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Sovereign Wealth Funds: A literature review

Bader Alhashel[*,1]

Kuwait University, Kuwait

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ABSTRACT

This paper reviews the research on the $6.65 trillion dollar Sovereign Wealth Funds (SWF). The literature, which has only appeared in the last few years, focuses for the most part on the investment behavior of SWFs, especially in light of calls for the regulation of these financial entities. The literature exhibits strong support for the idea that the motives of SWFs are economic, rather than political, as their opponents would claim. There appears to be conflicting evidence as to whether SWFs increase value.

1. Introduction

Sovereign Wealth Funds (SWFs) have gained considerable attention recently with various calls for more regulation of these vague investment vehicles. This sudden attention to SWFs, some claim,

* Correspondence to: College of Business Administration, Kuwait University, Shuwaikh, Kuwait. Tel.: +965 2498 8495; fax: +965 2483 8980.
E-mail address: balhashel@cba.edu.kw
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is caused by their large size, which by some accounts totals around $6.65 trillion (Sovereign Wealth Funds Ranking, 2014). It is possible that this increased attention is mainly due to the large investments these SWFs have made into some of the largest firms of the Western world, specifically financial firms such as Citicorp and Merrill Lynch during the last financial crisis. Along with this scrutiny comes the wrath of many stakeholders who have accused these SWFs of being driven by political motives, of trying to threaten the national security of the countries they invest in, and of stealing their intellectual property by investing in strategic industries.

To answer these concerns fully or partially, I try in this paper to review the as yet nascent literature on SWFs.

The rest of the paper proceeds as follows. Section 2 defines SWFs. Section 3 provides a short history of SWFs and their current status. Section 4 discusses the regulation literature. Section 5 discusses the benefits and costs SWFs bring to markets. Section 6 discusses the investment behaviors and strategies of SWFs. Section 7 discusses new trends emerging in SWFs behaviors. Section 8 presents the conclusions.

2. Definition

SWFs are state-owned investment vehicles that invest globally in various types of assets ranging from financial to real to alternative assets. These investment vehicles are usually funded by "commodity export revenues or the transfer of assets directly from official foreign exchange reserves. In some cases, government budget surpluses and pension surpluses have also been transferred into SWFs" (Butt, Shivdasani, Stendevad, & Wyman, 2008).

The main purposes for their establishment are stabilizing government and export revenues, accumulation of savings for future generations in resource-rich countries to offset the future lack of natural resources, and or/the management of foreign reserves (Aizenman & Glick, 2007; Beck & Fidora, 2008; Urban, 2011).

3. History and current status

Although some might think, based on the recent attention SWFs have been receiving, that they are new to global financial market, in fact they are not. SWFs have been in existence for quite some time, though not as visible as today. The first state SWF was actually established as far back as 1953 by Kuwait. It started as an operation to manage the country's oil revenue surpluses through a London office, and in 1983 it was officially established as a public government entity called the Kuwait Investment Authority (KIA) (Overview of KIA, 2013).

Prior to this fund, there was the Permanent School Fund established by the US state of Texas in 1854, followed by the Permanent University Fund in 1876. Both funds were intended to benefit educational institutions at all levels (Fawcett, 2013; Dewenter, Han, & Malatesta, 2010).

Today, there are about 71 SWFs managing assets estimated at US$6.65 trillion (Sovereign Wealth Fund Ranking, 2014) and acting as major players in today's market as they hold shares in one out of every five firms worldwide (Fernandes, 2009) accounting for about 2% of the total size of equity and bond markets globally (Gieve, 2009). To get an additional sense of the size of SWFs compare that to private equity firms which manages assets exceeding US$2 trillion as of 2011 (TheCityUK, 2012) and to hedge funds which manage about US$2.8 trillion in assets as of 2013 (Global Hedge Fund Asset Report, 2014). The Sovereign Wealth Fund Institute estimates that the largest SWFs are Norway's Government Pension Fund, UAE's Abu Dhabi Investment Authority, Saudi Arabia's SAMA Foreign Holdings, the China Investment Corporation, China's SAFE Investment Company, and the KIA (Sovereign Wealth Fund Ranking, 2014).

In Table 1 we see a list of the ten largest SWFs. The total assets managed by the ten largest funds amounts to about US$5 billion dollars which represents around 75% of the total estimated SWFs assets under management (AUM). While the majority of countries with SWFs are resource-rich countries with mainly oil as their natural resource, the table also shows that the source of capital for some of these major SWFs is not necessarily commodity related. China, as an example of a non-commodity dependent country, has three funds managing US$1.3 trillion. Such countries, as mentioned earlier,

Table 1
A List of the Top 10 SWFs by Assets.

Country	Fund	Assets US$ billion	Inception	Origin
Norway	Government Pension Fund – Global	878	1990	Oil
United Arab Emirates (UAE)	Abu Dhabi Investment Authority	773	1976	Oil
Saudi Arabia	SAMA Foreign Holdings	737.6	N/A	Oil
China	China Investment Corporation	575.2	2007	Non-commodity
China	SAFE Investment Company	567.9	1997	Non-commodity
Kuwait	Kuwait Investment Authority	410	1953	Oil
Hong Kong	Hong Kong Monetary Authority Investment Portfolio	326.7	1993	Non-commodity
Singapore	Government of Singapore Investment Corporation	320	1981	Non-commodity
China	National Social Security Fund	201.6	2000	Non-commodity
Singapore	Temasek Holdings	177	1974	Non-commodity

Source: Sovereign Wealth Fund Ranking (2014).
The table above shows a list of the top 10 Sovereign Wealth Funds (SWFs) by assets under management (AUM) along with information on each AUM's, year of inception, and origin of wealth.

have established these funds to manage their foreign reserves and improve the return they achieve on traditional exchange reserves (Beck & Fidora, 2008).

The US has eight SWFs as can be seen in Table 2 managing assets totaling US$128 billion, the largest of which is the Alaska Permanent Fund with assets of about US$51.7 billion. The sources of capital for the US SWFs are commodities ranging from oil, gas, to minerals.

Fig. 1 shows the evolvement of total SWFs assets quarterly since September 2007. The figure shows that the AUM of SWFs doubled over the time period of September 2007 and June 2014. This doubling in terms of AUM over the time period 2007–2014 coincides with a significant surge in the number of SWFs as can be seen in Fig. 2 which is a continuation of the an earlier strong trend in SWFs initiation that started earlier in 2000. There was also a relative surge in the number of SWFs established in the 1970s as oil revenues increased dramatically during to the two Oil Shocks of that period.

4. Regulation of SWFs

There have been numerous outcries against SWFs and demands for their regulation. This was vividly observed in the US over the previous decade. Two examples are the Dubai Ports World (DPW), a state-owned entity, and the China National Offshore Oil Corporation (CNOOC). DPW was supposed to manage six US ports as a result of its acquisition of a British company. Given the severe opposition,

Table 2
A list of US SWFs.

State	Fund	Assets US$ billion	Inception	Origin
Alaska	Alaska Permanent Fund	51.7	1976	Oil
Texas	Texas Permanent School Fund	30.3	1854	Oil and other
New Mexico	New Mexico State Investment Council	19.8	1958	Oil and gas
Texas	Permanent University Fund	15.3	1876	Oil and gas
Wyoming	Permanent Wyoming Mineral Trust Fund	5.6	1974	Minerals
Alabama	Alabama Trust Fund	2.5	1985	Oil and gas
North Dakota	North Dakota Legacy Fund	1.7	2011	Oil and gas
Louisiana	Louisiana Education Quality Trust Fund	1.1	1986	Oil and gas

Source: Sovereign Wealth Fund Ranking (2014).
The table above shows a list of US Sovereign Wealth Funds (SWFs) along with information on each fund's assets under management, year of inception, and origin of wealth.

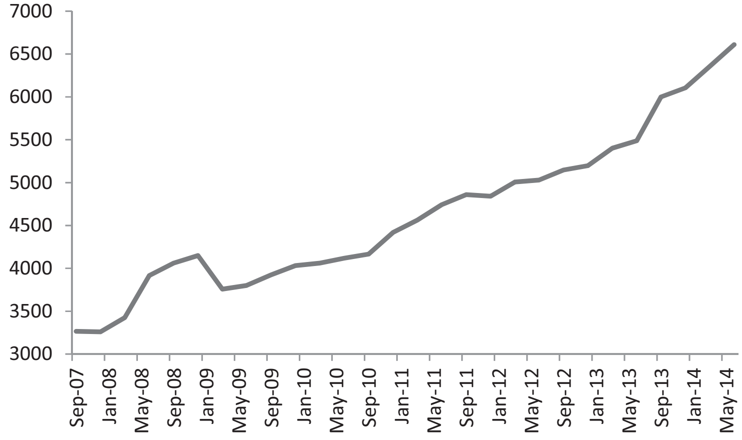

Fig. 1. SWFs Assets over time. The figure above shows total assets under the management of SWFs quarterly over the time period September 2007 and June 2014.
Source: Sovereign Wealth Fund Ranking (2014).

DPW divested from the management of these ports. The response to the bid made by CNOOC for the US oil company Unocal was no different.

These outcries have been accompanied by demands for significant regulation of SWFs in target countries and for greater transparency on the part of the SWFs.

Gilson and Mailhaupt (2007; hereafter GM) argue that the controversy with regard to SWFs is caused by the friction of two concepts, state capitalism and market capitalism. Market capitalism is defined by minimal government intervention in the economy and by individual firms whose objective function is to maximize their value. On the other hand, state capitalism is concerned with maximizing the value of a country's economy as a whole (e.g. China) and is characterized by a government that has a significant role in the economy. GM call it the new mercantilism.

GM note that the controversy regarding the SWF equity investments that allow them to become major controllers of the firm is a bit exaggerated. They take the US as an example. There are regulations that relate to the matter of foreign investors and their willingness to buy controlling stakes in US firms.

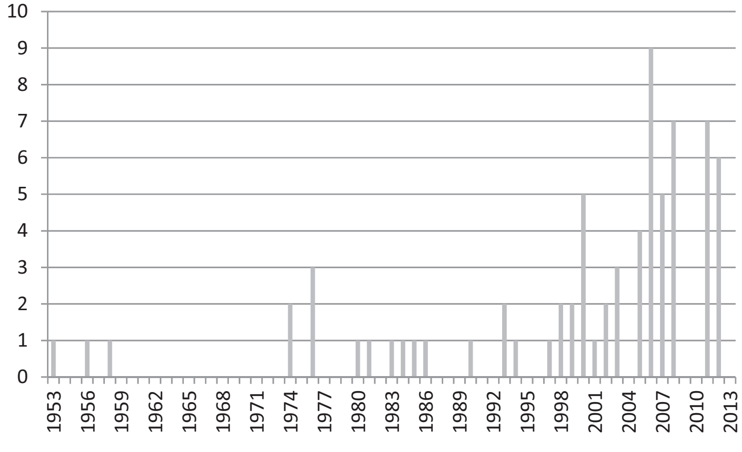

Fig. 2. Number of SWFs Established over Time 1953–2013. The figure above shows the number of SWFs established annually over the time period 1953–2013.
Source: Sovereign Wealth Fund Ranking (2014).

These regulations can result in the termination of any such deals on the basis of their ostensible threat to national security, and such calls have been made by the former president of the United States George W. Bush. Various countries have regulations similar to the US. The true controversy noted by GM is what they call "the acquisition of significant, but non-controlling, stakes in domestic companies by portfolio investors affiliated with foreign governments." Such types of investments do not fall under regulation by the government.

Regulation should attempt to reduce any national threat and any industrial espionage while not eliminating any benefits bestowed on the markets by having such players, GM suggests. GM go on to suggest that the stakes acquired by SWFs should be non-voting, thus precluding the SWFs from meaningful control yet allowing them to maintain their financial return, the main and only goal as stated by certain SWFs. This was the case for the SWFs capital that was injected in US financial institutions in the dawn of the financial crisis as it resulted in passive stakes for the SWFs (Baker & Boatright, 2010). However, many could argue that SWFs might be able to create value, as other institutional investors have done (e.g. Smith, 1996), through their active role in the management of the company, which would be lost if their ability to vote was taken away.

Rose (2008) notes that if SWFs wanted to make their investments politically driven instead of economically driven, there are various regulatory, economic, and political effects mitigating such risks. Rose goes on to argue that the US does not need more regulation but rather continued vigilance to protect the US from any possible political threats from SWFs. The argument against additional or excessive regulation is further supported by Avendano and Santiso (2009), Bahgat (2008), Das (2009), Epstein and Rose (2009), Greene and Yeager (2008), Mezzacapo (2009), and Plotkin (2008). One example of a current regulatory mechanism is the Committee on Foreign Investment in the United States (CFIUS), headed by the Department of Treasury, which reviews major foreign investments. Such similar regulation already exists in many other countries (Baker & Boatright, 2010).

Mattoo and Subramanian (2009; hereafter, MS) indicate a different means of addressing the SWFs. MS note that the fear of SWFs is caused by two elements. The first is the doubt about the benefit of national ownership and control, while the second is related to national security and whether the SWFs are driven by political rather than economic motives. MS argue that the World Trade Organization (WTO) could play a role in managing the transactions by the capital exporters (SWFs) and the capital importers (SWFs target countries). In other words, this will place the regulation of foreign investments into the hands of the WTO instead of the host countries. While such an arrangement would be beneficial for SWFs because they would be dealing with an entity not linked to the host country, it might not be as advantageous for the host countries.

MS pose three issues arising from unilateral action by one entity, the WTO. "First, unilateral action could easily acquire a protectionist slant, especially if protectionists articulate their concerns in the language of national security as happened in the aborted acquisition effort by Dubai Ports World and in the case of the Chinese national oil company, China National Offshore Oil Corporation (CNOOC). Second, there could be proliferating and hence highly heterogeneous standards imposed by different capital-receiving governments, which could impose undue costs of compliance on SWFs and hence affect the efficient flow of capital. Third, even where unilateral legislation is enlightened and uniform and takes the form of stipulating reasonable restrictions on SWFs in return for secure access, there are likely to be difficulties in monitoring compliance with these restrictions unilaterally or even bilaterally." However, they do note that a multilateral agreement might dominate a unilateral action. As for the choice of the WTO to have this responsibility, MS offer two reasons. The first is the WTO's service agreements, which to some extent cover material on SWFs, and second is its dispute settlement mechanism. Cohen (2009) alternatively suggests the OECD as an intermediary between host countries and SWFs by establishing negotiated agreements that address the definition of the SWFs investments, an assessment of their risk, and ways to resolute any potential disputes.

Gieve (2009) argues that for the benefits of SWFs to accrue, SWFs need to be more transparent or otherwise will be faced with significant financial protectionism. This is consistent with the call of Truman (2008). The empirical evidence supports the increased transparency of SWFs. Kotter and Lel (2011) find that the higher the transparency of the SWF, the higher the abnormal return of the target firm around the announcement day. Devlin and Brummitt (2007) point out that having international best practices for SWFs and additional transparency would help offset any financial protectionism from host countries.

Fleischer (2008) presents a different suggestion on dealing with SWFs. He recommends imposing an excise tax on sovereign wealth with the additional tax linked to the fund's compliance with best practices or measures of transparency and accountability.

There have been attacks against SWFs claiming their investments are driven by their desire to steal intellectual property. In terms of empirical evidence, the findings indicate no such desire (Fernandes, 2009).

There are also those who are on the other side of the argument stating that SWFs do not carry any threat to national security or foreign policy (Drezner, 2008). Reisen (2008) argues that the principles of public finance and development economics support countries in their establishment of SWFs for purely economic and financial reasons and therefore should reduce worry of a national security or industrial espionage threat. Similar conclusions are also arrived at by Shih (2009).

5. Benefits and costs of SWFs

Several papers have tried to look at the positive and negative effects SWFs bring to firms and target countries.

A very important benefit SWFs confer, given their nature as long-term investors with low leverage, is a long-term stabilizing influence on liquidity and financial markets promoting in turn higher economic growth (Baker & Boatright, 2010; Betbèze, 2009; Butt et al., 2008; Das, 2009; Keller, 2008; Makhlouf, 2010). This is supported, for example, by the very significant capital injection of $40 billion the SWFs made into various US financial institutions during the early stages of the recent financial crisis, which could be viewed as having helped the US and the global economy avoid a harder fall and a deeper recession (Aslund, 2007; GM). Banks that received SWFs capital injections did have better capital adequacy ratios after the financial crisis than non-SWFs backed banks (Anderloni & Vandone, 2012). Gieve (2009) goes on to argue that SWFs can be of significant help in improving the efficiency of global asset allocation and have a moderating effect on financial market downturns. This is supported by Sun and Hesse (2011), who look into 166 investments and disinvestments of SWFs and find that SWFs do not have a destabilizing effect on equity markets. Devlin and Brummitt (2007) put forth an additional supporting argument for lack of threat toward financial stability. Balin (2008) and GM also argues that SWFs will lead to more market liquidity and lower costs of capital. This goes counter to the criticism raised by Truman (2008) that changes in the asset allocations of SWFs would disrupt international financial markets. These arguments and findings concur with the case made by Baker and Boatright (2010) that the controversy surrounding SWFs is unwarranted and that their investments offer substantial benefits.

While agreeing that SWFs do bring liquidity to the market, In, Park, Ji, and Lee (2013) find that SWFs tend to destabilize the market. They do find, however, that SWFs with saving objectives did provide a stabilizing effect during the recent financial crisis.

Fotak, Bortolotti, Megginson, and Miracky (2008) noted the dependence of Western economies on SWFs as evidenced by the support the SWFs have given to the financial markets during their turmoil. They do indicate that much of the negative tone heard in the press is not supported by either theory or empirical findings. They state that: “Paradoxically, the popular concern over SWFs appears in direct contrast with a large body of academic literature which predicts that investments by large institutional shareholders will have a positive impact on firm profitability.” On the other hand, they find evidence suggesting that SWFs are value destroying. They find that investments by SWFs observed negative returns over the subsequent two year period. This finding gives support to an agency conflict hypothesis whereby SWFs are value-destroying entities as a result of driving firm managers to pursue goals that are not value-maximizing. The authors also point out that the stock returns of target companies observe positive abnormal returns around the day of the announcement, indicating that the market welcomes SWFs, an outcome that goes against their finding of long term negative returns. The findings regarding the stock performance in the short-run is also supported by Kotter and Lel (2011) and Raymond (2008). However, Dewenter et al. (2010) find that over a five year horizon there exists mixed positive evidence, which is consistent with Kotter and Lel's (2011) and

Raymond (2008) findings of zero-returns over the long-run. It should be noted that Dewenter et al. (2010) differ from those two papers in terms of looking at a much longer investment horizon. Lee and In (2013) explain the underperformance in target firm returns to be due the SWF's poor information on their target.

Knill, Lee, and Mauck (2012b) also argue that SWFs do not bring benefits to their targets firms as other institutional investors do. They arrive at this conclusion by looking at the risk-reward performance of target firms. They find that although risk is reduced in target firms after an SWF's investment, the compensation for risk is also reduced over the following 5 years. They also find that this drop in performance for target firms resembles that of firms targeted by other government-owned institutions.

There are other papers, however, that have found that SWFs bring value to their target firms (Chhaochharia & Laeven, 2008; Sojli & Tham, 2011). Fernandes (2009) uses the largest dataset I have encountered in this literature review, which contains 8000 investments made by SWFs in 58 countries. I believe this gives this paper greater robustness in its findings as compared to other papers that use datasets that amount to 10% or less of the size of this paper's dataset. Fernandes finds that there is an SWF premium. Firms with an SWF as a shareholder have values that are 10–15% higher than comparable firms, other things held constant. This result contradicts accusations that SWFs extract private benefits and/or their investments are driven by political motives (e.g. Truman, 2008), the author interprets. He also finds a positive association between the various operational performance measures of SWFs, which are what drives the increase in firm value. Such findings should be used as evidence against depriving SWFs of their control rights.

Moreover, Dewenter et al. (2010), by looking at acquisition returns and disinvestment returns, find a positive effect of SWFs on firm values. This effect is significantly driven by the transaction size. The effect has a positive relationship until it reaches a maximum, after which increases in transaction size have a negative effect on firm value.

Bertoni and Lugo (2014) find that the Credit Default Spread (CDS) of target companies drops following a SWF's investment. They find that the drop is larger when the SWF is for a politically stable non-democratic country that has a neutral relationship with the host country of the target country. The authors take this as evidence of markets expecting SWFs to protect their target investments especially when it is in their interest to build relationships with the host country.

Bortolotti, Fotak, and Megginson (2013) find evidence that announcement-period abnormal returns for SWFs are positive but are less than those for other comparable private entities. They also find an effect for the corporate governance of the SWF on the target firm's value. Firms targeted by active SWFs tend to achieve abnormal returns over the long-run while firms targeted by passive SWFs tend to underperform.

The benefits of SWFs could sometimes extend beyond the boundaries of firms to the host countries. Knill, Lee, and Mauck (2012a) find that SWF investments have a positive effect on closed countries while having the opposite effect on open countries.

6. Investment strategies

While SWFs tend to be quite opaque in terms of their asset allocations and investment strategies, several papers have tried to approach this area with the best information available. While furthering our understanding of their strategies, attempts to answer this question could also be of help in settling the debate on whether SWF investments are backed by political or economic motives along with the worries that SWFs might target strategic industries with strong ties to national security.

Chhaochharia and Laeven (2008; hereafter CL) approach this question by collecting data on SWF holdings in various listed firms. CL arrive at various findings. First, they find SWF investments are driven by diversification motives to a large extent, as they tend to invest in industries not located in their home countries. They have also found a bias in SWF investments, as they tend to be in countries with similar cultures as that of the SWF home country. They argue that this could either be driven by the desire of SWFs to be on familiar grounds or an exploitation of informational advantages. They also find value increases in the target countries. This value increase could be tied to the value-enhancement activities of active institutional investors. The authors argue that these results go against what is being expressed and advertised by many as politically driven investments and targeting of strategic industries. Finally, they find that there is a huge difference between funds in terms of transparency, governance, and activism.

Balding (2008) studies the portfolio construction of SWFs to look into the accusations made against SWFs and the implications of conspiring to influence the politics of the host countries, to create chaos in foreign economies, and to destabilize international financial markets. To address such an issue, he looks into the holding data of some of the largest SWFs, such as those of Singapore and Norway and various others. Hence, the question is whether economic motives drive the construction of these portfolios and the capital allocations among assets and geographic regions or not. First, he finds that SWFs do not have a large impact on the international financial markets. The second finding is that SWFs have been acting as rational economic agents in both their asset choices and diversification across assets and geographies. Balding concludes that, for the time being, there should not be support for restrictions on the cross-border investments of SWFs.

Fotak et al. (2008) study the pattern of investments made by SWFs. This is accomplished by the examination of 620 equity investments by SWFs around the world. They find that most of these investments were made in private firms in which the stake was a minority stake bought directly from the target companies (i.e. privately negotiated transactions). They also found that these investments were mostly made in the home country of the SWF and that there was a bias toward financial firms.

Contrary to Fotak et al. (2008), Kotter and Lel (2011) find that SWFs primarily target financially distressed, financially constrained, large, multinational firms. They also find huge disparities among the investment choices of the various SWFs. To arrive at these results, the authors look into over 400 SWF investments from 45 countries. This is consistent with Fernandes (2009), who documents that SWFs invest mostly in developed countries with little of their capital going to emerging markets. As for the characteristics of their target firms, Fernandes finds, contrary to Kotter and Lel (2011), a preference for large profitable firms with good analyst coverage located in countries with high investor protection and strong corporate governance. The final characteristic of SWF investments is that liquidity seems not to be a major concern, which could be attributed to their long-term investment horizon.

Bernstein, Lerner, and Schoar (2013) try to ascertain whether there is a difference in investment strategies across SWFs with a focus on their direct equity investments. The authors raise an interesting point overlooked in the other papers, which is that SWFs can be called upon to provide support to their domestic economy with investments or bailouts. The authors also investigate the relation between the governance structure of SWFs and their propensity to invest domestically or abroad. To answer these questions, the paper studies 2622 private and public equity investments made during the period 1984–2007. They find that SWFs are more likely to invest at home when domestic equity prices are high, and their investments abroad are made at still higher prices. However, the P/E ratio for their domestic investments is less than that for their international investments. Furthermore, these researchers determine that Asian SWFs and, to a lesser extent, Middle Eastern SWFs see the industry P/E of their investment fall in the subsequent year of the initial investment. They interpret this pattern as evidence to support their notion of SWFs supporting their domestic economies. As for the governance structure of SWFs, they specifically look into the presence of politicians on the boards and whether outside professional managers are involved in the decision making process. They find that those with politicians involved are more likely to invest at home than those with professional managers. Moreover, the SWFs with politicians observe the industry P/Es of their investments go down in the subsequent year as opposed to the opposite for SWFs with external managers, which observe an increase in the industry P/E in the subsequent year. The authors present two interpretations for these findings. First, it could be that SWFs, especially those with politicians involved, willingly invest in their home markets to achieve higher social returns at the expense of financial returns. The other interpretation is that SWFs are essentially making poor investment decisions. However, the authors note that the former interpretation would be difficult to reconcile with the findings in the paper that pertain to the investments of SWFs at times of peak P/E ratios in industries with high P/E ratios, which seems to be neither the time nor the type of firms that seek out financial support. The results and their interpretation in this paper should be viewed with skepticism, as they do not observe the return of the specific investment, instead observing only the return of the industry, and second, they only look at the industry return over a time-period of one year; and SWF have been found to be long-term investors.

SWFs providing support and acting as “investors of last resort” as well as “lenders of last resort” are also documented by Raymond (2010) and Couturier, Sola, and Stonham (2009).

Kotter and Lel (2011) argue that SWFs are passive rather than active shareholders. This is consistent with Rose (2008), who notes that the investments of SWFs in the US have been passive and that they have not exhibited any indication of control over their target firms. Similar findings are arrived at by Ghahramani (2013) who notes that even though SWFs are passive they do have a natural tendency to be active. However, Dewenter et al. (2010) find SWFs take on a more active role in target firms as evidenced by SWFs taking on directorships, senior management turnover, the target firm engaging in business addresses the fund, and/or governmental action. Mehrpouya, Huang, and Barnett (2009) arrive at similar results of an active role.

Knill et al. (2012a) find that political relations affect where SWFs invest although not the size of the investment. They find that SWFs tend to invest in countries with which they have weaker political relations. They argue that this is evidence their investments are not necessarily driven by financial motives and are indicative of SWFs not being rational investors seeking to maximize return and minimize risk. Along these lines, Dewenter et al. (2010) find evidence in support of the hypothesis that some SWF acquisitions are driven by information on government actions that will significantly affect the target firm's value. However, Avendano and Santiso (2009) find that SWFs investment decisions are not politically biased and do not differ greatly from those of other asset managers using equity mutual funds as their benchmark for assessment. Additional evidence on the lack of political bias is also provided by Keller (2008).

Dyck and Morse (2011) conduct an extensive analysis of SWF portfolios over the period 1999–2008 by looking at investments made in public equities, private firms, and real estate. They find that there is heterogeneity in the objectives pursued, which manifests itself in their portfolio compositions. While some SWFs are driven exclusively by financial motives in which they aim to maximize their risk-adjusted returns, other SWFs are affected by political motives with the hope of influencing the developmental path of their nation. The political considerations found here are in contrast to the political motives critics have attributed to the SWFs. An interesting finding is that SWFs tend to hedge their nation's economic risk by tilting their portfolio to reduce the covariance of its returns with important domestic drivers of wealth. The authors also find that SWFs usually take an active role in their investments and focus more on certain industries, such as finance, transportation, energy, and telecommunication.

Examining the investments of 19 SWFs over the period 1991–2010, Johan, Knill, and Mauck (2013) find that SWFs have a greater propensity to invest in private equity than other types of institutional investors. Furthermore, they find SWFs are not deterred by low investor protection or weak bilateral relations between their nation and the target country. Moreover, cultural differences have a positive effect on SWF investments instead of the usual negative effect found for other institutional investors.

These findings are supported by Boubakri, Cosset, and Samir (2011). Boubakri et al. (2011) find that SWFs prefer to invest in less developed neighboring nations with whom they do not necessarily share religious or cultural similarities. Furthermore, they find that SWFs prefer to invest in large, less liquid, less innovative companies that are distressed yet maintain significant growth opportunities.

Megginson, You, and Han (2013) find evidence in support of SWFs pursuing mostly economic returns through acting as commercial investors facilitating cross-border investments. They find that countries with high levels of economic development and openness but with less developed local capital markets tend to have their SWFs invest abroad in target countries with high levels of investor protection and more developed capital markets.

Miceli (2013) looks at 2740 deals over the period 1990–2010 for 29 SWFs and find no herding in their behavior. She instead finds that they follow a consistent investment strategy across industries in a given period which is more pronounced compared to other institutional investors.

Most of the SWF literature looks at a large pool of SWFs, however Caner and Grennes (2010) differ from the rest by examining the record of only one fund, that of Norway. They find that the fund's record resembles that of a mutual fund but with greater risk taking.

We can see that the spectrum of findings is very wide and dispersed. A deeper investigation is definitely warranted to reach a more robust conclusion regarding the investment strategies of SWFs. One possible reason for such conflicting evidence is the significant heterogeneity among SWFs. Therefore, future research could try to group similar SWFs together and observe whether differences still remain within homogenous groups and across differing groups.

7. SWFs: new trends?

In my coverage of the literature on the investment strategies of SWFs in the previous section, I documented significant disparity in terms of the finding on the role of SWFs in their target firms, from findings of a significant passive role (e.g. Kotter & Lel, 2011) to that of having a highly active role (e.g. Dewenter et al., 2010). This disparity could be attributed to the noteworthy difference between funds in their activism (CL).

This disparity has been more noted over the past few years as a stronger trend of SWFs activism is emerging. The type of activism SWFs are following is better described as "defensive" activism which is in contrast to that followed by hedge funds, "offensive" activism (Sovereign Shareholder Activism: How SWFs Can Engage in Corporate Governance, 2014). In defensive activism, SWFs try to create long-term value by taking actions that prevent mismanagement such as proposed corporate governance enhancement programs, taking a board set, and/or playing an active role during merger negotiations.

A leading SWF in this regard is the Norges Bank Investment Management (NBIM), the entity responsible for managing Norway's Government Pension Fund-Global. In its efforts of increasing shareholder rights, NBIM has submitted three shareholder proposals requesting proxy access for US firms. This would allow shareholders to nominate candidates to the board of directors resulting in a better representation of shareholders. NBIM has also an extensive program for the improvement of the governance of its target firms (The Corporate Governance of Sovereign Wealth Funds, 2014).

The Qatar Investment Authority (QIA) is another example of a SWF that recently played an active role that brought significant value to the target company's shareholders. QIA played a very strong role in the Glencore-Xstrata merger of 2013 by acting as a roadblock to the merger until a better price is offered, which eventually was granted resulting in the betterment of all the target company's shareholders in this merger.

There are also other examples in which the SWF tried to create a board that will better represent the interest of the shareholders. For example, the Amar Dhari Investments (a Kuwaiti investment syndicate) in partnership with another shareholder pushed for board changes in PLUS Markets Group. Temasek Holding, an investment arm for the Government of Singapore, called for more independent directors in Standard Chartered Plc while abstaining from voting for the reelection of the nonexecutive directors on the board. A third example would be China Investment Corporation recent stake in Blackstone including voting rights as opposed to an earlier non-voting stake.

This changing trend in the role of SWFs has several implications toward regulation as well as toward the extant literature findings on value creation and investment strategies. By adopting an active role, SWFs are exposing themselves greater to the risk of attracting regulatory scrutiny (Bortolotti et al., 2010; Sovereign Shareholder Activism: How SWFs Can Engage in Corporate Governance, 2014). However, such activism could very possibly bring significant value creation for target companies in similar vein to active value-enhancing roles taken by other financial institutions such as CalPERS (Smith, 1996), the Hermes UK Focus Fund (Becht, Franks, Mayer, & Rossi, 2010), and hedge funds (Brav, Jiang, Partnoy, & Thomas, 2008; Klein & Zur, 2009). Therefore, it would be quiet possible to find that along with this new activism trend that SWFs are more likely to bring value to their target firms challenging the mixed findings of the extant literature as discussed earlier as well as putting challenging any possible regulation that limits such value enhancement.

8. Conclusions

This paper attempts to cover the nascent literature on SWFs. I believe there are two reasons for our lack of knowledge regarding SWFs. First, SWFs have been inconspicuous; therefore, almost no attention has been paid to them until recently. Second, there is the question of their opaqueness and the limited information about their activities. This literature has the potential for growing and bringing more knowledge about SWFs as time progresses and more information becomes available. There is a significant amount of evidence, as covered in this paper, supporting the notion that SWFs are driven by economic motives, not political ones, and behave as economic entities maximizing their financial returns. This piece of evidence should be of great importance when discussing the regulation issues of SWFs and is surely a good point for the literature to launch from to create an appropriate system of regulation for these economic entities.

The following questions and issues could lead to potential enlightening research and better understanding of how SWFs operate and function.

- *Value creation*: There seems to be conflicting evidence on whether SWFs increase or decrease value to investors. This opens up the field for future research to try and better address this question and find an answer for. SWFs are not a homogenous group (Dyck & Morse, 2011) and therefore a possible way to address this is by looking at different subgroups of SWFs and how they affect the value of their targets especially in light of their growing activism.
- *Investment strategies*: Conflicting evidence also exists on the types of strategies SWFs follow, which renders further investigation necessary. Here again making use of the SWFs heterogeneity by splitting the sample based on several characteristics (e.g. active versus passive, source of capital) might give us a better idea. Would a commodity-backed SWF follow an investment style that is different from a non-commodity-backed one? As additional data becomes available performing equity style analysis as well as factor analysis as in the mutual funds and hedge funds literatures could go a long way in providing a more concrete answer to this question. Additional potential research that fall within this category would also try to understand the type of risk SWFs take and the risk exposure they have. Moreover, the literature could shed light on whether any market timing behavior is implored by SWFs.
- *Activism:* the growing active role played by SWFs could warrant more attention especially in terms of the tactics and styles of their activism. Questions that address what types of tactics are being used by SWFs and whether the choice of tactics depends on the funds characteristics could be worth pursuing. What kind of performance remedies is suggested? Are they mostly on corporate governance or do they also involve strategic, operational, and financial fixes for the target firm? Do SWFs generally coordinate with other shareholders or do they act independently? What kind of firms are targets to SWFs activism? Is there privately negotiated activism and how large is it? No less important is to ask whether this activism is fruitful and to observe which tactics and strategies are successful, if any, in enhancing a firm's value and/or its accounting performance.
- *Performance:* The question of performance is yet to be answered and is definitely of great importance especially to the SWFs stakeholders. The major question would be whether SWFs are able to achieve any positive risk-adjusted return (i.e. alpha). An additional question to understand is whether there is any persistence in SWFs performance. While it does not give a full picture, one could use currently available datasets to see whether there is any persistence in their equity transactions across funds. In other words, are there any funds that have their equity targets consistently do relatively well compared to other funds' picks? Future research could also shed light on whether SWFs firm picks (i.e. targets) differ in their performance depending on whether the target is foreign versus domestic. Possible differences could come from information on the firm as well as due to other effects (e.g. political) driving SWFs investments in local firms.
- *Governance:* none of the above mentioned literature looked at the agency relationship between managers and the owners (i.e. the country for which these managers are managing the funds). This question would greatly help in understanding SWFs, their structure, and how they operate. Possible questions would look into manager turnover and tie it to performance. It would also look at how their incentive mechanisms work as their structure would differ greatly from those of mutual fund managers and hedge fund managers as in those setting doing better leads to higher AUM which in turn leads to higher fees as well as incentive schemes for hedge funds. Do SWFs managers' incentive schemes work? What kind of behavior to do they induce?
- *Alternative assets:* SWFs are usually major investors in alternative assets such as private equity and real estate. The vast majority of the literature mentioned above deals with public equity. Many of the questions previously addressed or suggested could be extended to this arena. Furthermore, including

SWFs' alternative assets could give us a fuller picture of their assets and lead therefore to a better assessment of their performance and strategies.

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