

OVERCOMING CONSTRAINTS TO THE FINANCING OF INFRASTRUCTURE

Sovereign Wealth Funds and Long-Term Development Finance: Risks and Opportunities ¹



¹ Prepared by the Staff of the World Bank Group for the G20 Investment and Infrastructure Working Group, February 2014. These are the views of WBG staff and do not necessarily represent those of the Executive Board or the governments which they represent.

Introduction

Sovereign Wealth Funds represent a large and growing pool of savings. Many are owned by natural resource exporting countries and have long-term objectives, including inter-generational wealth transfer. Traditionally these funds have invested in external assets, especially securities traded in major markets for a number of reasons including sterilization and lack of domestic investment opportunities.

Over time, and in part reflecting low returns in developed countries after the financial crisis, their investment holdings have broadened to include real property and investments in developing economies. Potentially competitive returns in developing economies and the sharp reductions in traditional sources of long-term financing after the financial crisis have contributed to fuel a growing interest among national authorities in permitting, and even encouraging, the national SWF to invest domestically, in particular to finance long-term infrastructure investments. Such pressure is inevitable, considering the fact that many countries with substantial savings, several of them recent resource-exporters, also have urgent needs. A number of existing SWFs now invest a portion of their portfolios domestically and more are being created to play this role.

Is it appropriate to use SWFs to finance long-term development needs? Does it matter whether these investments are domestic or foreign? This paper considers these issues, in particular the controversial question of using SWFs to finance domestic projects motivated, in part, by their perceived importance for development. In particular, the paper focuses on commercial or quasi-commercial domestic market investments by SWFs in resource-driven countries and explores the conditions that affect their ability to be an efficient and prudent investor while fostering local economic diversification and the mobilization of private capital.

At first sight the fit between the long-term goals of the SWF and the long-term investment needs of developing countries appear to align. As a specialized investor, a high-capacity SWF might also be able to bring appraisal skills to the table to help improve the efficiency of the investment program. However, domestic investment by the SWF risks to: (i) de-stabilize macroeconomic management and (ii) undermine both the quality of public investments and the wealth objectives of the fund. The source of these risks is essentially that the SWF is owned by the same entity – the government – that seeks to promote the domestic public investments. These risks may be mitigated but not eliminated.

Naturally no approach is risk-free. For example, the level of fiscal spending can be benchmarked by fiscal rules that emphasize sustainability, but may not be contained; spending may also be of low quality, especially if dependence on rents weakens the incentives for taxpayers to scrutinize expenditure. Building up large external savings funds runs the risk of their being raided by future governments, either directly (funds are used for purposes other than those originally intended or planned contributions are not paid) or indirectly (through unsustainable accumulation of public debt). On the other hand, in some views the risks of using SWFs to finance domestic public investments are so serious as to recommend that SWF portfolios should be confined to foreign assets with all public investment funding being appropriated through the budget.

With this backdrop, section II of the paper summarizes the limited available information on SWFs that are permitted or mandated to invest domestically. Section III considers the macroeconomic and management issues around the level and effectiveness of fiscal spending and domestic public investment in resource-producing countries, and notes the risks that may be associated with involving the SWF in their financing. However,

recognizing that some countries have already embarked on this course Section IV proposes approaches to mitigating these risks. Section V summarizes our conclusions.

The first priority is to ensure that domestic investments made by the SWF are considered in the context of the public investment plan and phased to ensure a sustainable flow of investment spending rather than destructive and costly boom-bust macroeconomic cycles. The second priority is to create a clear separation between the government as promoter of investments and as owner of the SWF: domestic investment by the SWF should not be used to finance public expenditure bypassing budgetary controls. At the same time it is necessary to build capacity for the SWF to operate as an expert, professional, investor that can contribute positively to the quality of the public investment program. Possible approaches include: (a) screening investments for commercial or near-commercial financial return; (b) investor partnerships, including possibly other SWFs and development lenders as well as private investors, to diversify risk, and increase implementation capacity; (c) institutional design of the governance of the SWF to credibly insulate it from political pressure, strengthen accountability, ensure oversight, and bring technical skills to bear on investment decisions; and (d) full transparency, in particular on individual domestic investments and their financial performance.

Some of these elements are already included in good-practice principles for SWFs, in particular the *Santiago Principles* although these principles were not formulated with a particular focus on domestic investments and may need to be strengthened in that regard. Some countries may be able to mitigate the risks through such mechanisms. Others, with weaker governance, will find it an uphill struggle. Especially for such countries, the risks of using SWFs to finance development spending may outweigh the potential benefits.

II The Diversification of SWF Investments

Rich natural resource reserves, primarily hydrocarbons and minerals, offer great development opportunity but they also expose producing countries to difficult policy questions. How much to save for the long term and how to invest the savings? How much to set aside in precautionary reserves to cushion the potentially damaging impact of volatile resource markets? How to phase in large investment programs to avoid hasty and wasteful spending in the face of absorptive constraints? SWFs can be set up to play a number of roles (Table 1) but it is important to stress that they are only a mechanism to help address such issues, and their establishment is no substitute for strengthening fiscal management or improving governance (Dixon and Monk 2011). Unfortunately many countries have created funds only to undermine them or to render them irrelevant through poor or inconsistent policy.

Table 1
Functions for Sovereign Wealth Funds

Function	Investment Objectives	Strategic Asset Allocation
Saving	Inter-generational equity, national endowment, meeting particular long-term liabilities or contingent liabilities (pensions)	Long term investment horizon, diversification with moderate to high risk tolerance, and low liquidity requirement in short-medium run
Precautionary	Stabilize spending in the face of short-term and medium-term volatility in resource income	Liquidity, safety (capital preservation), short to medium term investment horizon
“Buffer”	Hold committed funds to pace disbursements in line with absorptive capacity constraints	Safety (capital preservation), liquidity, short to medium term investment horizon

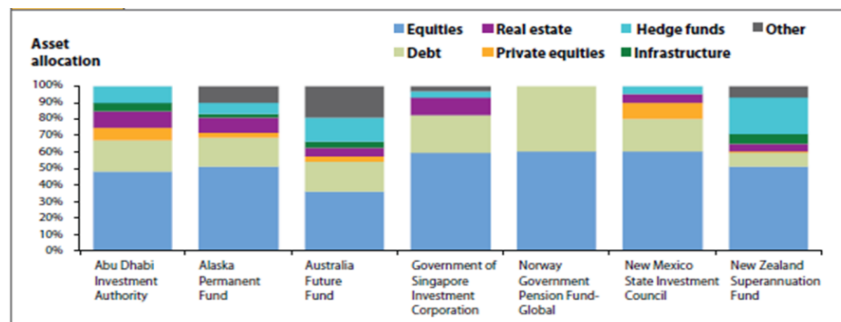
Multiple objectives could be achieved through appropriate strategic asset allocation within one fund, or the assets could be separated into separate funds with distinct characteristics. For example, if the long-term portfolio has adequate liquidity a savings fund can do double-duty as a precautionary fund (van den Bremer and van der Ploeg 2012). The objectives of the fund impact its investment objectives and strategic asset allocation (Box 1). The focus of a fund’s investment policy should not be on the performance of individual asset classes but on the performance of the portfolio as a whole comprising a balanced mix of various asset classes.

Box 1

Fund Objectives, Investment Objectives and Strategic Asset Allocation

Strategic Asset Allocation (SAA) refers to a benchmark portfolio of financial assets that meets the overarching objective for a particular fund. The SAA maximizes expected investment return subject to the risk tolerance, taking into account the uncertainty of flows in and out of the fund. It thus captures the fund owner’s trade-off between risk and return. Risk tolerance exemplifies the hypothetical line between acceptable and unacceptable investment outcomes and should reflect the fund’s *ability* to take risk in the operating environment. The SAA choice would be very different for funds with short versus long investment horizons, those with short investment horizons are predominantly in bonds, and half or more of those with long horizons are in equity and similar asset classes. Figure B1 shows SAAs for several SWFs that include not only debt and public equities, but also alternative asset classes such as private equity, real estate, infrastructure, and hedge funds. Stabilization funds, such as Chile’s ESSF, will seek high liquidity and low risk investments, usually in fixed income assets. An experienced investor such as the Government of Singapore’s Investment Corporation (GIC), targets an investment mix of 60 percent equity, 25 percent debt, and 15 percent alternative investment classes. This is quite similar to well-staffed and experienced public pension funds (e.g. ABP, and CalPERS).

Figure B1: Sample SWFs SAA Portfolios



Sources: Milken Institute, Preqin.

Some SWFs with a primary mandate of investing abroad have a long record of domestic activities. Truman (2011) estimated that domestic holdings constituted 16 percent of total investments for a sample of 60 SWFs, although these included some pension funds. Infrastructure investments are also not uncommon in SWF portfolios. As of 2012, at least 56 percent of all SWFs held investments in the infrastructure asset class; of these, approximately 36 percent included investments in social infrastructure such as hospitals and schools (Preqin, 2012).

The motivation for the vast bulk of these investments has been commercial. They have typically been focused on bankable infrastructure projects, especially high-return existing infrastructure, rather than greenfield investments. The vast majority of these investment flows has focused on non-domestic assets mostly in Europe and Asia, although a part has benefited domestic infrastructure projects. While this aspect of their portfolios may suggest that SWFs can be potential partners for development finance institutions as well as for private investors, their decisions have largely been driven by portfolio optimization strategies that emphasize return and risk diversification even though they may have investments in developing countries (Box 2) (Balding, 2008).

Box 2

Sovereign Funds in Emerging Markets

For a number of years SWFs have been looking to investments in emerging markets to diversify their portfolios and boost returns. Examples cited by Santiso (2008) include Temasek's holdings in India's ICICI Bank and Tata Sky, the Kuwait Investment Authority's profitable investments in China's ICBC, the Abu Dhabi Investment Authority's holdings in Egypt's EFG Hermes and Malaysian land projects, and the Dubai Investment Corporation's stakes in North African companies like Tunisia Telecom. Funds from the Gulf were estimated to hold 22 percent of their assets in Asia, North Africa and the Middle East. OECD's sovereign funds were also looking to boost their exposure in emerging and frontier markets, including in Africa and Latin America.

There appears to be a trend towards including domestic investment as part of the mandate of SWFs. Recent examples include the Nigerian Sovereign Investment Authority, and the Fundo Soberano de Angola; they are also being established by, or under discussion in, Colombia, Morocco, Tanzania, Uganda, Mozambique and Sierra Leone. Table 2 lists a number of funds that include domestic development in their mandate. Many have been created by governments of resource-exporting countries. In some cases their domestic investment role has emerged out of a broadening of the mandate of an existing SWF, but the emergence of public funds as active players in the development strategies of resource-rich countries, in particular to support strategic investments, represents a shift in thinking on the appropriate use of resource revenues.

Table 2
SWFs with Domestic Investment Mandates

Country	Fund	Year of Establishment	Objectives	Asset Value ^a \$ (billion)	Domestic Portfolio (%)	Funding Source ^b
Abu Dhabi	Investment Council	2007	To assist the government of Abu Dhabi in achieving continuous financial success and wealth protection, while sustaining prosperity for the future. To increasingly participate in and support the sustainable growth of the Abu Dhabi economy.	627.0	n. a.	H
Angola ^c	Fundo Soberano de Angola	2012	To generate sustainable financial returns that benefit Angola's people, economy, and industries.	5	n. a.	H
Australia	Future Fund	2005	To strengthen the Australian government's long-term financial position by making provision for unfunded Commonwealth superannuation liabilities.	75	30	NC
Bahrain	Mumtalakat	2006	To create a thriving economy diversified from oil and gas, focused on securing sustainable returns and generating wealth for future generations.	13.5	n. a.	H
France	Strategic Investment Fund	2008	To make strategic investments in French firms to prevent them from being bought at discounted prices by foreign investors, through participation and investment in innovative enterprises with a long-term investment horizon.	25.1	100	NC
Kazakhstan	Samruk-Kazyna	2008	<ul style="list-style-type: none"> • To develop and ensure implementation of regional, national, and international investment projects. • To support and modernize existing assets of the Samruk-Kazyna Group of Companies. • To support regional development and implementation of social projects. • To support national producers. 	47.4	n. a.	H
Malaysia	Kazanah	2003	To promote economic growth and make strategic investments on behalf of the government, contributing to nation-building. To nurture the development of selected strategic industries in Malaysia with the aim of pursuing the nation's long-term economic interests.	34.4	n. a.	NC
Nigeria	Nigeria Infrastructure Fund ^d	2011	To invest in projects that contribute to the development of essential infrastructure in Nigeria.	1	100	H
Palestine	Palestine Investment Fund	2003	To strengthen the local economy through strategic investments, while maximizing long-run returns for the fund's ultimate shareholder—the people of Palestine.	0.9	80	NC
Russia	Russia Direct Investment Fund	2011	To make equity investments in strategic sectors within the Russian economy on a commercial basis by coinvesting with large international investors in an effort to attract long-term direct investment capital.	10.0	n. a.	H
South Africa	Public Investment Corporation	1911	To deliver investment returns in line with client mandates. To contribute positively to South Africa's development.	114.6	n. a.	H
Taiwan	National Development Fund	1973	To serve as a catalyst for Taiwan's economic development and to accomplish a multiplier effect in the courses of its investment process.	16.1	n. a.	NC
United Arab Emirates (UAE)	Mubadala	2002	To facilitate the diversification of Abu Dhabi's economy, focusing on managing long-term, capital-intensive investments that deliver strong financial returns and tangible social benefits for the Emirate.	641.0	n. a.	H

Sources: World Bank Data, based on publicly available information and disclosures from the relevant funds (see references page for a list of websites).

Note:

^a The 2012 Prequin Sovereign Wealth Fund Review.

^b H = hydrocarbons; NCs = noncommodities.

^c "While the Fund considers investments across Africa and globally, it has a strong focus on investing in the domestic market, building Angola's infrastructure and creating opportunities for the people of Angola. By taking a long-term view with our investments, we aim to achieve sustainable and stable returns" <http://www.fundosoberano.ao/index.php?lang=en>.

^d The Nigeria Investment Fund is one of three funds managed by the Nigeria Sovereign Investment Authority and absorbs between 20 and 60 percent of the authority's funding.

n. a. Not applicable.

III Domestic Investments in Resource Exporting Countries

Countries dependent on natural resources face several policy questions on the use of their revenues. How much should be saved and invested to ensure long-term fiscal and economic sustainability rather than consumed when realized? Should part of the windfall be transferred to citizens rather than being all spent by the state? In addition to holding shorter-run precautionary balances to help cushion volatile resource price movements, what types of longer-term investments are most appropriate?

Long-term fiscal sustainability for resource-rich countries is sometimes benchmarked against some version of Permanent Income (PI). In earlier formulations, this was used as a benchmark for the primary fiscal deficit excluding resource revenues, comparing it with the permanent income flow expected from the resource sector (Box 3). This formulation has been called into question. To the extent that a part of fiscal spending is for productive investment, this should be counted as part of savings rather than as consumption. That opens up greater fiscal space for domestic investment spending, but only if the investment is effective in building up national wealth.

Following on from this argument, it has been shown that not every country will find it optimal to build up a SWF savings fund that invests abroad. If the domestic risk adjusted rate of return on investment is higher than that on foreign assets, the optimal strategy might involve boosting domestic investment rather than accumulating long-term foreign assets (Berg et al., 2012; Collier et al., 2009; van der Ploeg and Venables 2010). In principle, and for countries that are capable of effectively using funds for productive purposes, well chosen, planned and executed domestic investments, including some naturally within the scope of the public sector, can help the economy to grow and diversify away from risky dependence on a dominant resource.

In practice, even if these conditions are satisfied macroeconomic and institutional absorptive capacity constraints will require that a portion of the revenue is invested in liquid financial assets outside of the domestic economy, possibly for a number of years. There would also still be a need to hold precautionary reserves, sometimes for quite extended periods because of the nature of commodity cycles. If the sole objective of accumulating funds in a SWF is stabilization then no domestic investment within that fund is advisable.

Box 3

Domestic Investments and Fiscal Benchmarks

Long-run fiscal sustainability for resource-rich countries is sometimes benchmarked against some version of Permanent Income (PI). The present value of the discounted stream of non-resource primary balances (NRPB: the difference between total spending and non-resource fiscal revenue) should equal the present value of resource wealth W (assets in the SWF plus the discounted present value of all future resource revenue). Under simplifying assumptions this can be expressed as $NRPB = r.W$ where r is the real return on the wealth portfolio. The rule will not provide an unchanging benchmark since markets and reserve and wealth projections will evolve over time, but at any moment it provides a conditional benchmark, given future expectations.

The PI approach has been criticized for providing a fiscal benchmark that is too tight (Baunsgaard et al 2012, Ossowski 2012). In a poor, resource-constrained country investing more resource revenues domestically, for example on infrastructure, could boost non-resource growth and create a virtuous cycle of increased fiscal space. Capital scarcity should also mean that domestic investments can return higher financial returns than those available on foreign assets in a traditional SWF, again increasing fiscal space through increasing r .

The PI approach can be modified to reflect country-specific conditions and yet provide a useful benchmark for fiscal policy. One approach could be to treat all public investment as adding to national wealth and re-define the rule to reflect only the non-resource current balance. However, this eliminates the value of the approach as a fiscal anchor and also opens the door to creative accounting, as there is a strong incentive to redefine current

spending items as capital investments. Not all investments will be productive. Even if productive in the very long run, some might incur recurrent costs that will be difficult to cover for many years.

A balanced approach would be to screen proposed investments by their economic and financial returns according to their impact on the real return on wealth $r.W$. Following this reasoning, high-returning domestic investments are the most appropriate for an SWF because of the emphasis on managing them as a portfolio of national assets. Even if they open up fiscal space, the domestic investments of the SWF need to be coordinated under strong integrated expenditure management because of absorptive capacity constraints and the risk of inducing damaging “boom-bust” cycles.

The link between investment and growth is neither automatic nor guaranteed. Public investment poses significant management and governance challenges, including low capacity, weak governance and regulatory frameworks and lack of coordination among public entities. Furthermore multiple institutions can have overlapping investment mandates, leading to fragmented programs and inefficient use of public funds. Careful coordination is necessary when multiple entities carry out public investment programs (Box 4).

Box 4

Institutional Investment in Brazil

A government’s institutional set-up is seldom straight forward and consequently activities –such as public investment management- are divided among multiple institutions, across levels of government and involve commercial and quasi-commercial corporations, banks and quasi-banks. Brazil provides an example of careful coordination in a large government with multiple actors engaged in public investment.

The management of public investment in Brazil takes place across the tiers of government (federal, state and municipal) and is divided among multiple institutions. Key institutions include the: Ministry of Finance; Ministry of Planning and Budgeting; Line Ministries; Congress; Chief of Staff Office (Casa Civil); Federal Control Office and Federal Court of Accounts.

Sub-national government is responsible for a significant proportion of public investment. Similarly to the Federal Government, State governments execute investments through both their budgets and through state owned enterprises (SOE). Municipal governments also play a role in managing typically smaller SOEs, and investing through the executive’s budget. This mirrors the situation across OECD countries where approximately two thirds of public investment takes place at the sub-national government level.

In addition several SOEs, at all levels of government not dependent on the Treasury are active and include Petrobras (a semi-public energy corporation) that invests directly from its own capital in pursuit of national goals. The Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social, or BNDES) also plays a key role by offering financial support mechanisms to public administration entities as well as the private sector.

Given that public investment is carried out across so many entities there is a need for careful coordination in Brazil. For example, the Secretariat of Planning and Investment at the Ministry of Planning works closely with the Department of Coordination and Control of State Enterprises (in the same ministry), which is responsible for the preparation of the comprehensive plan of expenditures for SOEs. Approval is later sought at the Congress level. Strategies for public investment typically follow the political cycle and examples include the Programa de Aceleração do Crescimento (Growth Acceleration Program), better known as PAC, active from 2007 to 2010 and its successor ‘PAC-2’ for period 2011 to 2014 (forecast to spend \$582 billion).

Sources: Allain-Dupré, D. (2011), “Multi-level Governance of Public Investment: Lessons from the Crisis”, OECD Regional Development Working Papers, 2011/05, OECD Publishing. See: <http://dx.doi.org/10.1787/5kg87n3bp6jb-en>; accessed August 19, 2013

Many resource-exporting countries have launched massive investment programs to little effect (Gelb 1988). Box 5 summarizes the key features of effective public investment management arrangements. On average, countries tend to be relatively stronger in the

early stages of strategic guidance and appraisal, and weaker in the later stages of project implementation and especially in project audit and evaluation. An index of the quality of public investment management shows this to be markedly weaker in resource-exporting developing countries than in other countries (Dabla Norris et al. 2011). However, some resource-dependent countries, like Chile, offer good-practice examples (World Bank 2006).²

Box 5 **Effective Public Investment Management**

High-quality public investment is essential to growth (Gupta et al., 2011) but poor investment management may result in wasted resources and corruption. The risk is increased if investment is scaled up rapidly in the face of macroeconomic and institutional absorption constraints (Berg et al., 2012). Efficient public investment management can be divided into four consecutive phases, each with several individual components (Rajaram et al., 2010) and Dabla-Norris et al., 2011):

- ▶ *Strategic Guidance and Project Appraisal.* Strategic guidance ensures that investment projects are selected based on synergy and growth outlook, and reflect development objectives and priorities. Projects that pass this first screening must then undergo scrutiny of financial and economic feasibility and sustainability. This requires several steps – financial and economic cost-benefit analyses, pre-feasibility and feasibility studies, environmental and social impact assessments - all undertaken by staff trained in project evaluation skills. Furthermore, creating potential project lists strengthen accountability.
- ▶ *Project Selection and Budgeting.* Vetting proposed projects requires a politically independent gate-keeping function. The participation of international experts, together with national technical experts, can enhance the quality and robustness of the review. Linking the process of selecting and appraising projects to the budget cycle is necessary to take account of recurrent costs and to ensure appropriate oversight and consistency with long-term fiscal and debt management objectives. This requires a medium-term fiscal framework that translates investment objectives into a multi-year forecast for fund and budget aggregates.
- ▶ *Project Implementation.* This covers a wide range of aspects, including efficient procurement, timely budget execution, and sound internal budgetary monitoring and control. Clear organizational arrangements, sufficient managerial capacity and regular reporting and monitoring are essential to avoid under-execution of budgets, rent-seeking and corruption. Procurement needs to be competitive and transparent, including a complaints mechanism to provide checks and balances and a credible internal audit function.
- ▶ *Project Audit and Evaluation.* Ex-post evaluation is in many developing countries a missing feature of public investment management systems, as are adequate asset registers. Registers are necessary to maintain and account for physical property, and should be subject to regular external audits.

Sources: Berg, Portillo, Yang and Zanna (2012) and Dabla-Norris, Brumby, Kyobe, Mills and Papageorgiu (2011).

The variable performance of countries in managing their public investment programs points to the fact that not all have strong central management of the level and quality of public spending, properly integrated into the budget and subject to oversight by parliament. Off-budget flows are often substantial. Sub-national governments or line ministries may have considerable scope for independent action, with little effective oversight. In many countries state-owned enterprises, including powerful national resource companies, may take on fragmented responsibility for a wide range of development activities, again often with little effective oversight, either from the market or from the state.

In addition, few resource exporters have managed to sustain counter-cyclical fiscal policy in the face of large swings in resource markets. This leaves their economies vulnerable to destructive “boom-bust” cycles, which have a direct impact on investment quality and returns. On the upside of the cycle, spending outruns management capacity, raising the

² World Bank Appraisal of Public Investment: Chile. 2006

prospect of poor-quality spending as well as creating bottle-necks that raise costs for all investors. On the downside, sharp fiscal consolidation leaves partly-completed projects in limbo and may also cut the utilization of completed investments by constraining operational spending. Chile, again offers a good-practice example, of the use of fiscal rules to sustain counter-cyclical fiscal policy (De Gregorio and Labbe 2011).

Opening up a separate window for domestic investment by the country's SWF has the potential to exacerbate these risks. It can further fragment the public investment program, and may even provide an avenue to bypass parliamentary scrutiny of spending. With its resources provided from resource rents and not from the capital market the SWF is not subject to oversight by market actors and institutions. Furthermore, even if the fund is restricted to commercial investments or investments with near-commercial returns, it could exacerbate macroeconomic and asset-price cycles by investing heavily when resource prices are booming. Therefore, it can only offer potential benefits relative to alternative approaches if, as a high-capacity expert investor, it operates in coordination with the government's macro-fiscal policy

IV Investment Rules and Institutional Models to Mitigate Risk

While it is not possible to eliminate all of the risks of a SWF investing in the domestic economy, it may be possible to mitigate some of them and at the same time ensure that the SWF's engagement plays a constructive role in strengthening the quality of public investments by acting as a high-quality, commercially driven investor. This would require: (i) ensuring that its investments are not destabilizing to the macro-economy, (ii) limiting the scope of domestic SWF investments to those appropriate for a wealth fund; (iii) investing through partnerships with entities that bring credible standards for project quality and governance; (iv) establishing credible governance arrangements to ensure that the SWF operates with independence and professionalism, and clear accountability mechanisms; and (v) mandating full transparency, particularly on each domestic investment and its performance.

4.1 Coordinate investments with macroeconomic policy.

Especially if large, the domestic spending of the SWF needs to be considered within the overall macro-economic framework. There is otherwise a risk that it will rapidly scale up investments when resource prices and revenues are high, undermining efforts at counter-cyclical fiscal policy and imposing costs on other investors. This is also important for the quality and cost of the SWF's investments themselves, to limit the adverse impact of stop-and-go cycles.

In addition, SWF usually receive their funding from the budget, as a one-time endowment, or discretionary transfers or earmarking of specific sources of revenue. During market downturns the government would normally ring-fence public sector expenditure, curtailing or halting transfers to the SWF. Therefore, the SWF's investment program needs to be carefully crafted to limit the risk of sudden and costly financing shortages.

4.2 Invest in commercial or near-commercial projects.

Public investments can be evaluated from two perspectives: (i) their financial or private returns and (ii) their broader economic and social returns. The latter include, in addition to the financial return, positive or negative externalities for the wider economy and society that can cause the social rate of return to be higher or lower than the financial rate of

return. For example an infrastructure project might have positive economic externalities that are not fully captured by its financial return.³ Some worthy investments might have no direct financial returns at all, and may instead require years of recurrent spending to realize a value for the country. An example could be investments in early childhood development that boost the cognitive skills and earning capacity of a future workforce.

As a wealth fund, the SWF should not invest in projects that are justified primarily by their economic or social externalities. Such investments should be funded through the normal budget process, which should also make provision for the future recurrent costs necessary for operations and maintenance. By preserving the value of its assets over time through commercial or quasi commercial investments the SWF would perform an inter-generational wealth transfer function, compatible with the modified PI approach discussed in Box 3. Moreover, SWF investment not warranted on commercial grounds would greatly complicate the accountability of the fund as its management could no longer be benchmarked on financial returns. The fund may also not be accountable for the wider social and economic impacts of investments that may depend on factors outside its control. For example, a sectoral ministry may choose not to provide the recurrent inputs to operate the assets (such as schools) built by the fund. This dilution of accountability leaves the fund vulnerable to political manipulation.

The SWF should therefore screen domestic investment proposals primarily according to their financial return, seeking development opportunities with market or close-to-market financial returns, and where it can crowd in, rather than displace, private investors. Taking advantage of its long-term horizon, the fund could provide financing to extend the term of available private credit; it could offer a range of instruments to share risk and make commercially attractive projects viable for the market. In some circumstances, the fund may accept a somewhat below-market return on domestic investments with large economic benefits. This home bias should be clearly stipulated. For example instead of an external rate of return of say 4 percent in real terms over an investment horizon of 10 years, it could stipulate a real return of 2 percent over a horizon of 20 years. Box 6 provides an example, where lower returns are accepted to bring down the price of power through innovative public private partnership (PPP) arrangements.

³ A toll road for example, while paying for itself can also alleviate congestion on alternative routes. This would bring down business costs beyond the cost of the toll, attracting job-creating private investment and cutting unemployment. It could also improve public health by improving access to medical facilities. On the other hand, if undertaken at the height of a resource-led spending boom, its construction could increase congestion and lead to higher costs and delays for others, leading to negative externalities. It is not always easy to estimate financial returns and to quantify economic and social returns. This reinforces the importance of independent assessments and vetting of project proposals.

Box 6

Investing to Bring Down Power Costs

SWFs can use a variety of instruments to support domestic investment, including equity (ordinary or preference shares), debt (including subordinated or syndicated loans) and guarantees (commercial or political risk). Projects can also be implemented through Public-Private Partnerships (PPPs), contracts between public and private parties in which the latter provides a public service and assumes substantial financial, technical and operational risk. The SWF might co-invest on purely commercial terms, or it could modify the terms of its engagement to reflect clearly identified economic or social benefits. For example, the national market could be unable to support a market price for power that is high enough to justify the construction of a generation plant on commercial terms. A SWF could co-finance the project with a private company, accepting a positive but below-market return and a long investment horizon to enable an acceptable return for the private partner with lower power tariffs. A similar approach has been used in Mauritania, as well as other countries. PPPs can be attractive vehicles for SWFs that seek to promote developmental objectives while still generating reasonable financial returns. But experience shows that proposals need expert assessment to ensure that they will deliver their social and development objectives and that the balance between risk and profitability is not heavily tilted in favor of the private partners.

For investments which are not fully justified on commercial grounds, it is essential to have a clear and transparent process for benchmarking financial return and for trading off financial and non-financial goals.⁴ The risk is that any such formulation may reduce public accountability because the measurement of economic benefits is more ambiguous than that of financial benefits. Identifying the size of the home bias is a challenging endeavor, owing to country specific and project specific considerations. An alternative approach could be for the government to set the overall target return on investment for the SWF's portfolio, and the threshold minimum rate of return for all investments (for example, the government's average long-term real borrowing rate on commercial loans). The SWF would then be free to decide the composition of its investment portfolio so as to maximize the overall rate of return, while guarding against investing in project with expected negative returns. For clear accountability, it is also important to separate out the below-market portion of the portfolio from the rest. Box 7 provides examples of capital objectives and methodology used by some institutional investors to assess investment projects.

Box 7

Trading off financial and non-financial investment objectives

SWFs that invest domestically need to formalize the trade-off between policy and financial objectives, since investing in domestic development to fulfill policy mandates can conflict with financial performance and jeopardize long-term financial sustainability (Scott, 2007). It is illustrative to look at the type of capital objectives used by development banks to ensure financial soundness of investments with a developmental purpose (Luna-Martinez and Vicente, 2012). These include (i) achieving a minimal return that exceeds inflation (Financiera Rural of Mexico and Credit Bank of Turkey), (ii) generating a rate of return that equals or exceeds the government's long-term borrowing costs (Business Development Bank of Canada), and (iii) an explicit target return on capital, ranging from 7 to 11 percent annually (Development Bank of Samoa, EXIM Bank of India, Kommunalbanken of Norway).

The International Financial Corporation (IFC) uses the Development Outcome Tracking System (DOTS) to measure the development effectiveness of its investment services. At the outset of a project, standardized industry-specific indicators are adopted, with baselines and targets. The indicators facilitate the tracking of progress throughout project implementation, allowing for real-time feedback. Four performance categories are considered: financial performance, economic performance, environmental and social performance, and private sector development impact. These performance categories are in turn informed by industry-specific indicators.

⁴ Home bias can be defended on various grounds, including providing jobs for underemployed labor, pecuniary externalities and the expected contribution of investment to diversification and reduced exchange rate risk. However, this should not unduly dilute the financial motivation for SWF investments.

To obtain a positive rating, a project must make a contribution to the host country's development. The DOTS does not have a formal methodology to assess the trade-off between financial and other performance categories. However, projects are not "created equal": while some generate positive development outcomes, others do not or even intensify tensions with affected communities; some projects engage communities in design and implementation, while others use a top-down approach; some mitigate risk while others may even increase it. To fill this gap and in order to remove the subjectivity of rating, a new financial valuation tool, the Sustainability Program Quality Framework, has been developed that attempts to capture the full value of sustainability/social programs. The framework includes a Self-Assessment Tool, which generates a numerical score ranging from 1 (ineffective) to 4 (excellent), and a Quality Benchmark Matrix, which maps scores to practices characterized at each scoring level. The score can be inputted into the Financial Valuation Tool's quality ranking sections. The tool is being applied on a pilot basis.

Further lessons can be sought from OECD countries' investment practices. For example in the United Kingdom a 'Green Book' provides a methodology for assessing the business cases of public investments. The business case sets out the strategic case (i.e. whether the proposal is supported by a robust case for change); the economic case (where there is value for money); the commercial case; the financial case; and the management case (i.e. whether the project can be delivered successfully). When reviewing a business case, officials seek to make a judgment as to whether the project is affordable, in line with other objectives and value for money.

Source: International Financial Corporation <https://www.fvtool.com/page.php?node=aW090TA>; UK Treasury http://www.hmtreasury.gov.uk/Economic_Data_and_Tools/Greenbook/data_greenbook_index.cfm.

Seeking domestic investment opportunities with market or close-to-market financial returns and where private investors can be crowded in by the assurance of some public financial support implies that the domestic investment program of the SWF cannot be driven by quantity mandates, for example, to hold a particular percentage of its portfolio in domestic investments. It needs to be able to shape the rhythm of domestic investment according to the opportunities available and consistent with macroeconomic policy tradeoff. In the upswing of the resource cycle, the fund may see relatively few domestic opportunities relative to its rapidly growing resources. In this case it should not be forced to invest domestically into low-quality projects. The SWF should be free to plan its portfolio with a long term perspective, including by investing domestically only as good opportunities emerge. Furthermore, potentially attractive domestic investments should be allowed to compete with foreign assets for investable funds based on expected returns and sound investment management principles.

4.3 Invest through partnerships

SWFs are usually permitted by their charters to invest in traded securities only as minority shareholders. A similar principle should apply to domestic investments, whether portfolio or direct. This opens up the investment decision to external evaluation, adds to the expertise at the disposal of the fund, and also creates a more credible investor body to monitor the implementation of the investment and the policy framework that affects its financial performance. SWFs that make equity investments may be passive and long term investors with no desire to impact company decisions by actively using their voting rights, or have a more active ownership policy. Explicit limitations may also be imposed in the establishment law.

Funds can actively seek to create investor pools with each other and with other sources of institutional capital, as well as with private investors (Box 8). Partnership agreements at project or portfolio level may be crafted to strengthen the SWFs investment efficiency and investment selection process, to mirror those used by private equity investors. They might also seek to leverage the investments of the Multilateral Development Banks. For example, the Oman-India Joint Investment Fund (OIJIF), a co-investment vehicle between the Oman State General Reserve Fund (SGRF) and the State Bank of India, was set up in 2010 to

strengthen infrastructure investment in both economies through equity investments in various sectors; and in 2011 Khazanah Nasional Berhad (Malaysia) and Temasek Holdings (Singapore) set up two strategic ventures to jointly develop infrastructure projects in their respective countries.

Box 8
Nigeria Infrastructure Fund

The Nigeria Infrastructure Fund (NIF) is one of three pools of the recently established Nigeria Investment Authority (NSIA), and the only one that will invest domestically. The NIF holds a 32.5 percent share of the NSIA's US\$1 billion seed capital, the other shares being held by the future generations fund and the stabilization fund. The NSIA's stated objectives are to "build a savings base for the Nigerian people, enhance the development of Nigerian infrastructure, and provide stabilization support in times of economic stress".

The NSIA, which commenced operations in October 2012 and made its first investment in September 2013, relies heavily on international partnerships, and this maiden investment consisted of a transfer of \$200m to UBS, Credit Suisse and Goldman Sachs, for external management of a fixed income portfolio.

International partnerships are also a key part of the NSIA's domestic investment policy. The Nigeria Infrastructure Fund will invest in sectors including power, transport, agriculture and health care, and has signed memorandums of understanding with the Africa Finance Corporation and the International Finance Corporation to work together on transactions. For power sector investment, there is an agreement with General Electric, and another one being discussed with Power China.

Sources: Financial Times, September 16th, 2013 and NSIA website

SWFs should not seek to duplicate the roles of existing institutions. If a well-managed and skillful national development bank already exists, there would be no need to further fragment domestic investment by adding the SWF at least with regard to domestic investment with a commercial or quasi-commercial return. If inefficient, the development bank should be restructured instead of widening the mandate of the SWF and creating new and potentially competing institutional responsibilities. If no development bank exists, then the SWF's domestic investment should be subject to a level of oversight at least as rigorous as that of a development bank. This would include clear and publicly disclosed home bias parameters (e.g. permitted mark-down on the rate of return versus the benchmark rate of return on foreign assets), and may include transfers from the budget to compensate domestic investment below quasi-commercial return. The same solution could apply if an inefficient development bank existed but credible restructuring were not an option. However in this case there should be no confusion or overlap between the mandate of the SWF and that of the development bank. Table 3 outlines alternative institutional solutions.

Table 3
Domestic Investment Mandates: SWF and Development Bank

	SWF investment parameters	
	Return is below quasi-commercial	Commercial and quasi-Commercial Return
Development Bank with a strong track record	Domestic investment is implemented by the Development Bank	Domestic investment by the SWF competes on equal terms with returns on foreign assets. No minimum or maximum domestic investment target. The SWF invests only as a minority shareholder. Resource allocation based on market principles. Investment partnerships and pooling of funds to leverage private sector and reduce risk. The methodology to assess quasi-commercial returns is clearly defined, and based on measurable criteria. Quasi commercial investments are disclosed separately.
Development Bank with a poor track record	Restructure the Development Bank.	
No Development Bank, or not possible to restructure	The domestic investment function of the SWF is subject to parliamentary scrutiny. Parliamentary approval of maximum envelope for domestic investment, and home bias parameters are part of the budget process and compensated through the budget. Investment partnerships and pooling of funds to leverage private sector and reduce risk. Clear separation of mandate between SWF and un-restructured development bank.	

4.4 Institutional Models for Risk Mitigation

Establishing rules on the type (e.g. commercial or quasi-commercial investment) and modalities (e.g. no controlling stakes; leveraging private investment) of investment that the SWF is permitted to make is one way to ensure the separation between the activities of the SWF and those of other government institutions with investment mandates (e.g. the budget, the national development bank, the investment authority, and state-owned enterprises). But good corporate governance is a pre-requisite for effective and sustainable performance.⁵ Sound corporate governance arrangements provide incentives for the board and management to pursue shareholders' objectives, and facilitate the monitoring of performance by shareholders and owners. This is particularly important for SWFs and other state-owned institutions, especially those with complex mandates that may include supporting green investments, "ethical" investments or other national policies.

SWFs are normally established as separate legal entities with statutory responsibility for managing investments at arm's length from the government. In some countries international and domestic investment are channeled through dedicated SWFs, in others the SWF invest domestically through a separate wholly owned subsidiary. Examples include the Central Huijin Investment Ltd. (the domestic investment arm of China Investment Corporation), the Abu Dhabi Investment Council (managed separately from the Abu Dhabi Investment Authority), and the Nigeria Investment Fund (one of three funds managed by the Nigeria Sovereign Investment Authority). One advantage of keeping domestic and

⁵ The term "*corporate governance*" refers to the process and structure to guide and oversee direction and management of a corporation so that it carries out its mandate and objectives effectively" (Report of the Auditor General of Canada, February 2005, Chapter 7, http://www.oag-bvg.gc.ca/internet/English/parl_oag_200502_07_e_14927.html). Corporate governance includes the formal and informal practices that establish the relationship between the board of directors, the management, and the owner.

international investment under the same SWF is to create internal competition for funding based on expected returns, which in turn leads to flexible and more efficient portfolios and may be more effective at insulating the fund's investment decisions from political pressure.

The objectives and mandate of the fund, the organization of the ownership function of the state, and the institutional arrangements that govern its internal management bodies and processes are usually specified in a purpose-designed law, as well as company law, financial sector regulations, and the SWFs' statutes. The *Santiago Principles* for the operations of SWFs (IWG, 2008), the Revised Guidelines for Foreign Exchange Reserve Management (IMF, 2013), existing literature on good corporate governance practice, including the *Principles of Corporate Governance* (OECD, 2004), and the *Guidelines on Corporate Governance of State Owned Enterprises* (OECD, 2006) provide a detailed framework for effective corporate governance. This section outlines the external and internal corporate governance issues that are of particular relevance to SWFs for which domestic investment is permitted.

4.4.1 External governance relates to the relationship between the SWF and the state as its owner. Ownership provides certain rights and obligations, including voting on matters defined by law and by the SWF's statutes; electing, appointing, and removing board members; and obtaining information on the performance of the SWF, its board and its management.⁶

For SWFs, the Minister of Finance usually acts as owner on behalf of the state. However, dual responsibility is possible, for example where the fund is given public policy objectives in specific sectors or spending is earmarked for specific uses. This is the case for the Nation Building Funds in Australia – a group tasked with enhancing the Commonwealth's ability to make payments in relations to public investment in transport, communication, energy, education, health and hospitals. Table 3 contains examples of ownership arrangements for SWFs for which domestic investment is permitted.

Table 3
Examples of ownership arrangements

Fund	Country	Method of Establishment	Type of Organization	Ownership Function
Public Investment Corporation	South Africa	Public Investment Corporation Act 2004	Corporation	Minister of Finance
Investment Authority	Kuwait	Law 47/1982	Independent legal entity	Minister of Finance
Samruk-Kazyna	Kazakhstan	Presidential decree No. 669 and 962	Joint stock company	The President of the Republic
Khazanah	Malaysia	Companies Act 1965	Public limited company/Investment Holding Company	Minister of Finance Incorporated, a corporate body incorporated pursuant to the Minister of Finance (Incorporation) Act, 1957

Particularly where several representatives act as owner, competing interests may dilute accountability and weaken the incentives for performance of the board. Therefore, clarity of roles and responsibility, transparency, as well as *separation between ownership and regulatory/supervisory functions* are important to prevent conflict of interests, and to ensure

⁶ Ideas on how best to organize the ownership function of state owned entities have evolved over time. These can be grouped under three main models: (a) the traditional "decentralized model" that consists of assigning the responsibility of each state owned entity on the basis of its sector of activity to the relevant line ministry; (b) the "centralized model" that centralizes the ownership function under a single ministry or an entity; and (c) the "dual model" that splits the ownership function between the line ministry of the state-owned entity and a central administrative entity.

accountability and operational independence in the management of the SWF. Having an explicit *ownership policy* can reinforce the authority and responsibility of the owner and provide guidance to the board (OECD, 2006). The ownership policy defines the overall objectives of state ownership, the state's role in corporate governance and the manner in which the policy will be implemented, including the extent of government participation (priority or strategic sectors, controlling or non-controlling share), and the policy with regard to the exercise of voting rights in equity investments (active or silent owner).⁷

The objectives and mandate of the SWF provide the framework for the definition of investment strategies by the fund's management, and the measurement of performance of the fund. It is therefore important that objectives and mandate be clear.⁸ Translating objectives into performance targets is among the tasks of the shareholder representative. These should include overall financial performance targets, and operational targets to guide business practice and monitor efficiency, and clear public policy targets to measure the fund's contribution to local economic development whenever a home bias exists. Targets should be clear and a methodology for measuring them should be made explicit in the *shareholder compact* or similar agreement between the owner and the board of the fund. Since policy priorities and market conditions change over time, it should be possible to review and update these targets periodically. Benchmarking with targets and results of similar institutions can facilitate performance assessment and help to define realistic targets.

4.4.2 Internal governance includes institutional arrangements, such as the composition, structure, functioning and authority of the board of directors or trustees, and the SWF's management processes, including recruitment, decision-making, raising capital, investment autonomy, risk management, asset classes, audit, and public disclosures.

The board of a SWF. The board (whether trustees or directors) is generally entrusted with high level management of the activities of the SWF. The terms "*trustee*" and "*director*" are often used interchangeably, but the fiduciary standards of a trustee under most trust laws often hold the trustee to a higher standard of conduct than that applicable to a director (for example, liability for acts of simple negligence, as opposed to gross negligence). The creation of a SWF under trust law could in principle alleviate some of the concerns about inadequate public disclosure, but higher fiduciary standards may also encourage an excessively cautious approach of the board to investment, and thus be more applicable for SWFs that invest in listed equities as opposed to unlisted equities and real assets.

The duties of the board normally include appointing corporate officers and executive management and evaluating their performance; approving investment policies; ensuring that internal financial and operational controls are in place and appointing auditors; confirming that processes are in place to manage risks; establishing performance indicators and benchmarks in line with the objectives of the SWF; and ensuring that financial statements and other disclosures clearly present the SWF's performance. These duties, normally specified in the law, by-laws of the SWF, and board charter, serve to set the board's authority vis-à-vis the management providing the basis for management accountability and to defining management independence from the owner.

⁷ Countries that have formal ownership policies include Finland, France, New Zealand, Poland, South Africa and Sweden.

⁸ See for example Khazanah (Malaysia), Mumtalakat (Bahrain), Russia Direct Investment Fund (Russian Federation), and Public Investment Fund (Saudi Arabia).

The size of the board and its composition (professionals versus government officials) affect the efficiency, quality, and independence of the decision-making process. The need to ensure an adequate level of professionalism and independence of the board (both actual and perceived) is common to all state-owned entities (particularly those with domestic investment mandate) where government officials often serve as board members. Combining ownership and supervisory roles presents conflicts of interest that may undermine the integrity of both functions, and expose decision-making to political capture. In some countries government officials are prohibited from serving on boards of state-owned financial institutions (Norway and Australia). In any event, requisite skills and experience should be specified in the law or by-laws of the SWF, and should apply to all members of the board. Furthermore, separation between board membership and executive management should be observed to strengthen the oversight function of the board.⁹ State owned financial institutions increasingly have independent directors with professional and academic backgrounds in relevant business areas.¹⁰ Nomination committees composed of individuals themselves deemed to be independent and objective can reduce political interference and increase the independence of the board, although it is difficult to expect perfect independence when the owner is the state. Box 9 provides an example of institutional arrangements to strengthen the independence of the board.

Box 9

Institutional arrangements and independence of the board: lessons from New Zealand.

The New Zealand Superannuation Fund is governed by a separate Crown entity called the Guardians of New Zealand Superannuation with a Board of at least five and at most seven members. Each Board member is appointed for a term of up to five years and is eligible to be reappointed. Board members are appointed by the Governor General on the recommendation of the Minister of Finance. 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. Board members are chosen for their experience, training, and expertise in the management of financial investments.

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 appoint external investment managers to manage different parts of the Fund. The Fund is authorized investment in a full range of asset classes, including domestic asset, and is required to invest on a prudent, commercial basis.¹

While accountable to Government, the Guardians operate at arm's length from Government. Under the law, the Minister of Finance may give directions to the Guardians regarding the Government's expectations as to the Fund's performance (overall risk and return), but must not give any direction that is inconsistent with the duty to invest the Fund on a prudent, commercial basis. The Guardians must have regard to any direction from the Minister. But they are free to enter into investment arrangements that best suit the Fund's purpose with minimum agency risk. Any direction given by the Minister must be tabled in Parliament.

In addition to reviews by the Office of the Auditor General, an independent review of how effectively and efficiently the Guardians are performing their function is carried out every five years.

This independence was tested in 2009 when the Ministry of Finance sent a request to the Fund to increase the Fund's domestic investments citing national interests. The request stated the Government's expectations that the Fund should increase domestic investments to 40 percent of the total portfolio. The Government's objective was to increase investment in New Zealand's productive sector, and further the development in domestic capital

⁹ It is common practice among state-owned institutions to include the chief executives on the board, which undermines the independence of the board and its ability hold management accountable. If politically impracticable to authorize the board to appoint the chief executive officer, an alternative arrangement is for the board to recommend a shortlist of candidates to the shareholder representative (Scott, 2007).

¹⁰ Independent directors exclude government officials, and employees or representatives of employees of the SWF and its affiliates.

markets. This was to be done consistently with the Fund’s duty to invest “on a prudent, commercial basis”, in accordance with the relevant legislation.²

The Guardians, however, considered the request at odds with the Fund’s mandate to maximize return over a long-term horizon without undue risk, and consistent with best practice portfolio management. If allocation to New Zealand assets were to substantially increase beyond the then-current 18 percent share of the total portfolio, the Fund would run the “risks associated with asset concentration, the relative illiquidity of New Zealand assets, and other relevant idiosyncratic risks associated with investing in any single location.” Consequently the Guardians did not offer “an assurance as to how much, if at all, the Fund’s New Zealand assets will increase” based on “the unpredictable nature of future commercial, prudent, investment opportunities”. It was noted that in order “to guarantee an increase to a prescribed percentage would require a modification to the Fund’s commercial objectives” in the relevant legislation. The Guardians concluded that “while local investment activities may produce positive benefits (externalities) in assisting developing New Zealand’s capital markets, we cannot take these externalities directly into account when making an investment decision under our current Act”.³

Sources:

¹ New Zealand Superannuation Fund <http://www.nzsuperfund.co.nz/index.asp?pageID=2145879271>; Accessed January 22, 2014.

² New Zealand Superannuation Fund <http://www.nzsuperfund.co.nz/files/Letter%20from%20MoF%20regarding%20NZ%20directive%20and%20funding%20May%2014%202009.pdf>; Accessed January 22, 2014.

³ New Zealand Superannuation Fund <http://www.nzsuperfund.co.nz/files/FINAL%20response%20to%20NZ%20investment%20directive%20%20June%202009.pdf>; Accessed January 22, 2014.

Specialized committees are often used to improve performance of the board. These include the audit committee, the remuneration committee, the risk management committee, the corporate governance committee, and the ethics committee. While most SWFs have established audit and executive committees, remuneration, risk management, and corporate governance committees are a relatively new trend. Table 4 summarizes the internal governance arrangements for a small sample of SWFs with domestic investment authority.

Table 4
Example of internal governance arrangements

Fund	Country	BOD size	Indep. directors	Structure	Appointment authority and process	Duties	BOD committees	Term of service
Kazanah	Malaysia	9	5 Expertise: audit, economics, and finance.	Chaired by the Prime Minister. Includes the special economic advisor to the prime minister, the deputy minister of finance, and the managing director.	Minister of Finance Incorporated	The board of directors has all the powers necessary for managing and for directing and supervising the management of the business and affairs of the company subject to any articles of association	Audit; Executive	n/a
Kuwait Investment Authority	Kuwait	9	3	Chaired by the Minister of Finance. Includes the Energy Minister, Governor of the Central Bank, Undersecretary.		To formulate the general policy of the Authority, and supervise implementation Monitor investment programs; Adopt financial and administrative regulations; Approve investments and transactions; Approve budget and annual financial accounts.	Audit; Executive.	Four-year term, renewable if at least three board members do not hold any public office.
Samruk-Kazyna	Kazakhstan	10	3 Of which two foreign nationals. Expertise: law, business, and economics.	Chaired by the Prime Minister. Included: the deputy PM, minister of oil and gas, minister of finance, and assistant to the President.	The Council of Ministers through an Amiri Decree	Approve investment plan and budget Approve investment, monitor execution, and approves disclosures; Identify key performance indicators within the framework of the development plan of the Fund;	Nomination, Remuneration, Audit, Control and Analysis	At the discretion of the "sole shareholder"
Public Investment Corporation,	South Africa	10	7 Expertise: business, finance, economics, and accounting	Chaired by the deputy minister of finance (non-executive director). Includes CEO and CIO.	Minister of Finance, after consulting the Council of Minister	Responsible for overall strategy, approval of capital expenditure	Director's Affairs; Investment; PIC properties HR and remuneration; Audit and Risk; Social and Ethics	No fixed term for non-executive directors. But 1/3 rd to retire from office at each annual meeting
Singapore Temasek Holdings	Singapore	9	8 Expertise: heads of corporations, former government officials, and national trade union. Chairman previously held several cabinet level in the Singapore government.	Majority of Board members are non-executive independent private sector business leaders.	Minister of Finance, subject to the President's concurrence.	Define long term strategic objectives Approve annual budget and annual audited statutory accounts; Approve major investment and divestment proposal; Approve major funding proposal; Appoint the CEO and establish succession plans	Executive Committee; Audit Committee; Leadership Development & Compensation Committee	No fixed term.
Future fund	Australia	7	7 Expertise: legislated requirement of substantial expertise in investing or managing financial assets or in corporate governance	Independent Board of Guardians drawn from outside of the government.	Treasurer and the Minister for Finance and Deregulation	Accountable to the Government for the safekeeping and performance of the assets of the Funds.	Audit, Risk, Remuneration, Governance, and Conflict	

Internal governance processes. The domestic investment models for SWFs can be broadly grouped into two categories:

- *Traditional.* SWFs that invest in equity and debts of domestic companies, preferably quoted on the domestic stock exchange. This model requires the existence of a local equity market, and is therefore of limited applicability in developing countries; and
- *Frontier.* SWFs that invest in real assets directly or through the creation of special purpose vehicles (SPVs) to leverage funding from private investors or other sources. These funds have many features in common with development banks and investment banks.¹¹

A SWF may use both investment models as necessary to fulfill its mandate and comply with risk criteria set by the owner and/or the board. However, the implementation of these investment models requires different skills and expertise, and entails the use of different financial instruments with different risk levels, with implications for the internal governance processes of the SWF. As noted previously, it also entails different risks for fiscal policy management. This sub-section will focus on three critical processes of internal governance: (i) the sources of capital; (ii) the investment decisions and risk management; (iii) audit and disclosures.

Source of capital. A SWF usually receives its funding from the budget, either as discretionary transfers or earmarking of specific sources of revenue, for example from resource taxes. This can weaken incentives for efficiency and accountability, making good corporate governance mechanisms even more important. Tools such as performance related compensations for executives, and the use of compensation committees can help to align management and shareholder's objectives.¹² SWFs that receive funding from other state-owned financial institutions – like government employees pension funds, and unemployment funds – act as custodians. These funds have an added layer of controls and accountability and are often subject to market control mechanisms. Box 10 provides an example of this type of arrangement.

¹¹ In addition, some countries have set up special purpose funds that provide funding for priority sectors or projects through the normal budget process. These funds are driven by maximizing the return on investment within specified risk parameters just like SWFs. However funds can only be withdrawn for the purposes identified in the laws and by-laws establishing the fund following the normal budget appropriation process. The Nation Building Funds of Australia are an example of this approach to development financing. However, these funds do not have a domestic investment mandate.

¹² According to current global debates on performance-based compensation for bankers, such compensation should be related to long-term performance, with the UK Parliamentary Commission on Banking Standards recommending that bonuses should be locked up for as long as 10 years and take the form of bail-in-able bonds (Martin Wolf, FT, June 20th, 2013). However, the fees of the non-executive directors should not be linked to the performance of the SWF to foster objectivity and independence.

Box 10

The Public Investment Corporation of South Africa: accountability mechanisms.

The Public Investment Corporation (PIC) of South Africa was established by an Act of Parliament to provide for the investment of funds received or held by, for or on behalf of the state and certain state-owned institutions. Its mandate is to:

- Deliver investment returns in line with client mandates;
- Create a working environment that will ensure that the best skills are attracted and retained;
- Be a beacon of good corporate governance; and
- Contribute positively to South Africa's development.

The PIC clients include public bodies that operate pension, provident, social security and guardian funds. The Government Employees Pension Fund (GEPF) is by far PIC's largest client.

In addition to traditional return-maximizing asset management (fixed income, listed equities, and properties), a division of the PIC, Isibaya, invests in commercially viable South African based projects that have strong, positive developmental impact. Isibaya provides finance for projects that support the long-term economic, social and environmental growth of South Africa. Investment in projects comprise of debt, equity and mezzanine funding. All investment decisions are directed by detailed client mandates, which are negotiated individually with each client in line with their investment profile and risk appetite.

Three acts of Parliament govern the operations of the PIC:

- The Public Investment Corporation Act, 2004, defines PIC as a government-owned Corporation that is subject to the Companies Act;
- The Financial Advisory and Intermediary Services Act, 2002, governs the South African financial services sector through the Financial Services Board, the regulator; and
- The Public Finance Management Act, 1999, requires that the PIC's annual financial statements be audited by the Auditor-General. The PIC is therefore accountable to Parliament for its financial management.

Furthermore, the PIC has a publicly disclosed code of ethic, anti-money laundry policy, and anti-fraud policy, and integrated sustainability and financial reports.

Source: Public Investment Corporation's website <http://www.pic.gov.za/>

Investment decisions and risk management. The implementation of the investment mandate involves several steps that are common to all SWFs, whether they can invest domestically or not. These include the setting of specific investment targets (risk, financial return, economic return) and benchmarks (reference performance), the identification of investment opportunities, their assessment, ranking, and selection, the definition of investment strategies (timing and modality of investment), the due diligence of selected alternatives, the investment itself, and the monitoring of results. The policy objectives of the owner and the flexibility of the investment mandate, together with the level of sophistication of the domestic financial and capital markets, affect the *operational skills* required to implement the mandate, and the *internal processes* to ensure compliance and efficiency in the execution of the mandate. A discretionary portfolio mandate could provide a wide range of autonomy and flexibility to select investments that respond to the general investment criteria set by the owner (for example, asset classes or sub-classes, with a target return or a benchmark, and a degree of risk tolerance). On the other hand, a SWF mandated to support domestic companies considered strategic by the government would require a project specific mandate and the identification of qualifying investments by the owner. The SWF investment policy should be clearly defined and consistent with its defined objectives and risk tolerance, as set out in the investment mandate, and should be publicly disclosed.

SWFs usually have a long-term investment horizon but the liquidity of their domestic portfolio largely depends on the level of sophistication of the domestic financial and capital markets, as well as the owner's investment objectives. SWFs that invest in companies listed on the domestic stock exchange require skills and internal management processes similar to those of SWFs with international portfolios and asset managers. Those that do not, require

competences and internal management processes comparable to those of development banks and private sector investment banks. The absence of a functional domestic stock exchange in many resource rich developing countries necessarily impedes the use of the traditional investment model.

To a certain extent, a SWF's competence gaps can be addressed by the use of external managers. However, this approach may be more suited to the implementation of traditional investment models with a discretionary portfolio mandate. For frontier investment models, and in the absence of suitable domestic investment institutions (e.g. domestic development bank), co-investing, including through PPPs, may help to address the concerns about the quality of a SWF's due diligence process as well as defray the risk, but only provided that the investment partners' interests are well-aligned and the SWF has an adequate level of project selection and assessment capacity. Frontier investments open the door to flexible tools of project financing; on the other hand, *marking to market and benchmarking to reference classes* is challenging for this type of investment.

The definition of a *clear methodology and organizational responsibility for identifying, assessing, implementing, and monitoring the result of investment decisions* is a critical step towards the efficient implementation of a SWF mandate as well as ensuring its internal (management to the board) and external (board to the owner) accountability. While this applies to all investment models, it is particularly relevant when a SWF is permitted to invest domestically. Approving the methodology and investment procedures proposed by the SWF management is one of the duties of the board. Box 7 above provides examples of methodologies to assess the development impact of investments.

Risk management refers to the process of *managing uncertainty*. Standard risk metrics can be used to manage the risk of simple reference portfolios of standard asset classes, but managing the risk of direct investments and private equity is more complex and labor intensive. Direct investment is less liquid and requires a clear appreciation of the trade-off between potential returns (financial, economic and social) and illiquidity, as well as resources for monitoring sustainable performance. *Investment partners* can help to manage exposure to risk, and may provide a buffer against political capture and interference into the investment process. An effective *risk management process* should include: a risk management policy to be established by the SWF's board, identifying risks and tolerance levels, permitted instruments (for example, the use hedging and derivatives); the systems and procedures for risk identification, measurement, monitoring and control; the institutional oversight and responsibilities (board, risk management, committee, senior management; the procedures to deal with problem investments; and the risk management framework review mechanism.

4.5 Full Transparency.

Rigorous internal audit procedures and standards, and independent external audits are critical for good corporate governance and accountability of SWFs. To ensure independence from the owner, the *internal audit function* should report directly to the board. Many SWFs have audit committees; these should be chaired by an independent non-executive board member to ensure the integrity of the oversight process and to shelter the audit function from political interference. This is particularly relevant when board members are also government officials.

External audit should be conducted according to international standards by a reputable international audit firm that is independent of management and the owner. External

financial audit provides the board with an independent assessment of the accuracy of reporting by management, and the quality and integrity of financial and operational controls. Audit conducted by the *state supreme audit institution* would normally focus on the use of public funds and budget resources, and are not a substitute for external audit (Scott, 2007).

Legislation usually provides for the accountability arrangements for the Board, including tabling the annual report and audited financial statements in Parliament and presenting interim reports on the SWF's performance to the owner representative. In addition, the SWF may be subject to the oversight of the relevant capital and financial market regulator. In addition to the audited financial statements SWFs which mandate includes a home bias, should publicly disclose investment mandates; investment policy; risk management policy; asset allocation; targets, benchmarks and results for asset classes and direct investment, to strengthen external accountability and credibility as investment partners.¹³

VI Conclusion

Though not entirely novel, SWFs that are permitted or mandated to invest domestically are emerging on a wider scale. They have not been systematically surveyed so that much remains to be understood about their processes and activities.

The emergence of SWFs with domestic investment mandates represents a shift of emphasis on the role of natural resource rents in development towards domestic investments. About 20 sovereign funds now have at least some specific mandate in this area, including some that traditionally have invested abroad. As resource markets stay strong and more countries make discoveries, more domestic investment mandates are being established.

While information on the policies and performance of domestic portfolios is incomplete, experience indicates that a SWF that is permitted or mandated to invest domestically, like a development bank, risks being influenced by the political economy of the country. The downside risks are large, and in some views prohibitive. Many resource-rich countries flush with funds have invested but seen little payoff. Sometimes this has been due to accelerating investment beyond the limits of macroeconomic or management capacity. Investment programs have also often been politically captured, used to distribute patronage and undermined by corruption. Unlike development banks that need to obtain market-based funding, SWFs are endowed by budget transfers or by direct payments from resource sectors. They are not subject to similar market discipline, increasing the downside risks. Only if a SWF is allowed to operate as a professional expert investor can it strengthen the management of the public investment program and contribute to building national wealth.

The experience of similar institutions suggests a number of considerations that a country contemplating allowing a SWF to invest domestically might consider. The overall objective is to create a system of checks and balances to help ensure that the SWF does not undermine macroeconomic management or become a vehicle for politically driven "investments" that add nothing to national wealth. The difficult environments in which

¹³ Separate accounting and reporting of investment mandates that provide for investment below market return would ensure the correct assessment of a SDF's performance eliminating the bias of hidden subsidies and clearly separating responsibilities for the choice of investment between the SDF and its owner. This is particularly important for a SDF that is mandated to invest in rescuing ailing SOEs, particularly when private capital is not involved in the transaction.

some SWFs are being established suggest that these will often be major concerns. The main priorities concern the criteria for selecting investments, partnerships, external and internal governance arrangements, transparency and reporting, and consistency with macroeconomic policy. These are summarized below.

Macroeconomic integration

- Experience in resource-rich countries indicate that private and public sector investments tend to be correlated with fluctuations in the prices of the country's major commodity exports. This creates damaging "boom-bust" cycles. To avoid exacerbating asset-price and macroeconomic cycles, as well as running into absorption constraints, if the SWF's domestic portfolio is large relative to the size of the economy its domestic investments need to be considered in the context of overall private sector and public sector investment.

Appropriate Investments

- SWF investments need to be screened for financial return (for example, maintain capital value in real terms), as well as adequate economic justification. If the SWF is to function as a quality domestic investor, it cannot be subject to investment quotas, but must be able to adjust its spending to demand and absorption constraints. Most SWFs that permit domestic investment will therefore also manage a "holding" portfolio of undisbursed funds.

Partnerships

- SWFs will benefit from investing in partnership with others. This could involve private investors, pooling with other SWFs, and co-financing with IFIs. Confining investments to minority stakes can reduce risk, bring in additional expertise and enhance the credibility of the investment decision. Especially for frontier investment models, co-investing may help to defray project risk and to address concerns about the quality of a SWF's due diligence process, but there will still need to be an adequate level of operational skills within the SWF.

External Governance

- The ownership function for an SWF normally rests with a central ministry (such as Finance) or in some cases the head of state. Its objectives and mandate need to be set out in a clear and unambiguous manner. The mandate should be translated into performance targets clearly and transparently, as in a shareholder compact between owner and board.
- Supervisory and oversight functions should be separated from ownership, for example by placing them with the Auditor General.
- It is advisable to separate regulation from ownership, for example by placing this with the regulatory body for financial and capital markets.

Internal Governance

- To ensure an adequate level of expertise and independence, all board members should meet skills and experience requirements. For a politically independent selection process, candidates should be nominated by an independent election committee, supported by an internationally recognized professional executive search firm.
- The presence of public officials on the board weakens the separation of responsibility within government for, on the one hand, exercising ownership, and on

the other exercising supervisory responsibilities, an accepted principle of SOE ownership. The large majority of board members should hence be independent directors from outside government. Independence can be further strengthened by appointing foreign nationals and establishing an external advisory board of independent experts.

- Since the domestic frontier model investment function of an SWF resembles that of investment banks and, to some extent, development banks, guidelines on staffing and investment policies can draw on best practice examples. They should include a clear and transparent methodology for evaluating tradeoffs between financial returns and economic and social returns (home bias). However, when a development bank exists, care should be exercised to clearly separate its functions from those of the SWF and refrain from using the SWF as an alternative to restructuring an inefficient development bank.
- PPPs can help screen project proposals but require due diligence to ensure that the balance between risk and return does not unduly favor the private partners.
- Internal audit should report directly to the board, and external audit be undertaken by an internationally reputable firm that is independent of the owner.

Transparency and Reporting

- Consistent with good practice, SWFs permitted or mandated to invest domestically should issue accessible public reports covering their activities, assets and returns. Where part of the portfolio is market-based and part invested in projects with below-market returns these should be reported on separately.

Suggested Next Steps. Though not entirely novel, SWFs that are permitted or mandated to invest domestically are emerging on a wider scale. They have not been systematically surveyed so that much remains to be understood about their processes and activities. As they combine features of traditional SWFs and development banks, they can draw on good practice examples from both types of institutions, as well as from each other. More research is needed to better understand their operations and potential role for financing in developing countries.

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