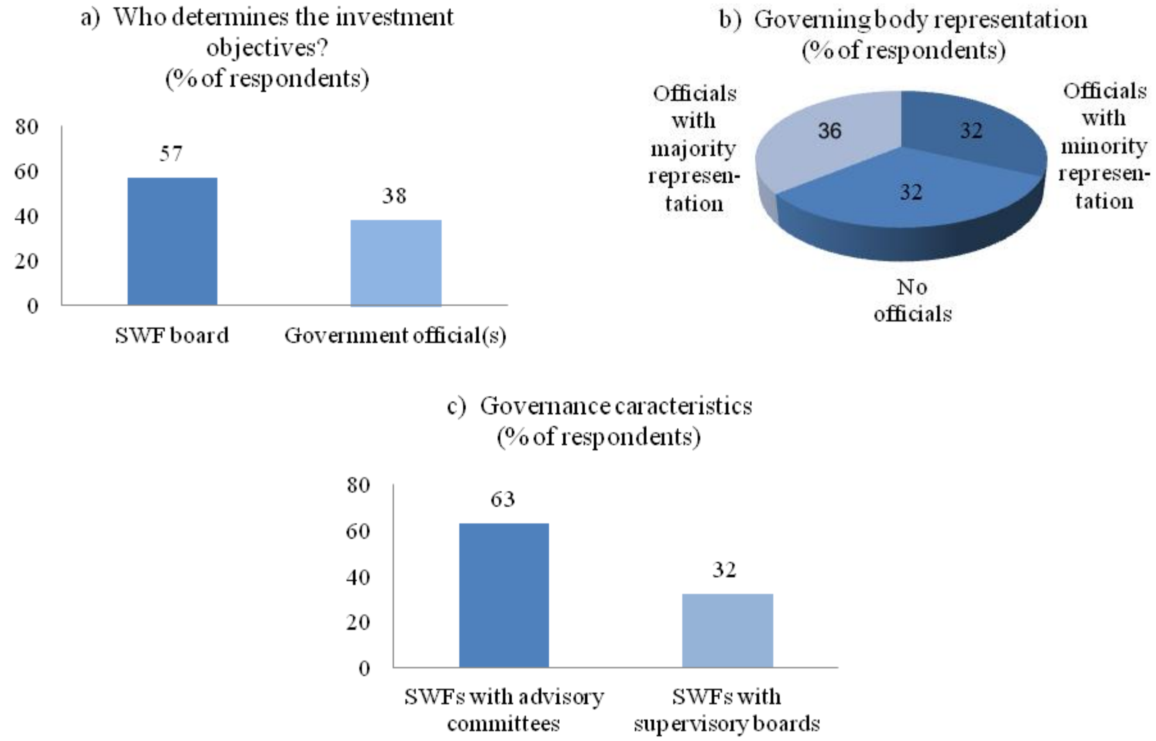
Corporate governance mechanisms and controls are designed to reduce the inefficiencies that arise from asymmetric information problems between principal and agent. Many features of good corporate governance are universally applicable. Good corporate governance of SWFs is very important for domestic stakeholders. For instance, general principles regarding the rights of the shareholder and key ownership functions, the governing board, the composition and responsibilities of the board, the role of stakeholders, disclosure and transparency and the flow of information between management, and compensation for managers are all relevant for SWFs (IMF 2008).

One of the main elements of corporate governance is control and ownership structure which refers to the types and composition of shareholders in a corporation. By definition and evidence from the existing SWFs, governments own the SWFs and exercise control directly or indirectly upon them. In other words, SWFs are political financial institutions. Although many SWFs have liabilities, such as contractual liability to transfer money into the general budget or a social security system, in the majority of the cases, SWFs have no outside budget liabilities (Ahmadov, Tsani and Aslanli 2010).

Due to the state ownership of SWF, one may think that the best governance practices for state-owned enterprises or public pension funds might fit to SWFs. However, such an analogy can be wrong in reality because there are at least the four following differences between SWFs and public pension funds. First, their objectives are different. Second, pension funds usually face strong pressures to invest their assets domestically and in riskless instruments like government bonds, while SWFs mainly invest in foreign, more risky assets. Third, SWFs and pension funds have different sources of funding. Finally, while pension funds have fiduciary responsibilities and require greater transparency by trustees, SWFs have no such duty (Blundell-Wignall, Hu and Yermo 2008).

Almost half of the existing SWFs operate as separate legal entities while the others are entities within the Ministry of Finance or the Central Bank of the home country (Ahmadov, Tsani and Aslanli 2010). This result is repeated in a survey based on responses from 20 members of the International Working Group of SWFs (Hammer, Kunzel and Petrova 2008). Hammer et al. (2008) also reveal that the internal governance structure of especially legally separate SWFs is similar to the structure of private corporations. In particular, internal governance controls, such as the board of directors, balance power and internal auditors monitor activities and take corrective action to reach

Figure 2. Governance practices of SWFs



Source: (Hammer, Kunzel and Petrova 2008) organizational goals. According to the survey, investment policies, management and operational decisions are often made within the SWF or the central bank through a Board of Directors (Figure 2a). Moreover, in many cases, SWFs are provided operational independence, while at the same time, keeping its accountability to the government and the public. Legally separate SWFs have the right to appoint and remove the members of the governing body while for legally not separate SWFs, all the members of the governing body are likely to be government officials (Figure 2b). In many cases, SWFs have an advisory committee to assist the Board (Figure 2c). Although this survey of operational practices of SWFs does not say anything about the governance quality, one can come to the conclusion that governance design of most SWFs has been, at least, in accordance with basic corporate governance principles.

Another important issue for corporate governance is management compensation. According to the standard economic theory, efficient executive payment can motivate executives and, therefore, improve performance of the corporation. For only a few transparent SWFs the executive compensation data is available and Table 2 shows some of them. Based on this limited data, it is impossible to estimate the relationship between executive pay and performance (return) SWFs. The country's average income suggests that the funds may offer a good compensation to executives in terms of relative salary. However, it seems not such a high for motivating the world-class, top executives. For instance, the compensation for the Executive Director of Alaska' Permanent Fund ($300K) has been one of the highest payments for state government officers in Alaska,[5] but it may be not such a competitive payment to attract top executives.

Table 2. Executive compensation of SWFs

The fund	Year	Executive(s)	Compensation*	Return (%)	GDP per capita (PPP$)
Australia Future Fund	2010-2011	11 senior	$7,600,000	10.6	38,160
State Oil Fund of Azerbaijan	2010	Top 3	$152,500	1	9,936
US-Alaska Permanent Fund	2010	Director	$267,000	11.7	47,153
Norway Pension Fund	2011	CEO	$960,000	-2.5	57,231

[5] According to State Officer Compensation Commission of Alaska Department of Administration, the top two employees of state's executive branch were chief investment officer and executive director of the Alaska Permanent Fund. (http://doa.alaska.gov/dop/socc/background/)

* Compensations and returns were converted into USD using the exchange rate to the currency in which the return was reported, and the last date of the year.

Sources: Annual reports of the SWFs and World Bank country data.

The principles of transparency and accountability are probably the most important aspect for corporate performance especially in the government sector. The government, ultimately the public, should revise and monitor its SWFs performance. However, as a public good/resource, a SWF needs transparent and accountable management as well as clear rules and principles for preventing the potential scope of mismanagement, corruption and misuse. According to Davis et al. (2005), the inefficiency of the funds is caused by the lack of transparent rules and operations, and mechanisms that ensure accountability and prevent resource misuses.

Transparency in the public sector is not only a good means against corruption, but also a mechanism that prevents managers from not doing their best. "In the private sector, openness allows principals to better hold their agents accountable, resulting in better performance. The same principle should be applied to the public sector" (Brito and Perrault 2009). In the direction of making the sovereign funds more transparent, there have been many initiatives from evaluating the funds to pushing them to openness. A method of rating transparency with respect to SWFs is Linaburg-Maduell Transparency Index developed at the SWF Institute. The index is calculated from the following principles: The fund provides…

1. history including reason for creation, origins of wealth, and government ownership structure
2. up-to-date independently audited annual reports
3. ownership percentage of company holdings, and geographic locations of holdings
4. total portfolio market value, returns, and management compensation
5. guidelines in reference to ethical standards, investment policies, and enforcer of guidelines
6. clear strategies and objectives
7. If applicable, the fund clearly identifies subsidiaries and contact information
8. If applicable, the fund identifies external managers
9. Fund manages its own web site
10. Fund provides main office location address and contact information such as telephone and fax

Each principle adds 1 point to the index. SWF Institute recommends a minimum rating of 8 in order to claim adequate transparency. According to the rating of the 1st quarter of 2012, the most transparent

SWFs are Chile, UAE-Mubadala, Singapore-Temasek, Ireland, Azerbaijan, Australia, USA-Alaska, Norway, and New Zealand (each has maximum 10 point), while the least transparent SWFs are Algeria, Brunei, Iran, Kiribati, Mauritania, Nigeria, Oman, Libya and Venezuela-FIEM (each has 1 point).

Accountability to the citizens of the home and host countries of an SWF, as well as participants in financial markets, should be the primary motivating objective of SWF best practices (Truman 2010). The survey in Hammer et al. (2008) indicates that accountability to the legislature is a duty of the entity that controls the fund. In the case where SWF is a division of government, the Ministry of Finance annually reports to Parliament on the performance of the SWF. The report to Parliament contains audited financial statements of the fund, or the audited financial statements of the managing entity. So then Parliaments can critically examine the activities of SWFs. If the SWF is a legally separate entity like Temasek Corporation of Singapore, the government may require the entity to be accountable to its shareholder for its performance. The survey also shows that all SWFs prepare and present their financial statements according to a prescribed set of accounting standards.

Auditing is a necessary part of accountability and good governance. According to the survey in Hammer et al. (2008), all SWFs have internal audit arrangements. For internal auditing, some SWFs have special internal audit divisions controlling their business activities on a daily basis, but the others are audited by accounting firms or temporarily appointed statutory auditors. For external audits, most SWFs audited by independent and internationally recognized accounting firms. Of the respondents, 60% of SWFs disclose their audited financial statements to the public.

From all the corporate governance principles, accountability and transparency might be the key requirements for designing SWFs, especially in highly corrupt countries.

2.2. Standards of accountability and transparency of SWFs

Currently, the main standard of SWF activities is Generally Agreed Principles and Practices or the ‘Santiago Principles’, a set of best practices regarding fund management and transparency. This voluntary code includes 24 principles and 11 sub-principles that are listed in Appendix 1. The Santiago Principles covers three main areas: (i) legal framework, objectives, and coordination with macroeconomic policies; (ii) institutional framework and governance structure; and (iii) investment and risk management framework.

Most of the 21 members of the International Forum of SWFs already published their first self-assessment reports on this standard. According to a survey on members‘ experiences in implementing the Santiago Principles, conducted by the International Forum of SWFs, there is a high degree of compliance with the Principles (IFSWF 2011). Even though examination by Bagnall and Truman (2011) reveals that the extent of compliance with the Santiago Principles is somewhat exaggerated, members' practices are generally consistent with the principles. Table 5 in the next chapter provides the Santiago Principles score for SWFs drawn from Truman (2011). Although this score is not calculated from all the Santiago Principles, it can be a proxy indicator. According to the Santiago Principle score, the 'best' SWFs are Norway, New Zealand, US-Alaska, US-Wyoming, Ireland, and Australia. In contrast, the 'worst' SWFs are Oman, UAE-Abu Dhabi International Petroleum Investment Company, Venezuela, Nigeria, Iran, Algeria and Bahrain.

Another standard of SWFs is Truman's Scoreboard. Truman (2008) suggests an approach of SWF ranking based on systematic, regularly available, public information. His scoreboard has 33 elements that are grouped in four categories: (i) structure of the fund, including its objectives, links to the government's fiscal policy, and whether the fund is independent from the countries' international reserves; (ii) governance of the fund, including the roles of the government, the board of the fund and its managers, and whether the fund follows guidelines for corporate responsibility; (iii) accountability and transparency of the fund in its investment strategy, investment activities, reporting, and audits; and (iv) behavior of the fund in managing its portfolio and its risk management policies, including the use of leverage and derivatives. Table A1 in the Appendix provides overall scores for each fund, for each element, and for each category. Each element corresponds to a simple "Yes/No" question. If the answer is "Yes", a score of 1 is assigned, otherwise a score of 0 is given. In some cases, however, partial scores of 0.25, 0.5 and 0.75 are recorded.

According to Truman's scoreboard in Table A1 in the Appendix, the first group of elements, structure, covers basic organization of each fund and majority of SWFs comply with each element. However, the two lowest scored elements are whether fiscal treatment elements are integrated with the budget (20 SWFs of the 44 funds do not have clear rules) and whether the nature of the subsequent use of the principal and earnings of the fund is clear (21 SWFs have not clear statements).

The second group, governance, covers respective roles of government, governing bodies and fund managers in the operations of a fund, and use of ethical and corporate governance guidelines. Compliance is 45 percent. The lowest scored elements are guidelines for corporate responsibility (for 38 SWFs, there is no guideline, or it is not publicly available) and ethical investment guidelines (38 SWFs have no such guideline).

The third group, accountability and transparency, covers subgroups of openness on investment strategy implementation and investment activities, reporting and auditing. This group consists of 14 of a total 33 elements, so it weighs significantly more on the total score than other groups. Compliance is less than 50 percent. The lowest scored elements are whether a report includes information on the currency composition of investment (26 SWFs do not report) and whether the report includes information on the specific investment (29 SWFs do not report).

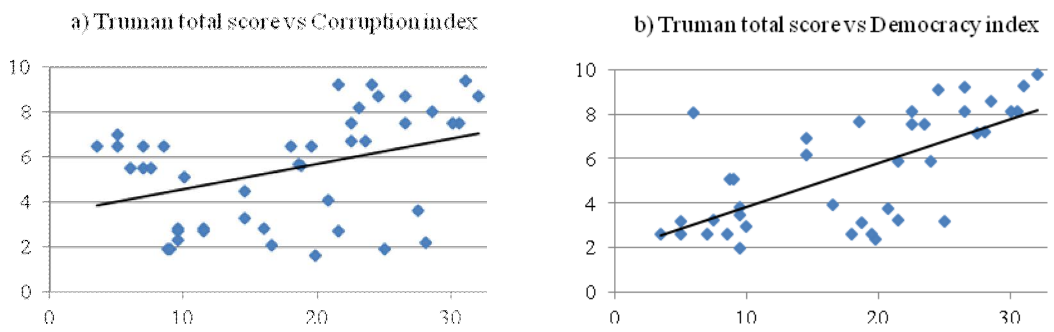
The last group, behavior, covers risk management and investment behavior. Compliance is generally very low, 24 percent. The lowest scored elements are whether the SWF indicates the nature and speed of adjustment in its portfolio (37 SWFs do not indicate) and whether the SWF has a policy on the use of leverage (35 SWFs do not have).

In addition, Truman (2010) finds great increases in almost all scores and in almost all SWFs for 2007-2009. This analysis shows that there is a diversity of compliance probably due to the diversity of political and cultural origins of the funds. And it suggests that for SWFs, in general, there is still room to improve transparency and accountability.

In the SWF scores of these standards on transparency, accountability, and governance, the wealth funds of OECD countries have always had the top rankings while funds of developing countries, like Libyan Investment Authority or Oil Stabilization fund of Iran, have always been one of the lowest rankings. Using the Worldwide Governance Indicators constructed by Kaufmann, Kraay, and Mastruzzi, and Truman's SWF Scoreboard, Aizenman and Glick (2008) find that although countries with SWFs score significantly lower than developed countries for all governance measures, they have better governance on average than other developing countries. Developing countries with better governance, particularly in terms of government effectiveness, regulatory quality, and control of corruption, are more likely to have SWFs. Based on a univariate probit model, they also prove that there is no statistical association between national governance and SWF likelihood, but voice and accountability sub-index has a significant negative effect on the incidence of SWFs.

Similarly, Figure 3 demonstrates the positive but weak relationships between Truman score, a SWFs' performance indicator, and indicators of country's governance, such as Corruption Perception Index of Transparency International and Democracy Index of Economist Intelligence Unit, as of 2009. The lower the corruption level or the higher the corruption index score is (Figure 3a), the better the SWFs performance. Furthermore, the higher the demacracy index is (Figure 3b), the better the SWFs performance.

Figure 3. Truman scoreboard and national governance indicators



Despite the fact that more developed countries have a more favorable institutional environment to adopt those principles, however, those general practices and principles are potentially achievable by countries at all levels of economic development. This fact also suggests that governance quality at a country level can be a background of governance quality of the fund. So, from the perspective of the global development in supporting democracy and combating corruption, governance of sovereign funds, on average, seems to be improving further in years coming.

Chapter 3. The Best Practices and Effective Strategies

For designing good governance, the very first step is to understand the relationship between organizational structure and performance. However, measuring the performance of the SWFs is questionable. This chapter starts with the performance rankings of the SWFs, and based on that, provides best governance cases focusing on the role of Board of Directors. It then discusses effective strategies for designing "good" SWFs.

3.1. Ranking the performance

The simple way of defining the best practices of SWFs governance might be checking statistical association between the returns of all those funds against their governance designs. Although SWFs performance related data is so limited that it is impossible to draw a valid conclusion on the relationship between return and governance, some estimates are made. According to Chile's Ministry of Finance (2010), average returns on a selected nine SWFs in 2007-2010 were in the range between 0.6% and 9.8% which are shown in Table 3. The performance can be explained by the type of investment policy of the SWFs. The conservative SWFs made a loss less likely during the global financial crisis, but have benefited less from the subsequent recovery.

Table 3. Average returns and investment policy of SWFs (2007-2010)

Country	Return of SWFs	Purpose	Investment policy
Australia	9.8%	Pension reserve	tolerant of risk
Chile	5.5%	Stabilization	conservative
Canada	5.2%	Savings	tolerant of risk
East Timor	4.6%	Stabilization	conservative
New Zealand	4.3%	Pension reserve	tolerant of risk
Trinadad and Tobago	4.1%	Stabilization	conservative
Norway	3.4%	Savings	tolerant of risk
Alaska	2.1%	Savings	tolerant of risk
Ireland	0.6%	Pension reserve	tolerant of risk

Source: Chile's Ministry of Finance (2010)

To identify the good governance design, one can compare annual returns of SWFs and pick the high ranked SWFs as a 'role model'. From Table 3, SWFs in Australia, Chile and Canada can be the best models in terms of return. However, this would be a superficial conclusion although the calculation considered the same basis currency and year. It should take a longer time to assess those funds with long-term objectives. According to a survey of the Oxford SWF Project (Clark and Monk 2009), a huge majority (88%) of 146 asset managers (respondents) think that SWFs should judge their success over a time horizon of 5 years or more. Table 4 shows 10-year annualized returns based on annual reports of some transparent SWFs.

Table 4. Longer-term returns of SWFs

Fund name	Return (%)
Singapore Temasek Corporation	12
New Zealand Superannuation Fund	7.65*
Singapore Investment Corporation	7.4
US-Alaska Permanent Fund	6
Canada Alberta's Heritage Fund	5.3
China-Hong Kong Monetary Authority Investment Portfolio	4.9
Timor-Leste Petroleum Fund	4.3
Norway Pension Fund Global	4.17
Ireland National Pension Reserve Fund	1.2

*-since its inception in 2003 (New Zealand).

Source: 2010 annual reports of the SWFs

From Table 4, Temasek Corporation, the New Zealand Superannuation Fund and the Singapore Investment Corporation are the "best" SWFs in terms of annualized return over 10 years. However, the sample is still limited. There are also many missed SWFs that potentially could have better return than the SWFs in the samples. More importantly, for many SWFs, as a political financial institute, pursuing higher return may not be the ultimate goal. SWFs have various goals and their institutional and financial framework differs a lot. For example, according to the survey in Hammer et al. (2008), 30% of respondents indicate that they have absolute return objective, 45% of them have relative return objective and the rest of them do not have specific return objectives. So, taking the return as the criteria of fund performance might not be a better strategy for seeking good governance design.

Another suggestion for ranking SWFs performance can be the integrated index of Truman's scoreboard, SWF Institute's Linaburg-Maduell index and Santiago Principles score. First, accountability and transparency are key elements for running sovereign funds in the interest of society as a whole. So accountability and transparency of the fund can be defined as a performance indicator for SWFs. Especially in developing countries with high corruption and low quality governance transparent and accountable institutions can be more important and relevant for the development of the country than profitable ones. Second, each index has its own advantages as well as drawbacks. They can be complements to each other. Averaging them allows us to reflect this effect.

Table 5. SWF ranking by transparency and accountability

Country	Fund name	Truman's score*	Linaburg-Maduell index**	Santiago Principles***	Average index
Norway	Government Pension Fund – Global	97.0	100	96	97.7
New Zealand	New Zealand Superannuation Fund	93.9	100	98	97.3
US – Alaska	Alaska Permanent Fund	92.4	100	96	96.1
Ireland	National Pensions Reserve Fund	86.4	100	94	93.5
US – Wyoming	Permanent Wyoming Mineral Trust Fund	90.9	90	96	92.3
Australia	Australian Future Fund	80.3	90	90	86.8
Singapore	Temasek Holdings	72.7	100	82	84.9
Azerbaijan	State Oil Fund	75.8	100	76	83.9
US – New Mexico	New Mexico State Investment Council	80.3	90	80	83.4
Canada	Alberta’s Heritage Fund	74.2	90	80	81.4
Chile	Social and Economic Stabilization Fund	71.2	100	70	80.4
UAE – Abu Dhabi	Mubadala Development Company	59.1	100	66	75.0
East Timor	Timor-Leste Petroleum Fund	84.8	60	80	74.9
China – Hong Kong	Hong Kong Monetary Authority Investment Portfolio	69.7	80	74	74.6
Trinidad & Tobago	Heritage and Stabilization Fund	83.3	50	82	71.8
Singapore	Government of Singapore Investment Corporation	65.2	60	78	67.7
Kuwait	Kuwait Investment Authority	62.9	60	71	64.6
Kazakhstan	Kazakhstan National Fund	65.2	60	67	64.1
China	China Investment Corporation	56.8	60	60	58.9
South Korea	Korea Investment Corporation	18.2	90	67	58.4
Russia	National Welfare Fund	50.0	50	52	50.7
US – Alabama	Alabama Trust Fund	68.2		76	48.1
Bahrain	Mumtalakat Holding Company	30.3	80	32	47.4
Chile	Pension Reserve Fund	68.2		68	45.4
Malaysia	Khazanah Nasional	43.9	40	48	44.0
UAE – Abu Dhabi	Abu Dhabi Investment Authority	10.6	50	71	43.9
Botswana	Pula Fund	56.1	10	62	42.7
Vietnam	State Capital Investment	34.8	40	42	38.9

Country	Fund name	Truman's score*	Linaburg-Maduell index**	Santiago Principles***	Average index
	Corporation				
Kiribati	Revenue Equalization Reserve Fund	34.8	10	44	29.6
UAE – Dubai	Investment Corporation of Dubai	21.2	40	22	27.7
Qatar	Qatar Investment Authority	15.2	50	15	26.7
Nigeria	Nigerian Sovereign Investment Authority	28.8	10	34	24.3
Algeria	Revenue Regulation Fund	28.8	10	32	23.6
Iran	Oil Stabilization Fund	28.8	10	32	23.6
Venezuela	Macroeconomic Stabilization Fund	27.3	10	25	20.8
Brunei	Brunei Investment Agency	21.2	10	28	19.7
Oman	State General Reserve Fund	22.7	10	26	19.6

Source: *- (Truman 2010); **- SWF Institute: http://www.swfinstitute.org/fund-rankings/; ***- (Truman 2011)

According to the ranking in Table 5, the 'best' funds are Norway's Government Pension Fund-Global, New Zealand Superannuation Fund and US-Alaska Permanent Fund.

3.2. Case study: governance of best SWFs

Considering both criteria, longer term return criteria and, transparency and accountability criteria, from the analysis in the previous section, I choose Singapore's Temasek Holdings, Norway's Government Pension Fund-Global and New Zealand Superannuation Fund as a best case of SWF with high performance. A comparative study from the perspective of governance is discussed below. I focus on the most important elements of governance, such as division of roles and responsibilities, board independence and the background of board members.

Before going further, it is better to describe briefly the funds which I choose. Temasek Holdings of Singapore is an investment company fully owned by Singapore's Ministry of Finance and established to take over the Government's stakes in local companies held by the Ministry. Temasek is focused on increasing total shareholder return and active shareholder and investor in diverse industry: banking and financial services, real estate, education etc. Its stated mission is to create and maximize long term shareholder value as an active investor and shareholder of successful enterprises.

Norway's Government Pension Fund – Global is a sovereign wealth fund derived mainly from Norway's oil wealth and its stated aim is to support government saving and promote an intergenerational transfer of resources. The fund facilitates the long-term management of the government's petroleum revenues. Given the expected population aging in Norway, it serves to pre-fund public pension expenditures. The fund is managed by Norges Bank Investment Management, a part of the Norwegian Central Bank. It is one of the largest sovereign wealth funds in the world. The Global fund invests in a wide array of asset classes and both domestically and internationally. Since 2004, the Global fund's investments have been restricted by an ethical council that has the power to exclude firms that are involved in objectionable activities.

Established under the New Zealand Superannuation and Retirement Income Act 2001, the New Zealand Superannuation Fund was created to partially provide for the future cost of funding New Zealand Superannuation payments. The Fund is the retirement benefit paid to all eligible New Zealanders aged 65 or over. It is funded on a Pay As You Go basis. This means that the cost of paying pensions in any one year is paid from the taxes levied on the incomes of working New Zealanders in that same year.

Division of roles and responsibilities must be clear for effective governance. In the case of Temasek Holdings, subject to the President's concurrence, the Ministry of Finance (shareholder) has the right to appoint, remove or renew Board members at shareholder meetings. Except for the above-mentioned matter, the Board and Management have full authority and responsibility for investment and other business decisions, reflecting the characteristic of a private investment seeking profitable results.

For Norway's Pension Fund, it is widely accepted that its governance model builds on a clear delegation of duties and effective systems for control and supervision. The Norwegian parliament has set the framework in the Government Pension Fund Act and the Ministry of Finance has formal responsibility for the fund's management. The operational management is delegated to the Norwegian central bank (Norges Bank), and the central bank's Executive Board has in turn delegated management to the central bank (NBIM). NBIM is a separate agency within the Norges Bank and responsible for investing the Fund's assets.

The New Zealand Superannuation Fund is governed by a separate Crown entity called the Guardians of New Zealand Superannuation. The Guardians are responsible for establishing investment policies, standards and procedures for the Fund, including determining the proportion of money allocated to various types of investments and appointing external investment managers to manage different parts of the Fund. The Guardians appoint a Chief Executive Officer, who in turn recruits staff to assist the Board in the development and implementation of investment policy.

An independent board which has a clear mandate and adequate authority and competency to curry out its functions is very important for good governance. For Temasek Holdings, although the fund has strong, and often international, boards and management, well-developed remuneration policies linking pay to performance, good internal control and risk management processes, it is difficult to stay independent of the Singapore government in its investment decisions (Teen n.d.). The members of its boards with their formerly political backgrounds might play a considerable role. The concept of clear separation between the state and the private sector does not apply in Singapore, but there is a growing perception that Temasek is increasingly commercially driven and relatively independent of political interference (Wicaksono 2009).

For Norway's Pension Fund, there is no independent Board of Directors because the fund is a part of Norges bank. The Executive Board of Norges Bank is itself independent, but the fund's management team faces some specific limits from the Ministry of Finance on its investment decision. The Finance Ministry also varies level of risk of the fund's investment over time. Since inception, the top management has changed only once, in 2008.

The New Zealand Superannuation Fund is governed by a separate Board. All decisions relating to the business of the Guardians are made under the authority of the Board of the Guardians. The Board is selected by the Minister of Finance for their skills and experience. The Minister's recommendation follows nominations from an independent nominating committee. On receiving those nominations the Minister must consult with representatives of other political parties in Parliament before recommending the Governor General appoint a person to the Board. The Board must comprise of at least five, but no more than seven, members. Each Board member is appointed for a term of up to five years and is eligible to be reappointed.

Board members should have relevant skills, background and experience rather than being based on community or sectional interests. Membership would be expected to include government representatives, independent representatives, and SWF investment manager. In the case of Temasek Holdings, the Board of Directors consists of nine directors of which the chairman is an ex-Minister, two deputy chairmen are civil servants (MOF) and one from the private sector, six other directors (including CEO) are from the pure private sector (3) and from civil service, government or mixed (3). All members have great experience in corporate governance and, currently, most of them have an outside position on the board of other organizations.

The Executive Board of Norges Bank is responsible for Pension Fund's management and appointed by the King in Council, and is made up of the Governor, the Deputy Governor and five external members. While three of the external members are from the private sector and have broad experience as a board member or held executive positions in business sectors, two are from academics and consultancy. Their background is in finance, economics and business administration.

The Board of Guardians of the New Zealand Superannuation fund has six members of which four members are from the private sector, one is from the central bank, and one is from academia. All of them have relevant background and broad and long experience in finance and business.

In short, while the best funds which I chose to make a comparison are quite different in their board independence, level of background and experience of their board members are similarly very high, and board members are not selected on the basis of sectional and community interests. The division of roles and responsibilities within their governance system is clearly formulated and regulated by Companies Act or a separate Act of the funds.

3.3. Effective strategies for protecting the assets from corruption and political interference

Governmental corruption and misuse are an indication of the principal-agent problem. If the people cannot adequately monitor their political agents, the agents' incentives can become misaligned with those of the people. The mismanagement of SWF assets is primarily a concern with respect to countries at a lower level of development, such as Papua New Guinea, Timor-Leste, and Vietnam because these economies have proportionately more to lose as a result of corruption and asset mismanagement. With respect to countries using their SWFs to pursue political and economic power objectives, it should be recognized that there is a heavy dose of politics involved in SWFs and their investments, at least at the level of perception (Truman 2011).

The timing of the establishment of a SWF is an important factor of further success. In practice, SWFs are typically set up after commodity price booms. As discussed in Chapter 1, the decision to set up a fund relies on alternatives as well. After establishing a SWF, it will be important to define a framework of principles and practices that makes the SWF's governance "proper" in order to ensure that investments are made on an economic and financial basis. According to Edwin Truman, there are five major concerns about the activities of SWFs. First, governments may mismanage their international investments to their own economic and financial detriment, as well as with negative consequences for the global economic and financial system, including large-scale corruption in handling the huge amounts of money involved. Second, governments may manage those investments in pursuit of political objectives, raising national security concerns, or economic power objectives, for example, promoting state-owned or state-controlled national champions as global champions. Third, financial protectionism may be encouraged in host countries in anticipation of the pursuit of political or economic objectives by the owners of the investments or in response to their actual actions. Fourth, in their management of their international assets, SWFs may contribute to market turmoil and uncertainty. Finally, foreign government owners of international assets may have conflicts of interest with the domestic or foreign managers of those assets or with the governments of the countries in which they are investing (Monk 2010).

Mandatory transparency is one solution to this type of information asymmetry, and it has a crucial role to play in highly corrupt countries. In order to prevent such problems, the government should design or redesign a SWF carefully by taking into an account generally agreed principles and practices on transparency and accountability (TableA1 in Appendix), considering country specific factors and assessments of its SWF's performance.

According to Dyck and Zingales (2005), the prevailing view is that the law and a country's legal origin are the primary institutional factors that work to limit corporate abuses. This view focuses clearly on the interests of financial investors and the specific contractual and legal mechanisms that are designed to constrain managerial misconduct. The role of legal institutions such as legal environment, disclosure standards and enforcement is crucial, but extralegal institutions like public opinion pressure and internal policing through moral norms are important for that.

"Economics is based on a series of assumptions that allow for generalizations and theory building. Designers, conversely, assume that no two situations are the same; a design is a solution to a problem that exists in the field. Accordingly, the question of how best to set up a SWF in a specific place and at a specific time is one of design, not science" (Dixon and Monk 2011). So, Dixon and Monk conclude that there is no such thing as a best-practice SWF because everywhere institutional environments are very different from each other. The formal and informal institutions in developed economies are different from those in emerging and developing economies. So, in order to know which type of design works, broad and deep R&D works are necessary. In searching for a specific SWF design, drawing some guiding principles and practices from the existing funds is perhaps more useful than specific policy prescriptions derived from success stories (Frankel 2010). In recognizing inherited institutional and organizational features, studying own country's legal system, business ethics, social capital, rule of law, or even people's mentality, is very important.

Considering the above mentioned discussions, Dixon and Monk (2010) suggest the following governance principles which connect the investment governance and inherited institutional and organizational features:

- **Institutional Coherence:** It is the job of investment governance and management to align the local norms and institutions with the new and changing demands of an innovative investment policy.
- **People:** Funds must be able to attract, incentivize, and retain individuals who can run a modern financial institution. This is perhaps the toughest human resource challenge for SWFs, as these funds must fill public sector jobs with individuals that can compete in and with the private sector.

- **Process:** Funds require highly developed decision-making frameworks and risk mitigation capabilities in order to manage the complexities of modern financial investments.
- **Politics:** SWFs must develop protocols to stem unwarranted political interference, while facilitating accountability to these same policymakers. The governance arrangements must prevent unprincipled interventions by politicians whereby short-term political interests outweigh the interests in investing for the long-term benefit of the country. SWFs will require an unparalleled level of autonomy and independence.

Conclusion

As government-owned international investment institution, SWFs may need different type of governance, but standard corporate governance principles are still applicable. There is also a successful initiative, the Santiago Principles, to make the SWFs transparent and accountable which are the main elements of good governance. Assuming that good governance results to high performance and, then, using the return data as well as the recent surveys and rankings on transparency and accountability as a performance indicator, I chose the best SWFs: Singapore's Temasek Corporation, Norway's Pension Fund-Global and New Zealand Superannuation Fund.

Finally, I compared the selected funds' governance from the perspective of board independence, division of roles and responsibilities, and board membership. From this comparison, the best funds are quite different in their board independence, but the background of board members is the same, very high, and the division of roles and responsibilities is clearly stated by the relevant Acts.

Policy recommendation

In the global financial stage, as an impact of SWFs is becoming considerable, the countries in which the SWFs make investments concern with them, and the countries with large current account surpluses are interested in establishing of redesigning the SWFs. The benefits and cost of wealth funds, their investment impacts on global financial markets and preconditions for establishing the funds are relatively well-researched area. However, the designing SWFs for developing countries is a tough challenge for policy researchers and policy makers. One of the important factors of successful experience is governance of SWFs.

Once a country decides to establish own SWF, the following factors should be considered for designing SWFs from the perspective of good governance:

- Standard corporate governance principles are applicable
- Division of roles and responsibilities must be clear
- Independence of the Board is very important
- Board members should have relevant skills, background and experience rather than being based on community or sectional interests
- Transparency and accountability are the main elements of good governance
- The standards, such us, the Santiago Principles and Truman's scoreboard, are the bottom line of good governance
- General institutional environment also should be taken into account
- In sum, for designing an effective SWF, creating and implementing widely agreed principles and practices of SWFs might be more useful than special policy recommendation derived from lessons of past experience.

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Appendix

Generally Agreed Principles and Practices – Santiago Principles

of International Working Group of Sovereign Wealth Funds

Principle 1. The legal framework for the SWF should be sound and support its effective operation and the achievement of its stated objective(s).

Principle 1.1. The legal framework for the SWF should ensure legal soundness of the SWF and its transactions.

Principle 1.2. The key features of the SWF's legal basis and structure, as well as the legal relationship between the SWF and other state bodies, should be publicly disclosed.

Principle 2. The policy purpose of the SWF should be clearly defined and publicly disclosed.

Principle 3. Where the SWF's activities have significant direct domestic macroeconomic implications, those activities should be closely coordinated with the domestic fiscal and monetary authorities, so as to ensure consistency with the overall macroeconomic policies.

Principle 4. There should be clear and publicly disclosed policies, rules, procedures, or arrangements in relation to the SWF's general approach to funding, withdrawal, and spending operations.

Principle 4.1. The source of SWF funding should be publicly disclosed.

Principle 4.2. The general approach to withdrawals from the SWF and spending on behalf of the government should be publicly disclosed.

Principle 5. The relevant statistical data pertaining to the SWF should be reported on a timely basis to the owner, or as otherwise required, for inclusion where appropriate in macroeconomic data sets.

Principle 6. The governance framework for the SWF should be sound and establish a clear and effective division of roles and responsibilities in order to facilitate accountability and operational independence in the management of the SWF to pursue its objectives.

Principle 7. The owner should set the objectives of the SWF, appoint the members of its governing body(ies) in accordance with clearly defined procedures, and exercise oversight over the SWF's operations.

Principle 8. The governing body(ies) should act in the best interests of the SWF, and have a clear mandate and adequate authority and competency to carry out its functions.

Principle 9. The operational management of the SWF should implement the SWF's strategies in an independent manner and in accordance with clearly defined responsibilities.

Principle 10. The accountability framework for the SWF's operations should be clearly defined in the relevant legislation, charter, other constitutive documents, or management agreement.

Principle 11. An annual report and accompanying financial statements on the SWF's operations and performance should be prepared in a timely fashion and in accordance with recognized international or national accounting standards in a consistent manner.

Principle 12. The SWF's operations and financial statements should be audited annually in accordance with recognized international or national auditing standards in a consistent manner.

Principle 13. Professional and ethical standards should be clearly defined and made known to the members of the SWF's governing body(ies), management, and staff.

Principle 14. Dealing with third parties for the purpose of the SWF's operational management should be based on economic and financial grounds, and follow clear rules and procedures.

Principle 15. SWF operations and activities in host countries should be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which they operate.

Principle 16. The governance framework and objectives, as well as the manner in which the SWF's management is operationally independent from the owner, should be publicly disclosed.

Principle 17. Relevant financial information regarding the SWF should be publicly disclosed to demonstrate its economic and financial orientation, so as to contribute to stability in international financial markets and enhance trust in recipient countries.

Principle 18. The SWF's investment policy should be clear and consistent with its defined objectives, risk tolerance, and investment strategy, as set by the owner or the governing body(ies), and be based on sound portfolio management principles.

Principle 18.1. The investment policy should guide the SWF's financial risk exposures and the possible use of leverage.

Principle 18.2. The investment policy should address the extent to which internal and/or external investment managers are used, the range of their activities and authority, and the process by which they are selected and their performance monitored.

Principle 18.3. A description of the investment policy of the SWF should be publicly disclosed.

Principle 19. The SWF's investment decisions should aim to maximize risk-adjusted financial returns in a manner consistent with its investment policy, and based on economic and financial grounds.

Principle 19.1. If investment decisions are subject to other than economic and financial considerations, these should be clearly set out in the investment policy and be publicly disclosed.

Principle 19.2. The management of an SWF's assets should be consistent with what is generally accepted as sound asset management principles.

Principle 20. The SWF should not seek or take advantage of privileged information or inappropriate influence by the broader government in competing with private entities.

Principle 21. SWFs view shareholder ownership rights as a fundamental element of their equity investments' value. If an SWF chooses to exercise its ownership rights, it should do so in a manner that is consistent with its investment policy and protects the financial value of its investments. The SWF should publicly disclose its general approach to voting securities of listed entities, including the key factors guiding its exercise of ownership rights.

Principle 22. The SWF should have a framework that identifies, assesses, and manages the risks of its operations.

Principle 22.1. The risk management framework should include reliable information and timely reporting systems, which should enable the adequate monitoring and management of relevant risks within acceptable parameters and levels, control and incentive mechanisms, codes of conduct, business continuity planning, and an independent audit function.

Principle 22.2. The general approach to the SWF's risk management framework should be publicly disclosed.

Principle 23. The assets and investment performance (absolute and relative to benchmarks, if any) of the SWF should be measured and reported to the owner according to clearly defined principles or standards.

Principle 24. A process of regular review of the implementation of the GAPP should be engaged in by or on behalf of the SWF.

Table A1. **Scoreboard for SWFs (E. Truman 2010)** **STRUCTURE**

Country	Fund name	Objective stated	Legal framework	Changing the structure	Investment strategy	Source of funding	Use of fund earnings	Integrated with policies	Separated from int.l reserves	Sub-total
Algeria	Revenue Regulation Fund	1	1	1	0	1	0.5	0	1	**5.5**
Australia	Australian Future Fund	1	1	1	1	1	1	0.5	0.5	**7**
Azerbaijan	State Oil Fund	1	1	1	0.5	1	1	1	1	**7.5**
Bahrain	Mumtalakat Holding Company	1	0	0	1	1	0	0	0	**3**
Botswana	Pula Fund	1	1	0	1	0.5	1	1	0	**5.5**
Brunei	Brunei Investment Agency	1	1	1	0	0.5	0	0	0	**3.5**
Canada	Alberta's Heritage Fund	1	1	1	1	1	1	1	0.5	**7.5**
Chile	Social and Economic Stabilization Fund	1	1	1	0.5	1	1	1	1	**7.5**
Chile	Pension Reserve Fund	1	1	1	0.5	1	1	0.5	0.5	**6.5**
China	China Investment Corporation	1	0	0	1	1	1	1	1	**6**
China–Hong Kong	Monetary Authority Investment Portfolio	1	1	1	1	1	1	1	0	**7**
East Timor	Timor-Leste Petroleum Fund	1	1	1	1	1	1	1	1	**8**
Iran	Oil Stabilisation Fund	1	1	0.5	0	1	0.5	0	1	**5**
Ireland	National Pensions Reserve Fund	1	1	1	1	1	1	0.5	0.5	**7**
Kazakhstan	Kazakhstan National Fund	1	1	0.5	1	1	1	1	1	**7.5**
Kiribati	Revenue Equalization Reserve Fund	1	1	1	0.5	1	1	1	0	**6.5**
Kuwait	Kuwait Investment Authority	1	1	1	1	1	0	1	1	**7**
Malaysia	Khazanah Nasional	1	1	0	0.5	1	0	0	1	**4.5**
Mexico	Oil Revenues Stabilization Fund	1	1	0.5	0.5	1	0.5	1	1	**6.5**
New Zealand	New Zealand Superannuation Fund	1	1	1	1	1	1	0.5	0.5	**7**
Nigeria	Sovereign Investment Authority	1	1	1	0	1	1	0	0	**5**
Norway	Government Pension Fund – Global	1	1	1	1	1	1	1	1	**8**
Oman	State General Reserve Fund	0.5	1	0.5	0	1	0.5	0.5	1	**5**
Qatar	Qatar Investment Authority	1	1	0.5	0.25	0	0	0	1	**3.75**
Russia	National Welfare Fund	1	1	1	1	1	0.5	1	0	**6.5**
São Tomé and Príncipe	National Oil Account	1	1	1	1	1	1	1	1	**8**
Singapore	Government of Singapore Investment Corporation	1	1	1	1	0.5	1	1	0	**6.5**
Singapore	Temasek Holdings	1	1	1	1	1	0	1	1	**7**
South Korea	Korea Investment Corporation	0.5	0	0	0	1	0.5	1	1	**4**
Sudan*	Oil Revenue Stabilization account	1	1	1	1	1	0	1	0	**6**
Trinidad & Tobago	Heritage and Stabilization Fund	1	1	1	1	1	1	1	1	**8**
UAE	Ishtitmar World	1	0	0	0.5	0.5	0	0	0.5	**2.5**
UAE – Abu Dhabi	Abu Dhabi Investment Authority	0.5	0	0	1	0	0	0	0.5	**2**
UAE – Abu Dhabi	International Petroleum Investment Company	1	0	1	0	1	0	0	0.5	**3.5**
UAE – Abu Dhabi	Mubadala Development Company	1	1	0.5	1	1	0	0	0.5	**5**
UAE – Dubai	Investment Corporation of Dubai	1	1	0	0	1	0	0	0.5	**3.5**
UAE – Dubai	Dubai International capital	1	0	1	1	0.5	1	1	0.5	**6**
US – Alabama	Alabama Trust Fund	1	1	1	1	1	1	1	0.5	**7.5**
US – Alaska	Alaska Permanent Fund	1	1	1	1	1	1	1	0.5	**7.5**
US – New Mexico	New Mexico State Investment Council	1	1	1	1	1	1	1	0.5	**7.5**
US – Wyoming	Permanent Wyoming Mineral Trust Fund	1	1	1	1	1	1	1	0.5	**7.5**
Venezuela	National development fund	0.5	1	1	0	0.5	0	0	1	**4**
Venezuela	Macroeconomic Stabilization Fund	1	1	1	0.5	1	0	0	1	**5.5**
Vietnam	State Capital Investment Corporation	1	1	1	1	1	0.5	0	1	**6.5**
	Total (%)	**95**	**84**	**75**	**69**	**89**	**60**	**60**	**63**	

Table A1. Scoreboard for SWFs (*continued*) (E. Truman 2010) **GOVERNANCE**

Country	Fund name	Role of government	Role of governing body	Role of managers	Decisions made by managers	Internal ethical standards	Guidelines for corporate responsibility	Ethical investment guidelines	Sub- total
Algeria	Revenue Regulation Fund	1	0	1	0	0	0	0	**2**
Australia	Australian Future Fund	1	1	1	1	1	1	0	**6**
Azerbaijan	State Oil Fund	1	1	1	1	0	0	0	**4**
Bahrain	Mumtalakat Holding Company	0	1	0	0	0	0	0	**1**
Botswana	Pula Fund	1	1	1	1	0	0	0	**4**
Brunei	Brunei Investment Agency	0	0	0	0	0	0	0	**0**
Canada	Alberta's Heritage Fund	1	1	1	1	0	0	0	**4**
Chile	Social and Economic Stabilization Fund	1	1	1	1	0	0	0	**4**
Chile	Pension Reserve Fund	1	1	1	1	0	0	0	**4**
China	China Investment Corporation	1	1	1	0	0	0.5	0	**3.5**
China–Hong Kong	Monetary Authority Investment Portfolio	1	1	1	0	0	0	0	**3**
East Timor	Timor-Leste Petroleum Fund	1	1	1	0	0	0	0	**3**
Iran	Oil Stabilisation Fund	0.5	1	0.5	0	0	0	0	**2**
Ireland	National Pensions Reserve Fund	1	1	1	1	1	1	1	**7**
Kazakhstan	Kazakhstan National Fund	1	1	1	1	0	0	0	**4**
Kiribati	Revenue Equalization Reserve Fund	1	1	1	1	0	0	0	**4**
Kuwait	Kuwait Investment Authority	1	1	1	1	1	0	1	**6**
Malaysia	Khazanah Nasional	0.5	1	1	0.5	0	0.5	0	**3.5**
Mexico	Oil Revenues Stabilization Fund	0.5	0	0.5	0	0	0	0	**1**
New Zealand	New Zealand Superannuation Fund	1	1	1	1	1	1	1	**7**
Nigeria	Sovereign Investment Authority	0.5	1	1	0	0	0	0	**2.5**
Norway	Government Pension Fund – Global	1	1	1	1	1	1	1	**7**
Oman	State General Reserve Fund	0	0	0	0	0	0	0	**0**
Qatar	Qatar Investment Authority	0	1	0	0	0	0	0	**1**
Russia	National Welfare Fund	1	0	1	0	0	0	0	**2**
São Tomé and Príncipe	National Oil Account	1	1	1	1	0	0	0	**4**
Singapore	Government of Singapore Investment Corporation	1	1	1	1	1	0	0	**5**
Singapore	Temasek Holdings	1	1	1	1	1	0.5	0	**5.5**
South Korea	Korea Investment Corporation	0	0	0	0	0	0	0	**0**
Sudan*	Oil Revenue Stabilization account	1	1	1	1	1	0	0	**5**
Trinidad & Tobago	Heritage and Stabilization Fund	1	1	1	1	0.5	0	0	**4.5**
UAE	Ishtitmar World	0	1	0.5	0	0	0	0	**1.5**
UAE – Abu Dhabi	Abu Dhabi Investment Authority	1	1	1	1	0.5	0	0	**4.5**
UAE – Abu Dhabi	International Petroleum Investment Company	0.5	0.5	1	0	0	0	0	**2**
UAE – Abu Dhabi	Mubadala Development Company	1	1	1	0	1	0	0	**4**
UAE – Dubai	Investment Corporation of Dubai	0.5	0	0	0	0	0	0	**0.5**
UAE – Dubai	Dubai International capital	1	1	1	0	1	1	1	**6**
US – Alabama	Alabama Trust Fund	1	1	1	1	0	0	0	**4**
US – Alaska	Alaska Permanent Fund	1	1	1	1	1	1	0	**6**
US – New Mexico	New Mexico State Investment Council	1	1	1	0.5	0	0	0	**3.5**
US – Wyoming	Permanent Wyoming Mineral Trust Fund	1	1	1	1	1	0.5	1	**6.5**
Venezuela	National development fund	0	1	0	0	0	0	0	**1**
Venezuela	Macroeconomic Stabilization Fund	0	1	0	0	0	0	0	**1**
Vietnam	State Capital Investment Corporation	1	1	1	1	0	0	0	**4**
	Total (%)	**75**	**83**	**78**	**52**	**30**	**18**	**14**	

Table A1. Scoreboard for SWFs (*continued*) (E. Truman 2010) **TRANSPARENCY AND ACCOUNTABILITY**

Country	Fund name	Categories	Benchmarks	Credit ratings	Mandates	Size	Returns	Location	Specific investments	Currency composition	Annual	Quarterly
Algeria	Revenue Regulation Fund	0.5	0	0	1	0.5	0	0	0	0	0	0
Australia	Australian Future Fund	1	1	0.5	1	1	1	0	0	0	1	1
Azerbaijan	State Oil Fund	1	1	1	1	1	1	0.5	0	1	1	1
Bahrain	Mumtalakat Holding Company	1	0	0	0	1	1	1	1	0	1	0
Botswana	Pula Fund	1	1	1	0	1	0	0	0	0.5	1	0.5
Brunei	Brunei Investment Agency	0	0	0	1	0	0	0	0	0	0.5	0
Canada	Alberta's Heritage Fund	1	1	0.5	0	1	1	1	0	0.5	1	1
Chile	Social and Economic Stabilization Fund	1	1	1	1	1	1	1	1	1	1	1
Chile	Pension Reserve Fund	1	1	1	1	1	1	1	1	1	1	1
China	China Investment Corporation	1	0.5	0	0	1	1	0	0.75	0	1	0
China–Hong Kong	Monetary Authority Investment Portfolio	1	1	1	0	1	1	0.5	0	0.5	1	1
East Timor	Timor-Leste Petroleum Fund	1	1	1	1	1	1	1	1	1	1	1
Iran	Oil Stabilisation Fund	0	0	0	1	0.5	0.5	0	0	0	0.5	0
Ireland	National Pensions Reserve Fund	1	1	0	1	1	1	1	1	0	1	1
Kazakhstan	Kazakhstan National Fund	0.5	1	1	0	1	1	0.25	0	0.25	0.5	0.5
Kiribati	Revenue Equalization Reserve Fund	0	0	0	0	0	0	0	0	0	0.5	0.5
Kuwait	Kuwait Investment Authority	1	0.5	1	0	1	0.5	0.25	0	0	0.5	0
Malaysia	Khazanah Nasional	0.5	1	0	0	1	1	1	0.5	0	0.5	0
Mexico	Oil Revenues Stabilization Fund	0	0	0	0	1	1	0	0	1	0.5	0.5
New Zealand	New Zealand Superannuation Fund	1	1	1	1	1	1	1	1	1	1	1
Nigeria	Sovereign Investment Authority	0	0	0	1	0.5	0	0	0	0.5	0	0
Norway	Government Pension Fund – Global	1	1	1	1	1	1	1	1	1	1	1
Oman	State General Reserve Fund	0	0	0	0	0	0	0	0	0	0.5	0
Qatar	Qatar Investment Authority	0	0	0	0	0	0	0	0	0.25	0	0
Russia	National Welfare Fund	1	0	1	1	1	0.5	0.5	0	1	0.5	0.5
São Tomé and Príncipe	National Oil Account	0.5	0	0	1	0.5	0	0	0	0	0	0
Singapore	Government of Singapore Investment Corporation	1	1	0.5	0	0	0.5	1	0	0	1	0.5
Singapore	Temasek Holdings	1	0.5	0	0.5	1	1	1	0.5	0	1	0
South Korea	Korea Investment Corporation	0	0	0	1	1	0	0	0	0	0	0
Sudan	Oil Revenue Stabilization account	0.5	0.5	1	0	1	0.25	0	0	0	0.5	0
Trinidad&Tobago	Heritage and Stabilization Fund	1	1	1	1	1	1	1	0	1	1	1
UAE	Ishtitmar World	0.25	0	0	0	0.5	0	0.25	0	0	0	0
UAE – Abu Dhabi	Abu Dhabi Investment Authority	0.25	0.25	0	0	0	0	0	0	0	0	0
UAE – Abu Dhabi	International Petroleum Investment Company	1	0	0	0.5	0.5	0	0	1	0	0	0
UAE – Abu Dhabi	Mubadala Development Company	1	0.5	0	0.5	1	1	1	0.5	0	1	0
UAE – Dubai	Investment Corporation of Dubai	1	0	0	0	0	0	1	1	0	0	0
UAE-Dubai	Dubai International capital	1	0	0	0.5	1	0	1	1	0	0.5	0
US – Alabama	Alabama Trust Fund	1	1	1	0	1	1	0	0	0	1	0
US – Alaska	Alaska Permanent Fund	1	1	1	1	1	1	1	1	1	1	1
US – New Mexico	New Mexico State Investment Council	1	1	1	1	1	1	0.5	0	1	1	1
US – Wyoming	Permanent Wyoming Mineral Trust Fund	1	1	1	1	1	1	0.5	0	0.5	1	1
Venezuela	National development fund	0.25	0	0	0	1	0	0	0	0	1	0.5
Venezuela	Macroeconomic Stabilization Fund	0.5	0	0	1	1	0	0	0	0	0	0
Vietnam	State Capital Investment Corporation	1	0	0	0	0	0	0	0	0	0	0
	Total (%)	**70**	**49**	**42**	**50**	**75**	**55**	**44**	**30**	**32**	**63**	**40**

Table A1. Scoreboard for SWFs (*continued*)

		TRANSPARENCY AND ACCOUNTABILITY				BEHAVIOR					
Country	**Fund name**	**Regular**	**Published**	**Independent**	**Sub-total**	**Risk management policy**	**Policy on leverage**	**Policy on derivatives**	**Portfolio adjustment**	**Sub-total**	**TRUMAN SCORE**
Algeria	Revenue Regulation Fund	0	0	0	**2**	0	0	0	0	**0**	**9.5**
Australia	Australian Future Fund	1	1	1	**10.5**	1	1	1	0	**3**	**26.5**
Azerbaijan	State Oil Fund	1	1	1	**12.5**	0	0	1	0	**1**	**25**
Bahrain	Mumtalakat Holding Company	0	0	0	**6**	0	0	0	0	**0**	**10**
Botswana	Pula Fund	1	0	1	**8**	0	0	1	0	**1**	**18.5**
Brunei	Brunei Investment Agency	1	0	1	**3.5**	0	0	0	0	**0**	**7**
Canada	Alberta's Heritage Fund	1	1	1	**11**	0	1	1	0	**2**	**24.5**
Chile	Social and Economic Stabilization Fund	0.5	0	0.5	**12**	0	0	0	0	**0**	**23.5**
Chile	Pension Reserve Fund	0.5	0	0.5	**12**	0	0	0	0	**0**	**22.5**
China	China Investment Corporation	1	1	1	**8.25**	1	0	0	0	**1**	**18.75**
China–Hong Kong	Monetary Authority Investment Portfolio	1	1	1	**11**	1	0	1	0	**2**	**23**
East Timor	Timor-Leste Petroleum Fund	1	1	1	**14**	1	0	1	1	**3**	**28**
Iran	Oil Stabilisation Fund	0	0	0	**2.5**	0	0	0	0	**0**	**9.5**
Ireland	National Pensions Reserve Fund	1	1	1	**12**	1	0	1	0.5	**2.5**	**28.5**
Kazakhstan	Kazakhstan National Fund	1	1	1	**9**	0	0	1	0	**1**	**21.5**
Kiribati	Revenue Equalization Reserve Fund	0	0	0	**1**	0	0	0	0	**0**	**11.5**
Kuwait	Kuwait Investment Authority	1	0	1	**6.75**	0	1	0	0	**1**	**20.75**
Malaysia	Khazanah Nasional	1	0	0	**6.5**	0	0	0	0	**0**	**14.5**
Mexico	Oil Revenues Stabilization Fund	0.5	0.5	1	**6**	0	0	1	0	**1**	**14.5**
New Zealand	New Zealand Superannuation Fund	1	1	1	**14**	1	1	1	0	**3**	**31**
Nigeria	Nigerian Sovereign Investment Authority	0	0	0	**2**	0	0	0	0	**0**	**9.5**
Norway	Government Pension Fund – Global	1	1	1	**14**	1	0.5	0.5	1	**3**	**32**
Oman	State General Reserve Fund	1	0	1	**2.5**	0	0	0	0	**0**	**7.5**
Qatar	Qatar Investment Authority	0	0	0	**0.25**	0	0	0	0	**0**	**5**
Russia	National Welfare Fund	0	0	0	**7**	0	0	1	0	**1**	**16.5**
São Tomé and Príncipe	National Oil Account	1	0	1	**4**	0	0	0	0	**0**	**16**
Singapore	Government of Singapore Investment Corporation	1	1	1	**8.5**	1	0	0.5	0	**1.5**	**21.5**
Singapore	Temasek Holdings	1	1	1	**9.5**	1	0	1	0	**2**	**24**
South Korea	Korea Investment Corporation	0	0	0	**2**	0	0	0	0	**0**	**6**
Sudan*	Oil Revenue Stabilization account	1	0.5	1	**6.25**	1	0	1	0.5	**2.5**	**19.75**
Trinidad&Tobago	Heritage and Stabilization Fund	1	1	1	**13**	1	0	0	1	**2**	**27.5**
UAE	Ishtitmar World	0	0	0	**1**	0	0	0	0	**0**	**5**
UAE – Abu Dhabi	Abu Dhabi Investment Authority	0	0	0	**0.5**	0	0	0	0	**0**	**3.5**
UAE – Abu Dhabi	International Petroleum Investment Company	0	0	0	**3**	0	0	0	0	**0**	**8.5**
UAE – Abu Dhabi	Mubadala Development Company	1	1	1	**9.5**	1	0	0	0	**1**	**19.5**
UAE – Dubai	Investment Corporation of Dubai	0	0	0	**3**	0	0	0	0	**0**	**7**
UAE – Dubai	Dubai International capital	0	0	0	**5**	1	0	0	0	**1**	**18**
US – Alabama	Alabama Trust Fund	1	1	1	**9**	0	1	1	0	**2**	**22.5**
US – Alaska	Alaska Permanent Fund	1	1	1	**14**	1	1	1	0	**3**	**30.5**
US – New Mexico	New Mexico State Investment Council	1	1	1	**12.5**	0	1	1	1	**3**	**26.5**
US – Wyoming	Permanent Wyoming Mineral Trust Fund	1	1	1	**12**	1	1	1	1	**4**	**30**
Venezuela	National development fund	1	0	0	**3.75**	0	0	0	0	**0**	**8.75**
Venezuela	Macroeconomic Stabilization Fund	0	0	0	**2.5**	0	0	0	0	**0**	**9**
Vietnam	State Capital Investment Corporation	0	0	0	**1**	0	0	0	0	**0**	**11.5**
	Total (%)	**63**	**43**	**59**		**34**	**19**	**41**	**14**		