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Progress on Sovereign Wealth Fund Transparency and Accountability: An Updated SWF Scoreboard

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Authors' note: We thank Steve Weisman for very helpful comments on an earlier draft. This revision reflects the 2011 replacement of Iran's Oil Stabilization Fund with its National Development Fund as a member of the International Forum of Sovereign Wealth Funds. We have scored the latter as the successor of the former.

The term sovereign wealth fund (SWF) had not been coined a decade ago. By 2007, economists and the financial world were alternatively excited about or alarmed by the growing influence of these institutions, though in fact many of them had been around for decades. Politicians in countries in which the funds invested generally welcomed the additional financial resources from abroad while expressing concern about the motivations of investors and what they feared could be threats to political, economic, and financial security. The general public in the countries in which the funds were based realized at the same time that political leaders were investing large amounts of national wealth at home and abroad with limited disclosure, and they wanted to know more.

Following the global economic and financial crisis of 2008–09, the highly publicized debate over SWFs died down, in part because the assets managed by the funds stopped growing as rapidly as many had predicted. In addition, the general public in both recipient and home countries learned more about the funds, and the authorities and managers responsible for SWFs in many countries took steps to demystify the funds. For example, in September 2008 the International Working Group (IWG) of Sovereign Wealth Funds adopted a set of Generally Accepted Principles and Practices for SWFs in Santiago, Chile. This framework is known as the Santiago Principles. Truman was an early advocate of greater transparency and accountability for SWFs and, in part with Bagnall, actively participated in subsequent reviews of progress.[1]

This Policy Brief provides an update on the transparency and accountability of SWFs based on the SWF scoreboard that Truman first developed in 2007 and subsequently refined. For comparison, we have also scored the funds according to the Santiago Principles.[2] Many SWFs, in particular funds associated with the International Forum of Sovereign Wealth Funds (IFSWF), which succeeded the IWG in 2009, have made substantial progress in responding to demands at home and abroad for greater transparency and accountability about their activities. However, that progress has not been uniform. Moreover, most of the newer SWFs appear not to be following the example of the best of the older funds. The IFSWF also has fallen short in promoting the substantial adherence of some of its members to those principles.

The highest scoring funds are those of Norway, New Zealand, Chile, the United States (Alaska), and Ireland. Norway's Government Pension Fund–Global currently is the largest in the world as well as the highest ranking, but it is the only fund ranking in the top five that has more than $50 billion in assets under management. Each of these funds, as well as six of the next seven high-ranking funds, is associated with the IFSWF. At the other end of the spectrum, three of five lowest-scoring funds, those of Qatar, Libya, and Equatorial Guinea, are also associated with the IFSWF, and the estimated

1. See Truman (2007, 2008a, 2008b, 2008c, 2010, 2011) and Bagnall and Truman (2011).

2. Our scoring of SWFs on the Santiago Principles uses the elements of the SWF scoreboard where there is an overlap.

size of the Qatar Investment Authority is more than $100 billion and of the Libyan Investment Authority more than $50 billion. The IFSWF appears to have been broadly, but not universally, successful in raising global standards of transparency and accountability of SWFs.

Norway's Government Pension Fund–Global currently is the largest in the world as well as the highest ranking, but it is the only fund ranking in the top five that has more than $50 billion in assets under management.

In what follows, we first review updated estimates of the size of SWFs.[3] We next present the 2012 SWF scoreboard including six funds that we have scored for the first time. We also examine the progress in accountability and transparency that has been achieved, on the basis of this standard, since 2007. In addition, we compare results based on the Santiago Principles, and we look briefly at three other related indicators of transparency.

GROWTH OF SWFS

A rough estimate is that the total assets of SWF assets sextupled between the end of 2002 and the end of 2007, at which point assets under management were $2.8 trillion (Truman 2008c), on the IWG's definition of SWFs. Contemporary estimates (Truman 2010, 17) were that they would have reached as much as $7.5 trillion by 2011, $12 trillion by 2015, and $17.5 trillion by 2017. Truman (2010, table 2.1) estimated total SWF assets in mid-2010 at $3.1 trillion, including $2.6 trillion in foreign assets. As shown in table 1, estimated total SWF assets as of mid-2013 were $4.2 trillion, including $3.6 trillion in foreign assets—increases of almost 40 percent from mid-2010.[4]

Thus, SWFs have not grown at the rate that was anticipated six years ago.[5] Some have failed.[6] Nevertheless, SWFs remain important international financial players; 18 SWFs have estimated assets of more than $50 billion, nine have assets of more than $100 billion, and five have assets of more than $300 billion. Consequently the accountability and transparency of SWFs remain a matter of public concern in both host and home countries.

THE 2012 SWF SCOREBOARD

Table 2 presents a summary assessment of the accountability and transparency of 49 SWFs and nine government pension funds using the SWF scoreboard that Truman first developed in 2007, updated with the most recently available information.[7] In this new edition of the scoreboard, we include six new SWFs and dropped one SWF, as discussed below.[8] Therefore, table 2 provides results for 49 SWFs and nine government pension funds for a total of 58 funds, which is five more than the 54 funds scored in the 2009 edition of the scoreboard. The funds scored span 52 countries, 48 of which have SWFs, four with only government pension funds and five with both.

3. In this Policy Brief, we employ the definition of a SWF adopted by the International Working Group of SWFs (IWG 2008, 3). That definition includes government pension reserve funds as SWFs. These are funds that are not directly linked to the financing of social security systems but are expected to be used for that purpose in the future. The definition does not include other forms of government pension funds. However, we report some information on such funds in some of the tables that follow. The IWG agreed: "SWFs are special purpose investment funds or arrangements that are owned by the general government. Created by the general government for macroeconomic purposes, SWFs hold, manage, or administer assets to achieve financial objectives, and employ a set of investment strategies that include investing in foreign financial assets." The IWG noted that "general government includes both central government and subnational government." It added, "SWFs are commonly established out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports." This language on the financial resources used to establish and expand SWFs is also found in the International Monetary Fund's (IMF) Sixth Balance of Payments and International Investment Position Manual (IMF 2009).

4. The total figure is essentially identical to the Sovereign Wealth Fund Institute (SWFI) estimate for June 2010, $4.1 trillion, scaled down by 25 percent. See www.swfinstitute.org/fund-rankings (accessed July 1, 2013). The SWFI estimates include some entities that do not fit the IWG definition of SWFs. Based on the SWFI figures for June 2013 the estimate in table 1 of total SWF assets is about 25 percent lower than the SWFI estimate of $5.5 trillion.

5. The SWFI estimates imply an increase in SWF assets of 59 percent over the six-year period. Interestingly, the imprecise proxy for SWF investments in the United States, the line in the US international investment position data "other foreign official assets," implies a 90 percent increase in SWF investments in the United States over the same period.

6. We have dropped Papua New Guinea's Mineral Resource Stabilization Fund, which has not been scored, from this tabulation in table 1 because it has failed; see Monk (2010). It is not the first, nor likely to be the last, SWF to have failed; domestic politics and poor design often defeat sound intentions.

7. Appendix A provides a description of the SWF-scoreboard approach, the 33 individual elements included in the scoreboard, and how the scoreboard has evolved. Appendix B provides the 2012 scores for each of the 49 SWFs and nine government pension funds. The assessment was completed in July 2013, using currently available information, but in many cases that information is from the end of 2012. Therefore, this scoreboard should be regarded as the 2012 scoreboard, and the results in Truman (2010) as the 2009 scoreboard.

8. We treat the Oil Revenue Stabilization Account previously owned by Sudan as being owned by Sudan and South Sudan because that is the way we understand the terms of the agreement to create a new country. However, there is not a lot of information on its activities.

Table 1 SWF assets (billions of US dollars)

Country	Fund	Total assets	Foreign assets
Norway	*Government Pension Fund-Global**	720	720
UAE (Abu Dhabi)	*Abu Dhabi Investment Authority**	627**	627**
China	*China Investment Corporation**	482	187
Hong Kong	*Exchange Fund*	359	334
Kuwait	*Kuwait Investment Authority**	342	342
Singapore	*Government of Singapore Investment Corporation**	248**	248**
Singapore	*Temasek Holdings**	174	122
Russia	*National Welfare Fund and Reserve Fund**	171	171
Qatar	*Qatar Investment Authority**	115**	115**
Australia	*Future Fund (PR)**	88	61
Kazakhstan	*National Fund*	76	64
UAE (Dubai)	*Investment Corporation of Dubai*	70*	70*
UAE (Abu Dhabi)	*International Petroleum Investment Company*	65	65
Korea	*Korea Investment Corporation**	57	57
Libya	*Libyan Investment Authority**	56**	56**
Algeria	*Revenue Regulation Fund*	55	55
UAE (Abu Dhabi)	*Mubadala Development Company*	55	22**
Iran	*National Development Fund*	54	18**
United States	*Alaska Permanent Fund**	47	17
Malaysia	*Khazanah Nasional**	40	4
Azerbaijan	*State Oil Fund**	35	35
Brunei	*Brunei Investment Agency*	30**	30**
United States	Texas Permanent School Fund	29	8
New Zealand	*Superannuation Fund (PR)**	23	18
Chile	*Economic and Social Stabilization Fund**	22	22
Kazakhstan	National Investment Corp	20	20**
Canada	*Alberta Heritage Savings Trust Fund**	17	7
Ireland	*National Pensions Reserve Fund (PR)**	15	4**
Timor-Leste	*Petroleum Fund**	13	13
UAE (Dubai)	*Dubai International Capital*	13**	12**
UAE (Dubai)	*Istithmar World*	12**	12**
Bahrain	*Mumtalakat Holding Company*	11**	9**
Oman	*State General Reserve Fund*	8*	8*
Chile	*Pension Reserve Fund (PR)**	6	6
Mexico	*Oil Income Stabilization Fund**	6	6
United Arab Emirates	Emirates Investment Authority	6	6
United States	*Permanent Mineral Trust Fund (Wyoming)*	6	1
Brazil	*Sovereign Wealth Fund of Brazil*	5**	2**
Angola	*Fundo Soberano de Angola*	5**	5**
Botswana	*Pula Fund**	5	5
Canada	Fonds des générations	5	2**
Trinidad and Tobago	*Heritage and Stabilization Fund**	5	5
Peru	Fiscal Stabilization Fund	4	4
United States	*Severance Tax Permanent Fund (New Mexico)*	4	0.5

(continues)

Table 1 SWF assets (billions of US dollars) *(continued)*

Country	Fund	Total assets	Foreign assets
United States	*Alabama Trust Fund*	2	0.6
Colombia	Oil Stabilization Fund	2**	2**
UAE (Ras al Khaimah)	RAK Investment Authority	1**	1**
China	Shanghai Financial Holdings	1**	1**
Nigeria	*Sovereign Investment Authority*	1	1
North Dakota	Legacy Fund	1	1**
Ghana	*Ghana Petroleum Funds*	0.9	.9**
Venezuela	*National Development Fund*	0.8**	0.8**
Venezuela	*Macroeconomic Stabilization Fund*	0.8	0.8
Vietnam	*State Capital Investment Corporation*	0.7	0.7
Kiribati	*Revenue Equalization Reserve Fund*	0.6*	0.6*
Turkmenistan	Stabilization Fund	0.5**	0.5**
UAE (Dubai)	DIFC Investments	0.5**	0.5**
Gabon	Fund for Future Generations	0.4	0.4
Uganda	Poverty Action Fund	0.4**	0.4**
Indonesia	Government Investment Unit of Indonesia	0.3	0.3
Mauritania	National Fund for Hydrocarbon Reserves	0.3	0.3
Mongolia	Fiscal Stability Fund	0.3	0.3**
Panama	Fondo de Ahorro de Panama	0.3	0.3**
São Tomé and Príncipe	*National Oil Account*	0.1**	0.1**
Sudan /South Sudan	*Oil Revenue Stabilization Account*	0.1	0.1
Equatorial Guinea	*Fund for Future**	0.08*	0.08*
Nauru	Phosphate Royalties Trust	0.06	0.06
Subtotal		4,221	3,609
of which IFSWF members		3,384	2,869
of which non-IFSWF members		837	740
Country	**Government pension funds**	Total Assets	Foreign Assets
Japan	*Government Pension Investment Fund*	1,293	292
Netherlands	*Stichting Pensioenfonds ABP*	369	303**
United States	*California Public Employees' Retirement System*	258	71
Canada	*Canada Pension Plan*	183	116
Canada	*Caisse de dépôt placement du Québec*	176	75
China	*National Social Security Fund (China)*	161	32**
Canada	*Ontario Teachers' Pension Plan*	130	60**
France	*Fonds de réserve pour les retraites*	48	32**
Thailand	*Government Pension Fund (Thailand)*	17	3**
Subtotal		2,635	984
Total		6,852	4,595

Note: Funds evaluated on the SWF scoreboard are italicized.

* denotes International Forum of Sovereign Wealth Funds (IFSWF) member.
** denotes estimate.
PR denotes a pension reserve fund.

Source: National and international reports.

Table 2 2012 SWF scoreboard

Country	Fund	Score
Norway	Government Pension Fund-Global	98
New Zealand	Superannuation Fund (PR)	94
Chile	Economic and Social Stabilization Fund	91
United States	Alaska Permanent Fund	91
Ireland	National Pensions Reserve Fund (PR)	90
Australia	Future Fund (PR)	89
United States	Wyoming Permanent Mineral Trust Fund	89
Azerbaijan	State Oil Fund	88
Canada	Alberta Heritage Savings Trust Fund	86
Chile	Pension Reserve Fund (PR)	85
Timor-Leste	Petroleum Fund	85
Trinidad and Tobago	Heritage and Stabilization Fund	83
United States	New Mexico Severance Tax Permanent Fund	79
Singapore	Temasek Holdings	76
Kuwait	Kuwait Investment Authority	73
Kazakhstan	National Fund	71
Hong Kong	Exchange Fund	70
Korea	Korea Investment Corporation	69
United States	Alabama Trust Fund	67
Singapore	Government of Singapore Investment Corporation	66
United Arab Emirates	Mubadala Development Company	65
China	China Investment Corporation	64
Malaysia	Khazanah Nasional	59
United Arab Emirates	Abu Dhabi Investment Authority	58
Botswana	Pula Fund	56
United Arab Emirates	Dubai International Capital	55
Russia	National Welfare Fund and Reserve Fund	53
São Tomé & Principe	National Oil Account	48
Ghana	Petroleum Funds	47
United Arab Emirates	International Petroleum Investment Company	46
Mexico	Oil Income Stabilization Fund	44
Iran	National Development Fund	41
Bahrain	Mumtalakat Holding Company	39
Vietnam	State Capital Investment Corporation	38
Kiribati	Revenue Equalization Reserve Fund	35
Brazil	Sovereign Fund of Brazil	30
Algeria	Revenue Regulation Fund	29
Venezuela	National Development Fund	29
Oman	State General Reserve Fund	27
Venezuela	Macroeconomic Stabilization Fund	27
Brunei Darussalam	Brunei Investment Agency	21
United Arab Emirates	Investment Corporation of Dubai	21
Nigeria	Sovereign Investment Authority	18

(continues)

Table 2 2012 SWF scoreboard *(continued)*

Country	Fund	Score
Sudan/South Sudan	Oil Revenue Stabilization Account	18
Qatar	Qatar Investment Authority	17
United Arab Emirates	Istithmar World	17
Angola	Fundo Soberano de Angola	15
Libya	Libyan Investment Authority	6
Equatorial Guinea	Fund for Future Generations	2
SWF average (49)		54
IFSWF members (26)		65
Non-IFSWF members (23)		42
	Pension funds	
United States	California Public Employees' Retirement System	95
Canada	Canada Pension Plan	93
France	Fonds de réserve pour les retraites	93
Canada	Caisse de dépôt et placement du Québec	91
Japan	Government Pension Investment Fund	86
Canada	Ontario Teachers' Pension Plan	85
Netherlands	Stichting Pensioenfonds ABP	85
Thailand	Government Pension Fund	80
China	National Social Security Fund	70
Pension fund average (9)		86
All funds average (58)		59

IFSWF = International Forum of Sovereign Wealth Funds

Note: The number of funds in each subgroup is indicated in the parentheses. PR denotes a pension reserve fund.

Source: Appendix B.

The scoreboard has 33 individual elements that are equally weighted and translated into a 100-point scale. The average score for all funds (pension and nonpension) is 59. The average for all funds is positively skewed by the nine pension funds' average of 86; the average for the SWFs alone is 54. Within the group of SWFs, the 26 funds that are members of the IFSWF average 65, and the 23 nonmembers average 42.

As was the case with the 2009 scoreboard published in Truman (2010), the scores for the SWFs are distributed widely from a low of 2 for Equatorial Guinea's Fund for Future Generations to a high of 98 for Norway's Government Pension Fund–Global.[9] The funds do not fall into one high-scoring group and another low-scoring group. Instead, 12 funds score above 80; 14 funds score 30 or below; and 23 funds score more than 30 and 80 or less.

The evolution of the SWF scoreboard results since Truman published the first scoreboard in 2007 is discussed in some detail below. However, in brief, since the 2009 scoreboard (published in 2010), the number of SWFs scoring above 80 has increased from 7 to 12. Conversely, the number of funds scoring 30 or below has also increased, from 13 to 14.[10] The principal reason for this increase in the number of low-scoring funds is that in the 2012 scoreboard we have scored six new funds, and five of them score 30 or less, including Nigeria's new Sovereign Investment Authority, at 18, which is even lower than Nigeria's liquidated Excess Crude Account that scored 29 in 2009.[11] The other newly scored funds include

9. Norway's SWF has consistently scored at or near the top on the SWF scoreboards. Its score has increased from 97 on the 2009 scoreboard to 98 because, in our judgment, it now has a clearly stated policy on the use of leverage (element 31). The SWF does not receive a perfect score because we give it only partial credit for having a policy on the use of derivatives (element 32). The SWF provides a great deal of information on its use of derivatives, but we could not find a statement of underlying policy in that area.

10. Table 5.1 in Truman (2010) lists the score for the Abu Dhabi Investment Authority (ADIA) at 11, but text box 5.2 updated that score to 58, reducing the number of funds scoring 30 or less to 13.

11. The Nigerian Sovereign Investment Authority was established in 2011, and reportedly its board approved its investment policies in May 2013, but the *Financial Times* reported on June 25, 2103 ("Volatility Delays Investment

Equatorial Guinea's Fund for Future Generations (2) and the Libyan Investment Authority (6). We could find essentially no reliable public information on these funds, which was not unexpected, but we wanted to include them because they are members of the IFSWF and, in principle, adhere to the Santiago Principles.

Notwithstanding the apparent lack of progress in increasing the transparency and accountability of some SWFs, a number of SWFs have made substantial progress over the five years since the publication of the first SWF scoreboard, from 2007 to 2012.

We scored the new, as of 2009, Sovereign Fund of Brazil (30) because it has the potential to become very large. Brazil's record on transparency has been uneven. Brazil released the annual International Monetary Fund (IMF) staff report on its Article IV consultation for the first time only last year. And only in the past few years has Brazil begun to release IMF reports on the stability of its financial system. On the other hand, Brazil has subscribed to the Special Data Dissemination Standard and releases a considerable amount of information on its debt and fiscal situation as well as on domestic inflation.

We also scored the new (2011) Ghana Petroleum Funds (47) and Angola's new (2012) Fundo Soberano de Angola (15) because both these funds are important as African extractive-economy models. We were entirely not encouraged by the results. The score of Ghana's SWF places it in the middle group but below the average for all funds. The creation of this SWF was politically controversial in Ghana, because societies are tempted to consume the wealth now before politicians can steal or misuse it; for that reason the government took care in establishing the Ghanaian SWF's legal structure. But the subsequent evidence of careful implementation is skimpy.[12] We also wanted to score Mongolia's Fiscal Stability Fund, established in 2011, because it could play a significant role in contributing to that country's macroeconomic stability in the context of a boom in its commodity exports; however, there is insufficient information available to do any type of an assessment of that fund.[13]

For each of the five newly scored SWFs with very low scores, it might be argued that there are extenuating circumstances. A more disturbing conclusion is that despite the availability of the Santiago Principles, to say nothing of the SWF scoreboard, to guide their policies on transparency and accountability, these funds have fallen substantially short, or continue to fall substantially short, of many of their peers. It is also discouraging that only three of the SWFs that registered 30 or less on the 2009 scoreboard have moved up significantly: Bahrain's Mumtalakat Holding Company, whose score improved marginally to 39, Iran somewhat more to 41, and United Arab Emirates' International Petroleum Investment Company, whose score increased to 46.

ASSESSING PROGRESS

Notwithstanding the apparent lack of progress in increasing the transparency and accountability of some SWFs, a number of SWFs have made substantial progress over the five years since the publication of the first SWF scoreboard, from 2007 to 2012.[14,15] The upper panel of table 3 summarizes the progress of 32 SWFs and the California Public Employees' Retirement System (CalPERS). The average total change in the score of these 32 SWFs is 17 percentage points. The change in the score for CalPERS is 8 percentage points, from a higher 2007 score than for the 32 SWFs, suggesting that the trend toward greater transparency and accountability is not limited to SWFs.

As can be seen from table 3, a number of funds made significant improvements in the entire 2007–12 period, led by the Abu Dhabi Investment Authority (ADIA) and the Government of Singapore Investment Corporation, with increases of more than 50 percentage points each, and Chile's Economic and Social Stabilization Fund, Trinidad and Tobago's Heritage and Stabilization Fund, the Korea Investment Corporation, the UAE's Mubadala Development Company, the China Investment Corporation, and the UAE's

from Nigeria Sovereign Wealth Fund") (accessed July 22, 2013) that it has delayed making its initial investments. This may explain why the SWF has yet to provide much information on its activities.

12. For example, the governing law requires both annual reports and semiannual reports, but the public record so far includes only semiannual reports by the Bank of Ghana. They focus more on tracing the funds flowing from the petroleum investments than on the deployment of the funds into the two components of the SWF: a stabilization fund and a longer-term investment fund.

13. The same is true for the SWFs of Libya and Equatorial Guinea, but in those cases we wanted to establish the lack of information in connection with their membership in the IFSWF.

14. As described in appendix A, some adjustments in the SWF scoreboard were made between 2007 and 2009, which accounts for some of the minus signs in the 2007–09 column in the table. However, the results are broadly comparable; see Truman (2010, 89–91).

15. The 2009 scores are slightly different from those published in Truman (2010) because we have included the score for the ADIA that appeared in the text boxes (5.2 and 6.1) and we have marginally adjusted the scores for a few elements for a few countries to make them consistent with the other 2009 scores.

Table 3 Progress on SWF transparency and accountability

Country	Fund	2012 score	Change in percentage points 2009–12	2007–09	2007–12
	Funds first scored in 2007				
Norway	*Government Pension Fund-Global*	98	1	5	6
New Zealand	*Superannuation Fund (PR)*	94	0	2	2
Chile	*Economic and Social Stabilization Fund*	91	9	20	29
United States	*Alaska Permanent Fund*	91	0	19	19
Australia	*Future Fund (PR)*	89	9	12	21
Azerbaijan	*State Oil Fund*	88	12	10	22
Canada	*Alberta Heritage Savings Trust Fund*	86	13	–5	8
Timor-Leste	*Petroleum Fund*	85	0	–2	–2
Trinidad and Tobago	*Heritage and Stabilization Fund*	83	0	34	34
Singapore	*Temasek Holdings*	76	3	19	22
Kuwait	*Kuwait Investment Authority*	73	10	15	25
Kazakhstan	National Fund	71	6	7	13
Korea	*Korea Investment Corporation*	69	9	24	33
Singapore	*Government of Singapore Investment Corporation*	66	1	56	57
United Arab Emirates	Mubadala Development Company	65	6	45	51
China	*China Investment Corporation*	64	7	33	40
Malaysia	*Khazanah Nasional*	59	15	6	21
United Arab Emirates	*Abu Dhabi Investment Authority*	58	0	56	56
Botswana	*Pula Fund*	56	0	–2	–2
Russia	*National Welfare Fund and Reserve Fund*	53	3	12	15
São Tomé & Principe	National Oil Account	48	0	–1	–1
Mexico	*Oil Income Stabilization Fund*	44	0	16	16
Iran	*National Development Fund*	41	12	7	19
Kiribati	Revenue Equalization Reserve Fund	35	0	5	5
Algeria	Revenue Regulation Fund	29	0	11	11
Venezuela	National Development Fund	29	2	3	5
Oman	State General Reserve Fund	27	4	3	7
Venezuela	Macroeconomic Stabilization Fund	27	0	5	5
Brunei Darussalam	Brunei Investment Agency	21	0	11	11
Sudan/South Sudan	Oil Revenue Stabilization Account	18	0	–2	–2
Qatar	*Qatar Investment Authority*	17	2	7	9
United Arab Emirates	Istithmar World	17	0	2	2
Average		59	4	14	17
Memo: United States	California Public Employees' Retirement System	95	0	8	8
	Funds first scored in 2009				
Canada	Canada Pension Plan	93	1		
France	Fonds de réserve pour les retraites	93	4		
Canada	Caisse de dépôt et placement du Québec	91	2		
Ireland	*National Pensions Reserve Fund (PR)*	90	4		
United States	Wyoming Permanent Mineral Trust Fund	89	0		
Japan	Government Pension Investment Fund	86	2		
Chile	*Pension Reserve Fund (PR)*	85	17		
Canada	Ontario Teachers' Pension Plan	85	2		

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Table 3 Progress on SWF transparency and accountability *(continued)*

Country	Fund	2012 score	Change in percentage points 2009–12
	Funds first scored in 2009 *(continued)*		
Netherlands	Stichting Pensioenfonds ABP	85	0
Thailand	Government Pension Fund	80	2
United States	New Mexico Severance Tax Permanent Fund	79	0
Hong Kong	Exchange Fund	70	0
China	National Social Security Fund	70	0
United States	Alabama Trust Fund	67	0
United Arab Emirates	Dubai International Capital	55	0
United Arab Emirates	International Petroleum Investment Company	46	20
Bahrain	*Mumtalakat Holding Company*	39	9
Vietnam	State Capital Investment Corporation	38	3
United Arab Emirates	Investment Corporation of Dubai	21	0
Average		72	3

Notes: Funds associated with the IFSWF (International Forum of Sovereign Wealth Funds) are italicized. PR denotes a pension reserve fund.

Sources: Appendix B and Truman (2010, 2008b).

International Petroleum Investment Company, with increases of 20 percentage points or more each.

A number of the SWFs with substantial increases in their scores over the entire period have also made substantial progress over the past three years.[16] These include Azerbaijan's State Oil Fund, Alberta Canada's Heritage Savings Trust Fund, the Kuwait Investment Authority, Malaysia's Khazanah Nasional, Iran's National Development Fund, and, as shown in the lower panel, Chile's Pension Reserve Fund and the UAE's International Petroleum Investment Company, each with an increase of at least 10 percentage points. In general, larger increases in scores were recorded in the 2007–09 period, when the SWF issue was hot and pressure on SWFs to be more transparent and accountable was significant.

Table 4 presents changes in scores from the vantage point of the 24 individual elements that have been common to each of the SWF scoreboards for the 32 SWFs that have been scored since 2007. This allows us to measure the areas of improvement over time for the funds that we've been scoring since the initial edition of the scoreboard in 2007. The table also provides some perspective on the relative scores on these elements for all funds as of 2012.

The average for the 24 elements is 60 (out of 100), which is close to the average score of 54 for all 33 elements in 2012. It is not surprising that the highest scores for individual elements are those for a clear statement of an SWF's objective and its source of funding, followed by the role of managers in the fund, having a clear process for changing the fund's structure, and the size of the fund. The last element is not required or recommended by the Santiago Principles though 75 percent of these 32 SWFs and currently 80 percent of the 49 funds in the 2012 scoreboard release at least some information about their size.[17] The lowest scores are recorded for elements on whether an SWF has a publicly stated guideline on the nature and speed of the adjustment in its portfolio, which would help to limit market disruption, and whether it has a publicly stated guideline for ethical investment, which would govern what types of investments the SWF does not undertake. What may be most surprising about the scores on these 24 elements is how dispersed they are. This dispersion of behavior of the individual funds emphasizes a basic feature of the SWF scoreboard: Each element has been adopted by at least one fund.[18]

Not so surprisingly, most of the improvement in scores on the individual elements was during the 2007–09 period, with substantially less since 2009. The most substantial overall improvements, based on changes in percentage points, were with respect to clarity about how a fund's structure can be changed, identifying the holders of investment mandates,

16. Of course, the room for improvement for some funds was limited. Three of the 32 SWFs scored at 85 or above in the 2007 SWF scoreboard, and seven did so in the 2009 scoreboard.

17. Ten funds release no information.

18. In fact, among the 49 funds, the minimum number is six practitioners for the speed of adjustment and 11 for having ethical investment guidelines.

Table 4 Comparison of 24 SWF scoreboard elements

Element	2102 score	Change in percentage points 2009–12	2007–09	2007–12
Structure				
Objective stated	97	3	6	9
Changes in structure	78	3	35	38
Investment strategy	75	7	15	22
Source of funding	88	0	8	8
Use of fund earnings	59	1	6	7
Integrated with policies	62	0	8	8
Separate from international reserves	72	0	0	0
Average	*76*	*2*	*11*	*12*
Governance				
Role of government	75	2	20	22
Role of managers	77	0	7	7
Guidelines for corporate responsibility	28	9	5	14
Ethical investment guidelines	21	10	2	12
Average	*50*	*5*	*9*	*14*
Accountability and transparency				
Categories of investments	69	5	21	26
Mandates identified	50	0	33	33
Size of fund	75	0	7	7
Returns of fund	59	4	22	26
Location of investments	48	7	16	23
Specific investments	30	7	12	19
Currency composition	44	11	7	18
Annual reports	67	1	22	23
Quarterly reports	41	2	8	10
Regular audits	74	2	17	19
Published audits	54	10	20	30
Independent audits	72	5	12	17
Average	*57*	*5*	*16*	*21*
Behavior				
Portfolio adjustment	11	0	6	6
Overall average	60	4	13	17

Sources: Appendix B and Truman (2010, 2008b).

publishing audits, and publishing information on the returns of funds. In the more recent period, the most substantial improvements were with respect to providing information on the currency composition of investments, having ethical investment guidelines, and publishing audits.

THE SANTIAGO PRINCIPLES

This section compares the 2012 performance of the 49 SWFs and nine pension funds on the SWF scoreboard to the Santiago Principles. The Santiago Principles include 30 principles and subprinciples. They overlap with 25 of the 33 elements in the

SWF scoreboard; see Truman, (2010, appendix 6A) for the correspondence.[19] Alternatively, 16 of the 24 major Santiago Principles overlap with one or more of the elements in the SWF scoreboard. Table 5 presents the scores of the SWFs and government pension funds on the SWF scoreboard and two versions of the Santiago Principles: 25 and 16 elements.[20]

The rankings of funds are broadly similar. In fact, the simple correlation of the scoreboard scores with the 25 elements included in the Santiago Principles is 0.9912, and the correlation with the 16 elements is 0.9609. The average score on the Santiago principles is 3 to 5 percentage points higher, but this difference is not statistically significant.[21] Interestingly the higher average score is essentially the same for the 26 funds that are associated with the IFSWF, which sponsors the Santiago Principles, as for the 23 funds that are not. One might expect that the funds that are associated with the IFSWF would be more inclined to tailor their adherence to international standards in the direction of the Santiago Principles, rather than the independent SWF scoreboard.

Seven SWFs record slightly lower scores on the 25-element version of the Santiago Principles than on the SWF scoreboard, and 12 funds have lower scores on the 16-element version of the Santiago Principles. Only three funds stand out with scores on the 25-element version of the Santiago principles that are 10 percentage points or more higher than on the SWF scoreboard: the Government of Singapore Investment Corporation, the ADIA, and São Tomé and Principe's National Oil Account. They are joined on the 16-element version by the China Investment Corporation, Dubai International Capital, Kiribati's Revenue Equalization Reserve Fund, and the Fundo Soberano de Angola. On the whole, the tale of transparency and accountability told by the SWF scoreboard and that told by the Santiago Principles are very similar. The principal difference is the improvement in performance, as of 2012, of those funds that are associated with the IFSWF and those that are not.

Returning to table 3, the 24 funds associated with the IFSWF are identified in italics.[22] Four of the funds already had received high scores in the earliest editions of the SWF scoreboard; they did not have much room to improve because their scores at the start were 85 or above, though most scores did increase marginally.[23] Thirteen of the funds have recorded increases in their scores of 20 percentage points or more, in either the 2007–12 period or just the 2009–12 period, and only two of those were not directly associated with the IFSWF: Abu Dhabi's Mubadala Development Company and its International Petroleum Investment Company.[24]

Considering only the 32 SWFs that were first scored in 2007, the 21 funds that now are associated with the IFSWF had an average SWF scoreboard score at that time of 49, which has increased 21 percentage points on average to 71 in 2012. In contrast, the 11 funds that are not associated with the IFSWF had a lower average score of 25 in 2007, and a more modest 10 percentage point average increase to 35 in 2012. Of the 49 SWFs scored in 2012, 26 were recorded above the mean of 54, of which 19 (73 percent) are associated with the IFSWF. Of the 23 recorded below the mean, only 7 (30 percent) were associated with the IFSWF. Thus, we can conclude that association with the IFSWF appears to have served as an incentive for a number of funds to improve their performance.

On the other hand, the seven IFSWF funds that are now below the average for all SWFs are problematic in different degrees.[25] The funds of Russia and Mexico have boosted their SWF scores by 15 and 16 percentage points, respectively, since 2007 but remain below the mean. The scores for the other four SWFs associated with the IFSWF started out at 30 or

19. In fact, some elements from the Santiago Principles were incorporated into the SWF scoreboard when it was revised in 2010; see appendix A. The drafters of the Santiago Principles also were aware of the guidance offered to them in Truman (2008).

20. In the latter case, the scores of more than one element on the SWF scoreboard are averaged to produce a composite score for one of the Santiago Principles; see Truman (2010, appendix 6A).

21. A small bias is introduced into the scoring because with a smaller number of elements each element that receives a score of 1.0 has a larger value on a scale of 100. This may, in part, explain the fact that the nine pension funds also score higher on the two versions of the Santiago Principles and by a similar margin of 3 percentage points.

22. The website of the IFSWF associates two funds in Singapore and two in Chile with those countries' membership. (Note: we scored two of the 26 SWFs associated with the IFSWF for the first time only in the 2012 scoreboard.) Conversely, in the case of the United Arab Emirates and the United States, which have multiple SWFs that we have scored, only one is associated with each of those countries on the website. These funds are the ADIA and Alaska Permanent Fund, respectively.

23. The exception is Timor-Leste's Petroleum Fund, where a slight decline is recorded, reflecting changes in elements in the scoreboard.

24. Of the six SWFs associated with the UAE, three are linked to Abu Dhabi and three to Dubai (Dubai International Capital, Investment Corporation of Dubai, and Istithmar World). The average for the three Abu Dhabi funds on the 2012 SWF scoreboard is 56 and each has improved its score. The average for the three Dubai funds is 31, with only Dubai International Capital, at 55, about the average for all SWFs. All of the Abu Dhabi funds have improved their initial scores. Only Istithmar World, among the Dubai funds, has recorded a marginal improvement. It would appear that there has been some positive "neighborhood effect" in Abu Dhabi. In contrast, we find no such neighborhood effect among the five US funds that we have scored, CalPERS and four subnational SWFs. Only the Alaska Permanent Fund is linked to the IFSWF. Both CalPERS and the Alaska fund have improved their scores since 2007 when they were first scored, by 8 percentage points to 95 for CalPERS and by 19 percentage points to 91 for Alaska; the scores for the other three US subnational SWFs are unchanged from 2009 when they were first scored, averaging 78, 13 percentage points less than Alaska's SWF; see table 3.

25. It does not matter whether the SWF scoreboard, the 25 Santiago Principles, or the 16 Santiago Principles are used to rate these funds, the averages come out about the same at 27, 28, and 27, respectively.

Table 5 2012 SWF scoreboard and the Santiago Principles

Country	Fund	Scoreboard	Santiago Principles	
			25 elements	16 elements
Norway	Government Pension Fund-Global	98	98	99
New Zealand	Superannuation Fund (PR)	94	98	97
Chile	Economic and Social Stabilization Fund	91	92	92
United States	Alaska Permanent Fund	91	94	91
Ireland	National Pensions Reserve Fund (PR)	90	94	85
Australia	Future Fund (PR)	89	96	96
United States	Wyoming Permanent Mineral Trust Fund	89	94	93
Azerbaijan	State Oil Fund	88	90	87
Canada	Alberta Heritage Savings Trust Fund	86	90	89
Chile	Pension Reserve Fund (PR)	85	86	83
Timor-Leste	Petroleum Fund	85	80	73
Trinidad and Tobago	Heritage and Stabilization Fund	83	82	81
United States	New Mexico Severance Tax Permanent Fund	79	78	68
Singapore	Temasek Holdings	76	82	84
Kuwait	Kuwait Investment Authority	73	77	85
Kazakhstan	National Fund	71	75	78
Hong Kong	Exchange Fund	70	74	71
Korea	Korea Investment Corporation	69	76	77
United States	Alabama Trust Fund	67	74	69
Singapore	Government of Singapore Investment Corporation	66	79	82
United Arab Emirates	Mubadala Development Company	65	70	72
China	China Investment Corporation	64	70	79
Malaysia	Khazanah Nasional	59	64	69
United Arab Emirates	Abu Dhabi Investment Authority	58	71	78
Botswana	Pula Fund	56	62	64
United Arab Emirates	Dubai International Capital	55	62	73
Russia	National Welfare Fund and Reserve Fund	53	56	49
São Tomé & Principe	National Oil Account	48	58	60
Ghana	Petroleum Funds	47	54	54
United Arab Emirates	International Petroleum Investment Company	46	47	53
Mexico	Oil Income Stabilization Fund	44	42	40
Iran	National Development Fund	41	48	45
Bahrain	Mumtalakat Holding Company	39	43	39
Vietnam	State Capital Investment Corporation	38	42	45
Kiribati	Revenue Equalization Reserve Fund	35	44	54
Brazil	Sovereign Fund of Brazil	30	32	36
Algeria	Revenue Regulation Fund	29	32	32
Venezuela	National Development Fund	29	27	30
Oman	State General Reserve Fund	27	32	32
Venezuela	Macroeconomic Stabilization Fund	27	28	25
Brunei Darussalam	Brunei Investment Agency	21	28	25
United Arab Emirates	Investment Corporation of Dubai	21	22	19
Nigeria	Sovereign Investment Authority	18	24	23

(continues)

Table 5 2012 SWF scoreboard and the Santiago Principles *(continued)*

			Santiago Principles	
Country	**Fund**	**Scoreboard**	**25 elements**	**16 elements**
Sudan/South Sudan	Oil Revenue Stabilization Account	18	16	16
Qatar	Qatar Investment Authority	17	17	20
United Arab Emirates	Istithmar World	17	16	19
Angola	Fundo Soberano de Angola	15	20	27
Libya	Libyan Investment Authority	6	7	5
Equatorial Guinea	Fund for Future Generations	2	2	2
SWF average (49)		54	58	58
IFSWF members (26)		65	68	69
Non-IFSWF members (23)		42	46	47
	Pension funds			
United States	California Public Employees' Retirement System	95	96	96
Canada	Canada Pension Plan	93	97	96
France	Fonds de réserve pour les retraites	93	93	95
Canada	Caisse de dépôt et placement du Québec	91	98	97
Japan	Government Pension Investment Fund	86	89	91
Canada	Ontario Teachers' Pension Plan	85	88	91
Netherlands	Stichting Pensioenfonds ABP	85	84	87
Thailand	Government Pension Fund	80	83	84
China	National Social Security Fund	70	74	68
Pension fund average (9)		86	89	89
All funds average (59)		59	63	63

IFSWF = International Forum of Sovereign Wealth Funds

Note: The number of funds in each subgroup is indicated in the parentheses. PR denotes a pension reserve fund.

Source: Appendix B.

lower and—with the exception of Iran's successor National Development Fund, which has recorded an increase of 19 percentage points to a still-low total, and Bahrain's Mumtalakat Holding Company, which has recorded a small increase of 9 percentage points—are still below 30 as of 2012. In the case of two funds, those of Libya and Equatorial Guinea, perhaps the low scores and lack of improvement is not surprising, given political conditions in those countries. In the cases of Bahrain's Mumtalakat Holding Company and the Qatar Investment Authority (QIA), the limited improvement is decidedly disappointing.

The score for Bahrain's SWF has increased 9 points since 2009. Public information about its structure and governance remains meager though it does a bit better on the elements relating directly to transparency and accountability in its operations. (See appendix B.) With respect to transparency, its website states, "We always maintain the highest standards of international corporate governance and openness." The website also notes its score of 9 out of 10 on the Linaburg-Maduell Transparency Index for Sovereign Wealth Funds.

The QIA is associated in the press with a number of high-profile investments through Qatar Holding, a subsidiary. These investments include ownership of Harrods and stakes in Barclays Bank (which has sparked controversy), Volkswagen, and Credit Suisse. With more than $100 billion in estimated assets under management, financial market participants and the citizens of Qatar as well as the citizens of host countries to the QIA's investments are justified to expect more transparency and accountability. Qatar Holding announced on February 19, 2013 that it would seek a credit rating.[26] Doing so would require more disclosure of the fund's activities, but that has not yet occurred. Moreover, the website of QIA contains very little or no information germane to either the SWF scoreboard or the Santiago Principles. It declares, "As usual with many global investment institutions which are not listed on the public markets, the QIA does not publish financial information. We are acknowledged, however, as a well resourced, responsible

26. See "Qatar Holding to see Credit Rating, Didn't have Debt Last Year," http://www.qatarholding.qa/Media%20Center/QH%20News/Pages/QHSeeksCreditRate.aspx (accessed July 16, 2013).

investor, as manifested by our track record of transactions." Such a claim is impossible to substantiate without supporting documentation. In this case, the Linaburg-Maduell rating provides less of an endorsement, at 5 out of 10, but that relative score is still substantially higher than the QIA receives on the SWF scoreboard or the Santiago Principles.

What are we to conclude about the IFSWF and the Santiago Principles? It is a mixed story so far. First, the Santiago Principles were a compromise and, as a result, are not as rigorous as outsiders would prefer. For example, they are not explicit about what information should be publicly disclosed. In addition, 10 of the 30 Santiago Principles and subprinciples have little to do with the public and, rather, focus on relations between the fund and its government. Managers of SWFs, like central bankers that are often their philosophical cousins if not their de facto brothers and sisters, treasure their independence from their governments, which is a questionable long-term posture for both.

Also, as part of the 2008 compromise, the Santiago Principles do not call for SWFs to disclose their size, though about 80 percent of funds do so. They also are silent about the need to distinguish between SWF funds and international reserves; about 60 percent of SWFs make that distinction. They do not call for disclosure of the currency composition of investments although more than a third of all SWFs do so. They are silent on providing information on specific investments, but one-third of funds do so. And they do not advocate that SWF audits be published despite the fact that more than 50 percent of all SWFs and two-thirds of funds associated with the IFSWF do so. Given that SWF transparency is of primary concern to citizens in SWF home and investment host countries, we consider these points of nondisclosure to be of considerable importance. The size of a fund is an indication of its potential influence; information on reserves, currency composition, and investment suggest how the fund is transparent and accountable in its management of that influence.

Second, however, it would appear from the results presented above that association with the IFSWF has provided an incentive to a number of funds to increase their transparency and accountability. On the other hand, not all funds associated with the IFSWF have responded to such incentives, and progress among nonmembers lags substantially behind progress among members.

Third, it is gratifying that Malaysia and its Khazanah Nasional have recently quietly joined the IFSWF; a search of the internet turned up no announcement of that decision, but they are listed as members on the IFSWF website. Nevertheless, three economies with SWFs with estimated assets under management of more than $50 billion have not joined the IFSWF: Kazahkstan's National Fund, Hong Kong's Exchange Fund, and Algeria's Revenue Regulation Fund. The first and second register a reasonably respectable 71 and 70, respectively, on the SWF scoreboard, and the third is at 32.

COMPARISON WITH OTHER TRANSPARENCY INDEXES

Neither the Santiago Principles nor the SWF scoreboard is the only game in town when it comes to assessing the transparency and accountability of SWFs or the countries with which they are associated. In this final section, we look at the correlation between the SWF scoreboard measure of transparency and accountability of SWFs and the March 2013 Linaburg-Maduell Transparency Index for SWFs associated with the Sovereign Wealth Fund Institute, the Revenue Watch Institute's 2013 Resource Governance Index, and Transparency International's 2012 Corruption Perceptions Index. Table 6 presents results from the 2012 SWF scoreboard for the 49 SWFs along with comparable results on the Linaburg-Maduell index, where available for the SWF, and on the Revenue Watch Institute's index and the Transparency International index where available for the home country.

The scores on the three indexes are strongly correlated with the SWF scoreboard results at a very high level of significance.[27] This result is not surprising. The high correlation is also somewhat reassuring because each index looks at the SWF elephant and its sponsoring country from a slightly different perspective.

Truman (2010, 94–96) is critical of the Lindburg-Maduell index for being superficial in some of its 10 elements (such as: Does the fund have a website?), not releasing the resulting scores for each element, and for combining many factors into some elements, such as portfolio value, returns, and management compensation, without providing any information about how the factors were weighted within each element. Although the Linaburg-Maduell index yields results that are broadly similar to the SWF scoreboard, it assigns high scores, relative to the SWF scoreboard, to the SWFs of Korea, Bahrain, Brazil, Qatar, and three funds of the United Arab Emirates, and relatively low scores to Singapore's Temasek and the SWF of Kiribati.

The Revenue Watch Institute's country index rates highly, again relative to the scoreboard for one or more of their SWFs, Ghana, Mexico, Brazil, Venezuela, Nigeria, and Angola, and the reverse for Azerbaijan, Timor-Leste, and Kuwait. On the other hand Transparency International's Corruption Perceptions Index rates relatively highly the United Arab

27. The simple correlation coefficients with the SWF scoreboard are 0.8049, 0.6067, and 0.6007, respectively. Each is significant at the 1 percent level. In the case of the Revenue Watch and Transparency International indexes, the scores for SWFs from the same country were averaged before calculating the correlation.

Table 6 2012 SWF scoreboard and other transparency indexes

Country	Fund	2012 SWF scoreboard	Linaburg-Maduell Index	Resource Governance Index	Corruption Perceptions Index
Norway	Government Pension Fund-Global	98	10	98	85
New Zealand	Superannuation Fund (PR)	94	10	n.a.	90
Chile	Economic and Social Stabilization Fund	91	10	75	72
United States	Alaska Permanent Fund	91	10	92	73
Ireland	National Pensions Reserve Fund (PR)	90	10	n.a.	69
Australia	Future Fund (PR)	89	10	85	85
United States	Wyoming Permanent Mineral Trust Fund	89	9	92	73
Azerbaijan	State Oil Fund	88	10	48	27
Canada	Alberta Heritage Savings Trust Fund	86	9	76	84
Chile	Pension Reserve Fund (PR)	85	10	75	77
Timor-Leste	Petroleum Fund	85	8	68	33
Trinidad and Tobago	Heritage and Stabilization Fund	83	8	74	39
United States	New Mexico Severance Tax Permanent Fund	79	9	92	73
Singapore	Temasek Holdings	76	10	n.a.	87
Kuwait	Kuwait Investment Authority	73	6	41	44
Kazakhstan	National Fund	71	8	57	28
Hong Kong	Exchange Fund	70	8	n.a.	77
Korea	Korea Investment Corporation	69	9	n.a.	56
United States	Alabama Trust Fund	67	n.a.	92	73
Singapore	Government of Singapore Investment Corporation	66	6	n.a.	87
United Arab Emirates	Mubadala Development Company	65	10	n.a.	68
China	China Investment Corporation	64	7	73	39
Malaysia	Khazanah Nasional	59	5	46	49
United Arab Emirates	Abu Dhabi Investment Authority	58	5	n.a.	68
Botswana	Pula Fund	56	6	47	65
United Arab Emirates	Dubai International Capital	55	n.a.	n.a.	68
Russia	National Welfare Fund and Reserve Fund	53	5	56	28
São Tomé & Principe	National Oil Account	48	n.a.	n.a.	42
Ghana	Petroleum Funds	47	n.a.	63	45
United Arab Emirates	International Petroleum Investment Company	46	9	n.a.	68
Mexico	Oil Income Stabilization Fund	44	n.a.	77	34
Iran	National Development Fund	41	5	28	28
Bahrain	Mumtalakat Holding Company	39	9	47	51
Vietnam	State Capital Investment Corporation	38	4	41	31
Kiribati	Revenue Equalization Reserve Fund	35	1	n.a.	n.a.
Brazil	Sovereign Fund of Brazil	30	9	80	73
Algeria	Revenue Regulation Fund	29	1	38	34
Venezuela	National Development Fund	29	n.a.	56	19
Oman	State General Reserve Fund	27	4	n.a.	47
Venezuela	Macroeconomic Stabilization Fund	27	1	56	19
Brunei	Brunei Investment Agency	21	1	n.a.	55
United Arab Emirates	Investment Corporation of Dubai	21	4	n.a.	68

(continues)

Table 6 2012 SWF scoreboard and other transparency indexes *(continued)*

Country	Fund	2012 SWF scoreboard	Linaburg-Maduell Index	Resource Governance Index	Corruption Perceptions Index
Nigeria	Sovereign Investment Authority	18	n.a.	42	27
Sudan/South Sudan	Oil Revenue Stabilization Account	18	n.a.	31	13
Qatar	Qatar Investment Authority	17	5	26	68
United Arab Emirates	Istithmar World	17	n.a.	n.a.	68
Angola	Fundo Soberano de Angola	15	n.a.	42	22
Libya	Libyan Investment Authority	6	1	11	21
Equatorial Guinea	Fund for Future Generations	2	n.a.	13	20

n.a. = score not available for this index.

Note: PR denotes a pension reserve fund.

Sources: Appendix B and Revenue Watch Institute (2013), Sovereign Wealth Fund Institute (2013), and Transparency International (2012).

Emirates, Oman, Brunei, Qatar, and Equatorial Guinea, and the reverse for Ireland, Azerbaijan, Timor-Leste, Trinidad and Tobago, Kuwait, Kazakhstan, China, and Russia. One interpretation of the lack of complete congruity in these assessments is that countries in the first groups perform below expectations with respect to transparency and accountability in setting up their SWFs based on other indicators and countries in the second groups perform above expectations.

CONCLUSION

The growth of SWFs had slowed in recent years. However, with estimated total assets under management of $4.2 trillion, including an estimated $3.6 trillion in foreign assets, as of mid-2013, they are collectively major players in international financial markets (table 1). With 18 funds with estimated assets of more than $50 billion, nine funds with assets of more $100 billion, and five funds with assets of more than $300 billion, the activities of many funds are a potential source of continuing interest as well as potential concern.

On the 2012 SWF scoreboard, the average for 49 funds is 54 out of 100 (table 2). For a common group of 32 funds, the average is 59, up from 42 on the 2007 scoreboard (table 3). This 40 percent improvement is significant. However, progress has not been uniform, and the ratings of individual funds, while higher on average, remain widely dispersed. Progress has been concentrated almost exclusively in funds associated with the IFSWF.

The SWFs of the remaining members of the IFSWF have low scores on both the SWF scoreboard and the Santiago Principles with limited changes. While excuses might be made for Equatorial Guinea and Libya, the same cannot be said for Russia, Mexico, Iran, Bahrain, and Qatar. They had below average scores when they were first rated, and they have lagged behind other SWFs in any subsequent improvements. The case of Qatar, with an extremely low initial score and essentially no improvement over five years, is particularly troubling. Qatar fancies itself as a major political, economic, and financial player, and as such should hold itself to a high standard.

In addition to scoring the SWFs of Libya and Equatorial Guinea for the first time, we also scored the new SWFs of Angola, Brazil, Ghana, and Nigeria. With the exception of the Ghanaian SWF, each of these funds recorded 30 or less on the 2012 scoreboard and not significantly higher on the less demanding Santiago Principles. Brazil and Ghana score at above, or close to, the mean for the Revenue Watch Institute's Resource Governance Index and Transparency International's Corruption Perceptions Index, respectively, which makes the ratings on the SWF scoreboard for their funds all the more disappointing. Nigeria and Angola score not far from the mean of the Resource Governance Index.

The Santiago Principles and the IFSWF appear to have had limited influence on these countries. The IFSWF needs to strengthen its outreach to its low-performing members, to countries with new SWFs, and to the several countries with large funds (such as those of Hong Kong, Kazakhstan, and Algeria) that have yet to adhere to the Santiago Principles.

Progress has been made in increasing the transparency and accountability of SWFs, but more is needed.

APPENDIX A SCOREBOARD FOR SOVEREIGN WEALTH FUNDS

This appendix provides brief descriptions of the individual elements of the SWF scoreboard. The scoreboard has evolved since the first edition in 2007, as summarized below. See Truman (2010, chapter 5) for more discussion.

For each of the 33 elements, posed as 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 presentation of results in appendix B.

STRUCTURE

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

2. Is there a clear **legal framework** for the SWF? This element was incorporated into the 2008 scoreboard from the Santiago Principles.

3. Is the procedure for **changing the structure** of the SWF clear? (p)

4. Is the overall **investment strategy** clearly **stated?** (p)

Fiscal Treatment

5. Is the source of the SWF's **funding** clearly specified? (p)

6. Is the nature of the subsequent **use of** the principal and **earnings** of the **fund** clearly specified? (p)

7. Are the SWF's operations appropriately **integrated with fiscal and monetary policies**?[28] (p)

8. Is the SWF **separate from** the country's **international reserves**?[29]

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 governing body** of the SWF clearly established? (p) This element was incorporated into the 2008 scoreboard from the Santiago Principles.

11. Is the **role of** the **managers** in executing the investment strategy clearly established? (p)

12. Are **decisions** on specific investments **made by** the **managers**? (p)

13. Does the SWF have **internal ethical standards** for its management and staff? (p) This element was incorporated into the 2008 scoreboard from the Santiago Principles.

14. Does the SWF have in place, and make publicly available, **guidelines for corporate responsibility** that it follows? (p)

15. Does the SWF have **ethical investment guidelines** that it follows? (p)

TRANSPARENCY AND ACCOUNTABILITY

Investment Strategy Implementation

16. Do regular reports on investments by the SWF include information on the **categories** of investments? (p)

17. Does the strategy use **benchmarks**? (p)

18. Does the strategy use **credit ratings**? (p)

19. Are the holders of investment **mandates identified**? (p)

Investment Activities

20. Do regular reports on the investments by the SWF include the **size** of the fund? (p)

21. Do regular reports on the investments by the SWF include information on its **returns**? (p)

22. Do regular reports on the investments by the SWF include information on the geographic **location** of investments? (p)

23. Do regular reports on the investments by the SWF include information on the **specific investments**? (p)

24. Do regular reports on the investments by the SWF include information on the **currency composition** of investments? (p)

Reports

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

26. Does the SWF provide **quarterly reports**? (p)

28. Because this element is only marginally relevant to government pension funds and subnational SWFs, we give them an arbitrary score of 0.5 on it so as not to bias their results upward.

29. Because this element is not relevant to government pension funds and subnational SWFs, we give them an arbitrary score of 0.5 on it so as not to bias their results upward.

Audits

27. Is the SWF subject to a **regular** annual **audit**? (p)

28. Does the SWF **publish** promptly the **audits** of its operations and accounts? (p)

29. Are the **audits independent**? (p)

BEHAVIOR

30. Does the SWF have an operational **risk management policy**? This element was incorporated into the 2008 scoreboard from the Santiago Principles.

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. Does the SWF have a guideline on the nature and **speed of adjustment** in its portfolio? (p)

Four elements in the 2008 scoreboard are not included in the current scoreboard.

Element (a) was also included in the 2007 version. The others were new with the 2008 version.

(a) Are the guidelines for fiscal treatment generally followed without frequent adjustment?

(b) Does the SWF have limits on the size of its stakes?

(c) Does the SWF not take controlling stakes?

(d) Are derivatives used primarily for hedging?

Five elements in this scoreboard and the 2008 version were not included in the 2007 version.

(a) Are decisions on specific investments made by the managers?

(b) Does the strategy use benchmarks?

(c) Does the strategy use credit ratings?

(d) Does the SWF have a policy on the use of leverage?

(e) Does the SWF have a policy on the use of derivatives?

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores

		1	2	3	4	5	6	7	8	
Country	Fund	Objective stated	Legal frame-work	Changing the struc-ture	Investment strategy	Source of funding	Use of fund earnings	Integrated with policies	Separate from inter-national reserves	Subtotal
Algeria	Revenue Regulation Fund	1	1	1	0	1	0.5	0	1	5.50
Angola	Fundo Soberano de Angola	1	1	0	0	0.5	0	0	0	2.50
Australia	Future Fund (PR)	1	1	1	1	1	1	0.5	0.5	7.00
Azerbaijan	State Oil Fund	1	1	1	1	1	1	1	1	8.00
Bahrain	Mumtalakat Holding Company	1	0	0	1	1	0	0	0	3.00
Botswana	Pula Fund	1	1	0	1	0.5	1	1	0	5.50
Brazil	Sovereign Fund of Brazil	1	1	0	0	0	0	0	0	2.00
Brunei Darussalam	Brunei Investment Agency	1	1	1	0	0.5	0	0	0	3.50
Canada	Alberta Heritage Savings Trust Fund	1	1	1	1	1	1	0.5	0.5	7.00
	Caisse de dépôt et placement du Québec (P)	1	1	1	1	1	1	0.5	0.5	7.00
	Canada Pension Plan (P)	1	1	1	1	1	1	0.5	0.5	7.00
	Ontario Teachers' Pension Plan (P)	1	1	1	1	1	1	0.5	0.5	7.00
Chile	Economic and Social Stabilization Fund	1	1	1	1	1	1	1	1	8.00
	Pension Reserve Fund (PR)	1	1	1	1	1	1	0.5	0.5	7.00
China	China Investment Corporation	1	0.5	0	1	1	1	1	1	6.50
	National Social Security Fund (P)	1	1	0.5	1	1	1	0.5	0.5	6.50
Equatorial Guinea	Fund for Future Generations	0	0	0	0	0.5	0	0	0	0.50
France	Fonds de réserve pour les retraites (P)	1	1	1	1	1	1	0.5	0.5	7.00
Ghana	Petroleum Funds	1	1	1	1	1	1	1	0.5	7.50
Hong Kong	Exchange Fund	1	1	1	1	1	1	1	0	7.00
Iran	National Development Fund	1	1	1	0.5	1	0.5	0	1	6.00
Ireland	National Pensions Reserve Fund (PR)	1	1	1	1	1	1	0.5	0.5	7.00
Japan	Government Pension Investment Fund (P)	1	1	1	1	1	1	0.5	0.5	7.00
Kazakhstan	National Fund	1	1	0.5	1	1	1	1	1	7.50
Kiribati	Revenue Equalization Reserve Fund	1	1	1	0.5	1	1	1	0	6.50
Korea	Korea Investment Corporation	1	1	1	1	1	0	1	0	6.00
Kuwait	Kuwait Investment Authority	1	1	1	1	1	0	1	1	7.00
Libya	Libyan Investment Authority	0	1	0	0	0.5	0	0	0	1.50
Malaysia	Khazanah Nasional	1	1	0	0.5	1	0	0	1	4.50
Mexico	Oil Income Stabilization Fund	1	1	0.5	0.5	1	0.5	1	1	6.50
Netherlands	Stichting Pensioenfonds ABP (P)	1	1	1	1	1	1	0.5	0.5	7.00

(continues)

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Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		1	2	3	4	5	6	7	8	
Country	**Fund**	**Objective stated**	**Legal frame-work**	**Changing the struc-ture**	**Investment strategy**	**Source of funding**	**Use of fund earnings**	**Integrated with policies**	**Separate from inter-national reserves**	**Subtotal**
New Zealand	Superannuation Fund (PR)	1	1	1	1	1	1	0.5	0.5	7.00
Nigeria	Sovereign Investment Authority	1	1	0	1	1	1	0	0	5.00
Norway	Government Pension Fund-Global	1	1	1	1	1	1	1	1	8.00
Oman	State General Reserve Fund	1	1	0.5	0.5	1	0.5	0.5	1	6.00
Qatar	Qatar Investment Authority	1	1	0.5	0.25	0	0	0	1	3.75
Russia	Reserve Fund and National Welfare Fund	1	1	1	1	1	0.75	1	0	6.75
São Tomé & Principe	National Oil Account	1	1	1	1	1	1	1	1	8.00
Singapore	Government of Singapore Investment Corporation	1	1	1	1	0.5	1	1	0	6.50
	Temasek Holdings	1	1	1	1	1	0	1	1	7.00
Sudan/South Sudan	Oil Revenue Stabilization Account	0.5	0	0	0	1	0.5	1	1	4.00
Thailand	Government Pension Fund (P)	1	1	1	1	1	1	0.5	0.5	7.00
Timor-Leste	Petroleum Fund	1	1	1	1	1	1	1	1	8.00
Trinidad and Tobago	Heritage and Stabilization Fund	1	1	1	1	1	1	1	1	8.00
United Arab Emirates	Abu Dhabi Investment Authority	0.5	1	1	1	0.5	0.5	0.5	1	6.00
	Dubai International Capital	1	0	1	1	0.5	1	1	0.5	6.00
	International Petroleum Investment Company	1	0	1	0	1	0	0	0.5	3.50
	Investment Corporation of Dubai	1	1	0	0	1	0	0	0.5	3.50
	Istithmar World	1	0	0	0.5	0.5	0	0	0.5	2.50
	Mubadala Development Company	1	1	0.5	1	1	0	0	0.5	5.00
United States	Alabama Trust Fund	1	1	1	1	1	1	0.5	0.5	7.00
	Alaska Permanent Fund	1	1	1	1	1	1	0.5	0.5	7.00
	California Public Employees' Retirement System (P)	1	1	1	1	1	1	0.5	0.5	7.00
	New Mexico Severance Tax Permanent Fund	1	1	1	1	1	1	0.5	0.5	7.00
	Wyoming Permanent Mineral Trust Fund	1	1	1	1	1	1	0.5	0.5	7.00
Venezuela	Macroeconomic Stabilization Fund	1	1	1	0.5	1	0	0	1	5.50
	National Development Fund	1	1	1	0	0.5	0	0	1	4.50
Vietnam	State Capital Investment Corporation	1	1	1	1	1	0.5	0	1	6.50
Total (58 funds)		55.00	51.50	42.50	43.25	51.00	37.25	30.00	33.00	5.92
of which pension (9 funds)		9.00	9.00	8.50	9.00	9.00	9.00	4.50	4.50	6.94
of which SWFs (49 funds)		46.00	42.50	34.00	34.25	42.00	28.25	25.50	28.50	5.73
of which IFSWF (26 funds)		23.50	23.50	18.50	21.25	22.50	16.25	16.50	16.00	6.08
of which non-IFSWF (23 funds)		22.50	19.00	15.50	13.00	19.50	12.00	9.00	12.50	5.35

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		9	10	11	12	13	14	15	
Country	Fund	Role of government	Role of governing body	Role of managers	Decisions made by managers	Internal ethical standards	Guidelines for corporate responsibility	Ethical investment guidelines	Subtotal
Algeria	Revenue Regulation Fund	1	0	1	0	0	0	0	2.00
Angola	Fundo Soberano de Angola	1	1	0	0	0	0	0	2.00
Australia	Future Fund (PR)	1	1	1	1	1	1	1	7.00
Azerbaijan	State Oil Fund	1	1	1	1	1	0	0	5.00
Bahrain	Mumtalakat Holding Company	0	1	0	0	0	0.5	0.25	1.75
Botswana	Pula Fund	1	1	1	1	0	0	0	4.00
Brazil	Sovereign Fund of Brazil	1	1	0	0	0	0	0	2.00
Brunei Darussalam	Brunei Investment Agency	0	0	0	0	0	0	0	0.00
Canada	Alberta Heritage Savings Trust Fund	1	1	1	1	1	0	1	6.00
	Caisse de dépôt et placement du Québec (P)	1	1	1	1	1	1	1	7.00
	Canada Pension Plan (P)	1	1	1	1	1	1	1	7.00
	Ontario Teachers' Pension Plan (P)	1	1	1	1	0.5	1	1	6.50
Chile	Economic and Social Stabilization Fund	1	1	1	1	1	0	1	6.00
	Pension Reserve Fund (PR)	1	1	1	1	0	0	1	5.00
China	China Investment Corporation	1	1	1	1	1	0.5	0	5.50
	National Social Security Fund (P)	1	1	1	0	0	0	0	3.00
Equatorial Guinea	Fund for Future Generations	0	0	0	0	0	0	0	0.00
France	Fonds de réserve pour les retraites (P)	1	1	1	1	1	1	1	7.00
Ghana	Petroleum Funds	1	0.5	0	0	0	0	0.5	2.00
Hong Kong	Exchange Fund	1	1	1	0	0	0	0	3.00
Iran	National Development Fund	0.5	1	0.5	0.5	0	0	0	2.50
Ireland	National Pensions Reserve Fund (PR)	1	1	1	1	1	1	1	7.00
Japan	Government Pension Investment Fund (P)	1	1	1	1	1	1	0.5	6.50
Kazakhstan	National Fund	1	1	1	1	0	1	0	5.00
Kiribati	Revenue Equalization Reserve Fund	1	1	1	1	0	0	0	4.00
Korea	Korea Investment Corporation	1	1	1	1	1	0	0	5.00
Kuwait	Kuwait Investment Authority	1	1	1	1	1	0.5	1	6.50
Libya	Libyan Investment Authority	0	0	0	0	0	0	0	0.00
Malaysia	Khazanah Nasional	1	1	1	0.5	0.5	1	0	5.00
Mexico	Oil Income Stabilization Fund	0.5	0	0.5	0	0	0	0	1.00
Netherlands	Stichting Pensioenfonds ABP (P)	1	1	1	1	0	1	1	6.00

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		9	10	11	12	13	14	15	
Country	**Fund**	**Role of government**	**Role of governing body**	**Role of managers**	**Decisions made by managers**	**Internal ethical standards**	**Guidelines for corporate responsibility**	**Ethical investment guidelines**	**Subtotal**
New Zealand	Superannuation Fund (PR)	1	1	1	1	1	1	1	7.00
Nigeria	Sovereign Investment Authority	0	0	0	0	0	0	0	0.00
Norway	Government Pension Fund-Global	1	1	1	1	1	1	1	7.00
Oman	State General Reserve Fund	0	0	0	0	0.5	0	0	0.50
Qatar	Qatar Investment Authority	0	1	0	0	0	0	0.25	1.25
Russia	Reserve Fund and National Welfare Fund	1	0	1	0	0	0	0	2.00
São Tomé & Principe	National Oil Account	1	1	1	1	0	0	0	4.00
Singapore	Government of Singapore Investment Corporation	1	1	1	1	1	0	0	5.00
	Temasek Holdings	1	1	1	1	1	0.5	0	5.50
Sudan/South Sudan	Oil Revenue Stabilization Account	0	0	0	0	0	0	0	0.00
Thailand	Government Pension Fund (P)	1	1	1	1	0	1	1	6.00
Timor-Leste	Petroleum Fund	1	1	1	0	0	0	0	3.00
Trinidad and Tobago	Heritage and Stabilization Fund	1	1	1	1	0.5	0	0	4.50
United Arab Emirates	Abu Dhabi Investment Authority	1	1	1	1	1	0.5	0.5	6.00
	Dubai International Capital	1	1	1	0	1	1	1	6.00
	International Petroleum Investment Company	0.5	0.5	1	0	0	1	0	3.00
	Investment Corporation of Dubai	0.5	0	0	0	0	0	0	0.50
	Istithmar World	0	1	0.5	0	0	0	0	1.50
	Mubadala Development Company	1	1	1	0	1	1	0	5.00
United States	Alabama Trust Fund	1	1	1	1	0	0	0	4.00
	Alaska Permanent Fund	1	1	1	1	1	1	0	6.00
	California Public Employees' Retirement System (P)	1	1	1	1	1	1	1	7.00
	New Mexico Severance Tax Permanent Fund	1	1	1	0.5	0	0	0	3.50
	Wyoming Permanent Mineral Trust Fund	1	1	1	1	1	0.5	1	6.50
Venezuela	Macroeconomic Stabilization Fund	0	1	0	0	0	0	0	1.00
	National Development Fund	0	1	0	0	0	0	0	1.00
Vietnam	State Capital Investment Corporation	1	1	1	1	0	0	0	4.00
Total (58 funds)		45.00	47.00	42.50	32.00	24.00	21.00	19.00	3.97
of which pension (9 funds)		9.00	9.00	9.00	8.00	5.50	8.00	7.50	6.22
of which SWFs (49 funds)		36.00	38.00	33.50	24.00	18.50	13.00	11.50	3.56
of which IFSWF (26 funds)		21.00	22.00	21.00	17.50	15.00	8.50	9.00	4.38
of which non-IFSWF (23 funds)		15.00	16.00	12.50	6.50	3.50	4.50	2.50	2.63

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		16	17	18	19	20	21	22	23
Country	Fund	Categories	Benchmarks	Credit ratings	Mandates	Size	Returns	Locations	Specific investments
Algeria	Revenue Regulation Fund	0.5	0	0	1	0.5	0	0	0
Angola	Fundo Soberano de Angola	0	0	0	0	0	0	0	0
Australia	Future Fund (PR)	1	1	1	1	1	1	0.5	0
Azerbaijan	State Oil Fund	1	1	1	1	1	1	0.5	0.5
Bahrain	Mumtalakat Holding Company	1	0	0	0	1	1	1	1
Botswana	Pula Fund	1	1	1	0	1	0	0	0
Brazil	Sovereign Fund of Brazil	0	1	1	0	0	0	0	0
Brunei Darussalam	Brunei Investment Agency	0	0	0	1	0	0	0	0
Canada	Alberta Heritage Savings Trust Fund	1	1	1	0	1	1	1	0.5
	Caisse de dépôt et placement du Québec (P)	1	1	1	1	1	1	1	1
	Canada Pension Plan (P)	1	1	1	1	1	1	0.75	1
	Ontario Teachers' Pension Plan (P)	1	1	1	0.5	1	1	0.5	1
Chile	Economic and Social Stabilization Fund	1	1	1	1	1	1	1	1
	Pension Reserve Fund (PR)	1	1	1	1	1	1	1	1
China	China Investment Corporation	1	0.5	0	0	1	1	0	0.75
	National Social Security Fund (P)	1	1	1	1	1	1	0.5	0
Equatorial Guinea	Fund for Future Generations	0	0	0	0	0	0	0	0
France	Fonds de réserve pour les retraites (P)	1	1	1	1	1	1	0.75	1
Ghana	Petroleum Funds	0	0.5	0	0	1	1	0	0
Hong Kong	Exchange Fund	1	1	1	0	1	1	0.5	0
Iran	National Development Fund	1	0	0	1	0.5	0.5	1	0
Ireland	National Pensions Reserve Fund (PR)	1	1	0.25	1	1	1	1	1
Japan	Government Pension Investment Fund (P)	1	1	1	1	1	1	0.25	0.5
Kazakhstan	National Fund	0.5	1	1	0	1	1	0.25	0
Kiribati	Revenue Equalization Reserve Fund	0	0	0	0	0	0	0	0
Korea	Korea Investment Corporation	1	1	1	0	1	1	0.25	0
Kuwait	Kuwait Investment Authority	1	0.5	1	0	1	0.5	0.25	0
Libya	Libyan Investment Authority	0.25	0	0	0	0	0	0	0.25
Malaysia	Khazanah Nasional	0.5	1	0	0	1	1	1	0.5
Mexico	Oil Income Stabilization Fund	0	0	0	0	1	1	0	0
Netherlands	Stichting Pensioenfonds ABP (P)	1	1	1	0	1	1	0.5	1

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		16	17	18	19	20	21	22	23
Country	**Fund**	**Categories**	**Benchmarks**	**Credit ratings**	**Mandates**	**Size**	**Returns**	**Locations**	**Specific investments**
New Zealand	Superannuation Fund (PR)	1	1	1	1	1	1	1	1
Nigeria	Sovereign Investment Authority	0	0	0	0	0	0	0	0
Norway	Government Pension Fund-Global	1	1	1	1	1	1	1	1
Oman	State General Reserve Fund	0	0	0	0	0	0	0	0
Qatar	Qatar Investment Authority	0	0	0	0	0	0	0	0
Russia	Reserve Fund and National Welfare Fund	1	0	1	1	1	0.5	1	0.5
São Tomé & Principe	National Oil Account	0.5	0	0	1	0.5	0	0	0
Singapore	Government of Singapore Investment Corporation	1	1	0.5	0	0	0.75	1	0
	Temasek Holdings	1	0.5	0	0.5	1	1	1	0.5
Sudan/South Sudan	Oil Revenue Stabilization Account	0	0	0	1	1	0	0	0
Thailand	Government Pension Fund (P)	1	1	1	1	1	1	0.25	1
Timor-Leste	Petroleum Fund	1	1	1	1	1	1	1	1
Trinidad and Tobago	Heritage and Stabilization Fund	1	1	1	1	1	1	1	0
United Arab Emirates	Abu Dhabi Investment Authority	1	1	0.5	0	0	0.5	0.25	0
	Dubai International Capital	1	0	0	0.5	1	0	1	1
	International Petroleum Investment Company	1	0	0	0.5	1	0	0	1
	Investment Corporation of Dubai	1	0	0	0	0	0	1	1
	Istithmar World	0.25	0	0	0	0.5	0	0.25	0.5
	Mubadala Development Company	1	0.5	0.5	0.5	1	1	1	0.5
United States	Alabama Trust Fund	1	1	1	0	1	1	0	0
	Alaska Permanent Fund	1	1	1	1	1	1	1	1
	California Public Employees' Retirement System (P)	1	1	1	1	1	1	0.5	1
	New Mexico Severance Tax Permanent Fund	1	1	1	1	1	1	0.5	0
	Wyoming Permanent Mineral Trust Fund	1	1	1	1	1	1	0.5	0
Venezuela	Macroeconomic Stabilization Fund	0.5	0	0	1	1	0	0	0
	National Development Fund	0.25	0	0	0	1	0	0	0.25
Vietnam	State Capital Investment Corporation	1	0	0	0	1	0	0	0
Total (58 funds)		41.25	33.50	30.75	28.50	44.00	35.75	25.75	23.25
of which pension (9 funds)		9.00	9.00	9.00	7.50	9.00	9.00	5.00	7.50
of which SWFs (49 funds)		32.25	24.50	21.75	21.00	35.00	26.75	20.75	15.75
of which IFSWF (26 funds)		20.75	17.50	15.25	12.50	20.50	19.75	15.75	11.50
of which non-IFSWF (23 funds)		11.50	7.00	6.50	8.50	14.50	7.00	5.00	4.25

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		24	25	26	27	28	29	
Country	Fund	Currency composition	Annual reports	Quarterly reports	Regular audits	Published audits	Independent audits	Subtotal
Algeria	Revenue Regulation Fund	0	0	0	0	0	0	2.00
Angola	Fundo Soberano de Angola	0	0	0	0	0	0	0.00
Australia	Future Fund (PR)	1	1	1	1	1	1	12.50
Azerbaijan	State Oil Fund	1	1	1	1	1	1	13.00
Bahrain	Mumtalakat Holding Company	0	1	0	1	0	1	8.00
Botswana	Pula Fund	0.5	1	0.5	1	0	1	8.00
Brazil	Sovereign Fund of Brazil	0	1	0	1	1	1	6.00
Brunei Darussalam	Brunei Investment Agency	0	0.5	0	1	0	1	3.50
Canada	Alberta Heritage Savings Trust Fund	1	1	1	1	1	1	12.50
	Caisse de dépôt et placement du Québec (P)	1	1	0	1	1	1	13.00
	Canada Pension Plan (P)	1	1	1	1	1	1	13.75
	Ontario Teachers' Pension Plan (P)	1	1	0.5	1	1	1	12.50
Chile	Economic and Social Stabilization Fund	1	1	1	1	1	1	14.00
	Pension Reserve Fund (PR)	1	1	1	1	1	1	14.00
China	China Investment Corporation	0	1	0	1	1	1	8.25
	National Social Security Fund (P)	0	1	1	1	1	1	11.50
Equatorial Guinea	Fund for Future Generations	0	0	0	0	0	0	0.00
France	Fonds de réserve pour les retraites (P)	1	1	1	1	1	1	13.75
Ghana	Petroleum Funds	0	0.5	0.5	1	0	1	5.50
Hong Kong	Exchange Fund	0.5	1	1	1	1	1	11.00
Iran	National Development Fund	0	0.5	0.5	0	0	0	5.00
Ireland	National Pensions Reserve Fund (PR)	1	1	1	1	1	1	13.25
Japan	Government Pension Investment Fund (P)	0	1	1	1	1	1	11.75
Kazakhstan	National Fund	0.25	0.5	0.5	1	1	1	9.00
Kiribati	Revenue Equalization Reserve Fund	0	0.5	0.5	0	0	0	1.00
Korea	Korea Investment Corporation	0.25	0.5	0	1	1	1	9.00
Kuwait	Kuwait Investment Authority	0.75	0.5	0	1	1	1	8.50
Libya	Libyan Investment Authority	0	0	0	0	0	0	0.50
Malaysia	Khazanah Nasional	0	1	0	1	1	1	9.00
Mexico	Oil Income Stabilization Fund	1	0.5	0.5	0.5	0.5	1	6.00
Netherlands	Stichting Pensioenfonds ABP (P)	1	1	0.5	1	1	1	12.00

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		24	25	26	27	28	29	
Country	**Fund**	**Currency composition**	**Annual reports**	**Quarterly reports**	**Regular audits**	**Published audits**	**Indepen-dent audits**	**Subtotal**
New Zealand	Superannuation Fund (PR)	1	1	1	1	1	1	14.00
Nigeria	Sovereign Investment Authority	0	0	0	0	0	0	0.00
Norway	Government Pension Fund-Global	1	1	1	1	1	1	14.00
Oman	State General Reserve Fund	0	0.5	0	1	0	1	2.50
Qatar	Qatar Investment Authority	0.25	0	0	0	0	0	0.25
Russia	Reserve Fund and National Welfare Fund	0.5	0.5	0.5	0.25	0	0	7.75
São Tomé & Principe	National Oil Account	0	0	0	1	0	1	4.00
Singapore	Government of Singapore Investment Corporation	0	1	0.5	1	1	1	8.75
	Temasek Holdings	1	1	0	1	1	1	10.50
Sudan/South Sudan	Oil Revenue Stabilization Account	0	0	0	0	0	0	2.00
Thailand	Government Pension Fund (P)	0	1	1	1	1	1	12.25
Timor-Leste	Petroleum Fund	1	1	1	1	1	1	14.00
Trinidad and Tobago	Heritage and Stabilization Fund	1	1	1	1	1	1	13.00
United Arab Emirates	Abu Dhabi Investment Authority	0	1	0	1	0	1	6.25
	Dubai International Capital	0	0.5	0	0	0	0	5.00
	International Petroleum Investment Company	0	1	0	1	1	1	7.50
	Investment Corporation of Dubai	0	0	0	0	0	0	3.00
	Istithmar World	0	0	0	0	0	0	1.50
	Mubadala Development Company	0.5	1	0	1	1	1	10.50
United States	Alabama Trust Fund	0	1	0	1	1	1	9.00
	Alaska Permanent Fund	1	1	1	1	1	1	14.00
	California Public Employees' Retirement System (P)	1	1	1	1	1	1	13.50
	New Mexico Severance Tax Permanent Fund	1	1	1	1	1	1	12.50
	Wyoming Permanent Mineral Trust Fund	0.5	1	1	1	1	1	12.00
Venezuela	Macroeconomic Stabilization Fund	0	0	0	0	0	0	2.50
	National Development Fund	0	1	0.5	1	0	0	4.00
Vietnam	State Capital Investment Corporation	0	0	0	0	0	0	2.00
Total (58 funds)		24.00	40.5	25.00	42.75	34.50	42.00	8.13
of which pension (9 funds)		6.00	9.0	7.00	9.00	9.00	9.00	12.67
of which SWFs (49 funds)		18.00	31.5	18.00	33.75	25.50	33.00	7.30
of which IFSWF (26 funds)		15.25	20.5	13.00	20.75	17.50	21.00	9.29
of which non-IFSWF (23 funds)		2.75	11.0	5.00	13.00	8.00	12.00	5.04

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		30	31	32	33		
Country	**Fund**	**Risk management policy**	**Policy on leverage**	**Policy on derivatives**	**Portfolio adjustment**	**Subtotal**	**Total**
Algeria	Revenue Regulation Fund	0	0	0	0	0.0	9.50
Angola	Fundo Soberano de Angola	0.5	0	0	0	0.5	5.00
Australia	Future Fund (PR)	1	1	1	0	3.0	29.50
Azerbaijan	State Oil Fund	1	1	1	0	3.0	29.00
Bahrain	Mumtalakat Holding Company	0	0	0	0	0.0	12.75
Botswana	Pula Fund	0	0	1	0	1.0	18.50
Brazil	Sovereign Fund of Brazil	0	0	0	0	0.0	10.00
Brunei Darussalam	Brunei Investment Agency	0	0	0	0	0.0	7.00
Canada	Alberta Heritage Savings Trust Fund	1	1	1	0	3.0	28.50
	Caisse de dépôt et placement du Québec (P)	1	1	1	0	3.0	30.00
	Canada Pension Plan (P)	1	1	1	0	3.0	30.75
	Ontario Teachers' Pension Plan (P)	1	0	1	0	2.0	28.00
Chile	Economic and Social Stabilization Fund	1	1	0	0	2.0	30.00
	Pension Reserve Fund (PR)	1	1	0	0	2.0	28.00
China	China Investment Corporation	1	0	0	0	1.0	21.25
	National Social Security Fund (P)	1	0	1	0	2.0	23.00
Equatorial Guinea	Fund for Future Generations	0	0	0	0	0.0	0.50
France	Fonds de réserve pour les retraites (P)	1	0	1	1	3.0	30.75
Ghana	Petroleum Funds	0.50	0	0	0	0.5	15.50
Hong Kong	Exchange Fund	1	0	1	0	2.0	23.00
Iran	National Development Fund	0	0	0	0	0.0	13.50
Ireland	National Pensions Reserve Fund (PR)	1	0	1	0.5	2.5	29.75
Japan	Government Pension Investment Fund (P)	1	0	1	1	3.0	28.25
Kazakhstan	National Fund	1	0	1	0	2.0	23.50
Kiribati	Revenue Equalization Reserve Fund	0	0	0	0	0.0	11.50
Korea	Korea Investment Corporation	1	0.25	1	0.5	2.8	22.75
Kuwait	Kuwait Investment Authority	1	1	0	0	2.0	24.00
Libya	Libyan Investment Authority	0	0	0	0	0.0	2.00
Malaysia	Khazanah Nasional	1	0	0	0	1.0	19.50
Mexico	Oil Income Stabilization Fund	0	0	1	0	1.0	14.50
Netherlands	Stichting Pensioenfonds ABP (P)	1	0	1	1	3.0	28.00

(continues)

Appendix B 2012 scoreboard for sovereign wealth funds, raw scores *(continued)*

		30	31	32	33		
Country	**Fund**	**Risk management policy**	**Policy on leverage**	**Policy on derivatives**	**Portfolio adjustment**	**Subtotal**	**Total**
New Zealand	Superannuation Fund (PR)	1	1	1	0	3.0	31.00
Nigeria	Sovereign Investment Authority	1	0	0	0	1.0	6.00
Norway	Government Pension Fund-Global	1	1	0.5	1	3.5	32.50
Oman	State General Reserve Fund	0	0	0	0	0.0	9.00
Qatar	Qatar Investment Authority	0	0.25	0	0	0.3	5.50
Russia	Reserve Fund and National Welfare Fund	0	0	1	0	1.0	17.50
São Tomé & Principe	National Oil Account	0	0	0	0	0.0	16.00
Singapore	Government of Singapore Investment Corporation	1	0	0.5	0	1.5	21.75
	Temasek Holdings	1	0	1	0	2.0	25.00
Sudan/South Sudan	Oil Revenue Stabilization Account	0	0	0	0	0.0	6.00
Thailand	Government Pension Fund (P)	0.5	0	0.5	0	1.0	26.25
Timor-Leste	Petroleum Fund	1	0	1	1	3.0	28.00
Trinidad and Tobago	Heritage and Stabilization Fund	1	0	0	1	2.0	27.50
United Arab Emirates	Abu Dhabi Investment Authority	1	0	0	0	1.0	19.25
	Dubai International Capital	1	0	0	0	1.0	18.00
	International Petroleum Investment Company	1	0	0.25	0	1.3	15.25
	Investment Corporation of Dubai	0	0	0	0	0.0	7.00
	Istithmar World	0	0	0	0	0.0	5.50
	Mubadala Development Company	1	0	0	0	1.0	21.50
United States	Alabama Trust Fund	0	1	1	0	2.0	22.00
	Alaska Permanent Fund	1	1	1	0	3.0	30.00
	California Public Employees' Retirement System (P)	1	1	1	1	4.0	31.50
	New Mexico Severance Tax Permanent Fund	0	1	1	1	3.0	26.00
	Wyoming Permanent Mineral Trust Fund	1	1	1	1	4.0	29.50
Venezuela	Macroeconomic Stabilization Fund	0	0	0	0	0.0	9.00
	National Development Fund	0	0	0	0	0.0	9.50
Vietnam	State Capital Investment Corporation	0	0	0	0	0.0	12.50
Total (58 funds)		34.50	15.50	26.75	10.00	1.50	19.58
of which pension (9 funds)		8.50	3.00	8.50	4.00	2.67	28.50
of which SWFs (49 funds)		26.00	12.50	18.25	6.00	1.28	17.95
of which IFSWF (26 funds)		18.00	9.50	13.00	4.00	1.71	21.61
of which non-IFSWF (23 funds)		8.00	3.00	5.25	2.00	0.79	13.82

Note: PR denotes a pension reserve fund. P denotes a government pension fund.

IFSWF = International Forum of Sovereign Wealth Funds

Source: Authors' calculations from various national and international sources.

REFERENCES

Bagnall, Allie E. and Edwin M. Truman. 2011. *IFSWF Report on Compliance with the Santiago Principles: Admirable but Flawed Transparency*. Policy Brief 11-14 (August). Washington: Peterson Institute for International Economics.

IMF (International Monetary Fund). 2009. *Sixth Balance of Payments and International Investment Position Manual*. Washington. Available at www.imf.org.

IWG (International Working Group of Sovereign Wealth Funds). 2008. Sovereign Wealth Funds Generally Accepted Principle and Practices "Santiago Principles" (October). Washington. Available at www.iwg-swf.org (accessed July 10, 2013).

Monk, Ashby. 2010. *Papua New Guinea: Lessons Learned*. Oxford SWF Project. Available at http://oxfordswfproject.com/?s=Papua+New+Guinea (accessed July 26, 2013).

Revenue Watch Institute. 2013. *Resource Governance Index*. Available at http://www.revenuewatch.org/rgi/report (accessed July 16, 2013).

Sovereign Wealth Fund Institute. 2013. *Linaburg-Maduell Transparency Index*. Available at http://www.swfinstitute.org/statistics-research/linaburg-maduell-transparency-index/ (accessed July 16, 2013).

Transparency International. 2012. *2012 Corruption Perceptions Index*. Available at http://cpi.transparency.org/cpi2012/results/ (accessed on July 16, 2013).

Truman, Edwin M. 2007. *Sovereign Wealth Funds: The Need for Greater Transparency and Accountability*. Policy Brief 07-6 (August). Washington: Peterson Institute for International Economics.

Truman, Edwin M. 2008a. *A Blueprint for SWF Best Practices*. Policy Brief 08-3 (April). Washington: Peterson Institute for International Economics.

Truman, Edwin M. 2008b. The Management of China's International Reserves: China and a Sovereign Wealth Fund Scoreboard. In *Debating China's Exchange Policy*, ed. Morris Goldstein and Nicholas Lardy. Washington: Peterson Institute for International Economics.

Truman, Edwin M. 2008c. The Rise of Sovereign Wealth Funds: Impacts on US Foreign Policy and Economic Interests. Testimony before the Committee on Foreign Affairs, US House of Representatives (May 21). Available at www.piie.com (accessed on August 2, 2013).

Truman, Edwin M. 2010. *Sovereign Wealth Funds: Threat or Salvation?* Washington: Peterson Institute for International Economics.

Truman, Edwin M. 2011. Are Asian Sovereign Wealth Funds Different? *Asian Economic Policy Review* 6: 249–68.