The Rise of Sovereign Wealth Funds: Impacts on US Foreign Policy and Economic Interests

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Chairman Berman, ranking member Ros-Lehtinen, and members of the House Committee on Foreign Affairs, it is a pleasure to testify before you today on the rise of sovereign wealth funds and their potential impacts on US foreign policy and economic interests.

The broadest definition of a sovereign wealth fund (SWF) is a collection of government-owned or government-controlled assets. Narrower definitions may exclude government financial or nonfinancial corporations, purely domestic assets, foreign exchange reserves, assets owned or controlled by subnational governmental units, or some or all government pension funds. I use "sovereign wealth fund" as a descriptive term for a separate pool of government-owned or government-controlled assets that includes some international assets. I include all government pension, as well as nonpension, funds to the extent that they manage marketable assets. The basic objectives of both types are essentially the same. They raise virtually identical issues of best practice—the focus of my research and analysis—in government control and accountability regardless of their specific objectives, mandates, or sources of funding.

Sovereign wealth funds are funded from foreign exchange reserves, earnings from commodity exports, receipts from privatizations, other fiscal revenues, or pension contributions. (Table 1 lists 56 sovereign wealth funds of 38 countries.) These funds have been around for more than half a century with a range of structures, mandates, and economic, financial, and political (domestic and international) objectives—normally a mixture.[2] Consequently, it is perilous to generalize about sovereign wealth funds and associated potential threats to US foreign policy, national security, or economic interests.

Nevertheless, my summary conclusions are three:

First, sovereign wealth funds do not pose a significant new threat to US security or economic interests. We have adequate mechanisms to manage any potential threats they pose, which at this point are likely to be minimal.

Second, SWFs are one of the many challenges of global economic and financial change in the 21st century. Whether these particular challenges of globalization are appropriately addressed will have profound implications for the United States and for the world economy and financial system.

Third, the United States should continue to press countries with sovereign wealth funds to design and embrace best practices for these funds to enhance their accountability to citizens of the countries with the funds as well as to the citizens and markets in which they invest. At the same time, the United States should continue to try to minimize economic and political barriers to foreign

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[2] Table 1 also lists the dates when the funds were established, the sources of their funding, and estimates of their size. The table includes 44 SWFs that I have been able to identify that are not hard-wired to government pension funds and 12 representative pension SWFs. Note that the data in table 1, in the other tables attached to this testimony, and described in the text include the government pension SWFs of Chile and Thailand that were not part of the analysis presented in my *Blueprint for Sovereign Wealth Fund Best Practices* released as Policy Brief 08-3 by the Peterson Institute for International Economics, April 1, 2008.

investment in all forms from all sources here and around the world. Financial protectionism is the wrong answer to the very real challenges of financial globalization and the associated potential for global financial turbulence. The United States cannot disengage from evolving changes in the global financial system. If we were merely to hint that we are tempted to do so, we would risk catastrophic damage to the US and world economies.

It is useful to place the activities of sovereign wealth funds in a broader perspective. At the end of 2006, the estimated size of global capital markets was $190 trillion.[3] A conservative estimate of financial assets owned or controlled by governments is $15 trillion, or about 8 percent of global financial assets.[4] Governments in the United States own or control more than $3 trillion (20 percent) of the total.[5] Thus, the United States is in the business of sovereign wealth management. Consequently, we should be careful what we wish for.

International assets owned or controlled by governments are at least $10 trillion: $6 trillion in foreign exchange reserves, $2.7 trillion in assets of nonpension SWFs, and at least $1.3 trillion in government pension funds.[6] Excluding our modest holdings of foreign exchange reserves, international assets of US SWFs are about $800 billion mostly in the form of the pension funds of state and local governments. Thus, US sovereign wealth funds, as a group, are second to the United Arab Emirates in their holdings of international assets.

As an additional point of reference, at the end of 2006, US total holdings of foreign assets were $13.8 trillion. About 92 percent was managed by the private sector. Foreign holdings of US assets were $16.3 trillion. At least 17 percent was managed by the public sector.[7] US holdings of international financial assets are at least 20 percent of the global total. In other words, the US economy is thoroughly intertwined with the global financial system on both the asset and liability sides of our balance sheet through both the private and public sectors.

Over the past five years, the size of the global capital market has doubled, but asset holdings of SWFs have at least tripled. The explosive growth of SWFs reflects the sustained rise in commodity prices as well as global imbalances. However, the increased international diversification of financial portfolios—the weakening of so-called home bias—is as least as important as macroeconomic factors in explaining the growth of SWFs.

The increasing relative importance of SWFs has exposed two tensions as part of the ongoing globalization of the international financial system.

The first is the dramatic redistribution of international (or cross-border) wealth from the traditional industrial countries, like the United States, to countries that historically have not been major players in international finance. The newcomers have had little or no role in shaping the practices, norms, and conventions governing the system.

The second is the fact that governments own or control a substantial share of the new international wealth. This redistribution from private to public hands implies a decision-making orientation that is at variance with the traditional private-sector, market-oriented framework with which most of us are comfortable even though our own system does not fully conform to that ideal.

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[3] International Monetary Fund, *Global Financial Stability Report*, April 2008, table 3. The total includes stock market capitalization, public and private debt securities, and commercial bank assets.

[4] This estimate includes $6 trillion in foreign exchange reserves, $6 trillion in government pension funds (excluding the US social security fund and government pension funds that invest exclusively in government assets or are not involved in the management of marketable assets), and $3 trillion in assets of nonpension sovereign wealth funds.

[5] US governmental financial assets include $3 trillion in state and local government pension funds, $50 billion in other subnational SWF assets, and $40 billion in foreign exchange reserves.

[6] Based on various estimates, government pension funds around the world hold about $6 trillion in assets and roughly 25 percent of those are foreign.

[7] US and foreign data on the international stocks and flows of financial assets generally do not distinguish government from nongovernment holders. The above estimate of assets controlled by US governmental units includes federal government assets as reported by the Commerce Department (The US Net International Investment Position at Yearend 2006, Bureau of Economic Analysis, BEA 07-31, June 28, 2007) plus estimated holdings of $750 billion by state and local government pension funds that are included in our statistics among private sector assets. In the same Commerce Department release, foreign official assets in the United States include foreign exchange reserves and some holdings of sovereign wealth funds, but the data as collected do not distinguish between the two categories.

These twin tensions, in turn, are manifested in five broad concerns.

First, governments may mismanage their international investments to their own economic and financial detriment, including large-scale corruption in handling the huge amounts involved. It is a well known, though often ignored, regularity that governments are not good at picking economic winners; for example, government-owned banks tend to be less profitable than private banks. This concern about mismanagement is the principal reason why it is in the interests of every country with an SWF to favor the establishment of internationally agreed SWF best practices. Moreover, greater accountability of such funds is in the foreign policy interest of the United States because the mismanagement of SWF investments could lead to political as well as economic instability in countries with such funds.

Second, governments may manage SWF 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. Such behavior contributes not only to political conflicts between countries but also to economic distortions.

Third, financial protectionism may be encouraged in host countries in anticipation of the pursuit of political or economic objectives by the funds or in response to their actual actions. Development of and compliance with SWF best practices would help to diffuse this source of backlash against globalization. At the same time, countries receiving SWF investments should be as open as possible to such investments subject to the constraints of national security considerations narrowly defined.

Fourth, in the management of their international assets, SWFs may contribute to market turmoil and uncertainty. They also may contribute to financial stability, but their net contribution is difficult to establish a priori, in particular if their operations are opaque but also because judgments can be reached only on a case by case basis.

Fifth, foreign government owners of the international assets may come into conflict with the governments of the countries in which they are investing. For example, government ownership adds a further dimension in balancing open markets and appropriate macroprudential regulation.

At this point, these concerns, with the important exception of the first—potential adverse implications for the home countries—are largely in the realm of the hypothetical. The others are much more salient in the context of cross-border investments by government-owned or government-controlled financial or nonfinancial corporations. Nevertheless, a loud, often acrimonious, public discourse about SWFs is under way in many countries, and not only in countries receiving SWF investments.

In my view, the challenge is to make the world safe for sovereign wealth funds through the establishment of an internationally agreed voluntary set of best practices. The natural place to start is with the current practices of individual funds today. To this end, I have created with the assistance of Doug Dowson a scoreboard for 46 of the 56 funds listed in table 1, including the 12 pension SWFs.[8] The scoreboard rates funds on their current practices and includes 33 elements grouped in four categories: structure, governance, accountability and transparency, and behavior. We have scored the funds based on systematic, regularly available, public information. At least one fund receives a positive score on each element. In fact at least several do.

Table 2 provides a summary of the scoreboard results for all elements and for each of the four categories.[9] These results point to three take-away observations:

First, all sovereign wealth funds are not the same. Nor is there one cluster of "good" funds and another cluster of "bad' funds. The overall scores range from 95 to 9 out of a possible 100. The rating of each of them can be improved. The funds fall in three broad groups: 22 funds with scores

[8] We scored the two new Russian SWFs as the single fund it was before its recent transformation. The remaining nine funds, indicated by "c" in table 1, are either too new to score or we could not find sufficient information to do so.

[9] Table 3 provides the results for each fund on each element. The appendix provides a list of the 33 elements.

above 60, 14 funds with scores below 30, and 10 funds in a middle group. Moreover, the grouping of scores is essentially identical if one examines only the category of accountability and transparency.[10]

Second, although each of the 12 representative pension SWFs is in the top group, that group of 22 funds also includes 10 nonpension SWFs. Thus, it is not unreasonable to hold nonpension SWFs to the standard of accountability of pension funds. Chile's pension and nonpension SWFs both score in the top group. On the other hand, China's National Social Security Fund is in the top group, but the China Investment Corporation is in the bottom group.

Third, it is essentially impossible to correlate the ratings of the individual funds with the economic or political characteristics of their government owners. For example, the top group includes seven of the 14 funds with estimated assets of more than $100 billion, but four are in the second group, and two are in the third group.[11] The top group includes funds of a number of developing countries, including Azerbaijan, Chile, China, Kazakhstan, Thailand, and Timor-Leste. The middle group includes funds of nonindustrial countries as diverse as Russia, Mexico, Kuwait, and Singapore, whose two funds are in this group. Singapore's two funds have close-to-identical overall scores, but their scores differ on many individual elements. The bottom group includes three funds from Abu Dhabi, each of which has an excellent reputation in financial markets.

For some this diversity of current practice illustrates the challenge in developing a common set of best practices. In my view, it illustrates the opportunity to converge on a common high standard. A senior representative of the Abu Dhabi Investment Authority is co-chairing, with the director of the International Monetary Fund's (IMF) monetary and capital markets department, the International Working Group of Sovereign Wealth Funds to develop "a set of SWF principles that properly reflects their investment practices and objectives."[12] The decision by the authorities of the United Arab Emirates to provide a co-chairman for this group implies a commitment by them to enhance substantially the accountability and transparency of their SWFs.

In his letter of invitation to testify before this committee today, Chairman Berman raised three issues, other than the phenomenon of SWFs and their accountability and transparency, on which I have not yet commented explicitly.

First, he asked whether sovereign wealth funds have the potential to disrupt financial markets. All investors with large portfolios have the potential to disrupt financial markets whatever their motivation. However, the very size of their portfolios helps to inhibit them from doing so, in other words, discourages them from shooting themselves in their feet.

At the same time, it is inappropriate in my opinion to view SWFs as cornucopias available to be tapped to rescue the US or the global financial system. For every SWF investment in a US financial institution, that fund has to disinvest, or not invest, in some other asset, normally in the United States or at least in US dollars.

Some observers of private equity firms and hedge funds have concerns about their implications for the stability of our economy and financial system. I do not share most of those concerns though I have long favored increased transparency for large private equity firms and hedge funds. However, the facts do not support those who argue that SWFs are not like hedge funds and private equity firms in their speculative activities. Sovereign wealth funds invest in hedge funds, in private equity firms, and in other highly leveraged financial institutions whose activities, including the use of leverage, are indistinguishable from hedge funds and private equity firms. In effect, sovereign wealth funds are providing the capital that those firms subsequently leverage to generate high rates of return for the funds. They are no different from other investors except that their stakes may be measured in the billions rather than in the hundreds of millions of dollars.

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[10] The two exceptions are the National Oil Account of São Tomé and Principe, which drops into the bottom group of funds, and Singapore's Temasek, which moves into the top group.

[11] The fourteenth was not scored: the nonreserve holdings reported by the Saudi Arabian Monetary Agency.

[12] See IMF press release 08/97 dated May 1, 2008, "International Working Group of Sovereign Wealth Funds is Established to Facilitate Work on Voluntary Principles."

Second, Chairman Berman asked more generally whether the foreign policy and national security interests of countries with sovereign wealth funds pose a threat to the United States. It follows from what I have already said that my short answer is no.

I am not an expert on the foreign policy and national interests of each of the more than 30 countries with nonpension SWFs to say nothing of the additional countries that only have pension SWFs. However, it is clear that the interests of the individual countries are diverse, and perceptions of those countries fluctuate over time, in part, reflecting differences in the development and evolution of their political and social systems.

Policymakers are primarily interested in issues of underlying investment control even if they do not agree on how to define that concept. In this context, government-owned or -controlled financial and nonfinancial corporations are much more relevant because, in general, their activities are more focused and more easily integrated with foreign policy and national security objectives.

Although some SWFs do take controlling interests via their investments, more than half of the 46 funds we scored have explicit policies against doing so. A substantial proportion of the remaining 22 funds also do not seek controlling interests, but they do not have explicit, public policies in this area. Of course, it is possible to pursue foreign policy or national security interests without taking a controlling investment interest, but it is more difficult, and the investment interest is likely to be more narrowly focused and more easily identified. The essential point is that the activities of a few countries that have sovereign wealth funds and may use them to pursue political and economic interests should not be conflated with the motivations of the vast majority of countries that have such funds.

Finally, Chairman Berman asked for thoughts on how the US Congress and the administration can best "manage" sovereign wealth fund investing in the United States. I interpret his question as asking how the Congress and administration should best respond to the phenomenon of sovereign wealth funds.

Notwithstanding my view that the greatest risks associated with SWFs are to the citizens of the countries whose governments have accumulated the large stocks of international assets, authorities in the United States and other countries where those assets are invested also have legitimate concerns about how they will be managed. Those concerns focus primarily on acquisition of large or controlling stakes by foreign governments in private institutions. As noted, at present this is the exception not the rule for SWFs. However, one area of concern and potential conflict is the apparent use by a few countries, such as China and potentially Brazil, to use their SWFs to promote the expansion of their own economic enterprises.

Of course, the current, largely benign pattern could change, and foreign government–owned or –controlled financial and nonfinancial corporations do acquire stakes in companies in other countries, including controlling stakes. The 2007 Foreign Investment and National Security Act (FINSA) revised the framework and procedures of the Committee on Foreign Investment in the United States (CFIUS). With these changes and the existing powers of the Securities and Exchange Commission (SEC) as well as other US financial regulators, we are well positioned to evaluate and, if necessary, to mitigate, block, or pursue any US acquisitions or investment by an SWF or other foreign government entity to protect our national security or to enforce our laws and regulations governing financial markets and institutions.

With respect to economic security concerns, the greatest risk to the US economy is that we will erect unnecessary barriers to the free flow of capital into our economy and, in the process, contribute to the erection of similar barriers in other countries to the detriment of the health and continued prosperity of the US and global economies. We may not in all cases be comfortable with the consequences of the free flow of finance and investment either internally or across borders, but on balance it promotes competition and efficiency. We should exhaust all multilateral approaches before pursuing bilateral remedies, and any such bilateral remedies should be narrowly focused.

To this end, I endorse the administration's support of the Organization for Economic Cooperation and Development (OECD) process designed to strengthen the framework that the United States and other OECD member countries use to govern foreign investment including by governmental entities. At present that framework does not, in principle, extend to nonmembers of the OECD though often it does in practice. The United States should support its explicit extension to all countries.

My hope is that the OECD process will provide sufficient reassurance to countries with sovereign wealth funds so that, with the facilitation of the IMF, they can reach agreement on and fully comply with a voluntary set of best practices for their funds.

How should that IMF-facilitated effort be judged when it is completed in the fall of this year?

One test is whether the resulting set of best practices covers substantively all the elements included in my scoreboard. Of course, it is not essential to cover them precisely in the form outlined in the appendix to this testimony. However, each element should be adequately addressed. A significant omission should be seen as falling short of expectations.

A second test of success is whether the best practices are embraced by substantially all countries with large SWFs. Table 1 lists 14 SWFs with more than $100 billion in total assets. If each of them were to adhere to the prospective set of best practices, it is less critical that the others do so immediately. For each country, including those that choose not to adhere fully or at all, the minimum expectation should be that the country would comply, or it should explain why it does not do so in whole or in part.

A third test is the quality of compliance by the countries that embrace the best practices. If they are drawn up properly, the best practices should be self-enforcing. Politicians, the media, financial-market participants, and the general public in the home and host countries should be able to determine the degree of compliance.

On the other hand, if the voluntary best practices agreed under the auspices of the IMF are less precise than they should be, it will be necessary to have some mechanism to report on compliance. That function might be lodged in the IMF or the World Bank, which have experience with respect to overseeing compliance with 12 of the many existing international standards and codes. As is the case with existing standards subject to IMF and World Bank surveillance and oversight, the resulting process of implicit naming and shaming, combined with peer pressure from other SWFs that want to avoid the application of draconian restrictions to their activities, should contribute to a high level of compliance within a short period.

Some may favor supervisory inspections of SWFs beyond those that would be covered by IMF and World Bank surveillance plus published, independent audits as called for in my scoreboard. To my knowledge, no official has said so publicly. However, to advocate this type of supervision would sharply escalate the SWF debate from one about the content of and adherence to internationally agreed voluntary best practices to one about explicit regulation. At this point, such an escalation is neither appropriate nor justified on the merits.

On the recipient side, many countries today have (very diverse) regimes covering foreign direct investment in their countries. Pending the establishment of a broad consensus on those regimes as they apply to government investments, such as is being pursued within the OECD, and perhaps even in that context, the United States and other similarly situated countries might reasonably decide to take account of a country's voluntary compliance with the international best practices for SWFs as one of a number of factors considered in making determinations about whether a particular SWF's investment should be blocked because of a threat to national security. For example, in a March 13 letter to US Treasury Secretary Henry Paulson, Representatives Barney Frank, Carolyn Maloney, and Luis Gutierrez suggested that a country's compliance with aspects of SWF best practices could be used by the CFIUS as a factor in determining whether the committee should grant that country a waiver from a full investigation under FINSA of an investment, for example, by a government-owned pension fund.

More controversially, some observers have suggested that an SWF that takes even a noncontrolling stake in a company should be forbidden from voting its shares, presumably increasing the probability that the investment is "passive." My understanding is that there is no generally accepted legal definition of a passive investment. (I note that the proposed CFIUS regulations implementing the FINSA instead seek to define interests that are "solely for the purpose of investment," which is a more limited approach.) To limit the voting rights of government investors, if applied uniformly, would disenfranchise as much as several trillion dollars of investments by US state and local government pension funds. If the United States did not apply this type of restriction to domestic pension SWFs, it would still risk disenfranchising US government pension funds in their investment operations abroad. The reason is that it would be difficult to apply such a restriction to foreign nonpension SWFs and not to foreign pension SWFs. As a consequence, foreign governments almost certainly would retaliate in kind.

US Treasury Assistant Secretary Clay Lowery has suggested a more sensible approach: an SWF should either choose voluntarily not to vote its shares or disclose how it votes, as is now done voluntarily by some UK institutional investors and is required by the SEC for US mutual funds. The objective of the SEC rule for mutual funds is to address concerns about conflicts of interest and, as noted earlier, similar concerns arise with respect to SWFs. Presumably, the SWF would not face a formal SEC reporting requirement in this area; that would raise a host of other process and jurisdictional issues and also serve to escalate the SWF debate.

In conclusion, the phenomenon of sovereign wealth funds is a permanent feature of our global economy and financial system. Their potential impacts on US foreign policy, national security, and economic interests may be disquieting, but they do not endanger the United States. US authorities should exhaust all multilateral approaches to make the world safe for SWFs—in the form of SWF best practices and open financial environments—before turning to any additional, bilateral remedies for concerns that to date are between minimal and nonexistent.

Table 1: Sovereign wealth funds

Country	Current Name	Date Established	Source of Funds	Current Size[a] (billions of US dollars)	
NONPENSION FUNDS					
Algeria	Revenue Regulation Fund	2000	Natural resources	47	
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	1999	Natural resources	2	
Botswana	Pula Fund[b]	1993	Natural resources	7	
Brunei	Brunei Investment Agency	1983	Natural resources	35	(e)
Canada	Alberta Heritage Savings Trust Fund[d]	1976	Natural resources	17	
Chile	Economic and Social Stabilization Fund	2006	Natural resources	15	
China	China Investment Corporation[d]	2007	Foreign exchange reserves	200	
	Shanghai Financial Holdings[c,d]	2007	Fiscal surpluses	1	(e)
Gabon	Fund for Future Generations[c]	1998	Natural resources	0.4	(e)
Hong Kong	Exchange Fund Investment Portfolio[b,d]	1993	Foreign exchange reserves, fiscal surpluses	139	
Iran	Oil Stabilization Fund	2000	Natural resources	10	
Kazakhstan	National Fund for the Republic of Kazakhstan	2000	Natural resources	23	
Kiribati	Revenue Equalization Reserve Fund	1956	Natural resources	1	(e)
Korea	Korea Investment Corporation[b]	2005	Foreign exchange reserves	30	
Kuwait	Kuwait Investment Authority[d]	1953	Natural resources	213	
Libya	Libyan Investment Authority[c]	2006	Natural resources	50	
Malaysia	Khazanah Nasional[d]	1993	Fiscal surpluses	18	
Mexico	Oil Income Stabilization Fund	2000	Natural resources	5	
Nigeria	Excess Crude Account[b]	2003	Natural resources	17	(e)
Norway	Government Pension Fund – Global	1990	Natural resources	375	
Oman	State General Reserve Fund	1980	Natural resources	13	(e)
Qatar	Qatar Investment Authority	2005	Natural resources	60	(e)
Russia	National Wealth Fund[b]	2008	Natural resources	32	
	Reserve Fund[b]	2008	Natural resources	128	
São Tomé and Príncipe	National Oil Account	2004	Natural resources	0.02	(e)
Saudi Arabia	Saudi Arabian Monetary Agency[c]	1952	Natural resources	270	
Singapore	Government of Singapore Investment Corporation[b]	1981	Foreign exchange reserves, fiscal surpluses, employee contributions	200 – 330	(e)
	Temasek Holdings[d]	1974	Government enterprises	110	
Sudan	Oil Revenue Stabilization Account	2002	Natural resources	0.1	
Timor-Leste	Petroleum Fund	2005	Natural resources	2	
Trinidad and Tobago	Heritage and Stabilization Fund	2007	Natural resources	2	(e)
United Arab Emirates	Emirates Investment Authority[c]	2007	Natural resources	n.a.	
United Arab Emirates (Abu Dhabi)	Abu Dhabi Investment Authority and Council	1976	Natural resources	500 – 875	(e)
	International Petroleum Investment Company[c]	1984	Natural resources	12	
	Mubadala Development Company	2002	Natural resources	10	(e)
United Arab Emirates (Dubai)	DIFC Investments[c]	2006	Natural resources	n.a.	
	Dubai International Capital[c]	2004	Natural resources	13	
	Investment Corporation of Dubai[c]	2006	Natural resources	82	(e)
	Istithmar	2003	Natural resources	12	(e)
United States	Alaska Permanent Fund[d]	1976	Natural resources	37	
	Permanent Mineral Trust Fund (Wyoming)[d]	1974	Natural resources	4	
	Severance Tax Permanent Fund (New Mexico)[d]	1973	Natural resources	5	
Venezuela	Macroeconomic Stabilization Fund	1998	Natural resources	1	
	National Development Fund	2005	Natural resources	21	
***Subtotal*[e]**				**2,972**	
PENSION FUNDS					
Australia	Future Fund[d]	2006	Fiscal surpluses	53	
Canada	Canada Pension Plan[d]	1966	Employee contributions	121	
	Caisse de dépôt et placement du Québec[d]	1965	Employee contributions	157	
Chile	Pension Reserve Fund	2006	Fiscal surpluses	2	
China	National Social Security Fund[d]	2000	Fiscal surpluses	71	
France	Fonds de réserve pour les retraites[d]	2001	Fiscal surpluses	50	
Ireland	National Pensions Reserve Fund[d]	2001	Fiscal surpluses	31	
Japan	Government Pension Investment Fund[d]	1961	Employee contributions	1,274	
Netherlands	Stichting Pensioenfonds ABP[d]	1922	Employee contributions	316	
New Zealand	Superannuation Fund[d]	2001	Fiscal surpluses	10	
Thailand	Government Pension Fund[d]	1996	Employee contributions and fiscal surpluses	13	
United States	California Public Employees' Retirement System[d]	1932	Employee contributions	237	
Subtotal				**2,337**	
Total[e]				**5,308**	

(e) = estimate; n.a. = not available

a. Data are from the end of 2007 or the most recent date available.
b. Some or all assets are included in reserves.
c. Excluded from scoreboard.
d. A portion of the holdings is in domestic assets.
e. Total uses the midpoint of the range of estimates.

Sources: National authorities, IMF, other public sources.

Table 2: Summary sovereign wealth fund scoreboard (percent of maximum possible points)

Country	Fund	Structure	Governance	Accountability & Transparency	Behavior	Total
Canada	*Canada Pension Plan*	100	100	96	83	95
New Zealand	*Superannuation Fund*	100	100	100	75	95
United States (Alaska)	Alaska Permanent Fund	100	80	100	83	94
Canada (Québec)	*Caisse de dépôt et placement du Québec*	100	100	89	83	92
France	*Fonds de réserve pour les retraites*	100	100	89	83	92
Norway	Government Pension Fund – Global	94	100	100	67	92
United States (California)	*California Public Employees' Retirement System*	100	100	96	67	92
United States (Wyoming)	Permanent Mineral Trust Fund	100	90	82	100	91
Japan	*Government Pension Investment Fund*	100	90	80	83	87
Ireland	*National Pensions Reserve Fund*	100	100	86	58	86
United States (New Mexico)	Severance Tax Permanent Fund	100	50	86	100	86
Netherlands	*Stichting Pensioenfonds ABP*	100	100	86	50	85
Thailand	*Government Pension Fund*	100	100	88	42	84
Australia	*Future Fund*	100	80	68	83	80
Timor-Leste	Petroleum Fund for Timor-Leste	100	40	96	50	80
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	88	60	89	50	77
China	*National Social Security Fund*	100	40	82	67	77
Canada (Alberta)	Alberta Heritage Savings Trust Fund	94	60	79	50	74
Chile	Economic and Social Stabilization Fund	94	60	86	17	71
Chile	*Pension Reserve Fund*	94	60	86	17	71
Hong Kong	Exchange Fund	88	40	79	33	67
Kazakhstan	National Fund for the Republic of Kazakhstan	88	60	64	33	64
Botswana	Pula Fund	69	60	54	33	55
Trinidad and Tobago	Heritage and Stabilization Fund	100	60	46	0	53
Korea	Korea Investment Corporation	75	60	45	25	51
Russia	Reserve Fund and National Wealth Fund	72	40	50	33	51
São Tomé and Príncipe	National Oil Account	100	60	29	17	48
Kuwait	Kuwait Investment Authority	75	80	41	0	48
Mexico	Oil Income Stabilization Fund	69	20	43	50	47
Singapore	Temasek Holdings	50	50	61	0	45
Singapore	Government of Singapore Investment Corporation	63	40	39	17	41
Malaysia	Khazanah Nasional	44	50	46	0	38
China	China Investment Corporation	50	50	14	17	29
Kiribati	Revenue Equalization Reserve Fund	69	60	7	0	29
Algeria	Revenue Regulation Fund	56	40	11	17	27
Nigeria	Excess Crude Account	50	30	14	17	26
Iran	Oil Stabilization Fund	50	20	18	0	23
Venezuela	Macroeconomic Stabilization Fund	50	0	18	17	23
Venezuela	National Development Fund	38	0	27	0	20
Oman	State General Reserve Fund	50	0	18	0	20
Sudan	Oil Revenue Stabilization Account	56	0	14	0	20
Brunei Darussalam	Brunei Investment Agency	31	0	25	0	18
United Arab Emirates (Abu Dhabi)	Mubadala Development Company	44	10	7	0	15
United Arab Emirates (Dubai)	Istithmar World	38	10	7	0	14
Qatar	Qatar Investment Authority	34	0	2	0	9
United Arab Emirates (Abu Dhabi)	Abu Dhabi Investment Authority and Council	25	0	4	8	9
Subtotal Nonpension		68	41	44	25	46
Subtotal Pension		99	89	87	66	87
Total		76	53	55	35	56

Note: Pension funds are in italics.

Table 3: Scoreboard for sovereign wealth funds

		Structure								
			Fiscal Treatment							
		Objective Stated	Source of Funding	Use of Fund Earnings	Integrated with Budget	Guidelines Followed	Investment Strategy	Changes in the Structure	Separate from International Reserves	**Subtotal**
NONPENSION FUNDS										
Algeria	Revenue Regulation Fund	1	1	0.5	0	0	0	1	1	**4.5**
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	1	1	0.5	1	1	0.5	1	1	**7**
Botswana	Pula Fund	1	0.5	1	1	1	1	0	0	**5.5**
Brunei Darussalam	Brunei Investment Agency	1	0.5	0	0	0	0	1	0	**2.5**
Canada (Alberta)	Alberta Heritage Savings Trust Fund	1	1	1	1	0.5	1	1	1	**7.5**
Chile	Economic and Social Stabilization Fund	1	1	1	1	1	0.5	1	1	**7.5**
China	China Investment Corporation	1	1	0	0	0	1	0	1	**4**
Hong Kong	Exchange Fund	1	1	1	1	1	1	1	0	**7**
Iran	Oil Stabilization Fund	1	1	0.5	0	0	0	0.5	1	**4**
Kazakhstan	National Fund for the Republic of Kazakhstan	1	1	1	1	0.5	1	0.5	1	**7**
Kiribati	Revenue Equalization Reserve Fund	1	1	1	1	0	0.5	1	0	**5.5**
Korea	Korea Investment Corporation	1	1	0	1	1	1	1	0	**6**
Kuwait	Kuwait Investment Authority	1	1	0	1	0	1	1	1	**6**
Malaysia	Khazanah Nasional	1	1	0	0	0	0.5	0	1	**3.5**
Mexico	Oil Income Stabilization Fund	1	1	0.5	1	0	0.5	0.5	1	**5.5**
Nigeria	Excess Crude Account	1	1	1	0	0	0	1	0	**4**
Norway	Government Pension Fund – Global	1	1	1	1	0.5	1	1	1	**7.5**
Oman	State General Reserve Fund	0.5	1	0.5	0.5	0	0	0.5	1	**4**
Qatar	Qatar Investment Authority	1	0	0	0	0	0.25	0.5	1	**2.75**
Russia	Reserve Fund and National Wealth Fund	1	1	0.5	1	1	0.25	1	0	**5.75**
São Tomé and Príncipe	National Oil Account	1	1	1	1	1	1	1	1	**8**
Singapore	Government of Singapore Investment Corporation	1	0.5	1	1	1	0.5	0	0	**5**
Singapore	Temasek Holdings	1	1	0	0	0	1	0	1	**4**
Sudan	Oil Revenue Stabilization Account	0.5	1	0.5	1	0.5	0	0	1	**4.5**
Timor-Leste	Petroleum Fund for Timor-Leste	1	1	1	1	1	1	1	1	**8**
Trinidad and Tobago	Heritage and Stabilization Fund	1	1	1	1	1	1	1	1	**8**
United Arab Emirates (Abu Dhabi)	Abu Dhabi Investment Authority and Council	0.5	0	0	0	0	0.5	0	1	**2**
United Arab Emirates (Abu Dhabi)	Mubadala Development Company	1	0	0	0	0	0.5	1	1	**3.5**
United Arab Emirates (Dubai)	Istithmar World	1	0.5	0	0	0	0.5	0	1	**3**
United States (Alaska)	Alaska Permanent Fund	1	1	1	1	1	1	1	1	**8**
United States (New Mexico)	Severance Tax Permanent Fund	1	1	1	1	1	1	1	1	**8**
United States (Wyoming)	Permanent Mineral Trust Fund	1	1	1	1	1	1	1	1	**8**
Venezuela	Macroeconomic Stabilization Fund	1	1	0	0	0	0.5	0.5	1	**4**
Venezuela	National Development Fund	0.5	0.5	0	0	0	0	1	1	**3**
Total [a]		**32**	**28.5**	**18.5**	**20.5**	**15**	**20.5**	**23**	**26**	**5.4**
PENSION FUNDS										
Australia	Future Fund	1	1	1	1	1	1	1	1	**8**
Canada	Canada Pension Plan	1	1	1	1	1	1	1	1	**8**
Canada (Québec)	Caisse de dépôt et placement du Québec	1	1	1	1	1	1	1	1	**8**
Chile	Pension Reserve Fund	1	1	1	1	1	0.5	1	1	**7.5**
China	National Social Security Fund	1	1	1	1	1	1	1	1	**8**
France	Fonds de réserve pour les retraites	1	1	1	1	1	1	1	1	**8**
Ireland	National Pensions Reserve Fund	1	1	1	1	1	1	1	1	**8**
Japan	Government Pension Investment Fund	1	1	1	1	1	1	1	1	**8**
Netherlands	Stichting Pensioenfonds ABP	1	1	1	1	1	1	1	1	**8**
New Zealand	Superannuation Fund	1	1	1	1	1	1	1	1	**8**
Thailand	Government Pension Fund	1	1	1	1	1	1	1	1	**8**
United States (California)	California Public Employees' Retirement System	1	1	1	1	1	1	1	1	**8**
Total [a]		**12**	**12**	**12**	**12**	**12**	**11.5**	**12**	**12**	**8.0**
GRAND TOTAL [a]		**44**	**40.5**	**30.5**	**32.5**	**27**	**32**	**35**	**38**	**6.1**

a. For each category the value under subtotal represents the average for all funds.

Table 3: Scoreboard for sovereign wealth funds (continued)

		Governance						Accountability & Transparency			
								Investment Strategy Implementation			
		Role of Government	Role of Managers	Decisions made by managers	Guidelines for Corporate Responsibility	Ethical Guidelines	**Subtotal**	Categories	Benchmarks	Credit Ratings	Mandates
NONPENSION FUNDS											
Algeria	Revenue Regulation Fund	1	1	0	0	0	**2**	0	0	0	1
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	1	1	1	0	0	**3**	1	1	1	1
Botswana	Pula Fund	1	1	1	0	0	**3**	1	1	1	0
Brunei Darussalam	Brunei Investment Agency	0	0	0	0	0	**0**	0	0	0	1
Canada (Alberta)	Alberta Heritage Savings Trust Fund	1	1	1	0	0	**3**	1	1	0.5	0
Chile	Economic and Social Stabilization Fund	1	1	1	0	0	**3**	1	1	1	1
China	China Investment Corporation	1	1	0	0.5	0	**2.5**	0.5	0.5	0	0
Hong Kong	Exchange Fund	1	1	0	0	0	**2**	1	1	1	0
Iran	Oil Stabilization Fund	0.5	0.5	0	0	0	**1**	0	0	0	1
Kazakhstan	National Fund for the Republic of Kazakhstan	1	1	1	0	0	**3**	0.5	1	1	0
Kiribati	Revenue Equalization Reserve Fund	1	1	1	0	0	**3**	0	0	0	0
Korea	Korea Investment Corporation	1	1	1	0	0	**3**	0.5	0.5	1	0
Kuwait	Kuwait Investment Authority	1	1	1	0	1	**4**	0	0.5	1	0
Malaysia	Khazanah Nasional	0.5	1	0.5	0.5	0	**2.5**	0.5	1	0	0
Mexico	Oil Income Stabilization Fund	0.5	0.5	0	0	0	**1**	0	0	0	0
Nigeria	Excess Crude Account	0.5	1	0	0	0	**1.5**	0	0	0	1
Norway	Government Pension Fund – Global	1	1	1	1	1	**5**	1	1	1	1
Oman	State General Reserve Fund	0	0	0	0	0	**0**	0	0	0	0
Qatar	Qatar Investment Authority	0	0	0	0	0	**0**	0	0	0	0
Russia	Reserve Fund and National Wealth Fund	1	1	0	0	0	**2**	1	0	1	1
São Tomé and Príncipe	National Oil Account	1	1	1	0	0	**3**	0.5	0	0	1
Singapore	Government of Singapore Investment Corporation	0.5	0.5	1	0	0	**2**	0.5	1	0.5	0
Singapore	Temasek Holdings	0	1	1	0.5	0	**2.5**	0.5	0.5	0	0
Sudan	Oil Revenue Stabilization Account	0	0	0	0	0	**0**	0	0	0	1
Timor-Leste	Petroleum Fund for Timor-Leste	1	1	0	0	0	**2**	1	0.5	1	1
Trinidad and Tobago	Heritage and Stabilization Fund	1	1	1	0	0	**3**	1	0.5	0	1
United Arab Emirates (Abu Dhabi)	Abu Dhabi Investment Authority and Council	0	0	0	0	0	**0**	0.25	0.25	0	0
United Arab Emirates (Abu Dhabi)	Mubadala Development Company	0	0.5	0	0	0	**0.5**	0	0.5	0	0
United Arab Emirates (Dubai)	Istithmar World	0	0.5	0	0	0	**0.5**	0.25	0	0	0
United States (Alaska)	Alaska Permanent Fund	1	1	1	1	0	**4**	1	1	1	1
United States (New Mexico)	Severance Tax Permanent Fund	1	1	0.5	0	0	**2.5**	1	1	1	1
United States (Wyoming)	Permanent Mineral Trust Fund	1	1	1	0.5	1	**4.5**	1	1	1	1
Venezuela	Macroeconomic Stabilization Fund	0	0	0	0	0	**0**	0.5	0	0	1
Venezuela	National Development Fund	0	0	0	0	0	**0**	0.25	0	0	0
Total [a]		**21.5**	**24.5**	**16**	**4**	**3**	**2.0**	**16.75**	**15.75**	**14**	**16**
PENSION FUNDS											
Australia	Future Fund	1	1	1	1	0	**4**	1	1	0.5	1
Canada	Canada Pension Plan	1	1	1	1	1	**5**	1	1	1	1
Canada (Québec)	Caisse de dépôt et placement du Québec	1	1	1	1	1	**5**	1	1	0.5	1
Chile	Pension Reserve Fund	1	1	1	0	0	**3**	1	1	1	1
China	National Social Security Fund	1	1	0	0	0	**2**	1	1	1	1
France	Fonds de réserve pour les retraites	1	1	1	1	1	**5**	1	1	1	1
Ireland	National Pensions Reserve Fund	1	1	1	1	1	**5**	1	1	0	1
Japan	Government Pension Investment Fund	1	1	1	1	0.5	**4.5**	1	1	1	1
Netherlands	Stichting Pensioenfonds ABP	1	1	1	1	1	**5**	1	1	1	0
New Zealand	Superannuation Fund	1	1	1	1	1	**5**	1	1	1	1
Thailand	Government Pension Fund	1	1	1	1	1	**5**	1	1	1	1
United States (California)	California Public Employees' Retirement System	1	1	1	1	1	**5**	1	1	1	1
Total [a]		**12**	**12**	**11**	**10**	**8.5**	**4.5**	**12**	**12**	**10**	**11**
GRAND TOTAL [a]		**33.5**	**36.5**	**27**	**14**	**11.5**	**2.7**	**28.75**	**27.75**	**24**	**27**

a. For each category the value under subtotal represents the average for all funds.

Table 3: Scoreboard for sovereign wealth funds (continued)

		Investment Activities					Reports		Audit			
		Size	Returns	Location	Specific Investments	Currency Composition	Annual	Quarterly	Audited	Published	Independent	**Subtotal**
NONPENSION FUNDS												
Algeria	Revenue Regulation Fund	0.5	0	0	0	0	0	0	0	0	0	**1.5**
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	1	1	0.5	0	1	1	1	1	1	1	**12.5**
Botswana	Pula Fund	1	0	0	0	0	1	0.5	1	0	1	**7.5**
Brunei Darussalam	Brunei Investment Agency	0	0	0	0	0	0.5	0	1	0	1	**3.5**
Canada (Alberta)	Alberta Heritage Savings Trust Fund	1	1	1	0	0.5	1	1	1	1	1	**11**
Chile	Economic and Social Stabilization Fund	1	1	1	1	1	1	1	0.5	0	0.5	**12**
China	China Investment Corporation	1	0	0	0	0	0	0	0	0	0	**2**
Hong Kong	Exchange Fund	1	1	0.5	0	0.5	1	1	1	1	1	**11**
Iran	Oil Stabilization Fund	0.5	0.5	0	0	0	0.5	0	0	0	0	**2.5**
Kazakhstan	National Fund for the Republic of Kazakhstan	1	1	0.25	0	0.25	0.5	0.5	1	1	1	**9**
Kiribati	Revenue Equalization Reserve Fund	0	0	0	0	0	0.5	0.5	0	0	0	**1**
Korea	Korea Investment Corporation	1	0.25	0	0	0	0.5	0	1	0.5	1	**6.25**
Kuwait	Kuwait Investment Authority	1	0.5	0.25	0	0	0.5	0	1	0	1	**5.75**
Malaysia	Khazanah Nasional	1	1	1	0.5	0	0.5	0	1	0	0	**6.5**
Mexico	Oil Income Stabilization Fund	1	1	0	0	1	0.5	0.5	0.5	0.5	1	**6**
Nigeria	Excess Crude Account	0.5	0	0	0	0.5	0	0	0	0	0	**2**
Norway	Government Pension Fund – Global	1	1	1	1	1	1	1	1	1	1	**14**
Oman	State General Reserve Fund	0	0	0	0	0	0.5	0	1	0	1	**2.5**
Qatar	Qatar Investment Authority	0	0	0	0	0.25	0	0	0	0	0	**0.25**
Russia	Reserve Fund and National Wealth Fund	1	0.5	0.5	0	1	0.5	0.5	0	0	0	**7**
São Tomé and Príncipe	National Oil Account	0.5	0	0	0	0	0	0	1	0	1	**4**
Singapore	Government of Singapore Investment Corporation	0	0.25	0.25	0	0	0.5	0.5	1	0	1	**5.5**
Singapore	Temasek Holdings	1	1	1	0.5	0	1	0	1	1	1	**8.5**
Sudan	Oil Revenue Stabilization Account	1	0	0	0	0	0	0	0	0	0	**2**
Timor-Leste	Petroleum Fund for Timor-Leste	1	1	1	1	1	1	1	1	1	1	**13.5**
Trinidad and Tobago	Heritage and Stabilization Fund	1	0	0	0	0	0.5	0.5	1	0	1	**6.5**
United Arab Emirates (Abu Dhabi)	Abu Dhabi Investment Authority and Council	0	0	0	0	0	0	0	0	0	0	**0.5**
United Arab Emirates (Abu Dhabi)	Mubadala Development Company	0	0	0	0.5	0	0	0	0	0	0	**1**
United Arab Emirates (Dubai)	Istithmar World	0.5	0	0.25	0	0	0	0	0	0	0	**1**
United States (Alaska)	Alaska Permanent Fund	1	1	1	1	1	1	1	1	1	1	**14**
United States (New Mexico)	Severance Tax Permanent Fund	1	1	0	0	1	1	1	1	1	1	**12**
United States (Wyoming)	Permanent Mineral Trust Fund	1	1	0	0	0.5	1	1	1	1	1	**11.5**
Venezuela	Macroeconomic Stabilization Fund	1	0	0	0	0	0	0	0	0	0	**2.5**
Venezuela	National Development Fund	1	0	0	0	0	1	0.5	1	0	0	**3.75**
Total [a]		**24.5**	**15**	**9.5**	**5.5**	**10.5**	**18**	**13**	**21**	**11**	**19.5**	**6.2**
PENSION FUNDS												
Australia	Future Fund	1	1	0	0	0	1	0	1	1	1	**9.5**
Canada	Canada Pension Plan	1	1	0.5	1	1	1	1	1	1	1	**13.5**
Canada (Québec)	Caisse de dépôt et placement du Québec	1	1	1	1	1	1	0	1	1	1	**12.5**
Chile	Pension Reserve Fund	1	1	1	1	1	1	1	0.5	0	0.5	**12**
China	National Social Security Fund	1	1	0.5	0	0	1	1	1	1	1	**11.5**
France	Fonds de réserve pour les retraites	1	1	0.5	0	1	1	1	1	1	1	**12.5**
Ireland	National Pensions Reserve Fund	1	1	1	1	0	1	1	1	1	1	**12**
Japan	Government Pension Investment Fund	1	1	0.25	0	0	1	1	1	1	1	**11.25**
Netherlands	Stichting Pensioenfonds ABP	1	1	0.5	1	1	1	0.5	1	1	1	**12**
New Zealand	Superannuation Fund	1	1	1	1	1	1	1	1	1	1	**14**
Thailand	Government Pension Fund	1	1	0.25	1	0	1	1	1	1	1	**12.25**
United States (California)	California Public Employees' Retirement System	1	1	0.5	1	1	1	1	1	1	1	**13.5**
Total [a]		**12**	**12**	**7**	**8**	**7**	**12**	**9.5**	**11.5**	**11**	**11.5**	**12.2**
GRAND TOTAL [a]		**36.5**	**27**	**16.5**	**13.5**	**17.5**	**30**	**22.5**	**32.5**	**22**	**31**	**7.8**

a. For each category the value under subtotal represents the average for all funds.

Table 3: Scoreboard for sovereign wealth funds (continued)

		Behavior							Grand Total
						Derivatives			
		Portfolio Adjustment	Limits on Stakes	No Controlling Stakes	Policy on Leverage	Policy on Derivatives	For Hedging Only	**Subtotal**	
NONPENSION FUNDS									
Algeria	Revenue Regulation Fund	0	0	1	0	0	0	**1**	**9**
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	0	0	1	0	1	1	**3**	**25.5**
Botswana	Pula Fund	0	0	1	0	1	0	**2**	**18**
Brunei Darussalam	Brunei Investment Agency	0	0	0	0	0	0	**0**	**6**
Canada (Alberta)	Alberta Heritage Savings Trust Fund	0	0	0	1	1	1	**3**	**24.5**
Chile	Economic and Social Stabilization Fund	0	0	1	0	0	0	**1**	**23.5**
China	China Investment Corporation	0	0	1	0	0	0	**1**	**9.5**
Hong Kong	Exchange Fund	0	0	0	0	1	1	**2**	**22**
Iran	Oil Stabilization Fund	0	0	0	0	0	0	**0**	**7.5**
Kazakhstan	National Fund for the Republic of Kazakhstan	0	0	0	0	1	1	**2**	**21**
Kiribati	Revenue Equalization Reserve Fund	0	0	0	0	0	0	**0**	**9.5**
Korea	Korea Investment Corporation	0.5	0	0	0	1	0	**1.5**	**16.75**
Kuwait	Kuwait Investment Authority	0	0	0	0	0	0	**0**	**15.75**
Malaysia	Khazanah Nasional	0	0	0	0	0	0	**0**	**12.5**
Mexico	Oil Income Stabilization Fund	0	0	1	0	1	1	**3**	**15.5**
Nigeria	Excess Crude Account	0	0	1	0	0	0	**1**	**8.5**
Norway	Government Pension Fund – Global	1	1	1	0.5	0.5	0	**4**	**30.5**
Oman	State General Reserve Fund	0	0	0	0	0	0	**0**	**6.5**
Qatar	Qatar Investment Authority	0	0	0	0	0	0	**0**	**3**
Russia	Reserve Fund and National Wealth Fund	0	1	1	0	0	0	**2**	**16.75**
São Tomé and Príncipe	National Oil Account	0	0	1	0	0	0	**1**	**16**
Singapore	Government of Singapore Investment Corporation	0	0	0.5	0	0.5	0	**1**	**13.5**
Singapore	Temasek Holdings	0	0	0	0	0	0	**0**	**15**
Sudan	Oil Revenue Stabilization Account	0	0	0	0	0	0	**0**	**6.5**
Timor-Leste	Petroleum Fund for Timor-Leste	0	0	1	0	1	1	**3**	**26.5**
Trinidad and Tobago	Heritage and Stabilization Fund	0	0	0	0	0	0	**0**	**17.5**
United Arab Emirates (Abu Dhabi)	Abu Dhabi Investment Authority and Council	0	0.25	0.25	0	0	0	**0.5**	**3**
United Arab Emirates (Abu Dhabi)	Mubadala Development Company	0	0	0	0	0	0	**0**	**5**
United Arab Emirates (Dubai)	Istithmar World	0	0	0	0	0	0	**0**	**4.5**
United States (Alaska)	Alaska Permanent Fund	0	1	1	1	1	1	**5**	**31**
United States (New Mexico)	Severance Tax Permanent Fund	1	1	1	1	1	1	**6**	**28.5**
United States (Wyoming)	Permanent Mineral Trust Fund	1	1	1	1	1	1	**6**	**30**
Venezuela	Macroeconomic Stabilization Fund	0	0	1	0	0	0	**1**	**7.5**
Venezuela	National Development Fund	0	0	0	0	0	0	**0**	**6.75**
Total [a]		**3.5**	**5.25**	**15.75**	**4.5**	**12**	**9**	**1.5**	**15.1**
PENSION FUNDS									
Australia	Future Fund	0	1	1	1	1	1	**5**	**26.5**
Canada	Canada Pension Plan	0	1	1	1	1	1	**5**	**31.5**
Canada (Québec)	Caisse de dépôt et placement du Québec	0	1	1	1	1	1	**5**	**30.5**
Chile	Pension Reserve Fund	0	0	1	0	0	0	**1**	**23.5**
China	National Social Security Fund	0	1	1	0	1	1	**4**	**25.5**
France	Fonds de réserve pour les retraites	1	1	1	0	1	1	**5**	**30.5**
Ireland	National Pensions Reserve Fund	0.5	0	1	0	1	1	**3.5**	**28.5**
Japan	Government Pension Investment Fund	1	1	1	0	1	1	**5**	**28.75**
Netherlands	Stichting Pensioenfonds ABP	1	0	0	0	1	1	**3**	**28**
New Zealand	Superannuation Fund	0	0.5	1	1	1	1	**4.5**	**31.5**
Thailand	Government Pension Fund	0	1	1	0	0.5	0	**2.5**	**27.75**
United States (California)	California Public Employees' Retirement System	1	0	0	1	1	1	**4**	**30.5**
Total [a]		**4.5**	**7.5**	**10**	**5**	**10.5**	**10**	**4.0**	**28.6**
GRAND TOTAL [a]		**8**	**12.75**	**25.75**	**9.5**	**22.5**	**19**	**2.1**	**18.6**

a. For each category the value under subtotal represents the average for all funds.

APPENDIX
Scoreboard for Sovereign Wealth Funds

This appendix presents the elements of the scoreboard described in the testimony. For each of the 33 questions, if the answer is an unqualified yes, we score it as "1." If the answer is no, we score it as "0." However, partial scores of 0.25, 0.50, and 0.75 are recorded for many elements, indicated by (p) in the descriptions below.

The four categories in the scoreboard are listed below with subcategories where relevant. The words in bold are keyed to the results presented in table 3 for each SWF on each element.

Structure

1. Is the SWF's objective clearly communicated? (p)

Fiscal Treatment

2. Is the **source of** the SWF's **funding** clearly specified? (p)
3. Is nature of the subsequent **use** of the principal and earnings of the fund clearly stated? (p)
4. Are these elements of fiscal treatment **integrated with** the **budget**? (p)
5. Are the **guidelines** for fiscal treatment generally **followed** without frequent adjustment? (p)

Other Structural Elements

6. Is the overall **investment strategy** clearly communicated? (p)
7. Is the procedure for **changing the structure** of the SWF clear? (p)
8. Is the SWF **separate from** the country's **international reserves**?

Governance

9. Is the **role of the government** in setting the investment strategy of the SWF clearly established? (p)
10. Is the **role of the managers** in executing the investment strategy clearly established? (p)
11. Are **decisions** on specific investments made **by the managers**? (p)
12. Does the SWF have in place and publicly available **guidelines for corporate responsibility** that it follows? (p)
13. Does the SWF have **ethical guidelines** that it follows? (p)

Transparency and Accountability

Investment Strategy Implementation

14. Do regular reports on investments by the SWF include information on the **categories** of investments? (p)
15. Does the strategy use **benchmarks**? (p)
16. Does the strategy limit investments based on **credit ratings**? (p)
17. Are the holders of investment **mandates** identified?

Investment Activities

18. Do regular reports on the investments by the SWF include the **size of** the **fund**? (p)
19. Do regular reports on the investments by the SWF include information on its **returns**? (p)
20. Do regular reports on the investments by the SWF include information on the geographic **location** of investments? (p)
21. Do regular reports on the investments by the SWF include information on the **specific** investments? (p)
22. Do regular reports on the investments by the SWF include information on the **currency composition** of investments? (p)

Reports

23. Does the SWF provide at least an **annual report** on its activities and results? (p)
24. Does the SWF provide **quarterly reports**? (p)

Audits

25. Is the SWF subjected to a **regular** annual **audit**? (p)
26. Is the audit **published** promptly? (p)
27. Is the audit **independent**? (p)

Behavior

28. Does the SWF indicate the nature and **speed of adjustment** in its portfolio? (p)
29. Does the SWF have limits on the **size of** its **stakes**? (p)
30. Does the SWF not take **controlling stakes**? (p)
31. Does the SWF have a policy on the use of **leverage**? (p)
32. Does the SWF have a policy on the use of **derivatives**? (p)
33. Are derivatives used primarily for **hedging**?