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POLICY BRIEF

PB 16-18 Uneven Progress on Sovereign Wealth Fund Transparency and Accountability

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Sovereign wealth funds (SWFs) burst onto the international financial scene a decade ago. They are government-controlled funds that generally are invested in whole or in part outside their home country. SWFs attract political and financial attention because of their substantial size. The funds often are controlled by governments that are not major participants in international finance or in the construction of the associated web of standards and behavioral conventions. In many cases, funds' operations are substantially opaque. Such opacity, along with their size, give rise to suspicions about the motives behind their investments and their potential to contribute to economic, financial, or political disruption.

In fact, SWFs, in form if not in name, have been around for decades. They are a feature of government finance in many countries, in some cases much like government pension funds. The explosive growth of foreign exchange reserves during the 2000s provided the financial raw material for the establishment and expansion of these funds. However, some funds are financed from fiscal surpluses or are loosely tied to long-term pension plans. Others operate as stabilization funds.

In 2007, in response to the varied concerns about SWFs, one of us wrote a Peterson Institute Policy Brief on this issue (Truman 2007a), which inspired the development of a prototype scoreboard for sovereign wealth funds as a device to examine and promote the transparency and accountability of SWFs within and outside their countries (Truman 2007b). The first full scoreboard for 2007 was released in April 2008 (Truman 2008); the second for 2009 in Truman (2010); and the third for 2012 in Bagnall and Truman (2013). This Policy Brief updates and expands on that work, presenting the fourth SWF scoreboard.[1] The purpose is to

1. In preparing the 2015 scoreboard, the earlier scoreboard results were checked and scores were marked down on elements where there is no current evidence that the fund in question satisfies them. It is possible that scoring was too generous in the past, and it is also possible that the fund in question no longer provides public information on a certain element. The first possibility would be an error in consistency in applying the criteria. The second possibility suggests that the fund should be penalized in a later scoreboard for its failure to continue to provide this information. Alternatively, the fund's previous score could be reduced. Our rationale in choosing the alternative approach is that if a fund does not satisfy an element now, it should not receive credit on that element for past performance. Therefore, as part of this edition, scores were adjusted in all past scoreboards, 2012, 2009, and 2007. In addition, to take account of the modification in the elements between the first and second scoreboards, funds scored in 2007 now receive credit for scores on four elements from the 2009 scoreboard that were not included in the 2007 edition: (2) legal framework, (10) role of the governing body, (13)

assess the progress that has been made by the countries with these funds and by their managements with respect to transparency and accountability. It also assesses the role of the International Forum of Sovereign Wealth Funds (IFSWF) in promoting the transparency and accountability of SWFs.

The 60 SWFs scored in this edition of the scoreboard record substantial differences. A large number of them fall short of what the citizens of their countries or the international community should expect with regard to their transparency and accountability.

The Policy Brief draws three major conclusions. First, the 60 SWFs that are scored in this edition of the scoreboard record substantial differences. Some have high scores; others have low scores. Even funds within the same country have very different scores. Most important, a large number of funds fall short of what the citizens of their countries or the international community should expect with regard to their transparency and accountability. Second, the previous point notwithstanding, the scores of many funds have substantially improved over the past decade. This demonstrates that progress not only is possible but also is happening. Third, the IFSWF has been instrumental in promoting transparency and accountability of SWFs, and member funds generally score higher than nonmember funds. But only 32 (actually 31) of the 60 funds that are scored in this edition are members of the IFSWF.[2] The Forum can do a lot more not only to increase its membership but also to improve the transparency of its current members.

EVOLUTION OF SWFS

SWFs have many origins, take many forms, and have many objectives. What they have in common is that they are established by governments for the welfare of their citizens. Differences in political philosophies and government structures mean that links between a particular fund and its citizens are often difficult to discern. In some cases, such as the Alaska Permanent Fund, the linkage is clear. In funds established by royal decree, for example, the linkage may be less clear. In all cases, however, the governments involved attest, at least implicitly, that in administering their SWFs, they act in the interest of their citizens in the short, medium, and long runs.

Angela Cummine (2016) makes a provocative case for codifying the links between citizens' wealth, particularly in terms of the natural resources of an economy, and citizens' control over that wealth, via the establishment of the legal case for ownership, promotion of accountability and disclosure, and influence over the investments of the fund and the distribution of benefits. She buttresses her political case by drawing on the economics and finance literature. One does not have to completely accept Cummine's argument to agree that the transparency and accountability of SWFs are crucial to their political acceptance at home and abroad.

In 2007, the term "sovereign wealth fund" was not in common parlance, though Andrew Rozanov (2005) had coined it two years before. In the intervening years, the number of SWFs has proliferated. Building on a prototype presented in 2007 (Truman 2007b), the first full SWF scoreboard for 2007 (Truman 2008) identified 44 nonpension SWFs and scored 37 of them from 31 countries.[3] The second scoreboard in Truman (2010) scored 44, and the third scoreboard published in Bagnall and Truman (2013) scored 49.

In this fourth edition of the scoreboard, we identify 73 nonpension SWFs in table 1 and score 60 of them from 43 countries (table 2).[4] Table 1 presents each of the 73 funds'

internal ethical standards, and (30) risk management strategy (see Truman 2010, appendix 5A, and tables 4 and 7 below). Four elements in the 2007 scoreboard were dropped. (This treatment biases the 2007 scores upward slightly.) The results of all four scoreboards, including the adjusted versions of the 2007, 2009, and 2012 scoreboards, are available at www.piie.com. This Policy Brief uses the adjusted scoreboards for tracking progress on SWF transparency and accountability.

2. Norway's Government Pension Fund–Global has withdrawn from IFSWF membership, but it is treated as a member, making a total of 32.

3. In the first scoreboard, three pension reserve funds (of Australia, New Zealand, and Ireland) were included among the 10 government pension funds. Subsequently, following the definition adopted by the International Working Group of SWFs (IWG 2008, 3), these funds have been classified as regular SWFs. See footnote 4.

4. This Policy Brief employs the definition of an SWF adopted by the International Working Group of SWFs (IWG 2008, 3), and, we have adjusted the information presented in previous SWF scoreboards to be consistent with this treatment. That definition includes government pension reserve funds as SWFs. These funds 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, some information on such funds is reported in some of the tables that follow for comparison purposes. 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

Table 1 Total SWF assets under management (billions of US dollars)

Country	Fund name	Total assets	Foreign assets
	Nonpension SWFs		
Norway	Government Pension Fund–Global	888	888
China	China Investment Corporation	810	196
United Arab Emirates	Abu Dhabi Investment Authority[e]	700	700
Kuwait	Kuwait Investment Authority[e]	566	342
Hong Kong	Exchange Fund	459	459
Singapore	GIC Private Ltd.[e,f]	344	327
Singapore	Temasek Holdings	250	175
Qatar	Qatar Investment Authority[e]	242	242
United Arab Emirates	Investment Corporation of Dubai[f]	194	194
France	Caisse des Dépôts et Consignations[f]	163	25
United Arab Emirates	Abu Dhabi Investment Council[e]	111	111
Russia	National Welfare and Reserve Fund	110	110
Korea	Korea Investment Corporation	92	92
Australia	Future Fund	90	63
Saudi Arabia	Public Investment Fund[e,n]	88	44
United Arab Emirates, Abu Dhabi	International Petroleum Investment Company[e]	68	68
Libya	Libyan Investment Authority	67	67
United Arab Emirates, Abu Dhabi	Mubadala Development Company[f]	67	27
Malaysia	Permodalan Nasional Berhad[e,n]	64	21
Iran	National Development Fund of Iran[e]	63	20
Kazakhstan	National Fund of the Republic of Kazakhstan[n]	63	30
Australia	Queensland Investment Corporation[f,n]	57	6
United States	Alaska Permanent Fund Corporation	55	19
Argentina	Sustainability Guarantee Fund[e,n]	51	0
Algeria	Revenue Regulation Fund[f]	50	0
Kazakhstan	Samruk-Kazyna JSC[f]	50	50
France	BPIFrance Investissement	44	0
Brunei	Brunei Investment Agency[e]	40	40
Australia	Victorian Funds Management Corporation[n]	39	12
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	34	34
Oman	State General Reserve Fund[e]	34	34
United States	Texas Permanent School Fund[f]	34	11
United Arab Emirates	Dubai Holding[f]	22	11
New Zealand	New Zealand Superannuation Fund	21	18
Malaysia	Khazanah Nasional Berhad	20	9
United Arab Emirates	Istithmar World[e]	20	13
United States	New Mexico State Investment Council[f]	20	3
Canada	Alberta Heritage Savings Trust Fund[f]	18	8
Timor-Leste	Petroleum Fund of Timor-Leste	17	17
United Arab Emirates	Emirates Investment Authority[e,n]	17	9
United States	(Texas) Permanent University Fund[f]	17	6
Chile	Economic and Social Stabilization Fund	15	14
Bahrain	Bahrain Mumtalakat Holding Company[f]	11	6
Russia	Russian Direct Investment Fund	10	0
Chile	Pension Reserve Fund	9	9
Ireland	Ireland Strategic Investment Fund[f]	9	2
Peru	Fiscal Stabilization Fund	8	8

(table continues)

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

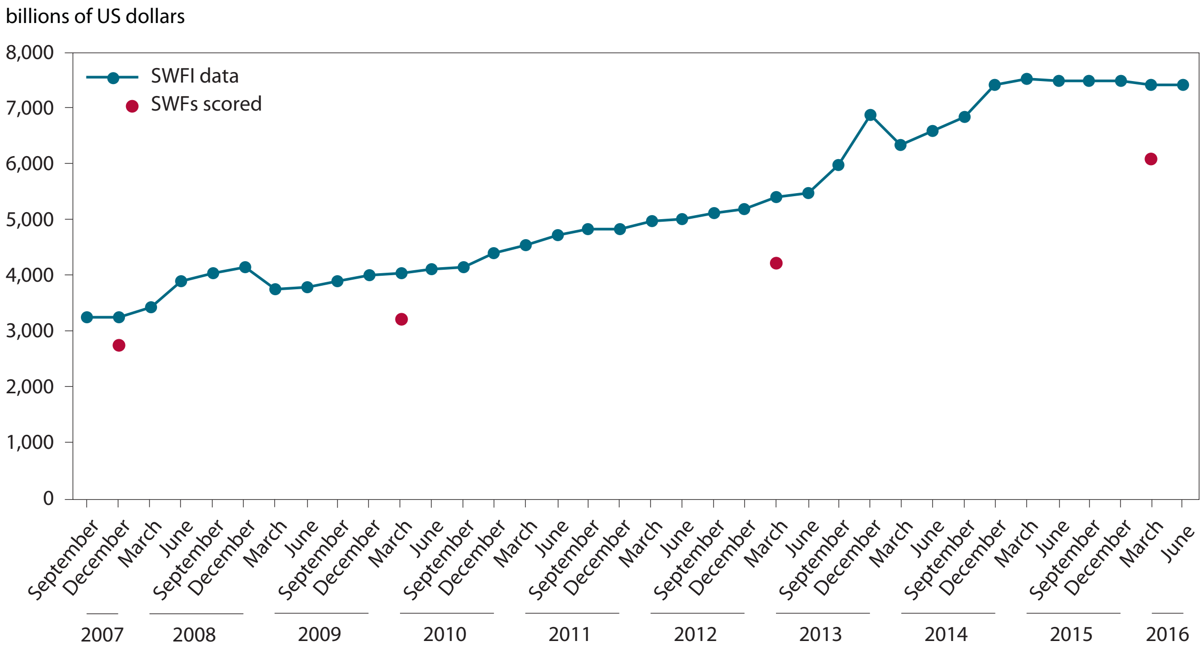
Country	Fund name	Total assets	Foreign assets
	Nonpension SWFs		
United States	Permanent Wyoming Mineral Trust Fund[f]	7	2
Botswana	Pula Fund[e]	6	6
Italy	Fondo Strategico Italiano	6	0
Mexico	Budgetary Income Stabilization Fund[e]	6	6
Trinidad and Tobago	Heritage and Stabilization Fund	6	6
Angola	Fundo Soberano de Angola	5	4
Brazil	Sovereign Fund of Brazil[e]	5	5
United States	North Dakota Legacy Fund[f]	4	1
United States	Alabama Trust Fund[f]	3	1
Vietnam	State Capital Investment Corporation[f]	3	3
Kazakhstan	National Investment Corporation[e]	2	1
Panama	Fondo de Ahorro de Panamá[n]	1.4	1.4
United Arab Emirates	Ras al Khaimah Investment Authority[e,n]	1	1
Palestine	Palestine Investment Fund	0.8	0.1
Nigeria	Nigeria Sovereign Investment Authority	0.6	0.6
Ghana	Ghana Petroleum Funds[e]	0.5	0.5
Kiribati	Revenue Equalization Reserve Fund[e]	0.5	0.5
Morocco	Moroccan Fund for Tourism Development[e]	0.5	0.25
Venezuela	Macroeconomic Stabilization Fund[e]	0.5	0.5
Indonesia	Government Investment Unit[e, n]	0.4	0.2
Mauritania	National Fund for Hydrocarbon Reserves[e,n]	0.4	0.4
Gabon	Sovereign Fund of the Gabonese Republic[e,n]	0.3	0.3
Mongolia	Fiscal Stability Fund[e,n]	0.3	0.3
Equatorial Guinea	Fund For Future Generations[e]	0.1	0.1
Rwanda	Agaciro Development Fund	0.04	0.04
Mexico	Fondo Mexicano del Petroléo para la Estabilización y el Desarrollo[e]	0	0
Subtotal		**6,281**	**4,581**
	Government pension funds		
Japan	Government Pension Investment Fund	1,306	438
Netherlands	Stichting Pensioenfonds ABP	361	310
United States	California Public Employees' Retirement System[fp]	302	219
Canada	Canada Pension Plan Investment Board	279	226
China	National Council for Social Security Fund	292	17
Canada	Caisse de dépôt et placement du Quebec	248	134
Canada	Ontario Teachers' Pension Plan	171	96
France	Fonds de réserve pour les retraites[fp]	33	26
Thailand	Government Pension Fund	21	16
Subtotal		**3,013**	**1,482**
Total		**9,294**	**6,063**

SWF = sovereign wealth fund
e = Estimate of total assets and foreign asssets
f = Estimate of foreign assets (stabilization and similar funds 100 percent, holding companies 50 percent, US states 33 percent [aproximately Alaska's share], and other information).
fp = Estimate based on information on the fund
n = Not included in SWF scoreboard

Note: The data are for 2016 or most recent available.

Sources: SWF websites and an average of estimates from the Sovereign Wealth Fund Institute website, www.swfinstitute.org/sovereign-wealth-fund-rankings; OMFIF (2016); and Sovereign Wealth Center, www.sovereignwealthcenter.com.

Figure 1 SWF assets under management, September 2007 to June 2016



Sources: Sovereign Wealth Fund Institute; table 1; Truman (2008, 2010); and Bagnall and Truman (2013).

total assets under management and the size of each one's foreign assets. We include the latter because much of the international attention on SWFs focuses on their cross-border investments. For a number of funds, the size and, more often, the share of foreign assets in the total are estimates. With that caveat, the share of foreign assets in the SWF compilation in table 1 is 73 percent compared with 86 percent three years ago (Bagnall and Truman 2013).[5] In quantitative terms, most of the difference is accounted for by the China Investment Corporation (CIC). Despite the media attention to its overseas investments, the value of the CIC's foreign investments is only 24 percent of the total. They have grown only 5 percent to $196 billion over the past three years, while CIC's domestic assets have doubled to $614 billion. In the case of the National Fund of the Republic of Kazakhstan, which is being drained, less than half its assets are now invested internationally, compared with about 85 percent three years ago.

In contrast, the share of foreign assets in the comparator group of government pension funds has increased over the past three years, from 37 to 49 percent. This shift is largely due to a change in strategy by Japan's very large Government Pension Investment Fund, which has shifted its foreign asset share from 23 percent three years ago to 34 percent (to reach its stated target of 40 percent). But the Japanese fund is not alone in shifting into foreign assets. The share of foreign assets for three Canadian GPFs combined has moved from 50 percent three years ago to 65 percent (table 1).[6]

Our list of SWFs might be longer. The Sovereign Wealth Fund Institute (SWFI) lists 79 SWFs,[7] while the Official Monetary and Financial Institutions Forum (OMFIF 2016) identifies 85 sovereign funds.[8] The assets under management by SWFs have increased substantially since 2007, but not to the extent that many observers once predicted; see Bagnall and Truman (2013, 2). As shown in figure 1, based on the

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).

5. One percentage point of the decline is because we have included in this compilation some funds that invest only domestically because some of them are members of the International Forum of Sovereign Wealth Funds (IFSWF). Some part of the decline also may reflect more accurate estimates.

6. The appreciation of the US dollar distorts these data to some degree. From the end of March 2013 to the end of March 2016, the Canadian dollar declined 22 percent against the US dollar, and the yen declined 16 percent.

7. See SWFI website, www.swfinstitute.org/sovereign-wealth-fund-rankings/.

8. The OMFIF text says that it lists 86 sovereign funds, but the count is only 85. On the other hand, it lists China's National Council for Social Security Fund as a sovereign fund, but we score it as a pension fund, and it lists the Exchange Fund of the Hong Kong Monetary Authority as a central bank. We treat the Exchange Fund, which is managed by the Hong Kong Monetary Authority, as an SWF.

SWFI data, SWF assets under management increased substantially before the global financial crisis in 2008–09. They subsequently dipped, recovered to a new peak in March 2015, only to decline by about 1 percent over the following five quarters as inflows to funds slowed or stopped and some jurisdictions drew down their funds. Nevertheless, the growth in assets under management by SWFs has been significant: by 125 percent between the end of 2007 and the second quarter of 2016, based on the SWFI data shown in figure 1, and by slightly less for the funds that have been scored.

The growth of SWF assets under management has slowed, but at about $6 trillion they remain collectively large enough to merit market attention and public concern about their activities.

There are some important exceptions to this generalization about the growth of SWFs over the past 10 years or so. The estimated size of the Abu Dhabi Investment Authority has not changed significantly since 2007, which may reflect the fact that its size has always been an estimate. (It is disturbing that total assets under management of nine of the 21 largest SWFs have to be based on estimates.) The combined Russian National Welfare and Reserve Fund has been drawn down in support of the Russian economy. Russia has established a Direct Investment Fund, but it invests primarily within Russia. Ireland's SWF, previously a pension reserve fund, was used to support Irish banks during the global financial crisis and Ireland's own crisis in the aftermath. It has been transformed into the Ireland Strategic Investment Fund, and it intends to redirect all its resources to the domestic economy. The National Fund of the Republic of Kazakhstan is a special case. It was scored in 2007 but is not scored in this Policy Brief because it appears to be inactive. If the fund had been scored, it would have received a very low score because very little information on it is publicly available. Declining oil revenues appear to have reduced the size of Algeria's Revenue Regulation Fund, which started out as a stabilization type of SWF but now invests exclusively domestically.

The situation of Norway's Government Pension Fund–Global, currently estimated to be the largest SWF, is particularly interesting. We are able to follow developments affecting this fund because of its high level of transparency. The fund reported at the end of June 2016 that the government of Norway had withdrawn 44.6 billion Norwegian kroner from the fund over the first six months of 2016, and the size of the fund declined by 204 billion Norwegian kroner. By design, the Norwegian government may withdraw 4 percent per year from the SWF on average over the business cycle, which is the expected annual return on the fund. However, returns are currently lower and at the same time net inflows to the fund from oil revenues have stopped, at least temporarily. The fund's size in kroner over the first half of the 2016 declined not only because of withdrawals by the government and lower earnings on investments but also because the kroner appreciated by 5.5 percent against the dollar. Consequently, in dollar terms, the size of the fund rose by $24 billion over the first half of 2016. Nevertheless, as reported in the press,[9] the fund, the government, and the Norwegians face two challenges: the size of the fund may have peaked, reflecting lower oil and gas prices and declines in Norwegian production, and global asset returns are low and expected to remain low, which calls into question the assumption of a 4 percent annual return. As with all SWFs, questions of how to invest the fund, and when and how much to draw on the fund to finance public needs, are inherently political, and they have dominated the political scene in Norway since the fund's inception in 1990.

Sovereign wealth funds have become well-known participants in international financial markets. The growth of their assets under management has slowed, but at about $6 trillion they remain collectively large enough to merit market attention and public concern about their activities. That is true in particular for the largest funds, 12 with more than $100 billion in assets and four with more than $500 billion. Consequently, SWFs continue to attract international attention. For example, the Financial Stability Board (FSB 2016) issued a consultative document on policy recommendations to address structural vulnerabilities (for the financial system as a whole) from asset management activities. The document includes an annex on pension funds and sovereign wealth funds in this regard.[10]

None of the 14 FSB recommendations is intended to apply specifically to SWFs, aside from the normal exhortations on transparency and disclosure. The annex mentions direct and indirect (via derivatives) influences on financial stability; see elements 31 and 32 in the SWF scoreboard results below. The other aspect flagged in the annex is the potential for withdrawals from the funds to disrupt financial markets; see elements 6 and 33 in the scoreboard. The FSB

9. Richard Hilne, "Oslo ruffles feathers as it taps wealth fund for the first time in two decades," *Financial Times,* August 24, 2016.

10. The second author was somewhat amused to discover that Bagnall and Truman (2013) is referenced as an "industry assessment," which it was not.

(2016, 39) states that it plans to return to pension funds and SWFs when it revisits its methodologies for identifying nonbank, noninsurance global systemically important financial institutions (NBNI G-SIFI). Whether their government owners or managers are concerned or flattered by this high-level attention, a subset of SWFs have become important players on the global financial stage. Their transparency and accountability are important tools for assessing the possible risks that they pose to the stability of the global financial system. The next section assesses SWF transparency and accountability based on the 2015 SWF scoreboard.

2015 SWF SCOREBOARD

Before turning to the 2015 scoreboard results, a reminder: The motivation behind the SWF scoreboard is not that every SWF should score 100 percent on every element and, thus, on the overall scoreboard. The scoreboard is intended to provide a benchmark, not to define perfection. The circumstances, environment, and national cultures surrounding each fund are different. It is unreasonable to expect that one size would fit all. Some of the elements in the scoreboard apply more precisely to some SWFs and less to others.

In this fourth SWF scoreboard, 60 SWFs and 9 government pension funds (GPFs) are scored for a total of 69 funds. As in the past scoreboards, GPFs are included because they are a natural point of comparison for SWFs: They, too, are government-controlled entities invested on behalf of the country's citizens for their future benefit. See Bagnall and Truman (2013, appendix A) for details on the 33 elements in the scoreboard.

Scores are based on publicly available information, such as summaries and annual reports on the funds' websites or from their ministries of finance. We also drew on the self-assessment reports that most members of the IFSWF have posted on the Forum's website. Most of the information used in this edition of the scoreboard is from 2015—hence its date—because funds tend not to release their annual reports for a given year, for example, until the second half of the following year, at the earliest.

The 2015 edition of the scoreboard includes 15 new funds (indicated by an asterisk in table 2). All members of the IFSWF are scored as in the past and there are eight new members of the Forum since 2012; two of them were scored previously before they joined the Forum. Three US funds are added to examine more broadly the transparency and accountability of SWFs in the United States. Likewise, two new funds from the United Arab Emirates (UAE) bring that country's total to seven. To add perspective on developing countries' SWFs, Peru's Fiscal Stabilization Fund and the Fondo Mexicano del Petroléo para la Estabilización y el Desarrollo are now included.

Though the SWF scoreboard has historically included funds that have at least some foreign assets, a few exceptions are included in this edition. Italy's Fondo Strategico Italiano and the new Russian Direct Investment Fund, which primarily invest domestically, are included because they are members of the IFSWF. France's BPIFrance Investissement is scored because it provides a point of comparison for Italy's fund. France's Caisse des Dépôts et Consignations was added for comparison purposes and because, founded in 1816, it is said to be the oldest SWF in the world.[11]

The range of these results emphasizes the fact that generalizations about the transparency and accountability of SWFs as a group are unfounded; the 2015 SWF scoreboard again demonstrates that funds differ widely.

Four funds that were included in the previous three scoreboards were dropped from the 2015 scoreboard: the National Fund of the Republic of Kazakhstan, São Tomé & Principe's National Oil Account, the Oil Revenue Stabilization Account of Sudan/South Sudan, and Venezuela's National Development Fund. Both the Venezuela and Kazakhstan funds were eliminated because they appear to be rapidly emptying, and there is little available information on them. As mentioned above, in the Kazakh fund's case, the drop in oil prices has caused the government to withdraw a large portion of the fund. In addition, we were unable to find any public information about the funds from Sudan/South Sudan and São Tomé & Principe. We speculate that the civil war in Sudan has prevented the fund from operating in recent years, if it has any assets left.[12]

11. As can be seen from table 1, a few other funds could have been added as well. The principal fund of any size is Saudi Arabia's Public Investment Fund, which we wanted to include but on which there is no information. In other words, it would have received a zero on the SWF scoreboard. The other large funds are Australia's Queensland Investment Corporation and the Victorian Funds Management Corporation, but until recently they invested only domestically.

12. In addition, for the 2015 scoreboard the names of several SWFs have changed: Ireland's National Pension Reserve Fund was replaced by Ireland Strategic Investment Fund, Mexico's Oil Income Stabilization Fund was replaced by Budgetary Income Stabilization Fund, Singapore's Government of Singapore Investment Corporation was replaced by GIC Private Ltd., and Dubai International Capital was replaced by its parent Dubai Holding.

Table 2 2015 SWF scoreboard

Country	Fund name	Score
	Nonpension SWFs	
Norway	Government Pension Fund—Global	98
New Zealand	New Zealand Superannuation Fund	94
United States	Permanent Wyoming Mineral Trust Fund	93
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	92
Canada	Alberta Heritage Savings Trust Fund	91
Chile	Economic and Social Stabilization Fund	91
Chile	Pension Reserve Fund	88
Timor-Leste	Petroleum Fund of Timor-Leste	88
United States	Alaska Permanent Fund Corporation	88
Australia	Future Fund	87
United States	New Mexico State Investment Council	84
Ireland	Ireland Strategic Investment Fund	82
United States	Alabama Trust Fund	82
Trinidad and Tobago	Heritage and Stabilization Fund	81
Korea	Korea Investment Corporation	78
Palestine	Palestine Investment Fund*	77
Nigeria	Nigeria Sovereign Investment Authority	76
Singapore	Temasek Holdings	76
United States	Texas Permanent School Fund*	73
China	China Investment Corporation	70
United States	(Texas) Permanent University Fund*	70
France	Caisse des Dépôts et Consignations*	68
Hong Kong	Exchange Fund	68
Kuwait	Kuwait Investment Authority	68
Mexico	Budgetary Income Stabilization Fund	68
United Arab Emirates	Mubadala Development Company	68
Angola	Fundo Soberano de Angola	67
Italy	Fondo Strategico Italiano*	67
France	BPIFrance Investissement*	65
United States	North Dakota Legacy Fund*	64
Malaysia	Khazanah Nasional Berhad	61
Singapore	GIC Private Ltd.	61
Brazil	Sovereign Fund of Brazil	60
Botswana	Pula Fund	59
United Arab Emirates	Dubai Holding	59
United Arab Emirates	Abu Dhabi Investment Authority	58
Rwanda	Agaciro Development Fund*	57
United Arab Emirates	Investment Corporation of Dubai	55
United Arab Emirates	International Petroleum Investment Company	55
Bahrain	Bahrain Mumtalakat Holding Company	52
Oman	State General Reserve Fund	52
Russia	National Welfare and Reserve Fund	49
Iran	National Development Fund of Iran	48
Kazakhstan	National Investment Corporation*	48
Mexico	Fondo Mexicano del Petroléo para la Estabilización y el Desarrollo*	48

(table continues)

Table 2 2015 SWF scoreboard *(continued)*

Country	Fund name	Score
	Nonpension SWFs	
Peru	Fiscal Stabilization Fund*	48
Kazakhstan	Samruk-Kazyna JSC*	47
Morocco	Moroccan Fund for Tourism Development*	47
Ghana	Ghana Petroleum Funds	45
Venezuela	Macroeconomic Stabilization Fund	42
Qatar	Qatar Investment Authority	40
Vietnam	State Capital Investment Corporation	39
Russia	Russian Direct Investment Fund*	36
Kiribati	Revenue Equalization Reserve Fund	35
United Arab Emirates	Abu Dhabi Investment Council*	33
Brunei	Brunei Investment Agency	30
Algeria	Revenue Regulation Fund	26
Libya	Libyan Investment Authority	23
United Arab Emirates	Istithmar World	23
Equatorial Guinea	Fund for Future Generations	11
Subtotal (60 SWFs)		**62**
	Government pension funds	
United States	California Public Employees' Retirement System	95
Canada	Canada Pension Plan Investment Board	94
France	Fonds de réserve pour les retraites	94
Netherlands	Stichting Pensioenfonds ABP	92
Canada	Caisse de dépôt et placement du Quebec	91
Canada	Ontario Teachers' Pension Plan	86
Thailand	Government Pension Fund	86
Japan	Government Pension Investment Fund	83
China	National Council for Social Security Fund	59
Subtotal (9 GPFs)		**87**
All funds (69)		**64**

* = indicates a fund that was included for the first time in this scoreboard

Source: Authors' calculations.

The Results

The 60 nonpension sovereign wealth funds received an average score of 62 percent in this edition of the SWF scoreboard (see table 2).[13] The median is 62.5. The range of scores was 87, distributed between 11 (Equatorial Guinea's Fund for Future Generations) and 98 (Norway's Government Pension Fund–Global), with a standard deviation of 20.5 percentage points. The range of these results emphasizes the fact that generalizations about the transparency and accountability of SWFs as a group are unfounded; the 2015 SWF scoreboard again demonstrates that funds differ widely.

The government pension funds scored an average of 87 with a standard deviation of 10 percentage points. The GPFs' higher average score reflects the fact that the institutions operating them are more firmly established in law and practice based on national and international standards. Moreover, the citizens of GPF countries have concrete expectations of benefiting from the funds, in the form of pensions, within their lifetimes. Although the GPFs score higher than SWFs on average, the 10 highest-scoring SWFs have scores as high as the GPF average or higher. In China's case, its GPF, the National Council for Social Security Fund, scored 11 points lower than its SWF, China Investment Corporation. In contrast, the US GPF California Public Employees' Retirement System (CalPERS) scored 95, higher than any of the US SWFs. France's Fonds de réserve pour les retraites scored 94, about 25 points higher than its SWFs

13. The scores on the 33 elements, which range from zero to one in one-quarter increments, are summed and scaled to 100.

Caisse des Dépôts et Consignations (68) and BPIFrance (65). Canada's three GPFs scored an average of 90, similar to its SWF, Alberta Heritage Savings Trust Fund (91).

Six US states have a total of seven SWFs: Alabama, Alaska, New Mexico, North Dakota, Wyoming, and Texas, which has two. Their average score is 79, significantly higher than the overall average of the 60 SWFs (62).[14] However, there is a 29-point range between the highest-scoring fund, the Permanent Wyoming Mineral Trust Fund (93), and the lowest-scoring, the North Dakota Legacy Fund (64), which is only slightly above the average for all nonpension SWFs.[15] Thus, the scores of US funds vary substantially.

One often hears that SWFs from emerging-market and developing countries are nontransparent, and consequently not as accountable to their citizens or those of the rest of the world. The scoreboard results refute this generalization.

A different comparison for the US funds is the other country with the largest number of SWFs and all at the subnational level: the United Arab Emirates. The seven Emirate funds average 50 percent, which is 12 points below the overall SWF average. In addition, the range between the highest scorer, Mubadala Development Company (68), and the lowest scorer, Istithmar World (23), is even greater than that for the US subnational funds.[16]

One often hears that SWFs from emerging-market and developing countries are nontransparent, and consequently not as accountable to their citizens or those of the rest of the world. The scoreboard results refute this generalization. It is true that all of the 30 SWFs below the median in table 2 are from emerging-market and developing countries. However, 15 of the 30 above the median score 77 on average, compared with 80 on average for the 15 funds from advanced countries and 79 for the group as a whole.[17] One can see that the funds of nonadvanced countries are well represented in each of the three groups of 10 above the median.

To address the Middle Eastern oil exporters specifically: two of them, the Kuwait Investment Authority (68) and the UAE's Mubadala Development Company (68), score above the overall average. But if the seven UAE funds are treated as one data point, the average for the six Middle Eastern oil exporters is 52 percent.[18] Their scores are low, but not at the bottom except for the UAE's Istithmar World.

On the other hand, the 15 new funds average only 57 percent.[19] The highest scorer is the Palestine Investment Fund at 77 percent. Five others squeeze in above the overall average of 62, and eight are below the average, with the Abu Dhabi Investment Council the lowest at 33.

Italy's Fondo Strategico Italiano earns a score of 67, essentially at the average. The Kuwait Investment Authority is an investor in the Italian fund and has a similar score 68. BPIFrance Investissement is slightly lower at 65, and its compatriot organization Caisse des Dépôts et Consignations receives a 68. None are distinguished scores.

In addition, the four largest funds with assets of more than $500 billion score only 74 percent on average, with the Abu Dhabi Investment Authority below the average for all funds. For the 10 next largest funds, the average is 62, equal to that for the 60 SWFs.

Progress on the SWF Scoreboard

A substantial number of SWFs have made significant progress in their transparency and accountability during what is essentially a decade since the first scoreboard was released in late 2007 (Truman 2007b).

Table 3 provides a summary comparison of the results of the four SWF scoreboards.[20] The number of funds added since the 2007 scoreboard (Truman 2008) is 27. Each row

14. By convention in the SWF scoreboards, the subnational and pension funds receive a score that is 3 percentage points lower than the maximum possible for all other funds because they receive only half credit on elements that by design do not apply to them: whether (7) their operations are integrated with monetary and fiscal policies and (8) their holdings are separate from international reserves. One might say yes to both questions and give them full credit, but that too would bias the results.

15. We understand that the role of Wyoming's SWF and other funds in jurisdictions experiencing lower-than-expected mineral prices and revenues was debated at the Stroock Public Forum on Sovereign Wealth, in Jackson, Wyoming, in August 2016.

16. Istithmar World may be in liquidation.

17. Of course, how one makes the split matters. In this comparison, countries such as Chile, Korea, China, Singapore, and Malaysia are classified as nonadvanced.

18. The average for the UAE funds is 50. The scores for the others are: the Kuwait Investment Authority 68, Bahrain Mumtalakat Holding Company 52, Oman's State General Reserve Fund 52, National Development Fund of Iran 48, and the Qatar Investment Authority 40.

19. The new funds are indicated by an asterisk (*) in table 2.

20. The number of SWFs scored in the 2007, 2009, and 2012 scoreboards were 37, 44, and 49, respectively, but, as mentioned earlier, four of these funds have been dropped from the 2015 scoreboard. Therefore, the number of funds that have been consistently scored are 33 (2007), 40 (2009), 45 (2012), and 60 (2015). See also footnote 1.

Table 3 Progression of average scores for the same nonpension SWFs (percent)

Number of funds	**2007**	**2009**	**2012**	**2015**	**Change from 2007, 2009, or 2012 score to 2015 score** (percentage points)
60 funds				62	0
45 funds			53	63	11
40 funds		56	57	66	10
33 funds	51	58	59	67	16

Note: The data for previous scoreboards are from Truman (2008, 2010) and Bagnall and Truman (2013), respectively, adjusted as described in footnote 1. Four funds that were evaluated in the first, second, and third scoreboards were not evaluated in the fourth (2015) scoreboard: the National Fund of the Republic of Kazakhstan, São Tomé & Principe's National Oil Account, the Oil Revenue Stabilization Account of Sudan/South Sudan, and Venezuela's National Development Fund.

Sources: Truman (2008, 2010); Bagnall and Truman (2013); and authors' calculations.

in the table provides averaged results on a consistent set of the indicated number of funds.

Three observations: First, the 16-percentage-point increase in the average score of the 33 funds first scored in 2007 is quite impressive, a 31 percent increase.[21] Second, for these funds the first big adjustment was between 2007 and 2009, after the work on this topic by one of us was first published (Truman 2007a, 2007b, 2008) and the Santiago Principles were developed and released (see below). The second big increase in scores was between 2012 and 2015, the explanation for which is not obvious, other than, perhaps, the growing influence of the IFSWF established after the Santiago Principles were released. Third, this pattern is repeated for each of the expanded lists of funds, those scored first for 2009 and 2012. Of course, the overall performance of each group is influenced by the scores of the first 33 funds in Truman (2008). But abstracting from the funds that came before, the seven funds introduced in 2009 (Truman 2010) showed no increase in average scores in the third scoreboard in 2012 (Bagnall and Truman 2013) but increased 15 percentage points, on average, in the latest scoreboard. The five funds introduced in 2012 had a very low average score at that time (19) but more than doubled their average by 2015 (41).

Figure 2 depicts the progress on the SWF scoreboard of the 60 nonpension funds in the 2015 scoring. Focusing on the 33 funds first scored in 2007, the divergence in improvement is striking. Ten funds had overall improvements of 20 percentage points (Singapore's Temasek Holdings and Trinidad and Tobago's Heritage and Stabilization Fund) to 64 percentage points (Nigeria Sovereign Investment Authority). Arrayed between these two extremes are, from largest to smallest, the funds of Oman, the UAE's Mubadala Development Company and Abu Dhabi Investment Authority, China, Qatar, Venezuela, and Iran. It would have been difficult for funds that scored highly in the 2007 scoreboard to show significant improvement by 2015. But one might have expected more improvement from the funds that scored below 80 percent in 2007. Nine of these 21 funds recorded less than double-digit improvements by 2015. From the lowest 2015 score to the highest, they were the UAE's Istithmar World, the funds of Algeria, Brunei, Kiribati, Russia's National Welfare and Reserve Fund, Botswana, Hong Kong, Ireland Strategic Investment Fund, and New Mexico State Investment Council. The last two funds did improve their scores from a respectable 77 percent to 82 and 84 percent, respectively.[22]

Performance on Elements of the Scoreboard

One approach to analyzing the results of the 2015 SWF scoreboard is to examine the performance of funds on average on each of the 33 elements and the four sections of the scoreboard: structure, governance, specific aspects of transparency and accountability, and behavior.[23] Table 4 summarizes the average performance in the 2015 scoreboard of the 60 SWFs and 9 GPFs on these elements and categories.

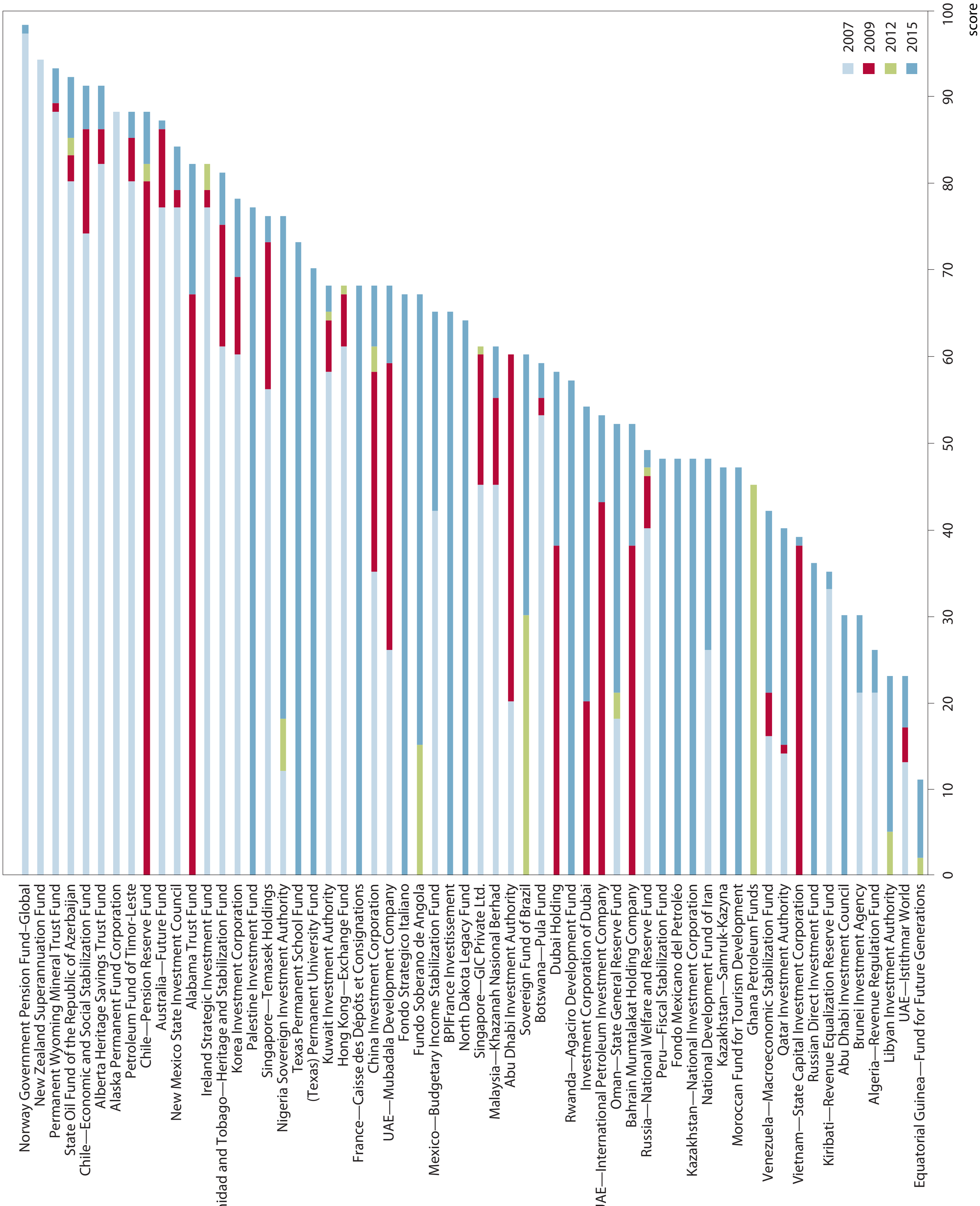
The nonpension SWFs on average score the highest on structure, perhaps because the elements in the structure

21. The seven GPFs that were scored in 2007 already had a rather high average score of 83 percent in 2007 and their average increased only to 87 percent in 2015.

22. Tables 6a and 6b provide more information on these trends.

23. One of the principles underlying the SWF scoreboard during its design phase was to make sure that at least one SWF did what all funds were being asked whether they did. The average scores understate the absolute number of funds that provide some information on each element because for most elements partial credit is allowed.

Figure 2 Progress on the SWF scoreboard, 2007–15



Source: Authors' calculations.

Table 4 2015 SWF scoreboard elements

	Element	Nonpension SWFs	Government pension funds	All funds
	Structure			
1	Objective stated	98	100	99
2	Legal framework	85	100	87
3	Changing the atructure	83	100	86
4	Investment strategy	75	100	79
5	Source of funding	88	100	89
6	Use of fund earnings	69	100	73
7	Integrated with policies	64	50	62
8	Separate from international reserves	64	50	62
Subtotal		**78**	**88**	**80**
	Governance			
9	Role of government	88	100	89
10	Role of governing body	88	100	90
11	Role of managers	65	100	70
12	Decisions made by managers	54	89	59
13	Internal ethical standards	53	78	57
14	Guidelines for corporate responsibility	36	89	43
15	Ethical investment guidelines	22	83	30
Subtotal		**58**	**91**	**62**
	Transparency and accountability			
16	Categories	78	100	80
17	Benchmarks	45	89	51
18	Credit ratings	48	89	54
19	Mandates	28	78	35
20	Size	85	100	87
21	Returns	63	100	67
22	Locations	41	75	46
23	Specific investments	48	83	53
24	Currency composition	43	78	47
25	Annual reports	82	100	84
26	Quarterly reports	46	56	47
27	Regular audits	89	100	90
28	Published audits	58	89	62
29	Independent audits	82	100	84
Subtotal		**60**	**88**	**63**
	Behavior			
30	Risk management	67	100	71
31	Policy on leverage	35	44	37
32	Policy on derivatives	58	100	63
33	Portfolio adjustment	11	44	15
Subtotal		**43**	**72**	**46**
Total	**All categories**	**62**	**87**	**65**

Source: Authors' calculations.

section concern the basics of organization. The funds score about the same (on average) for governance and transparency and accountability, and the least for behavior.

The governance elements focus on operations. The lowest scores in this section are on the elements about whether the fund has publicly stated policies with respect to (14) corporate responsibility (see below) and (15) guidelines for ethical investment. The latter concerns not the internal operations of the fund (covered by element 13) but whether it has public policies about where and in what types of activities it invests or does not invest.

A major issue surrounding SWFs at the time the SWF scoreboard was first developed in 2007–08 was the size of each fund in terms of assets under management.

The section on transparency and accountability includes 14 elements that relate to the scope and content of public reports. On average, the funds publish a substantial amount of information about (16) the categories of their investments, but less about (22) their location, (24) currency composition, or (23) specific investments. However, almost half the funds, in terms of their average scores, do provide some information on their specific investments. The same is true for whether funds state that they use (17) benchmarks or (18) credit ratings to guide their investments. The funds record the lowest scores on average on (19) disclosing the names of the external asset managers who have mandates to invest all or part of the fund.

A major issue surrounding SWFs at the time the SWF scoreboard was first developed in 2007–08 was (20) the size of each fund in terms of assets under management. In Truman (2010, 135) one of us predicted that within five years all SWFs would publicly disclose the size of their total assets at least once a year. While this prediction did not come to pass, Truman (2010) identified the trend in the funds that were scored in the 2009 scoreboard. Nine provided no information on their size in 2009, six of them still do not, and three of the six are estimated to be large funds (table 1): the Qatar Investment Authority, Singapore's GIC Private Ltd. (formerly the Government Investment Corporation), and the Abu Dhabi Investment Authority.[24] Five provided only some information on their size in 2009 and now only two of these five do, though one of the five (São Tomé & Principe) no longer is scored. In other words, progress for the funds initially scored is slower than was predicted. On the other hand, 18 of the 20 funds scored since 2009 report their size; the exceptions are Morocco's fund, which provides only partial information, and the UAE's new Abu Dhabi Investment Council.[25]

A lower level of transparency on average is recorded on (21) disclosure of funds' returns, and the improvement since the 2009 scoreboard is similarly meager. In contrast, the average score with respect to (27) regular auditing of funds has risen to 89 percent from 65 percent on the 2007 scoreboard. The average score for (29) independent audits, conducted by an outside party (which includes, for these purposes, the government audit authority), has recorded a similar rise. These results are encouraging.

The last element in the behavior section examines whether a fund has an announced policy for (33) how it adjusts its portfolio. The motivation is to discern whether the fund takes explicit account of its potential market impact. Few funds had such a policy in 2007 and the average score on this element in 2015 is roughly the same. However, on the more general question about (30) a risk management policy, the record is more comforting, with the average score for nonpension funds at 67 percent.

The performance of the GPFs on each element relative to the other elements is about the same as that of the nonpension SWFs, except higher in all cases.[26] In particular, however, the average performance on many of the transparency and accountability elements is substantially higher.

The objective of this exercise is not to see if all SWFs score 100 percent. As table 2 shows, no SWF scores 100 percent on the 2015 scoreboard. Consider the four top-scoring funds: We deduct half a point for Norway for the lack of clarity in its policy on the use of leverage. New Zealand, as a pension reserve fund, loses 3 percentage points off the top (see footnote 14), but it also has no public policy on how it adjusts its portfolio. The US Permanent Wyoming Mineral Trust Fund loses 3 percentage points because it is a subnational fund (see footnote 14), yet it also does not provide information on the location and currency composition of its investments. Finally, oil producer Azerbaijan's fund has no public policy on leverage or on adjusting its portfolio, and it receives only half credit for its statement of policy on corporate governance. In other words, even the funds with the highest scores demonstrate less than full performance on some elements of the SWF scoreboard.

24. The other three are Brunei's Investment Agency, Oman's State General Reserve Fund, and the UAE's Istithmar World.

25. In the UAE, each fund goes its different way as already noted. Four of the seven provide complete information on their size.

26. The lower scores on (7) integration with policies and (8) separate from international reserves reflect the convention described in footnote 14: The maximum score the GPFs can have on these elements is 50 percent.

THE IFSWF AND THE SANTIAGO PRINCIPLES

The IFSWF was formed by the countries and funds that participated in the International Working Group (IWG) of SWFs, which drafted the Santiago Principles, or the Generally Accepted Principles and Practices (GAPP) of SWFs, released in October 2008 (Truman 2010, 121). The IFSWF initially had 23 member countries with 25 funds and three observer countries, Oman (which recently joined), Saudi Arabia, and Vietnam.[27] Five years later, the IFSWF had added only one new member country and fund, Malaysia with its Khazanah Nasional Berhad. In 2014, it added four new member countries, Angola, Italy, Kazakhstan, and Nigeria, for a total of 28 countries and 30 funds.

As of this writing, four additional countries and their funds have joined the IFSWF (Morocco, Oman, Palestine, and Rwanda[28]), but two countries have withdrawn membership (Bahrain and Equatorial Guinea),[29] one fund has withdrawn (Singapore's Temasek Holdings),[30] and one country (Kazakhstan) now has two new member funds.[31] Norway's Government Pension Fund–Global withdrew from membership because the Norwegian finance ministry no longer sponsors it. However, in the 2015 scoreboard, it is treated as a member of the IFSWF. Thus, in this Policy Brief, the Forum is treated as having 30 member countries with 32 funds, of which 11 are new since the establishment of the Forum.

Four of the countries with funds that are now members of the Forum have changed the names and/or nature of the funds. In the 2015 scoreboard two of these funds are treated as continuations and two are not.[32] These adjustments reflect political and economic changes in those countries. Those changes illustrate the fact that the structure and purposes of a particular SWF are not, nor should they be, set in stone.

Several of the IFSWF member funds focus exclusively or predominantly on domestic investments, for example, the funds of Italy, Morocco, Palestine, Rwanda, and Russia. Consequently, in order to score all the IFSWF member funds, we dropped the previous, exclusive focus in the SWF scoreboard on SWFs that invest outside their countries.

Under the leadership of Adrian Orr as chair, the IFSWF has not only expanded its membership but also tightened its de facto membership criteria. Orr (2015a, 2015b) has emphasized the standard-setting role of the Forum by encouraging ongoing commitment to the Santiago Principles; knowledge-sharing with respect to increasing expected risk-adjusted investment returns of members; and representation in terms of collaboration with global financial policy institutions. The IFSWF now has subcommittees on governance, investment management, and the global economy. It has also promoted additional exercises in self-assessments by member funds with brief summaries of each fund's objectives on the IFSWF website and links to the websites of most of the member funds and to their reports on compliance with the Santiago Principles.

Six funds have not completed full self-assessments: Kazakhstan's Samruk-Kazyna, the Libyan Investment Authority, and Malaysia's Khazanah Nasional Berhad have nothing posted and the Abu Dhabi Investment Authority, Qatar Investment Authority, and Trinidad and Tobago's Heritage and Stabilization Fund only have brief summaries.[33] The evidence presented in the 2015 SWF scoreboard suggests that completion of an IFSWF self-assessment is no guarantee of a high score. Seven of the 26 funds that have completed the self-assessments score below the average for all 60 funds scored. On the 16-element simulation of Santiago Principles the comparable number is 5; see the next section.

27. Chile has two member funds, Economic and Social Stabilization Fund and Pension Reserve Fund, which have been scored as two funds starting with the 2009 scoreboard, even though the IFSWF treats them as one member fund. Singapore also had two member funds, the Government Investment Corporation (now GIC Private Ltd.) and Temasek.

28. The IFSWF classifies Rwanda as an associate member because it has not fully started investment operations.

29. Equatorial Guinea's Fund for Future Generations scored at the bottom of the 2015 SWF scoreboard, as it did when it was first scored in 2012. Bahrain Mumtalakat Holding Company at 52 percent scored closer to the average for all SWFs (62) but in 2012 it scored much lower at 38. One can surmise that these two funds were encouraged to withdraw from IFSWF membership in part because of the low level of their involvement with the IFSWF and its principles.

30. Reportedly, the managers of the entirely government-owned Temasek did not think the fund should be thought of as an SWF.

31. The IFSWF counts funds as members. Thus, Kazakhstan has two members. As noted above, the Forum counts Chile's two funds as one member fund because both funds report to the ministry of finance. In total, the Forum currently lists 30 member funds from 29 countries.

32. Iran's first fund in the IFSWF was its Oil Stabilization Fund, and now it is the National Development Fund. As noted above, Ireland's Pension Reserve Fund has been converted into the Ireland Strategic Investment Fund focused largely on investment in the domestic economy. These funds are treated as continuations. The National Fund of the Republic of Kazakhstan, which we did not score on this scoreboard because there was so little information on it, is reportedly being drawn down, but that country now has two funds that are members of the IFSWF, the National Investment Corporation and Samruk-Kazyna. Russia's combined National Welfare and Reserve Fund is also being drawn down, but enough information is available for us to score it. We also score the new Russian Direct Investment Fund, which is focused largely on domestic investments and is an IFSWF member.

33. The self-assessment of Mexico's Budgetary Income Stabilization Fund was posted in mid-September 2016. Reportedly, one or two more funds will post self-assessments in early November 2016.

Comparing the SWF 2015 Scoreboard with the Santiago Principles

Table 5 presents a comparison of the performance of the 60 SWFs and 9 GPFs on the 2015 SWF scoreboard and on two simulations of the Santiago Principles, which consist of 30 principles and subprinciples. The 30 parts overlap with 25 of the 33 elements in the SWF scoreboard; see Truman (2010, appendix 6A) for the correspondence. This simulation is in the third column of table 5. Alternatively, 16 of the major Santiago Principles overlap with one or more of the elements in the SWF scoreboard. This simulation is in the last column of table 5.[34]

Do funds that are IFSWF members score higher than their nonmember compatriots? The answer is no.

On average, the 60 SWFs score only marginally lower on the SWF scoreboard than on the two simulations of adherence to the Santiago Principles.[35] For all funds, the three measures are highly and significantly correlated. The current members of the IFSWF score about as well, on average, across the three measures. This may be a bit of a surprise given that one might expect them to have an advantage with their own criteria derived from the Santiago Principles, particularly in the16-element simulation, which implicitly requires less detail in some areas. On average, the current non-IFSWF-member funds also score slightly higher on the Santiago Principles simulations.

The results for 9 funds are higher by 15 percentage points or more on the narrower, 16-element simulation of the Santiago Principles than on the 2015 scoreboard. These funds are indicated by an asterisk (*). Seven of those funds are members of the IFSWF. One might suspect a certain amount of this behavior is guided by the specifics of the Santiago Principles. Two non-IFSWF-member funds also record double-digit positive differences. These differences are not large or persistent enough to produce a difference in increase in the average score for the two groups of funds in part because half a dozen funds have scores on 16-element simulation that are lower by about 10 percentage points than on the SWF scoreboard. On the SWF scoreboard, nine of the top 10 scores belong to members of the IFSWF; the exception is the Permanent Wyoming Mineral Trust Fund. Six of the next 10 funds are also members of the Forum.

In contrast, however, three of the lowest-scoring funds in the bottom 10 are also members of the IFSWF: the Libyan Investment Authority, the Russian Direct Investment Fund, and the Qatar Investment Authority. The assets of the Libyan Investment Authority have been frozen under UN sanctions even as the fund is suing Goldman Sachs and Société Générale in connection with their roles in earlier investment activities. (On October 14, 2016, the judge decided in favor of Goldman Sachs.[36]) The rival chairs of the fund and the unity government are trying to reach a solution to put the fund with its $67 billion in assets back in business.[37] The Russian Direct Investment Fund, investing primarily in Russia, receives a score 13 percentage points below the score of Russia's National Welfare and Reserve Fund, which was once a member of the IFSWF.

Another former member of the IFSWF, Equatorial Guinea's Fund for Future Generations, remains at the bottom of the scoreboard on all measures. On the other hand, the fund of Bahrain, also a former member country, improved its score on the 2015 scoreboard by 13 percentage points from the 2012 SWF scoreboard. Its score is also 9 percentage points higher on the 16-element simulation of the Santiago Principles than its score on the 2015 scoreboard.

Do funds that are IFSWF members score higher than their nonmember compatriots? The answer is no. As noted above, the new Russian Direct Investment Fund scores lower than the former Russian member fund. This pattern is seen in each of the other countries with multiple funds, where one fund is an IFSWF member. For the United States, the Wyoming fund scores slightly higher than the Alaskan fund, which is an IFSWF member; this margin is a bit larger in the 16-element comparison. (The Alaskan fund ranks second out of all seven US funds.) For Singapore, Temasek Holdings (former IFSWF member) outscores current member, GIC Private Ltd. though the gap narrows on the 16-element comparison. Lastly, the Abu Dhabi Investment Authority lags somewhat behind Mubadala

34. For the first, 25-element simulation, the 25 elements of the SWF scoreboard where there is an overlap are averaged to produce a score. For the second, 16-element simulation, the scores on more than one of the elements of the SWF scoreboard are averaged where they overlap with one of the Santiago Principles.

35. In the simulations each element is worth more when scaled to 100 than on the scoreboard.

36. Simon Clark, "Goldman Sachs Wins Legal Battle With Libyan Sovereign-Wealth Fund," *Wall Street Journal*, October 14, 2016, http://on.wsj.com/2ebfGRP.

37. Simon Clark, "Libya's Rival Sovereign-Wealth Fund Chiefs Seek Truce," *Wall Street Journal,* September 6, 2016.

Table 5 Comparison of 2015 SWF scoreboard and Santiago Principles

Country	Fund	2015 SWF scoreboard (33 elements)	Santiago Principles	
			25 elements	16 elements
	Nonpension SWFs			
Norway	*Government Pension Fund–Global*	*98*	*98*	*99*
New Zealand	*New Zealand Superannuation Fund*	*94*	*98*	*97*
United States	Permanent Wyoming Mineral Trust Fund	93	95	96
Azerbaijan	*State Oil Fund of the Republic of Azerbaijan*	*92*	*94*	*95*
Canada	*Alberta Heritage Savings Trust Fund*	*91*	*94*	*95*
Chile	*Economic and Social Stabilization Fund*	*91*	*88*	*84*
Chile	*Pension Reserve Fund*	*88*	*86*	*80*
Timor-Leste	*Petroleum Fund of Timor-Leste*	*88*	*84*	*80*
United States	*Alaska Permanent Fund Corporation*	*88*	*90*	*84*
Australia	*Future Fund*	*87*	*93*	*95*
United States	New Mexico State Investment Council	84	84	77
Ireland	*Ireland Strategic Investment Fund*	*82*	*84*	*88*
United States	Alabama Trust Fund	82	90	89
Trinidad and Tobago	*Heritage and Stabilization Fund*	*81*	*83*	*82*
Korea	*Korea Investment Corporation*	*78*	*85*	*88*
Palestine	*Palestine Investment Fund #*	*77*	*76*	*77*
Nigeria	*Nigeria Sovereign Investment Authority #*	*76*	*76*	*79*
Singapore	Temasek Holdings	76	80	86
United States	Texas Permanent School Fund	73	74	64
China	*China Investment Corporation **	*70*	*79*	*87*
United States	(Texas) Permanent University Fund	70	70	67
France	Caisse des Dépôts et Consignations *	68	74	84
Hong Kong	Exchange Fund	68	72	70
Kuwait	*Kuwait Investment Authority **	*68*	*78*	*85*
Mexico	*Budgetary Income Stabilization Fund*	*68*	*76*	*81*
United Arab Emirates	Mubadala Development Company	68	70	71
Angola	*Fundo Soberano de Angola #*	*67*	*70*	*66*
Italy	*Fondo Strategico Italiano #*	*67*	*72*	*73*
France	BPIFrance Investissement	65	70	73
United States	North Dakota Legacy Fund	64	63	55
Malaysia	*Khazanah Nasional Berhad #*	*61*	*64*	*69*
Singapore	*GIC Private Ltd.**	*61*	*78*	*81*
Brazil	Sovereign Fund of Brazil	60	59	61
Botswana	*Pula Fund*	*59*	*68*	*72*
United Arab Emirates	Dubai Holding	59	54	56
United Arab Emirates	*Abu Dhabi Investment Authority **	*58*	*73*	*81*
Rwanda	*Agaciro Development Fund #*	*57*	*58*	*70*
United Arab Emirates	Investment Corporation of Dubai	55	55	48
United Arab Emirates	International Petroleum Investment Company	55	50	49
Bahrain	Bahrain Mumtalakat Holding Company	52	57	61
Oman	*State General Reserve Fund *#*	*52*	*66*	*69*
Russia	National Welfare and Reserve Fund	49	49	47
Iran	*National Development Fund of Iran*	*48*	*56*	*59*
Kazakhstan	*National Investment Corporation #*	*48*	*56*	*52*

(table continues)

Table 5 Comparison of 2015 SWF scoreboard and Santiago Principles *(continued)*

Country	Fund	2015 SWF scoreboard (33 elements)	Santiago Principles 25 elements	Santiago Principles 16 elements
	Nonpension SWFs			
Mexico	Fondo Mexicano del Petroléo para la Estabilización y el Desarrollo	48	48	50
Peru	Fiscal Stabilization Fund	48	47	44
Kazakhstan	*Samruk-Kazyna #*	*47*	*50*	*55*
Morocco	*Moroccan Fund for Tourism Development * #*	*47*	*54*	*64*
Ghana	Ghana Petroleum Funds	45	52	51
Venezuela	Macroeconomic Stabilization Fund	42	48	49
Qatar	*Qatar Investment Authority **	*40*	*47*	*55*
Vietnam	State Capital Investment Corporation	39	43	47
Russia	*Russian Direct Investment Fund #*	*36*	*33*	*31*
Kiribati	Revenue Equalization Reserve Fund *	35	44	54
United Arab Emirates	Abu Dhabi Investment Council	33	36	41
Brunei	Brunei Investment Agency	30	35	35
Algeria	Revenue Regulation Fund	26	30	34
Libya	*Libyan Investment Authority*	*23*	*26*	*29*
United Arab Emirates	Istithmar World	23	22	27
Equatorial Guinea	Fund for Future Generations	11	10	9
Subtotal (60 SWFs)		62	65	67
of which IFSWF members (32)		68	73	75
Original members (21)		74	75	77
New members (11)		58	61	64
of which non-IFSWF members (28)		54	56	62
	Government pension funds			
United States	California Public Employees' Retirement System	95	96	96
Canada	Canada Pension Plan Investment Board	94	98	97
France	Fonds de réserve pour les retraites	94	98	97
Netherlands	Stichting Pensioenfonds ABP	92	94	95
Canada	Caisse de dépôt et placement du Quebec	91	98	97
Canada	Ontario Teachers' Pension Plan	86	90	94
Thailand	Government Pension Fund	86	88	88
Japan	Government Pension Investment Fund	83	89	91
China	National Council for Social Security Fund	59	68	66
Subtotal (9 GPFs)		87	91	91
All funds (69)		64	69	70

IFSWF = International Forum of Sovereign Wealth Funds; members indicated in italics including two separate funds for Chile, which the IFSWF counts as one member fund, and Norway's fund, which was formerly a member.
* = indicates a fund that scores 15 points or more higher on the 16-element simulation than on the 2015 SWF scoreboard
# = indicates a fund that joined the IFSWF after 2008

Source: Authors' calculations.

Development Company, though this ranking is reversed on the 16-element comparison.

In table 5, the 16-percentage-point gap between the average score for the 11 new members of the IFSWF since 2008 (58) and the 21 original members (74) on the SWF scoreboard is essentially the same as for the two simulations of the Santiago Principles.[38] Among the new members, the high

38. New members are indicated by # and shading in table 5, and include the two Kazakhstan funds as well as the new Russian Direct Investment Fund. Original members include Norway's Government Pension Fund–Global as well as both Chilean funds separately but exclude Singapore's Temasek.

scores of the new member funds of Palestine and Nigeria are notable. On the other hand, the two funds of Kazakhstan, the Moroccan fund, and the new Russian fund have a long way to go to catch up with other IFSWF members.

Progress of IFSWF Member and Nonmember Funds

As a complement to table 3, table 6a provides the scores for the current IFSWF member funds on the 2015 scoreboard. It also provides their scores in each of the three previous scoreboards if they were scored.[39] At the bottom are the average scores for a consistent group of funds each time they were scored. As with the entire group of SWFs, the big changes in average and individual scores for current IFSWF member funds were from the first, pre–Santiago Principles scoreboard for 2007 to the second in 2009 and from the third scoreboard for 2012 to the 2015 scoreboard. This latter change corresponds to a period of increased activity by the IFSWF. Notable among the scores of new IFSWF members is the current score for Nigeria's Sovereign Investment Authority, which has had, along with its country, a checkered economic and political history. Between the third and fourth scoreboards, its score increased by 58 percentage points.

The next to last column presents the changes in scores for 22 member funds from when they were first scored in 2007 until this fourth SWF scoreboard. The average change was 18 percentage points. Five funds had changes of more than 25 percentage points. They include the funds of Qatar and Oman and the Abu Dhabi Investment Authority, which are still below the average for all SWFs in this scoreboard. The scores of the funds of China, Mexico, and Nigeria also increased more than 25 percentage points.

An alternative measure of progress is shown in the last column, which presents the change between 2007 and 2015 relative to the difference between the fund's 2007 score and 100. The measure shows how much of this gap has been closed over the eight years. The average amount is 41 percent. Six funds narrow the gap by more than 50 percent: the funds of China and Nigeria, again, along with the funds of Trinidad and Tobago, Canada, Chile, and Azerbaijan.

In presenting the second edition of the SWF scoreboard, Truman (2010) noted the cluster of funds with scores above 80 percent. Nine current IFSWF members were in that category at the time, including two whose scores had moved into the category from the first scoreboard. Now there are two more, for a total of 11 of the 32 IFSWF member funds. Progress by any of the measures has not been uniform across these 32 funds. For example, Botswana's fund, which was only slightly below the average of all IFSWF members in 2007 and slightly above the average for all funds, has not recorded much progress on the SWF scoreboard.

Table 6b provides a similar historical comparison of the funds that are not members of the IFSWF. As already noted, they have recorded a lower average on each scoreboard. However, they show the same pattern as IFSWF members with their scores increasing principally between the first and second scoreboards and between the third and fourth scoreboards. The latter improvement cannot be directly attributed to the activities of the IFSWF. However, the activities of the IFSWF may have triggered a general uptick in embracing international standards. Alternatively, the member and nonmember funds may have been responding to common global and domestic forces for more transparency and accountability.

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Each of the 11 nonmember funds increased its score between the first and fourth scoreboard. The increases of Venezuela's Macroeconomic Stabilization Fund, UAE's Mubadala Development Company, and Singapore's Temasek Holdings are most noteworthy. Temasek's increase occurred primarily while it was a member of the IFSWF. In addition, four other funds recorded increases of 15 percentage points or more between the third and fourth editions of the scoreboard: the UAE's Investment Corporation of Dubai and Dubai Holding, Sovereign Fund of Brazil, and Alabama Trust Fund. On the other hand, the nonmembers of the IFSWF include laggards with low scores on the first scoreboard, which have remained low on the fourth; see the first four funds in table 6b that were scored for 2007.

39. The Nigerian and Malaysian funds were included in the 2007 scoreboard, but they did not join the IFSWF until later. Chile's Pension Reserve Fund was first included in the 2009 scoreboard.

Table 6a Progress of IFSWF member funds

Country	Fund	Scores 2007	Scores 2009	Scores 2012	Scores 2015	Change from 2007 to 2015: Percentage points	Change from 2007 to 2015: Relative to difference between 2007 score and 100
Libya	Libyan Investment Authority	—	—	5	23	—	—
Russia	Russian Direct Investment Fund	—	—	—	36	—	—
Qatar	Qatar Investment Authority	14	15	15	40	26	30
Morocco	Moroccan Fund for Tourism Development	—	—	—	47	—	—
Kazakhstan	Samruk-Kazyna	—	—	—	47	—	—
Iran	National Development Fund of Iran	26	26	26	48	22	30
Kazakhstan	National Investment Corporation	—	—	—	48	—	—
Oman	State General Reserve Fund	18	18	21	52	34	41
Rwanda[a]	Agaciro Development Fund	—	—	—	57	—	—
United Arab Emirates	Abu Dhabi Investment Authority	20	58	58	58	38	48
Botswana	Pula Fund	53	55	55	59	6	13
Malaysia	Khazanah Nasional Berhad	45	55	55	61	16	29
Singapore	GIC Private Ltd.	45	60	61	61	16	29
Angola	Fundo Soberano de Angola	—	—	15	67	—	—
Italy	Fondo Strategico Italiano	—	—	—	67	—	—
Mexico	Budgetary Income Stabilization Fund	42	42	42	68	26	45
Kuwait	Kuwait Investment Authority	58	64	65	68	10	24
China	China Investment Corporation	35	58	61	70	35	100
Nigeria	Nigeria Sovereign Investment Authority	12	12	18	76	64	73
Palestine	Palestine Investment Fund	—	—	—	77	—	—
Korea	Korea Investment Corporation	60	69	69	78	18	45
Trinidad and Tobago	Heritage and Stabilization Fund	61	75	75	81	20	51
Ireland	Ireland Strategic Investment Fund	77	79	82	82	5	22
Australia	Future Fund	77	86	86	87	10	43
Chile[b]	Pension Reserve Fund	—	80	82	88	—	—
Timor-Leste	Petroleum Fund of Timor-Leste	80	85	85	88	8	40
United States	Alaska Permanent Fund Corporation	88	88	88	88	0	0
Canada	Alberta Heritage Savings Trust Fund	82	86	86	91	9	50
Chile[b]	Economic and Social Stabilization Fund	74	86	86	91	17	65
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	80	83	85	92	12	60
New Zealand	New Zealand Superannuation Fund	94	94	94	94	0	0
Norway[c]	Government Pension Fund–Global	97	97	97	98	1	33
Average 32 funds					68		
Average 25 funds				60	72		
Average 23 funds			64	65	75		
Average 22 funds		56	63	64	74	18	41

— = not included on earlier scoreboards; IFSWF = International Forum of Sovereign Wealth Funds

a. The IFSWF classifies Rwanda as an associate member because it has not fully started its investment operations.
b. Chile has two member funds, Economic and Social Stabilization Fund and Pension Reserve Fund, which have been scored as two funds from the start even though the IFSWF treats them as one member fund.
c. The Norwegian Government Pension Fund-Global withdrew from membership because the Norwegian finance ministry no longer sponsors it. However, in this 2015 scoreboard, it is treated as a member of the IFSWF.

Source: Authors' calculations.

Table 6b Progress of non-IFSWF members

Country	Fund	Scores 2007	Scores 2009	Scores 2012	Scores 2015	Change from 2007 to 2015: Percentage points	Change from 2007 to 2015: Relative to difference between 2007 score and 100
Equatorial Guinea	Fund For Future Generations	—	—	2	11	—	—
United Arab Emirates	Istithmar World	13	17	17	23	10	11
Algeria	Revenue Regulation Fund	21	21	21	26	5	6
Brunei	Brunei Investment Agency	21	21	21	30	9	11
United Arab Emirates	Abu Dhabi Investment Council	—	—	—	30	—	—
Kiribati	Revenue Equalization Reserve Fund	33	33	33	35	2	3
Vietnam	State Capital Investment Corporation	—	38	38	39	—	—
Venezuela	Macroeconomic Stabilization Fund	16	21	21	42	26	31
Ghana	Ghana Petroleum Funds	—	—	45	45	—	—
Mexico	Fondo Mexicano del Petroléo para la Estabilización y el Desarrollo	—	—	—	48	—	—
Peru	Fiscal Stabilization Fund	—	—	—	48	—	—
Russia	National Welfare and Reserve Fund	40	46	47	49	9	15
Bahrain	Bahrain Mumtalakat Holding Company	—	38	38	52	—	—
United Arab Emirates	International Petroleum Investment Company	—	43	43	53	—	—
United Arab Emirates	Investment Corporation of Dubai	—	20	20	54	—	—
United Arab Emirates	Dubai Holding	—	38	38	58	—	—
Brazil	Sovereign Fund of Brazil	—	—	30	60	—	—
United States	North Dakota Legacy Fund	—	—	—	64	—	—
France	BPIFrance Investissement	—	—	—	65	—	—
United Arab Emirates	Mubadala Development Company	26	59	59	68	42	57
France	Caisse des Dépôts et Consignations	—	—	—	68	—	—
Hong Kong	Exchange Fund	61	67	68	68	7	18
United States	(Texas) Permanent University Fund	—	—	—	70	—	—
United States	Texas Permanent School Fund	—	—	—	73	—	—
Singapore	Temasek Holdings	56	73	73	76	20	45
United States	Alabama Trust Fund	—	67	67	82	—	—
United States	New Mexico State Investment Council	77	79	79	84	7	30
United States	Permanent Wyoming Mineral Trust Fund	88	89	89	93	5	42
Average 28 funds					54		
Average 20 funds				42	52		
Average 17 funds			45	45	55		
Average 11 funds		41	48	48	54	13	22

— = not included on earlier scoreboards; IFSWF = International Forum of Sovereign Wealth Funds

Source: Authors' calculations.

Comparison of IFSWF Members and Nonmembers on Elements of Scoreboard

With respect to the individual elements of the SWF scoreboard, members of the IFSWF, on average, score essentially as high as or higher than nonmembers (table 7). For the scoreboard as a whole, IFSWF members outperform nonmembers by 14 percentage points. An alternative measure of the difference in scores between the two groups on average is the difference relative to the gap between non-IFSWF members' scores and 100, which is 31 percent for the two average overall totals. By this measure, the higher average scores of IFSWF members are most pronounced in the structure and governance categories. This difference suggests that, as a group, the Forum funds are established with greater atten-

Table 7 Comparison of IFSWF members and nonmembes on scoreboard elements

	Element	All SWFs	IFSWF members	Other SWFs	Difference: Members minus nonmembers	Difference: Relative to gap with 100
	Structure					
1	Objective stated	98	100	96	4	100
2	Legal framework	85	95	73	22	83
3	Changing the structure	83	89	77	12	53
4	Investment strategy	75	76	75	1	3
5	Source of funding	88	87	89	–3	–24
6	Use of fund earnings	69	77	61	16	40
7	Integrated with policies	64	70	57	13	31
8	Separate from international reserves	64	72	55	17	37
Subtotal		**78**	**83**	**73**	**10**	**38**
	Governance					
9	Role of government	88	95	79	17	78
10	Role of governing body	88	100	75	25	100
11	Role of managers	65	77	52	25	51
12	Decisions made by managers	54	73	32	41	61
13	Internal ethical standards	53	67	38	30	48
14	Guidelines for corporate responsibility	36	41	31	9	14
15	Ethical investment guidelines	22	27	15	12	14
Subtotal		**58**	**69**	**46**	**23**	**42**
	Transparency and accountability					
16	Categories	78	84	62	22	57
17	Benchmarks	45	60	25	35	47
18	Credit ratings	48	53	38	16	25
19	Mandates	28	34	19	16	19
20	Size	85	84	75	9	38
21	Returns	63	66	52	14	29
22	Locations	41	53	24	29	38
23	Specific investments	48	45	46	–2	–3
24	Currency composition	43	48	31	17	25
25	Annual reports	82	86	68	18	56
26	Quarterly reports	46	57	29	28	40
27	Regular audits	89	97	70	27	90
28	Published audits	58	55	53	2	3
29	Independent audits	82	88	66	22	64
Subtotal		**60**	**65**	**54**	**11**	**25**
	Behavior					
30	Risk management	67	83	48	35	67
31	Policy on leverage	35	40	30	9	14
32	Policy on derivatives	58	63	51	12	25
33	Portfolio adjustment	11	14	7	7	7
Subtotal		**43**	**50**	**34**	**16**	**24**
Total		**62**	**68**	**54**	**14**	**31**

IFSWF = International Forum of Sovereign Wealth Funds

Source: Authors' calculations.

tion to these institutional aspects. With regard to accountability and transparency, the most significant difference in average scores is with respect to (25) annual reports and (27) and (29) regular and independent audits. The IFSWF members also perform better in terms of stated risk management policies (30).

Affiliation with the IFSWF and Corporate Responsibility

As in the past, slightly more than half of the funds scored in this fourth scoreboard are members of the IFSWF. As a consequence, three supplemental elements were added to the 2015 scoreboard to examine whether and to what extent these funds emphasize their affiliation with the Forum; see the left half of table 8. Of the 32 members, 20 members, or about two-thirds, mention their Forum membership on their websites.[40] The Alberta Heritage Savings Trust Fund received partial credit in this category because it mentions only its payment to the IFSWF for membership.

About half the members mention on their own websites the extent of their adherence to the Santiago Principles. The China Investment Corporation also does so even though it does not explicitly note its membership in the Forum. Interestingly, even though Bahrain's fund is not a member of the Forum, it states that it complies with the Santiago Principles but does not appear to comply thoroughly (see table 5). And Singapore's Temasek Holdings, a former member, mentions the Principles. In addition, the $1.4 billion Fondo de Ahorro de Panamá, which is not now a member of the IFSWF and was not scored because of its small size, states on its website that it adopts and seeks to comply with the spirit and purpose of the Santiago Principles.[41]

Lastly, six IFSWF members not only mention their adherence to the Principles but also post their self-assessment reports. The correlation between the average scaled score of members of the Forum on these three supplemental elements and their scores on the SWF scoreboard is only 0.17. The conclusion is that most of the members of the Forum are either reluctant to trumpet their membership or think it is not important to do so.

In the 2015 edition of the SWF scoreboard, the element on funds' policies with respect to corporate responsibility (scoreboard element 14) also was further investigated. This topic has been a focus of discussion within the Forum. The IFSWF cosponsored a workshop that included a session on responsible investment in March 2016. At the annual IFSWF meeting in November 2016, a focus will be on climate change. Moreover, Santiago Principle 21 states:

> SWFs view shareholder ownership rights as a fundamental element of their equity investments' value. If an SWF chooses to exercise its ownership rights, it should do so in a manner that is consistent with its investment policy and protects the financial value of its investments. *The SWF should publicly disclose its general approach to voting securities of listed entities, including the key factors guiding its exercise of ownership rights.* (Emphasis added)[42]

The right half of table 8 lists, first, the results for IFSWF members for SWF scoreboard element 14.[43] It then reports on three supplemental elements. First, on whether the fund's guidelines mention environmental considerations, only five IFSWF members do so with any clarity and one, Qatar's fund, received partial credit. The two French funds are the only nonmembers to mention the environment.

Second, in light of the italicized portion of Santiago Principle 21 above, another element asked whether the fund has a stated policy on voting its equity shares. Only 14 IFSWF members have a public policy, with the Italian fund receiving partial credit; in other words, less than half of IFSWF members. Seven nonmembers have a stated policy and two have a less-than-clear policy, for which they receive partial credit. The third supplemental element assesses whether the funds always exercise their voting rights. Only four members of the IFSWF clearly do so. In contrast, five nonmembers have a clear statement that they do, and the statements of two other funds give them half-credit.

The last column in table 8 scales the average score on these three supplemental elements to 100. In general, neither IFSWF members nor nonmembers appear to have active policies in the area of corporate responsibility. As one might suspect from visual inspection, the correlation of this average with IFSWF members' SWF scoreboard results is higher, at 0.42, than is the case for their stated relationship with the Forum in the left part of table 8.

40. Norway again is in the total, even though, as a nonmember, it would not be expected to comment on the Forum.

41. Fondo de Ahorro de Panamá, https://static1.squarespace.com/static/53924649e4b010f4651fd393/t/53da9174e4b04075c12db889/1406833012766/%5BPUB%5D+Pol%C3%ADticas+de+Inversi%C3%B3n+FAP+%28Acuerdo+%237%29_22+abril+2014_FirmasJD.pdf (accessed on October 14, 2016).

42. See the Santiago Principles at www.iwg-swf.org/pubs/eng/santiagoprinciples.pdf.

43. Element 14 of the scoreboard is "Does the SWF have in place, and make publicly available, guidelines for corporate responsibility that it follows?"

Table 8 IFSWF members' affiliation with the Forum and corporate responsibility

			IFSWF affiliation				2015 score on element 14: Guidelines for corporate responsibility	Environment and voting rights			
Country	Fund	2015 score	IFSWF mention	Principles mention	Self-assessment mention	Average scaled score		Environment mention	Voting mention	Voting in all cases	Average scaled score
Libya	Libyan Investment Authority	23	0	0	0	0	0	0	0	0	0
Russia	Russian Direct Investment Fund	36	1	1	0	67	0	0	1	0	33
Qatar	Qatar Investment Authority	40	1	1	0	67	0	0.5	1	0	50
Morocco	Moroccan Fund for Tourism Development	47	1	1	0	67	1	1	0	0	33
Kazakhstan	Samruk-Kazyna	47	0	0	0	0	1	0	1	0	33
Iran	National Development Fund of Iran	48	1	1	1	100	0	0	0	0	0
Kazakhstan	National Investment Corporation	48	0	0	0	0	0	0	0	0	0
Oman	State General Reserve Fund	52	1	0	0	33	0	0	0	0	0
Rwanda	Agaciro Development Fund	57	0	0	0	0	0	0	0	0	0
Botswana	Pula Fund	59	1	1	0	67	0	0	0	0	0
United Arab Emirates	Abu Dhabi Investment Authority	58	1	1	1	100	0.5	0	0	0	0
Malaysia	Khazanah Nasional Berhad	61	0	0	0	0	0	0	0	0	0
Singapore	GIC Private Ltd.	61	0	0	0	0	0	0	0	0	0
Angola	Fundo Soberano de Angola	67	1	1	0	67	0	0	0	0	0
Italy	Fondo Strategico Italiano	67	1	1	0	67	0.5	0	0.5	0	17
Mexico	Budgetary Income Stabilization Fund	68	0	0	0	0	0.5	0	0	0	0
Kuwait	Kuwait Investment Authority	68	1	0	0	33	0.5	0	1	0	33
China	China Investment Corporation	70	0	0.75	0	25	1	0	1	0	33
Nigeria	Nigeria Sovereign Investment Authority	76	1	1	0	67	0	0	0	0	0
Palestine	Palestine Investment Fund	77	1	0	0	33	0.5	0	1	0	33
Korea	Korea Investment Corporation	78	1	1	0	67	1	0	1	0	33
Trinidad and Tobago	Heritage and Stabilization Fund	81	0	0	0	0	0	0	0	0	0
Ireland	Ireland Strategic Investment Fund	82	0	0	0	0	1	0	0	0	0
Australia	Future Fund	87	1	0	0	33	1	1	1	0	67
Chile	Pension Reserve Fund	88	1	1	1	100	0	0	0	0	0
Timor-Leste	Petroleum Fund of Timor-Leste	88	1	1	0	67	0	0	0	0	0
United States	Alaska Permanent Fund Corporation	88	0	0	0	0	1	0	1	1	67
Canada	Alberta Heritage Savings Trust Fund	91	0.5	0	0	17	1	1	1	1	100
Chile	Economic and Social Stabilization Fund	91	1	1	1	100	0	0	0	0	0
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	92	1	1	1	100	0.5	0	1	0	33
New Zealand	New Zealand Superannuation Fund	94	1	1	1	100	1	1	1	1	100
Norway	Government Pension Fund–Global	98	0	0	0	0	1	1	1	1	100

(table continues)

Table 8 IFSWF members' affiliation with the Forum and corporate responsibility *(continued)*

			IFSWF affiliation				2015 score on element 14: Guidelines for corporate responsibility	Environment and voting rights			
Country	**Fund**	**2015 score**	**IFSWF mention**	**Principles mention**	**Self-assessment mention**	**Average scaled score**		**Environment mention**	**Voting mention**	**Voting in all cases**	**Average scaled score**
Total		—	**19.50**	**15.75**	**6.00**	—	**13.00**	**5.50**	**13.50**	**4.00**	—
Scaled											
IFSWF members (32)		68	61	49	19	43	41	17	42	13	24
Non-IFSWF members (28)		54	0	5	0	2	31	7	29	21	19
All SWFs (60)		62	33	29	10	24	36	13	36	17	22
GPFs (9)		87	—	—	—	—	89	56	89	78	74
All funds (69)		64	—	—	—	—	43	18	43	25	29

— = not applicable; IFSWF = International Forum of Sovereign Wealth Funds; GPFs = government pension funds

Source: Authors' calculations.

Summary

This analysis of the IFSWF and its work points to four conclusions about this important institution.

First, members of the Forum in general rank more highly on the SWF scoreboard. Some of the credit for their doing so must go to the activities of the Forum. But the differences between averages of member and nonmember scores are not huge.

Second, IFSWF members substantially diverge with respect to their performance on the SWF scoreboard and implicitly the Santiago Principles as well. Some members have low scores and/or have not substantially improved their scores since joining the IFSWF. Of the 32 IFSWF member funds, the mean and median score is 68 percent, only six percentage points above the average for all funds and 14 percentage points above the average for nonmembers (table 5). Of course, it is unreasonable to expect that all member funds will have very high scores.

Members of the Forum in general rank more highly on the SWF scoreboard. Some of the credit for their doing so must go to the activities of the Forum. But the differences between averages of member and nonmember scores are not huge.

Third, the IFSWF currently does not include as members all the largest funds. Six of the 11 funds listed in table 1 with more than $100 billion in assets under management are not current IFSWF members; three were formerly members counting, for this purpose, Norway's Government Pension Fund–Global, Singapore's Temasek, and Russia's National Welfare and Reserve Fund. Nine of the 14 funds with assets under management of between $50 billion and $100 billion are nonmembers; one was formerly a member but appears to be in dissolution (National Fund of the Republic of Kazakhstan) and two invest primarily domestically (Australia's Queensland Investment Corporation and Argentina's Sustainability Guarantee Fund). Saudi Arabia's Public Investment Fund is a prime candidate for IFSWF membership, especially if it absorbs Aramco. The IFSWF should also reach out to more funds from countries with multiple funds, particularly those in the United States and the United Arab Emirates.

Fourth, IFSWF members should revise either the Santiago Principles or their de facto practices to provide more relevant detail on funds' financial activities, such as identification of holders of investment mandates (scoreboard element 19), information on specific investments and the currency composition of their portfolios (elements 23 and 24), and, in particular, whether they not only conduct but also publish audits of their financial statements (element 28). They also fall short on corporate responsibility (element 14) and policy on leverage (element 31).

CONCLUDING REMARKS

Transparency and accountability are at the core of good governance. This was the principal motivation behind the development of the SWF scoreboard in 2007. The same motivation has guided the 2015 update provided in this Policy Brief.

The recent controversy surrounding Malaysia's sovereign fund, 1Malaysia Development Berhad (1MDB), illustrates the consequences of little-to-no openness to public scrutiny.[44] 1MDB is not technically an SWF, but it is at the lower end of the spectrum of accountability and transparency. Its website yields only a brief statement of its mission and no details about its governance, investments, or financial operations. Allegedly, some of its transactions involved the UAE's International Petroleum Investment Company, which is scored at 55 in the 2015 scoreboard. The head of that fund, Khadem Al Qubaisi, was dismissed when these allegations became public and recently was arrested.[45]

The 2015 SWF scoreboard results support three major conclusions. First, the variation in the 60 SWF scores is substantial in many dimensions. A large number of funds fall short of what the citizens of their countries or the international community should expect from these funds, in particular the large funds, with regard to their transparency and accountability.

Second, many funds have substantially increased their scores over the past decade, thereby increasing their transparency and accountability to their own citizens and to the

44. The 1MDB scandal involves a government-owned strategic investment company that has been charged with diverting funds to the personal account of the prime minister and others and taking on debt that it cannot service. The scandal is under investigation in a number of countries, including Switzerland, the United States, and the United Arab Emirates. See BBC News, "1MDB: The case that has riveted Malaysia," July 22, 2016, www.bbc.com/news/world-asia-33447456.

45. See Bradley Hope, "Key Figure in 1MDB Probe Is Arrested in Abu Dhabi," *Wall Street Journal*, August 18, 2016, www.wsj.com/articles/key-figure-in-1mdb-probe-is-arrested-in-abu-dhabi-1471561639.

governments and citizens of other countries. Progress is happening, but more can be done.

Third, the IFSWF has had substantial success in promoting the transparency and accountability of many of the SWFs that are members, but only 32 (actually 31) of the 60 funds that we scored are members. The Forum should be more active not only in increasing its membership but also in improving the transparency of its current members beyond the Santiago Principles.

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