

Determinants of Sovereign Wealth Fund Investment in Private Equity*

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Abstract

This paper examines investments of 50 sovereign wealth funds (SWFs) in 903 public and private firms around the world over the period 1984-2009. The data indicate that similar to institutional investors, SWFs are less likely to invest in private equity internationally, but the economic significance of this impact is surprisingly low. Cross-border investment by SWFs involves target nations where investor protection is low. SWFs are more likely to invest in private equity when the bilateral political relations between the SWF and target nation is weak. Surprisingly, cultural differences play a positive role in determining private equity investment outside of a SWF's own sovereign nation. Comprehensively, we are unable to reject the hypotheses in the paper, which suggest that, on average, SWFs invest in private equity with political motivations in mind. This leaves room for some SWFs to gain politically through potential corporate governance conflicts.

Key words: Sovereign wealth fund; private equity; international financial markets, legality, government policy and regulation.

“Sovereign nations have interests other than maximizing profits and can be expected to pursue them with every tool at their disposal, including financial power.”

- Former United States Senator and Chair of United States Security and International Trade and Finance subcommittee, Evan Bayh.

INTRODUCTION

Sovereign states manage their wealth by re-investing their assets both domestically and across borders, through various channels. Sovereign Wealth Funds (SWFs) are defined as sovereign-owned or sovereign-controlled pools of funds that invest in stocks, bonds, real estate and other financial instruments in target nations to maximize long-term risk-adjusted returns. The scope of SWF size, potential influence and lack of transparency raises suspicion among policymakers within target nations and other bodies charged with protecting global financial stability. In a report prepared for the members and committees of the U.S. Congress, the term “state capitalism” was specifically used to describe the possibility of SWFs using government-controlled assets to secure stakes around the world in strategic areas such as telecommunications, energy and mineral resources, and financial services, among other sectors (Weiss, 2008). The IMF has even raised the possibility that, "In some cases, assets may be shifted for political-strategic reasons rather than economic and financial reasons" (Tassell and Chung, 2007). Although there have not been any documented cases of SWFs realizing political objectives at the cost of financial objectives, there are several instances where nations have blocked investments with this fear in mind. The most notorious of these is when Dubai Port Authority, a company owned by one of the sovereign emirates within the United Arab Emirates, attempted to buy a company that had authority over six major seaports in the United States. Post-9/11, the U.S. Congress was very uncomfortable with an Arab company controlling U.S. ports and stepped in to block the transaction. Ultimately, the Dubai company was forced to divest the portion of the acquired firm that controlled the seaports.¹

¹ Other instances involve nations forcing SWFs to reduce their stakes in investments so that political agendas are less possible. For example, in 1986, then U.S. Defense Secretary Caspar Weinberger suspended a contract between the Department of Defense and a subsidiary of the Italian firm Fiat due to Fiat’s involvement with Muammar Gaddafi and the Libyan government through that country’s SWF. The situation became a major public relations issue for Fiat, especially given the Libyan’s refusal to sell the stake initially and the fact that the SWF had two board seats at Fiat. In 1988, the British Government took similar steps when it ordered the Kuwait SWF to cut its stake in British Petroleum by half. The Monopolies and Mergers commission explained its decision by saying, “Unlike other shareholders, Kuwait is a sovereign state with wide strategic interests and could be expected to exercise its influence in support of its own national interest” (Greenspon, 1988). At the time of the announcement, Kuwait held 21.7% of BP and subsequently reduced its stake to 9.9%.

Extant literature has suggested that SWFs make investments in public and private firms for both financial and political reasons (Dewenter et al., 2010; Kotter and Lel, 2011; Bernstein et al., 2009; Bortolotti et al., 2009; Chhaochharia and Laeven, 2008; Knill et al., 2009a; b). In this paper, we examine the factors that lead SWFs to invest in privately versus publicly-traded firms. Investment in privately-held firms is riskier as these firms are generally smaller, less stable (than public companies), less liquid and their true values are difficult to evaluate due to information asymmetries as well as opacity in disclosures. As a result, extant literature finds that institutional investors prefer to invest in large publicly-held firms when investments are international in scope (see, e.g., Dahlquist and Robertsson, 2001 and Aggarwal et al., 2005). Data on SWF investments shows that SWFs not only invest in privately-held firms, they invest in privately-held firms internationally. Since SWFs have met with resistance from governments concerned about their political motivations when investing in publicly-held firms internationally, investment in privately-held firms raises further questions about their motivations since these firms are not regulated. Indeed, though government regulators pay careful attention to public firms, private firms are relatively speaking “under the public radar”. If SWFs have overriding political reasons to invest, it is possible that SWFs could invest in private equity to minimize the scrutiny (i.e., government regulators and media) that they would receive when investing in publicly-held firms.

We test the drivers of private versus public SWF investment in this paper by examining investment patterns of 50 SWFs around the world in 903 public and private firms over the period 1984-2009. The data show SWFs are somewhat less likely to invest in private firms when the investment is cross-border but these results are economically small and do not hold up in further analysis. Contrary to prior work, the data fail to show evidence of a bias toward similar cultural characteristics. The data also shows that when SWFs invest in cross-border private equity, they are more likely to invest in private firms of target nations with weaker legal conditions. Finally, the data suggests that SWFs are more likely to invest in private targets when political relations between their domicile nation and the target nation are weak. Comprehensively, we cannot reject the hypothesis that SWFs, on average, invest in private equity with political motivations in mind. In the event that political rationales dominate certain SWF investment, there is the prospect of potential corporate governance conflicts.

While there is evidence that decisions to invest in or withdraw from target nations may be based on political reasons (Knill et al., 2009b), we know very little about the investment patterns of SWFs and especially the role politics plays in asset allocation (see Bernstein et al., 2009 and Dyck and Morse, 2011). If we were to assume that political motives play no role in investment decisions, then we could say that SWFs are, for all intents and purposes, merely institutional investors. Prior research

shows us that while institutional investors as a group follow similar investment patterns, each type of institutional investor will exercise differing “trading strategies”. Further, these different investment targets and risk tolerance will set asset allocation and asset weights over time (Fung and Hsieh, 2009). In the case of SWFs, we believe the issue of differing investment targets is significant, as these targets are set by the sovereign governments that own and run these funds. It is therefore extremely difficult to assume an absence of politics in asset allocation decisions. Prior research on SWFs have tried to do this. Bernstein et al. (2009) looks at the presence of politicians in the governance of a fund to determine SWF investment in private firms. If the data do not indicate the presence of an obvious politician, then it is assumed that there is no political affiliation. Though these authors find an impact of politicians leading the fund, the definition of political affiliation is troublesome. A sovereign nation can control the trading strategies of a SWF through avenues other than a board of directors; for example, through shareholder rights. Also, a person need not be a politician to be deemed a representative of the government shareholder of the SWF and to act in its interest. Indeed, Bernstein et al. fully acknowledge that a study across a wider set of asset classes is needed to fully understand SWF investment strategies. Dyck and Morse (2011) also look at SWF investment strategies and find that it is the political motives that provide an explanation for any variance in their investment patterns. For the purposes of this paper, we follow other extant research in assuming that it is the involvement of the sovereign governments in the ownership and management structures of SWFs that differentiate them from other large institutional investors.

It is for these reasons that we are analyzing the factors contributing to recently increased activity of SWFs in direct private equity investment (we refer to the SWF investment in private firm securities as direct private equity to differentiate it from investments made in private equity funds). Our paper adds to the burgeoning SWF literature on the impact of SWF investment. Dewenter et al. (2010), Kotter and Lel (2011) and Bortolotti et al. (2009) each find that SWFs have a short-term positive impact on their target firm performance with varying impacts in a longer-term window. Knill et al. (2009a) suggest that the impact of SWF investment most closely resembles that of other government investors, leaving room for political motivations and/or inefficiencies. Though political motivations may be as innocent as piggy-backing on existing firms to develop skills in acquirer nations, there is nevertheless the more serious potential for tunneling or the transfer and shifting of assets for politically-strategic reasons rather than economic and financial reasons (Johnson, 2000; Tassel and Chung, 2007; Sarkar, 2010). Our first look at drivers of public versus private SWF investment suggests distorted motivations for private investment in relation to legal conditions, and as such, further evidence on SWF conflicts of interest is warranted.

Our paper is perhaps closest in spirit to working papers by Morse (2011) and Bernstein et al. (2009). The first of these papers looks at SWF influence in private equity funds. Though the data and motivation of this paper certainly overlaps ours, the intent is quite different. Morse (2011) looks at deal and exit linkages for passive investment by SWFs in private equity funds to imply whether SWFs exert influence on the privately-held firms in which they invest. Our approach differs in that we examine the determinants of SWFs investing *directly* in privately-held firms versus publicly-held firms to infer whether or not SWFs invest with political motivations in mind. Bernstein et al. (2009) examines direct private equity investments and touches on politics, but from a different perspective than ours. This paper examines what impact politicians managing investments has on the location of those investments and finds that funds with politicians managing the SWF tend to see a stronger homeward bias. We take an entirely different approach in that we are interested in learning more about the motivations of the SWFs investing in direct private equity and examine bilateral political relations between the target and SWF nations.

This paper is organized as follows. The next section introduces the hypotheses and a theoretical framework for analyzing SWF investment in direct private equity. Thereafter we present the data, the empirical method and the multivariate analyses. Finally, the last two sections of the paper describe robustness checks that were provided as well as the conclusions.

SWF INVESTMENTS AND POLITICAL MOTIVATIONS

Central banks of sovereign states invest foreign exchange reserves and excess revenues from natural resources such as oil and gas in less liquid, more profitable assets. Government-owned enterprises utilise profits earned domestically to finance strategic cross-border acquisitions. Pension fund receipts are invested by public pension funds to ensure future pension liabilities can be met. Over the years however, a type of sovereign investor distinct from central banks, government enterprises and pension funds has evolved. These sovereign-run wealth managers are called sovereign wealth funds (“SWFs”) (Rozanov, 2005). While it is well documented that the first SWF may have been established in 1953 by the establishment of the Kuwait Investment Authority, it is Rozanov who is credited with coining the term “Sovereign Wealth Fund” in 2005 to distinguish the evolution of structure and objectives of this type of investor from those of other sovereign-investors (Bortolotti et al., 2009). More significantly, in the last decade there has been considerable interest in the speed of growth in size and number of SWFs, and the

size and nature of their investments. Such interest has in fact raised concern among policy makers and academics alike (Balding, 2008 and Johnson, 2007).

SWF's are identifiable and divergent from other types of pooled funds by their underlying objectives. These objectives are: (1) to insulate the sovereign state's budget and economy against resource price and supply swings; (2) to convert revenues from non-renewable resources such as oil or minerals into a more diversified portfolio of assets for use by future generations; (3) to increase the earnings on foreign currency reserves; (4) to provide budgetary support for potential unfunded contingent pension liabilities or other monetary requirements, and (5) to increase political influence by making political foreign investments (Knill *et al* (2009b)).² These objectives are in turn similar to those of other types of sovereign investors. We believe that the main distinguishing feature of SWFs, which clearly distinguishes them from other types of pooled-fund investors and sovereign investors, is their fifth objective. When taking into account the speed of growth and number in SWFs, as well as the fifth objective mentioned above, it becomes understandable how the increasing sway these funds have over international investments and the global financial markets has created much interest in determining factors influencing SWF investment decisions (Lyons, 2007).

In number alone, since 2005, at least six³ new SWFs have been created representing a 37.5% increase.⁴ Perhaps more important is that, according to most reports, SWFs are expected to grow at an even more impressive rate going forward. Currently, there is approximately \$2 ~ \$3 trillion being managed by SWFs. Some experts estimate that this will increase to approximately \$9 ~ \$15 trillion by 2012, although other studies find that estimates may be misleading due to inconsistent accounting of SWF assets (Jen, 2007; Balding, 2008). Such estimates may also be inaccurate as SWFs are notorious for their opacity. Unlike other pooled funds such as mutual funds or pension funds, SWFs are not scrutinized by any financial regulatory body and their only reporting requirements are to the sovereign states or sovereign owners that more often than not prefer less transparency. Further, evidence suggests that SWFs are diversifying from their preference of investing in publicly listed firms in target nations and increasingly investing in direct private equity (Kern, 2010; Randolph, 2008) (See Figure 1).

² See Sovereign Wealth Funds--A Work Agenda 5, International Monetary Fund (2008) p.5, available at <http://www.imf.org/external/np/pp/eng/2008/022908.pdf>

³ This figure is based on the definition of SWF used in this paper. A more generic or inclusive definition of SWF would find 17 new SWFs since 2005.

⁴ Sovereign Wealth Fund Institute at www.swfinstitute.org/

[Insert Figure 1 here]

To understand the implications of increased direct private equity investment by SWFs, it is necessary to determine the extent to which political (i.e., strategic or non-financial) objectives relate to investment decisions. Though we acknowledge that financial and political motivations are not necessarily mutually exclusive, if financial reasons are the overriding investment objectives, then the move from investments in public firms to direct private equity may be mainly financially motivated as SWFs underperform in the public markets (Bortolotti et. al., 2009). For example, SWFs may be interested in increasing earnings by investing in riskier, potentially high-yielding direct private equity in addition to further diversifying their portfolio holdings. Recent studies on SWFs such as Chhaochharia and Laeven (2008) find evidence that would imply that SWF motivations may also be political; direct evidence is provided by Knill et al. (2009b). A 2008 survey of sovereign wealth funds and investors, private equity managers and funds, financial institutions and corporate entities supports the findings of these studies by showing that 36.4% of respondents identified “potential strategic benefit/investment for relevant wealth fund jurisdiction” as the most important investment criterion and only 35.5% identified “the highest economic return” as the most important investment criterion.

The main concerns raised by the potential divergence between purely financial and political objectives for investments are related to the legal and operational structure of SWFs. From an institutional structure perspective, within our data sample for example, some SWFs are sovereign-owned corporations (e.g., Alaska Permanent Fund Corp). Others, such as the Abu Dhabi Investment Authority, Korea Investment Corporation and Qatar Investment Authority, are separate legal entities governed by the specific domestic constitutive law. Finally, still other SWFs, such as the Government Investment Corporation of Singapore (GIC) and Temasek Holdings Pte. Ltd., are owned by sovereign states but are subject to general company laws. Generally, domestic legislation either specifically establishes the governance and operational framework of the SWF, or the owners of the SWF (governments) work within existing company law to govern and maintain operational control. Sovereign owners of SWFs determine the investment objectives, appoint the members of the board (according to the IIFSW Report, 2011, the chairman being selected by the minister of finance, central bank governor or head of state), and provide general oversight. When the SWF is a sovereign-owned corporation, it may be directly managed by the sovereign nation’s Ministry of finance or a board comprised of government agencies or government officials. It is extremely difficult to identify the separation between sovereign state and SWF. This apparent sovereign ownership and control obviously raises concern among target nations as SWFs increasingly carry out investments in less transparent private companies.

The relative opacity of SWFs has not so far been deemed to be an insurmountable problem in view of SWF investments in public firms as the firms themselves are bound by relatively stringent disclosure requirements. However, in light of increasingly direct investments in equally opaque private firms by SWFs, it is theoretically possible that political objectives may lead to the exacerbation of corporate governance conflicts as corporate-level decisions are made with more political objectives in mind.⁵ As target nations and regulators are becoming increasingly observant of the effect of increased SWF investment on local markets, could SWFs be using this form of direct private equity investment to make investments in target nations under the public radar and potentially further their political strategies? If the increased investment in direct private equity is to potentially facilitate political objectives instead of gain financially, the target nations should consider the effect the additional agency costs SWF investment will have on existing corporate governance regimes and reevaluate their positions on SWF investments.

Since research on SWF investment in private equity is nascent, we must look to other literature for guidance as to what we might expect to find regarding SWF patterns of investment in private equity. The investment home bias literature would suggest that investors prefer to invest in the familiar (see e.g., Huberman, 2001), which typically translates into over-investing in the investor's home country and under-investing in foreign nations. This bias is explained by the information asymmetry between domestic and foreign investors (see, e.g., Kang and Stulz, 1997; Dvorak, 2005; Choe et al. 2005; Buckley and Casson, 1998; Seth et al., 2000; Covrig et al., 2006). To guide us as to what we will find when investments are cross-border (much of our sample), we look to the literature on cross-border investment. Extant literature clearly shows that institutional investors prefer to invest in larger, more stable firms when investing in foreign countries (see e.g., Dahlquist and Robertsson, 2001 and Aggarwal et al. 2005). If SWFs are investing with no political motivations whatsoever, we should find that their cross-border investment tendencies are similar to institutional investors. Conversely, if SWFs are investing with political motivations in mind, we would expect to find a positive relationship between cross-border investments and the likelihood that SWFs invest in private firms. Formally stated, this becomes:

Hypothesis 1a: The probability of SWF investment in direct private equity is positively associated with cross-border investment.

The results of Chhaochharia and Laeven (2008) find that SWFs exhibit a home bias and tend to invest in countries with similar cultures to their own. Keeping in mind that Chhaochharia and Laeven

⁵ Kuwait Investment Authority, China Investment Corporation and Dubai World have all publicly objected to increased attempts to force transparency. See also Gilson and Milhaupt (2008), p.17.

(2008) examine a subset of our sample that includes four SWFs with motivations that can be much more easily surmised based on almost completely transparent investment information, we can posit that SWFs with purely financial motivations (i.e., those found in Chhaochharia and Laeven, 2008) would see a negative relationship between cultural difference and the probability of SWF investment in direct private equity. If instead SWFs are investing for political reasons, we would expect to see either no relationship between cultural difference and the probability of SWF investment in private equity, or perhaps even a positive relationship. Formally stated, this becomes:

Hypothesis 1b: The probability of SWF investment in direct private equity is non-negatively associated with the cultural distance between the SWF and target nations.

To further analyze SWF investment patterns in private equity, we may also look to the literature on other types of pooled funds such as mutual funds and hedge funds. A natural analog to SWFs are mutual funds, since the stated mission of some SWFs is to preserve the wealth of the nation for future use. Though traditional mutual funds leave private equity investment to funds dedicated to this asset class, a Wall Street Journal article describes that institutional investors, such as mutual funds, began to invest in the asset class around 2006.⁶ Cumming and MacIntosh (2007) describe mutual funds in Canada called Labour Sponsored Investment Funds that invest in private equity, and many listed private equity funds in Europe and the US are more mutual-fund like in nature as the source of funds include retail investors (Cumming et al., 2011). That said, the allocation by mutual funds to this asset class is typically quite small. In fact, in the US, such investment is capped by the Securities and Exchange Commission at 15% due to the illiquidity of private equity.

SWFs also resemble hedge funds in that they are largely unregulated, frequently take large stakes in target firms, and have flexibility in choosing their investments. This flexibility makes hedge funds more likely to invest in private equity than mutual funds. In fact, a BusinessWeek article suggests that the line between hedge funds and private equity is becoming blurred, despite the mismatch in investment duration (hedge funds typically have a short-term investment horizon of under a year).⁷ Fung et al. (2008) find that most hedge funds do not create alpha, though some managers are able to produce positive risk-adjusted returns for investors. Empirical research also suggests that these positive returns are derived from, among other things, the monitoring benefits of blockholders (Shleifer and Vishny, 1986; McConnell and Servaes, 1990; Chen et al., 2007; Woitke, 2002). Borokhovich et al. (2006) find,

⁶ <http://www.post-gazette.com/pg/06214/710497-28.stm>

⁷ http://www.businessweek.com/magazine/content/07_09/b4023048.htm

however, that only certain types of institutional investors are able to provide benefits to firms via monitoring. Inasmuch as SWFs do not always take control rights via voting shares or board seats, SWFs' ability and desire to monitor is not clear a priori. Lins (2003) finds that the uncoupling of control rights from cash flow rights is associated with lower firm values, suggesting that this distinction is potentially meaningful.

Further, the size of the block owned may have implications on how much of a monitoring benefit is realized based on a trade-off between monitoring and tunneling. Indeed, Dewenter et al. (2010) use the findings of Shleifer and Vishny (1997)⁸ to distinguish investors by the size of the block of their investment, finding that there are gains of monitoring for blockholders owning less than 40% of the target firm but decreasing positive returns due to tunneling for blockholders owning more than 40%. Since SWFs often acquire large stakes in their targets, the risk of tunneling most likely outweighs any benefits from monitoring (especially in cases where SWFs do not take control rights). Since private firms are more vulnerable to tunneling due to the lack of formal corporate governance mechanisms, we might expect SWFs that are more concerned about protecting themselves against the potential for expropriation by other shareholders to invest in private equity in nations with relatively strong investor protection. Conversely, if SWFs are interested in being able to potentially tunnel themselves, we would expect to see their investment in private equity concentrated in nations with relatively weak investor protection. Stated formally this becomes:

Hypothesis 2: SWF investment in private equity is negatively related to the target nation's protection of investors.

Further to our proposition that SWFs prefer to invest in direct private equity of target nations with similar or more sophisticated legal regimes, we test the proposition that SWFs tend to invest in target nations with which they have relatively weak political relations. Indeed, in a study examining United Nations voting records, Knill et al. 2009b examine whether investment by SWFs is related to bilateral political relations and find evidence (both contemporaneous correlation and Granger causality) that SWFs tend to invest in nations when political relations deteriorate. Analogously, one could imagine a scenario where SWFs, who are sometimes blocked from investing in large, public firms, seek to invest "below the public radar", that is, take advantage of public versus private regulatory arbitrage by investing in the less transparent and scrutinized private equity. Put more formally:

⁸ As noted in Dewenter et al. (2010), other papers such as Barclay and Holderness (1989, 1991), Demsetz (1983), Fama and Jensen (1983) and Stulz (1988) discuss potential costs of having large shareholders.

Hypothesis 3. SWF's are more (less) likely to invest in private firms in target nations when there is a(n) deterioration (improvement) in political relations with target nations.

DATA

Data collection

We obtained data on SWF investments from two sources. First, we conducted a search of all known SWFs and their subsidiaries in Lexis Nexis to identify transactions involving SWFs. Second, we used acquisitions with the “SWF flag” in SDC platinum. Our Lexis Nexis search of SWFs and known SWF subsidiaries resulted in 180 transactions. Only approximately 60 of these observations were not captured by SDC. The resulting combined sample of SDC and Lexis Nexis observations consists of over 900 acquisitions of public and private target firms⁹ by 50 SWFs over the period 1984-2009, which is considerably larger than the sample size used in other SWF studies.¹⁰ By including direct private equity transactions, we are able to expand our sample and conduct a broader analysis. A list of the private and public transactions by industry, year and acquiring (SWF) nation are found in Panels A through C, respectively, of Table 1.

[Insert Table 1 about Here]

Even though our sample exceeds those of earlier studies, we must, as previous studies have, acknowledge that data availability limits our sample considerably. Though we use the two main sources utilized by earlier studies – SDC Platinum and Lexis Nexis – these sources are

⁹ We exclude investments in subsidiaries since these investments are typically a type of hybrid investment involving both private and public firms and their inclusion would confound results. That said, we have collected data on these transactions and have tested the robustness of the results with their inclusion. Results are qualitatively similar.

¹⁰ All SWF empirical papers face concerns over limited sample size. This sample size is comparable to other SWF working papers. For instance, Bortolotti et al. (2009) have a sample of 202 investments in their analysis of one-year return performance. Chhaochharia and Laeven (2008) use a large sample of holdings for determinants analysis, but do not perform transaction level analysis. Kotter and Lel (2011) use a sample of 184 matched pair purchases in their cross-sectional analysis, and Dewenter et al. (2010) use a sample of 178 for their analysis of one-year return performance. Differences among the samples are likely due to the inclusion or exclusion of certain funds in the search criteria.

likely missing SWF investment observations. This is especially important for our analysis as the deals we are interested in (private equity) may be particularly difficult events to observe.

As an example, we look closely at Singapore's Temasek. Temasek transactions comprise 417 of the over 900 transactions in our sample. Temasek reports a portfolio value of \$160.5B as of March 2011. SWF Institute reports their current assets at \$157.2B. The total value of Temasek transactions at the reported SDC value as of the date of acquisition (excludes subsequent gains or losses) is \$71.6B. The value of transactions is often missing in SDC SWF data. For instance, there are 143 deals involving Singapore SWFs that do not report the value of the deal. Of the 311 deals reporting the value of the transaction, the mean transaction value is \$305M. If we assume that the deals with missing values are of similar value, the missing values would sum to \$43B (143 deals * \$305M per deal) making the total SDC value of transactions for Singapore \$115.2B (\$71.6B + \$43.6B). This estimate may be overly optimistic given that the reason for missing transaction values may be due to the relatively small size of such transactions. Nonetheless, our estimate is roughly consistent with Dyck and Morse (2011) who find a total investment value of around \$128B for Temasek. Dyck and Morse (2011) include observed and estimated return for SWF investments in addition to gathering data on real estate investments. Our deal value excludes both of these elements. About 25% of the deals with missing transaction values involved private firms, which is actually lower than the proportion of private deals for Temasek (around 29%). Our actual (estimated) value of Temasek suggests we are missing approximately 55% (28%) of Temasek's total portfolio. The difference may be due to observations we do not observe, real estate investments not gathered for this paper and gains on investments. We note that this suggested bias, however overstates the actual bias we likely see in our analysis since missing deal values do not impact the results of our paper given our focus on private versus public target choice.

Data availability in other countries may be worse as Singapore's SWFs are relatively transparent funds. While we acknowledge our limitations, we also stress that we have looked at other sources of data such as the data that can be purchased from the Sovereign Wealth Fund Institute and Thomson Reuters, and find similar limitations. In a report issued by the U.S. Government Accountability Office (GAO) in 2008 regarding the availability of data on the size

of SWFs and their holdings internationally, the GAO reported that they were informed by the data collection agencies that “smaller transactions consisting of acquisitions resulting in aggregate beneficial ownership of 5 percent or less may be missed”. The report stated that “Since many SWFs have historically taken non-controlling interests in US companies with total ownership often below five percent; the number of transactions not captured could be large” (GAO (2008)). Unless SWFs themselves disclose their asset holdings, much of SWF investments in private equity is not generally identifiable. We believe therefore that the data we have hand collected here provides an as accurate as possible representation of SWF investment in public versus private companies for the purposes of our testing. Perhaps more importantly, the shortcomings of the data are only important if they bias the conclusions. If observations are missing where SWFs have been able to somehow manage to stay out of the sources used by SDC Platinum and/or Lexis Nexis, this would only strengthen our conclusions.

Determinants of private targets in SWF portfolios

To determine the likelihood of SWFs overcoming home bias and investing in private equity outside their domicile nation, we use an indicator variable to describe the scope of the investment. The variable, Cross-border, is equal to one if the SWF and target nation differ and is zero otherwise. To determine whether cross-border investments in private equity mirror those found in Chhaochharia and Laeven (2008) with regard to the proclivity to invest in nations with similar cultural characteristics (i.e., based on similarities in language and religion as well as geographical distance), we include proxies for the same.

To ascertain whether SWFs are comparable to institutional investors in their preference of investing in nations with strong investor protection, we include three proxies for measuring investor protection. The first, Anti-self-deal, is an index from Djankov et al. (2008) that describes a nation’s legal protection against insider expropriation. The other two proxies, Accounting Disclosure and FDI Restrictiveness come from Karolyi and Liao (2009) and describe the legal environment surrounding accounting disclosure and openness to foreign investors.

Following Gupta and Yu (2007) and Knill et al. (2009b), our proxy for political relations is based on United Nations voting records.^{11,12} The motivation for this proxy is that nations with more (less) closely related votes in the UN General Assembly are likely to have stronger (weaker) political relations. We quantify the degree to which countries' votes are similar using the Gartzke's "S" measure (Gartzke, 1998), where "S" is the proxy for bilateral political relations (PR).¹³ Specifically, we calculate the proxy using the equation:

$$PR = 1 - [2 * d / dmax] \quad (1)$$

where *PR* is the bilateral political relations, *d* is the sum of the distance between votes for a given bilateral pair and year, and *dmax* is the maximum possible distance between votes for a given bilateral pair and year. The distance between votes is calculated by first classifying "Yes" votes equal to one and "No" votes equal to zero.¹⁴ For each vote the distance is calculated as the absolute value of the difference in votes. Thus, if both nations vote the same (opposite) way, the distance is zero (one) for that vote. This distance measure is then cumulated over the year for each bilateral pair. Thus, our *PR* measure ranges from -1 (all votes are different) to +1 (all votes are the same), which represents weak and strong political relations, respectively. A political relations proxy based on UN voting is desirable due to the continuous nature of the measure and because it is based on official government action.

Additional variables

In addition, we gather data on other variables likely related to SWF investment. We follow Karolyi and Liao (2009) in constructing the control variables: market Correlation, Singapore, # of Public Firms, # of Private Firms, Ret. Diff, Exch. Ret Diff, Language Diff and Religion Diff. Market Correlation is the correlation between the SWF and target nations and is included to control for cases where the SWF

¹¹ UN voting records have also been used as a political relations proxy in, among others, Mansfield, Milner, and Pevehouse (2008).

¹²A second proxy for political relations, based on event data provided by Gary King's website (<http://dvn.iq.harvard.edu/dvn/dv/king>) uses as its basis a conflict cooperation scale to convert Integrated Date for Event Analysis event codes (provided by Virtual Research Associates) into a numerical score for political relations (King and Lowe, 2003). The limited coverage of this proxy (1990-2004) constrains our sample of SWF investments significantly. As a result, the proxy is only used for robustness. For brevity, these results are omitted from the analysis but are available upon request.

¹³ A comprehensive list of all UN General Assembly votes from 1946 to 2008 is provided by Erik Voeten's website (<http://dvn.iq.harvard.edu/dvn/dv/Voeten>).

¹⁴ For robustness we also compile results defining "Yes" votes equal to one, "Abstain" votes equal to two, and "No" votes equal to three. Results are similar and therefore omitted for brevity. These results are available upon request.

is investing in a higher-risk nation for diversification purposes. If that is the case, we would expect to find a statistically significant negative marginal effect. We include an indicator variable which takes on a value of one if the SWF nation is Singapore due to the large number of observations in the dataset stemming from this country. We include the number of private and public firms in the target nation to control for the supply of these firms in a nation (i.e., a SWF cannot invest in a private firm in a nation that does not have any).¹⁵ We include the difference in market return, exchange rate return, language and religion between the SWF and target nations that might impact a SWF's choice of a private versus public target. In robustness tests found later in the analysis, we include whether or not the two nations are trading partners to control for the trading relationship between the two nations, an indicator for whether or not the target nation has a civil law origin to control for legal origin's effect on investor protection and both the age and the opacity of the SWF.¹⁶ The details of the variable construction are found in Appendix B. A list of all of these variables, as well as their summary statistics, is provided in Table 2.

[Insert Table 2 about Here]

Univariate comparisons

To provide some insight as to what we might expect in our main analysis, we perform a difference-in-means analysis for the variables set forth in the hypotheses section of the paper. This analysis is provided in Table 3.

[Insert Table 3 about Here]

Looking to our first variable of interest, Cross-border, the results suggest that there is no statistically significant difference between the number of private firms SWF's invest in both cross-border and domestically. This would suggest that SWFs are unlike institutional investors as they may be more comfortable with the unfamiliarity of investing outside their own nations or more willing to overcome home bias. The results suggest that SWFs are undeterred by the combined risk of investing in private equity internationally and support the contentions of Hypothesis 1a.

¹⁵ We are grateful to an anonymous referee for this suggestion.

¹⁶

The variables from Chhaochharia and Laeven (2008) proxying cultural differences show mixed results. Two of the three variables show statistical significance. What is interesting, however, is that the sign is positive for all proxies. This suggests that the probability of investment in private firms is positively associated with differences in language and religion. This is supportive of Hypothesis 1b.

Looking to our three legality proxies, we see that SWFs invest in direct private equity significantly more in nations that have a lower legality index. This is the case regardless of the proxies and is once again, supportive of what we hypothesized (in this case, Hypothesis 2).

Finally, looking to our political relations variable, we see that though the sign is suggestive of a relationship consistent with Hypothesis 3, the univariate analysis does not find a statistically significant difference in the political relations between SWF and the target nations (levels or change) in nations where SWFs are more or less likely to invest in private equity.

Collectively, the results suggest that SWFs invest distinctly from institutional investors; differences that foreshadow the results found in the rest of the paper. These results leave room for the possibility that SWFs on average, invest in private equity for political reasons, i.e., to take advantage of lower investor protection and the potential for corporate governance conflicts.

EMPIRICAL METHODS

To analyse the impact of our variables of interest on the probability of SWFs investing in private targets, we examine our sample of SWF investments to ascertain the impact of the investment being cross-border on the probability of the target being private (Hypothesis 1a). Specifically, we analyse the following probit model:¹⁷

$$Prob(PrivTgt)_i^{i,j} = \gamma_{i,0} + \gamma_{i,1}Cross - border_i^{i,j} + \gamma_{i,2}X_{i,t} + e_{i,t}, \quad (2)$$

where *PrivTgt* is an indicator variable which takes the value of one if the firm is private and the value of zero if the target is publicly listed on any stock exchange. Each specification includes industry and year dummies and clusters standard errors by SWF following the suggestions of Petersen (2009). $X_{i,t}$ is a vector of control variables mainly taken from Karolyi and Liao (2009) including controls for differences

¹⁷ Results using logit are qualitatively identical and though omitted for brevity, are available upon request.

in stock market return (Return Difference), and exchange rates (Exchange Rate Difference) as well as other controls such as the correlation in the two stock markets (Market Correlation), and an indicator variable describing whether or not the SWF nation is Singapore (Singapore). To control for the existing supply of public and private firms in a nation, we include the quantity of each (# of Public Firms and # of Private Firms). To test whether or not the probability of SWFs investing in a private firm is impacted by the cultural closeness of the SWF and target nations (Chhaochharia and Laeven, 2008), we include the difference in both language and religion (Language Diff and Religion Diff) as well as the proximity of the two nations (Geographic Distance).

To ascertain whether SWFs invest in private firms to potentially expropriate from other shareholders (Hypothesis 2), we examine the relationship between the protection of investors in the target nation. Specifically, we examine the following probit model:

$$Pr ob(Pr ivTgt)_t^{i,j} = \gamma_{i,0} + \gamma_{i,1} Inv Pr otect_t^{i,j} + \gamma_{i,2} X_{i,t} + e_{i,t}, \quad (3)$$

Where InvProtect refers to the protection of the target nation's investors and is proxied by one of three variables: Anti-self-deal, Accounting Disclosure or FDI Restrictiveness. Anti-self-deal refers to the level of legal protection afforded its investors through anti-expropriation measures (Djankov et al., 2008). Accounting Disclosure is an index describing the level of accounting disclosure provided in accounting statements (La Porta et al., 1997; 1998). FDI Restrictiveness is an index describing how restrictive laws in a nation are against foreign investment (Golub, 2003). All other variables are as defined in Equation (2).

To ascertain the impact of changes in bilateral political relations on the probability of SWFs investing in private targets (Hypothesis 3), we analyse the following probit regression:

$$Pr ob(Pr ivTgt)_t^{i,j} = \gamma_{i,0} + \gamma_{i,1} PR_t^{i,j} + \gamma_{i,2} X_{i,t} + e_{i,t}, \quad (4)$$

where PR refers to the change in bilateral political relations as calculated using the Gartske's S score. Both the level and change in the value are analysed. This measure was used in Knill et al. (2009b).

MULTIVARIATE ANALYSIS

Table 4 displays the results of equation (2) in analysing the propensity for SWFs to invest in cross-border private equity. The results of the analysis suggest that SWFs are less likely to invest in

private equity when the investment is outside their domicile nation. Statistical significance is found in each of the seven specifications with only one of them falling to the 5% level (10% significance is not considered). The economic significance is such that a one-standard-deviation increase in cross-border investment by SWFs is met with, on average (across specifications) an 8.82% decrease in the likelihood of the investment being private equity. Though this is certainly economically meaningful, it falls significantly short of suggesting SWFs do not invest in private equity in nations other than their domicile nation. Given the riskiness of investing in private equity (even domestically), it is surprising that this number does not exceed 50%, or higher. Indeed, a 1995 survey of 204 of the largest U.S. institutional investors conducted by Goldman Sachs and Frank Russell Capital found that international private equity represents only 5.8% of their allocation to alternative investments (i.e., not to the whole portfolio).¹⁸ Considering that their allocation to alternative investments is usually quite small – perhaps 5% - and the fact that only 51% of the institutional investors surveyed even invest in private equity internationally, the hesitation of institutional investors to invest in this asset class overseas becomes evident. Making this point even more salient is the fact that the investments of these surveyed institutional investors were in private equity funds (i.e., not direct). The economic significance of the results, therefore, seem vastly different than what we would find of institutional investors. The conservativeness of the magnitude begs further analysis.

Specification (5) speaks to the second part of Hypothesis 1, which posits that SWFs would not be less willing to invest in private equity when target and SWF nations are more dissimilar. Using three proxies for cultural distance, we examine differences in language, religion and geographic distance. All three of the proxies suggest that we cannot reject Hypothesis 1b. Interestingly, the marginal effects of two of the three proxies – Language Diff and Geographic Distance – are positive. Specifically, the marginal effect of language suggests that as the difference in language increases by one standard deviation, the probability of SWFs investing in private equity increases 21.2%. The marginal effect of Geographic Distance suggests that a one standard deviation increase in this variable corresponds to a 7.05% increase in the likelihood that the SWF will invest in private equity. These results are inconsistent with the contentions of Chhaochharia and Laeven (2008), however, care must be taken in reading too much into this comparison, as our samples are considerably different. Though the authors collect data on both public and private equity, their analysis is limited to four SWFs: Government Pension Fund of Norway, National Pensions Reserve Fund of Ireland, Alaska Permanent Fund, and New Zealand Superannuation Fund. These four SWFs are the most transparent of the SWFs; arguably the SWFs least prone to investing with political motivations in mind (i.e., since investments and objectives are disclosed). We therefore are not

¹⁸ <http://www.people.hbs.edu/pgompers/IPE.html>

surprised by this distinction. In fact, we feel that it underscores the diversity in SWFs. The results suggest that on average, SWFs fail to demonstrate the tendency of institutional investors to invest in the familiar (Huberman, 2001). In fact, the results suggest that SWFs actually seek out these differences. Though these results fall significantly short of proving that SWFs invest in private firms directly with political motivations in mind, we cannot reject the hypothesis that they are.

[Insert Table 4 about Here]

Table 5 displays the results of the analysis of the impact of investor protection on the probability of SWF investment in private targets. The results suggest that, consistent with Hypothesis 2, SWFs are more (less) likely to invest in private firms when the target nation's legality index is low (high). Although we may expect SWFs to prefer to invest in nations with better legal protection, given that foreign investors are thought to have inferior information relative to domestic investors (Dvorak, 2005), we find the opposite. Regardless of the proxy for investor protection, the results suggest that when SWF's do invest cross-border, they are *less* likely to invest in private equity in nations where there are better investor protections. The economic significance of the marginal effect is such that a one standard deviation improvement in the Anti-self-deal index decreases the probability of SWFs investing in private targets by 11.17% and 15.13% in specifications (1) and (4), respectively. The economic significance of a one-standard deviation improvement in the Accounting Disclosure index decreases the probability of SWFs investing in private targets by 9.21% and 11.51% in specifications (2) and (5), respectively. Finally, the economic significance of a one standard deviation improvement in the FDI Restrictiveness index decreases the probability of SWFs investing in private equity by 17.79% and 18.58% in specifications (3) and (6), respectively. These results are inconsistent with the literature on institutional investors and leave room for objectives that fall outside the purely financial, i.e., political. Though these results do not prove that SWFs have political motivations, they are suggestive that the motivations of SWFs in overcoming their home bias and making cross-border investments in private equity may include political motivations that can only be more readily realised in target countries with lower investor protection.

[Insert Table 5 about Here]

Table 6 displays the results of the analysis of bilateral political relations on SWFs' propensity to invest in private firms relative to all equity investments in their portfolios. Indeed, Table 6 shows strong evidence to support Hypothesis 3. As political relations increase (decrease), SWFs are more likely to

invest in public (private) firms. This statistically significant relationship exists whether the proxy for political relations is expressed as a level (Models 1 and 4), a difference (Models 2 and 5) or a lagged difference (Models 3 and 6). The economic significance of political relations (the level) is such that a one standard deviation increase in the variable is associated with a decrease in the probability that SWFs will invest in private firms of 13.64% and 8.90% (in specifications 1 and 4, respectively). The economic significance of political relations when changes in this variable are used is similar. The results suggest that the lagged change in political relations is more economically significant than the change from time $t-1$ to time t . Indeed, a one standard deviation increase in the Change in PR variable is associated with a 5.64% reduction in the probability that SWFs will invest in private equity (specification 2) whereas a one standard deviation increase in the Lagged Change in political relations is associated with a 7.21% (specification 3). Including the control variables from Karolyi and Liao (2009) increases this difference to a 7.21% and 14.75% reduction in the probability for Change in PR and Lagged Change in PR, respectively. These results are consistent with H3 and Knill et al. (2009b), who cannot rule out political motivations for SWF investment.

[Insert Table 6 about Here]

Table 7 displays the results when key variables are interacted. The data highlight the fact that the statistical significance of the results pertaining to investor protection (all three proxies) and political relations is consistent with the results reported in Tables 5 and 6. When considering political relations and investor protection together, i.e., interacted, the results suggest that the legality of the target nation actually mitigates the impact of political relations on the probability that a SWF will invest in private equity. For example, when we examine the economic significance of the impact of a one standard deviation increase in political relations at different levels of one of the investor protection proxies – FDI Restrictiveness – it becomes obvious that legality is pivotal. Though low (i.e., mean minus standard deviation) and average levels of the FDI Restrictiveness variable result in a decrease in the probability that SWFs will invest in private equity (12.35% and 7.66%, respectively) for a one standard deviation increase in PR, high levels of FDI Restrictiveness actually see an increase in the probability that SWFs will invest in private equity (i.e., 7.66%).

The results also suggest, similar to the difference-in-means results, that the cross-border relation is relatively weak compared to the others. This is seen in the lack of consistent statistical significance in specifications (4) through (6). The results suggest further that legality exacerbates the effect of cross-border such that the two key variables have somewhat of a comprehensive effect. The higher the investor protection index, the greater the economic significance of the marginal effect of Cross-border. Indeed, when the

Accounting Disclosure Index is low (mean minus standard deviation), the impact of a one standard deviation increase in Cross-border is a decrease of 17.79% whereas when this index is high (mean plus standard deviation), the impact is almost double that at 31.55%.

[Insert Table 7 about Here]

Table 8 displays the results of specifications with additional control variables that might impact the probability of SWFs investing in private targets. These additional proxies include whether or not the SWF and target nations are trading partners, the age of the SWF and the opacity of the SWF, and the legal origin of the nation. In all cases, statistical significance of the results is retained and the implications of the results are robust to the inclusion of these variables. As well, the economic significance of these variables is very similar to that reported above, highlighting the consistency of the evidence and robustness to different specifications.

[Insert Table 8 about Here]

ROBUSTNESS

Beyond the robustness provided in Table 8, we have undertaken additional empirical exercises to ensure the reliability of our results. These robustness checks include 1) a different definition for the dependent variable, 2) different empirical methodologies, 3) different specifications for sample inclusion, and 4) the inclusion of different control variables. The alternate definition of the dependent variable described above defines private as a proportion of total investments. The alternate empirical methodologies include logit as well as OLS and tobit for the alternative dependent variable. We also clustered the observations by target nation instead of SWF nation and also by industry (instead of including industry dummies). Altering the sample inclusion criteria, we include subsidiaries, hybrid investments that include both privately- and publicly-held firms. Finally, we have rerun specifications including controls for GDP, GDP growth, democracy difference and a legality index for the target nation. In all cases, results are at least qualitatively similar and in most cases, qualitatively identical. These results are left out for brevity but are available upon request.

CONCLUSIONS

In this paper we examine the determinants of a SWF's investment in direct private equity. Both non-governmental international institutions such as the IMF and governmental bodies have raised the possibility of SWFs using investments as a way to secure stakes outside their own sovereign nations in strategic areas such as telecommunications, energy and mineral resources. The potential risk of tunneling and asset shifting by SWFs has been an issue discussed among academics and policy makers alike. Although there have not been any documented cases of SWFs realizing political objectives at the cost of financial objectives, there are several well documented instances where the leaders of nations have blocked investment by SWFs for fear of political motivations. Though we are unable to prove conclusively that SWFs invest in private equity for political reasons, we are unable to reject any of our hypotheses that suggest that SWFs invest consistent with political motives. The data show that, on average, SWF investment patterns are counter to institutional investors. There is some evidence that, on average, these patterns are also counter to the most transparent SWFs, who are unlikely to have political agendas given their level of disclosure in both investments and investment objectives. We find that SWFs act as other investors in that they are less likely to invest in private equity when the investment is outside their domicile nation but the economic significance of this effect is considerably shy of suggesting that they are unwilling to invest in private equity internationally and the results are not consistent throughout our analysis. Our findings also suggest that SWFs do not seek protection by investing in private equity in nations that provide strong investor protection and instead our findings leave room for the possibility that SWFs may seek to potentially take advantage of lax investor protection to fulfil political goals if required to do so. Finally, we find that political relations significantly influence the probability that SWFs will invest in direct private equity (versus public equity). All three sets of results leave room for the suggestion that when SWFs seek to invest across borders, they are increasingly investing in private equity to avoid or mitigate the intense scrutiny and criticisms of the public such as that faced by the United Arab Emirates upon investing in a company controlling five U.S. ports.

Appendix A: Funds in sample; 50 Funds; 903 Public and Private Investments

No	Sovereign Wealth Fund Name	# Private	# Public
1	IMDB	0	1
2	Abu Dhabi Investment Authority	6	22
3	Advanced Tech Invest Co LLC	0	1
4	Alaska Permanent Fund Corp	0	1
5	Abu Dhabi Investment Authority Abu Dhab	2	0
6	Abu Dhabi Investment Co Abu Dhabi Inves	1	0
7	Alaska Permanent Fund Corp	1	0
8	Brunei Investment Agency	4	3
9	Bulgarian Acquisition Co II State Gene	1	0
10	CalPERS	16	17
11	China Investment Corp{CIC}	18	28
12	DIFC	9	6
13	Dubai International Capital	17	3
14	Fond Natsional'nogo Blagososto	6	1
15	Future Fund Mgmt Agcy	1	4
16	GIC	24	43
17	GIC Future Fund Mgmt Agcy	1	0
18	GIC GIC Real Estate Pte Ltd	5	26
19	GIC GIC Real Estate Pte Ltd Temasek Hol	0	1
20	GIC Real Estate Pte Ltd GIC	12	20
21	GIC Real Estate Pte Ltd GIC Temasek Hol	0	1
22	GIC Temasek Holdings(Pte)Ltd	0	1
23	GIC Temasek Holdings(Pte)Ltd GIC Real E	0	2
24	Hong Kong Monetary Authority	0	1
25	ICD	1	2
26	IPIC	11	20
27	Istithmar PJSC	10	16
28	Istithmar PJSC Mubadala Development Co	0	1
29	Istithmar PJSC Temasek Holdings(Pte)Ltd	0	2
30	KIA	1	5
31	KIA CalPERS	1	0
32	Khazanah Nasional Bhd	38	39
33	Korea Investment Corp	1	1
34	Korea Investment Corp Temasek Holdings	0	1
35	LIA	0	2
36	Libyan Arab African Investment	1	0
37	Libyan Arab Foreign Invest Co	4	3
38	Mineral Resources Dvlp Co Pty	1	2
39	Mubadala Development Co	9	9
40	National Pensions Reserve Fund	0	1
41	NZ Superannuation Fund	1	0
42	Oman Investment Fund	4	4
43	Qatar Investment Authority	19	29
44	RAK Investment Authority	3	1
45	Seletar Invest Pte Ltd Temasek Holdings	1	1
46	State General Reserve Fund	1	0
47	TT International Ltd	6	3
48	Temasek Holdings(Pte)Ltd	148	187
49	Temasek Holdings(Pte)Ltd Seletar Invest	2	1
50	Temasek Holdings(Pte)Ltd Seletar Invest	0	4
	Total	387	516
	Combined Total (Private + Public)	903	

Appendix B. Variable definitions

Variable	Variable Definition	Source
<i>Panel A: Variables of Interest</i>		
Cross-border	An indicator variable equal to one if the target is in a different nation than the SWF and zero otherwise.	SDC Platinum
Anti-Self-Deal	An index based on the private enforcement mechanisms in the target nation in 2003 precluding insiders from “self-dealing”.	Djankov, La Porta, Lopez-de-Silanes and Shleifer (2008)
Accounting Discl	An index created by the Center for International Financial Analysis and Research to rate the quality of 1990 annual reports in the target nation on their disclosure of accounting information. This index ranges from 0 (less disclosure) to 100 (more disclosure).	LaPorta, Lopez-de-Silanes, Shleifer and Vishny (1997, 1998)
FDI Restrictiveness	An index that quantifies discrimination against foreign firms regarding right of establishment, ranging from 0 (least restrictive) to 1 (most restrictive) of the target nation.	Golub (2003)
PR	The distance between UN General Assembly votes for a given bilateral pair and year. Specifically, we calculate PR using $PR = 1 - [2 * d / dmax]$ where d is the sum of the distance between votes for a given bilateral pair and year, and dmax is the maximum possible distance between votes for a given bilateral pair and year. The distance between votes is calculated by first classifying “Yes” votes equal to one and “No” votes equal to zero. Then for each vote the distance is calculated as the absolute value of the difference in votes.	Gartzke (1998)
Language Difference	An index from zero (same) to one (different) describing whether or not the SWF and target nations have different languages.	CIA World Factbook
Religion Difference	An index from zero (same) to one (different) describing whether or not the SWF and target nations have different religions.	La Porta et al., 2006?
Geographic Distance	A dummy variable that indicates whether countries are geographically distant from the acquiring nation. We define “distant” as within 500 miles of each other.	Gleditsch and Ward (2001)
<i>Panel B Control Variables and Robustness</i>		
Market Correlation	The correlation between annual market returns for the SWF and target nation. (From Karolyi and Liao, 2009)	Datastream
Singapore	An indicator variable equal to one if the SWF nation is Singapore and zero otherwise.	SDC Platinum
Private Target	A dummy variable equal to one if the target is a private firm and zero otherwise.	SDC Platinum
Public Target	A dummy variable equal to one if the target is a publicly listed firm and zero otherwise.	SDC Platinum
Return Difference	The annual difference in real stock market return between the SWF and target nation. Return data is gathered in the local currency and deflated using 2000 Constant Price Index (CPI). (From Karolyi and Liao, 2009)	Datastream
Exchange Rate Difference	The annual difference in bilateral U.S. dollar exchange rate returns between the SWF and target nation. (From Karolyi and Liao, 2009)	Datastream
Partner	PARTNER, a dummy variable equal to one if the target nation is identified as an “important” trade partner of a given SWF in the CIA World Factbook, and equal to zero otherwise.	CIA World Factbook
SWF Age	The age in years of the SWF.	SDC Platinum; Lexis Nexis
SWF Opacity	A dummy variable equal to one if the SWF is below the median disclosure score from Truman (2007) and zero otherwise.	Truman (2007)
Civil Law	An indicator variable equal to one if the legal origin of the target nation is Civil Law and zero otherwise.	La Porta et al. (1997)

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Table 1
Sample Characteristics

This table displays characteristics of the data. Panel A displays the industry composition. Panel B displays the temporal composition. Panel C displays the breakdown of private versus public by acquiring (SWF) nation.

Panel A: Industry Composition

FF Industry	Private Freq.	Public Freq.	% Private
Con. Non-durable	15	26	36.59%
Con. Durable	3	15	16.67%
Manufacturing	20	48	29.41%
Energy	9	27	25.00%
Hi-Tech	42	59	41.58%
Telecom.	24	58	29.27%
Retail	25	24	51.02%
Healthcare	13	17	43.33%
Utilities	2	30	6.25%
Other	234	433	35.08%
Total	387	737	34.43%

Panel B: Temporal Composition

Year	Private Freq.	Public Freq.	% Private
1984	1	0	100.00%
1985	0	0	-
1986	0	1	0.00%
1987	0	0	-
1988	0	0	-
1989	0	3	0.00%
1990	0	0	-
1991	1	7	12.50%
1992	1	8	11.11%
1993	3	6	33.33%
1994	0	15	0.00%
1995	5	40	11.11%
1996	9	17	34.62%
1997	3	10	23.08%
1998	1	24	4.00%
2000	8	29	21.62%
2001	18	44	29.03%
2002	35	46	43.21%
2003	14	41	25.45%
2004	8	63	11.27%
2005	14	51	21.54%
2006	20	58	25.64%
2007	16	47	25.40%
2008	27	61	30.68%
2009	21	83	20.19%

Panel C: Acquiring (SWF) nation target type

	Private Freq.	Public Freq.	% Private
Australia	6	17	26.09%
Austria	1	0	100.00%
Bahamas	0	1	0.00%
Belgium	0	1	0.00%
Bermuda	0	2	0.00%
British Virgin	0	1	0.00%
Brunei	3	3	50.00%
Canada	0	1	0.00%
Cayman Islands	0	2	0.00%
China	15	31	32.61%
Denmark	0	1	0.00%
France	9	2	81.82%
Germany	2	6	25.00%
Guernsey	1	0	100.00%
Hong Kong	6	13	31.58%
India	6	4	60.00%
Indonesia	7	9	43.75%
Ireland	0	1	0.00%
Israel	0	1	0.00%
Kazakhstan	5	3	62.50%
Kuwait	2	8	20.00%
Libya	5	7	41.67%
Luxembourg	1	0	100.00%
Macau	1	0	100.00%
Malaysia	36	58	38.30%
Mauritius	7	11	38.89%
Netherlands	1	2	33.33%
New Zealand	3	0	100.00%
Oman	5	3	62.50%
Pakistan	2	3	40.00%
Papua New Guinea	1	2	33.33%
Qatar	10	32	23.81%
Russian Fed	1	0	100.00%
Singapore	150	365	29.13%
South Africa	1	0	100.00%
South Korea	2	3	40.00%
Spain	0	1	0.00%
Sweden	8	6	57.14%
Switzerland	1	0	100.00%
United Kingdom	11	14	44.00%
United States	28	39	41.79%
Utd Arab Emirates	49	83	37.12%
Vietnam	1	0	100.00%
Average			44.05%

Table 2
Data Characteristics

This table reports number of observations, as well as the mean, median, minimum and maximum values as well as standard deviation of each variable in the data. Variables are as defined in The Appendix.

Panel A: Summary Statistics

Variable	Obs	Mean	Median	Min	Max	Std. Dev.
Private	560	0.389	0.000	0.000	1.000	0.488
Cross-Border	560	0.666	1.000	0.000	1.000	0.472
Anti-self-deal	560	0.721	0.760	0.160	1.000	0.237
Accounting	468	70.504	74.000	45.000	83.000	7.671
FDI Restrict	223	0.172	0.169	0.064	0.390	0.081
PR	468	0.795	1.000	-0.879	1.000	0.443
Change in PR	391	-0.002	0.000	-0.176	0.230	0.033
Market Correlation	444	0.800	1.000	-1.000	1.000	0.373
Singapore	560	0.179	0.000	0.000	1.000	0.383
# of Public Firms	560	1.096	0.583	-3.621	9.236	2.276
# of Private Firms	477	3.906	3.526	0.000	9.046	2.081
Ret. Diff	490	0.003	0.000	-0.720	1.062	0.205
Exch. Ret Diff	479	1.403	0.000	-0.998	305.191	16.130
Language Diff	560	0.643	1.000	0.000	1.000	0.480
Religion Diff	560	0.584	1.000	0.000	1.000	0.493
Close	560	0.109	0.000	0.000	1.000	0.312
Partner	560	0.246	0.000	0.000	1.000	0.431
SWF Age	493	28.846	36.000	3.000	57.000	11.064
SWF Opaque	560	0.829	1.000	0.000	1.000	0.377
Civil Law	560	0.34	0.00	0.00	1.00	0.48

Table 2 (cont.)
Data Characteristics

This table reports correlation coefficients across the variables defined in the Appendix. Correlations significant at the 5% level are highlighted in bold.

Panel B: Correlations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Private (1)	1.00																			
Cross-Border (2)	-0.39	1.00																		
Anti-self-deal (3)	-0.21	0.12	1.00																	
Accounting (4)	-0.10	0.05	0.83	1.00																
FDI Restrict (5)	-0.23	0.21	-0.21	-0.19	1.00															
PR (6)	0.25	-0.47	0.11	0.09	0.16	1.00														
Change in PR (7)	-0.04	-0.09	0.11	0.12	-0.10	0.10	1.00													
Market Correlation (8)	0.08	0.00	-0.13	-0.04	0.00	-0.04	-0.07	1.00												
Singapore (9)	-0.10	-0.61	0.64	0.52	.	0.25	0.08	.	1.00											
# of Public Firms (10)	0.02	0.03	0.16	0.24	0.04	0.08	-0.03	0.05	0.01	1.00										
# of Private Firms (11)	0.20	0.12	-0.36	-0.13	-0.26	-0.44	-0.12	0.19	-0.13	-0.09	1.00									
Ret. Diff (12)	-0.06	0.04	0.03	0.10	-0.16	-0.18	0.01	-0.21	-0.02	0.14	0.11	1.00								
Exch. Ret Diff (13)	0.04	-0.07	-0.01	0.00	0.09	0.06	0.05	0.33	0.04	-0.04	0.02	0.02	1.00							
Language Diff (14)	-0.04	0.82	-0.58	-0.60	-0.24	-0.41	-0.12	0.01	-0.59	-0.04	0.11	0.04	-0.07	1.00						
Religion Diff (15)	-0.04	0.73	-0.53	-0.52	-0.25	-0.43	-0.09	0.03	-0.17	0.15	-0.33	-0.01	-0.02	0.29	1.00					
Close (16)	-0.11	0.27	0.06	-0.07	.	0.11	0.04	-0.17	0.15	-0.33	-0.01	-0.02	0.29	0.27	0.03	1.00				
Partner (17)	-0.12	0.55	-0.21	0.02	0.26	-0.55	-0.15	-0.16	-0.34	0.13	0.17	0.11	0.04	0.58	0.60	0.16	1.00			
SWF Age (18)	-0.10	0.01	0.02	-0.09	0.22	0.01	-0.05	-0.10	0.34	-0.10	0.08	-0.16	-0.02	-0.02	-0.03	0.02	0.04	1.00		
SWF Opaque (19)	0.05	0.14	-0.15	-0.16	0.19	-0.01	-0.06	0.06	0.29	-0.04	0.33	-0.12	-0.01	0.17	0.17	0.05	0.12	0.74	1.00	
Civil Law (20)	0.07	0.25	-0.39	-0.33	-0.04	0.05	-0.07	0.18	-0.29	0.33	-0.12	-0.10	0.07	0.34	0.13	0.27	0.27	-0.07	0.02	1.00

Table 3
Difference in means

This table displays univariate comparison tests for the determinants of target type including legality index, difference in legality index, political relations, changes in political relations, correlation between the markets of the acquiring (SWF) nation and the target nation, and whether the source of funds is oil or not. ** and * indicate significance levels of 1 and 5 percent respectively.

	Prob(Private)
Cross-border	0.349
Domestic	0.400
Difference	-0.051
Language Different	0.354
Language Same	0.209
Difference	0.145**
Religion Different	0.354
Religion Same	0.221
Difference	0.133**
Distant	0.290
Close	0.275
Difference	0.015
Above median Anti-self-deal	0.149
Below median Anti-self-deal	0.412
Difference	-0.263**
Above median Accounting Discl.	0.255
Below median Accounting Discl.	0.443
Difference	-0.188**
Above median FDI Restrictiveness	0.24
Below median FDI Restrictiveness	0.548
Difference	-0.308**
Above median PR	0.306
Below median PR	0.332
Difference	-0.026
Above median Change in PR	0.344
Below median Change in PR	0.429
difference	-0.084

Table 4
Private Targets and Characteristics of their Domicile Nation

This table displays the results of the following probit regression: $Pr ob(PrivTgt)_t^{i,j} = \gamma_{i,0} + \gamma_{i,1}Cross - border_t^{i,j} + \gamma_{i,2}X_{i,t} + e_{i,t}$, where $PrivTgt$ is an indicator variable which takes on a value of one if the SWF investment is in a private target and zero otherwise. $Cross - border$ is an indicator variable which takes on a value of one if the SWF investment is outside of their domicile nation and zero otherwise. $X_{i,t}$ is a vector of control variables including the market correlation, an indicator variable for investments made by Singapore based SWFs, number of public firms and number of private firms. Additional control variables include the difference in the value for market return, exchange rate return, and language between the acquiring (SWF) nation and the target nation as well as the geographic distance between the two nations. Variable definitions are in the Appendix. Standard errors clustered by SWF nation are in brackets. ** and * indicate significance levels of 1 and 5 percent respectively.

	(1)	(2)	(3)	(4)	(5)
Cross-Border	-0.159*	-0.207**	-0.215**	-0.216**	-0.310**
	[0.065]	[0.054]	[0.050]	[0.049]	[0.071]
Market Correlation	0.044	0.077	0.051	0.046	0.082
	[0.044]	[0.063]	[0.052]	[0.055]	[0.062]
Singapore	-0.202**	-0.208**	-0.208**	-0.208**	-0.197**
	[0.051]	[0.024]	[0.025]	[0.025]	[0.030]
# of Public Firms		0.014	0.019	0.019	0.017
		[0.016]	[0.014]	[0.014]	[0.017]
# of Private Firms		0.052**	0.054**	0.053**	0.051**
		[0.008]	[0.008]	[0.008]	[0.007]
Ret. Diff			-0.262*	-0.256**	-0.246*
			[0.104]	[0.097]	[0.101]
Exch. Ret Diff				0.265	0.285
				[0.706]	[0.701]
Language Diff					0.442**
					[0.074]
Religion Diff					0.139
					[0.085]
Geographic Distance					0.226**
					[0.052]
Year Dummies	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes
Observations	469	368	368	368	368
Log Likelihood	-290.4	-219.3	-217.6	-217.5	-214.4
Pseudo R-squared	0.0541	0.0871	0.0939	0.0944	0.107

Table 5
Private Targets and the Investor Protections of Target Nations

This table displays the results of the following probit regression: $Prob(PrivTgt)_{i,t}^{i,j} = \gamma_{i,0} + \gamma_{i,1}InvProtect_{i,t}^{i,j} + \gamma_{i,2}X_{i,t} + e_{i,t}$, where $PrivTgt$ is an indicator variable which takes on a value of one if the SWF investment is in a private target and zero otherwise. $Anti-Self-deal$ is an index that measures a nation's protection of its investors. $Accounting Discl.$ is an index of the level of disclosure in accounting statements. $FDI Restrict$ is an index describing the restrictions against investment by foreign investors. $X_{i,t}$ is a vector of control variables including the market correlation, an indicator variable for investments made by Singapore based SWFs, number of public firms and number of private firms. Additional control variables include the difference in the value for market return, exchange rate return and language between the acquiring (SWF) nation and the target nation. Variable definitions are in the Appendix. Standard errors clustered by SWF nation are in brackets. ** and * indicate significance levels of 1 and 5 percent respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Anti-self-deal	-0.471** [0.177]			-0.638** [0.140]		
Accounting		-0.012** [0.004]			-0.015** [0.004]	
FDI Restrict			-2.197** [0.622]			-2.294** [0.740]
Cross-Border	-0.265** [0.060]	-0.301** [0.055]	-0.361** [0.099]	-0.326** [0.079]	-0.314** [0.074]	-0.371** [0.133]
Market Correlation	0.069 [0.060]	0.056 [0.057]	0.081 [0.106]	0.058 [0.056]	0.034 [0.061]	0.050 [0.110]
Singapore	-0.135** [0.045]	-0.154** [0.039]		-0.141* [0.057]	-0.170** [0.043]	
# of Public Firms	0.016 [0.018]	0.016 [0.017]	0.024 [0.029]	0.022 [0.016]	0.020 [0.015]	0.009 [0.030]
# of Private Firms	0.039** [0.009]	0.053** [0.007]	0.010 [0.021]	0.043** [0.008]	0.053** [0.007]	[0.030] 0.009
Ret. Diff				-0.231** [0.088]	-0.246 [0.128]	[0.017] -0.205
Exch. Ret Diff				0.238 [0.685]	0.221 [0.668]	[0.222] [0.872]
Language Diff				0.086 [0.068]	0.042 [0.082]	0.020 [0.114]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	366	331	122	366	331	122
Log Likelihood	-215.7	-192.4	-68.24	-214.0	-191.2	-65.31
Pseudo R-squared	0.0984	0.105	0.180	0.106	0.111	0.215

Table 6
Private Targets and the Political Relations between Target and Acquiring Nations

This table displays the results of the following probit regression: $Prob(PrivTgt)_{i,t}^{i,j} = \gamma_{i,0} + \gamma_{i,1}PR_{i,t}^{i,j} + \gamma_{i,2}X_{i,t} + e_{i,t}$, where is PrivTgt is an indicator variable which takes on a value of one if the SWF investment is in a private target and zero otherwise. PR is the political relations between the target and acquiring nations. $X_{i,t}$ is a vector of control variables including the market correlation, an indicator variable for investments made by Singapore based SWFs, number of public firms and number of private firms. Additional control variables include the difference in the value for market return, exchange rate return and language between the acquiring (SWF) nation and the target nation. Variable definitions are in the Appendix. Standard errors clustered by SWF nation are in brackets. ** and * indicate significance levels of 1 and 5 percent respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
PR	-0.308** [0.090]			-0.201** [0.053]		
Change in PR		-1.697** [0.518]			-0.965* [0.418]	
Lag Change in PR			-2.173** [0.452]			-4.447** [1.466]
Market Correlation	0.085 [0.085]	0.149 [0.090]	0.069 [0.133]	0.227 [0.144]	0.107 [0.095]	0.072 [0.158]
Singapore	-1.809** [0.082]	-0.988* [0.410]	-1.749** [0.343]	-1.663** [0.145]	-1.442** [0.294]	-2.243** [0.204]
# of Public Firms	0.005 [0.015]	0.013 [0.016]	-0.023 [0.017]	0.006 [0.023]	0.014 [0.018]	-0.021 [0.020]
# of Private Firms	0.065** [0.017]	0.085** [0.016]	0.114** [0.018]	0.132** [0.031]	0.126** [0.011]	0.119** [0.016]
Return Diff				-0.356** [0.115]	-0.205 [0.108]	-0.140 [0.108]
Exch Ret Diff				0.153 [0.641]	-0.501 [0.527]	-0.557 [0.407]
Language diff				0.254* [0.107]	0.195** [0.047]	0.121 [0.064]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	175	156	139	152	152	138
Log Likelihood	-99.39	-83.41	-68.66	-77.08	-78.31	-62.27
Pseudo R-squared	0.111	0.148	0.201	0.187	0.174	0.266

Table 7
Interaction of Key Variables

This table displays the results of the following probit regression: $Prob(PrivTgt)_t^{i,j} = \gamma_{i,0} + \gamma_{i,1}PR_t^{i,j} + \gamma_{i,2}X_{i,t} + e_{i,t}$, where $PrivTgt$ is an indicator variable which takes on a value of one if the SWF investment is in a private target and zero otherwise. PR is the political relations between the target and acquiring nations. $Anti\text{-}Self\text{-}deal$ is an index that measures a nation's protection of its investors. $Accounting\ Discl.$ is an index of the level of disclosure in accounting statements. $FDI\ Restrict$ is an index describing the restrictions against investment by foreign investors. $X_{i,t}$ is a vector of control variables including the market correlation, an indicator variable for investments made by Singapore based SWFs, number of public firms and number of private firms. Additional control variables include the difference in the value for market return, exchange rate return and language between the acquiring (SWF) nation and the target nation. Variable definitions are in the Appendix. Standard errors clustered by SWF nation are in brackets. ** and * indicate significance levels of 1 and 5 percent respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
PR	-0.513*	-0.741**	-7.125**			
	[0.211]	[0.258]	[1.464]			
Anti-self-deal	-0.688**			-0.149		
	[0.196]			[0.289]		
Anti-self-deal * PR	7.109*					
	[3.572]					
Cross-border				0.116	0.817**	0.043
				[0.220]	[0.208]	[0.187]
Anti-self-deal * Cross-border				-0.469**		
				[0.102]		
Accounting		-0.014**			0.008	
		[0.005]			[0.005]	
Accounting * PR		0.496**				
		[0.178]				
Accounting * Cross-border					-0.019**	
					[0.007]	
FDI Restrict			-2.257**			0.123
			[0.689]			[0.844]
FDI Restrict * PR			37.338**			
			[9.979]			
FDI Restrict* Cross-border						-2.676**
						[0.804]
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	292	290	97	366	331	122
Log Likelihood	-164.3	-161.7	-51.67	-213.0	-190.4	-66.95
Pseudo R-squared	0.128	0.134	0.221	0.110	0.114	0.196

Table 8
Robustness

This table displays the results of the following probit regression: $Prob(PrivTgt)_t^{i,j} = \gamma_{i,0} + \gamma_{i,1}PR_t^{i,j} + \gamma_{i,2}X_{i,t} + e_{i,t}$, where $PrivTgt$ is an indicator variable which takes on a value of one if the SWF investment is in a private target and zero otherwise. PR is the political relations between the target and acquiring nations. $X_{i,t}$ is a vector of control variables including the market correlation, an indicator variable for investments made by Singapore based SWFs, number of public firms and number of private firms, the difference between SWF and target nations in the value for market return, exchange rate return, language, religion, geographic distance. $X_{i,t}$ also includes an indicator variable describing whether or not the SWF and target nations are trading partners, SWF age and SWF opacity. Variable definitions are in the Appendix. Standard errors clustered by SWF nation are in brackets. ** and * indicate significance levels of 1 and 5 percent respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cross-Border	-0.276** [0.104]						
Anti-self-deal		-0.457** [0.158]					
Accounting			-0.009* [0.004]				
FDI Restrict				-7.580** [1.176]			
PR					-0.272** [0.082]		
Change in PR						-0.375** [0.123]	
Lag Change in PR							-1.647** [0.350]
Market Correlation	-0.007 [0.042]	0.059 [0.049]	-0.044 [0.043]	-0.567** [0.191]	0.195** [0.054]	0.010 [0.014]	-0.147** [0.042]
Singapore	-0.234* [0.111]	-0.144 [0.098]	-0.069 [0.089]		-0.721** [0.023]	-0.107 [0.161]	
# of Public Firms	0.004 [0.016]	-0.001 [0.016]	-0.022 [0.012]	0.104** [0.036]	-0.027** [0.010]	-0.005** [0.001]	-0.019** [0.004]
# of Private Firms	0.029 [0.020]	0.032 [0.018]	0.021 [0.024]	0.033 [0.024]	0.049** [0.012]	0.007 [0.004]	0.007 [0.011]
Ret. Diff	-0.195* [0.095]	-0.180* [0.086]	-0.274** [0.099]	0.418 [0.252]	0.110 [0.092]	0.010 [0.025]	-0.070** [0.023]
Exch. Ret Diff	0.369 [0.612]	0.327 [0.632]	0.155 [0.605]	2.021* [0.955]	0.355 [0.646]	-0.227** [0.061]	-0.403** [0.100]
Language Diff	0.529** [0.140]	0.524** [0.170]	-0.164 [0.101]	0.407** [0.087]	0.262 [0.165]	-0.074 [0.081]	-0.997** [0.001]
Religion Diff	0.116 [0.167]	0.167 [0.204]	-0.077 [0.221]	-0.253** [0.068]	-0.402** [0.113]	-0.698** [0.162]	-0.507** [0.105]
Geographic Distance	-0.637** [0.073]	-0.357** [0.028]	-0.198** [0.068]		-0.328** [0.032]	-0.774** [0.037]	-0.253** [0.045]
Partner	-0.167* [0.080]	-0.202** [0.035]	-0.078 [0.043]	0.284 [0.229]	-0.283** [0.040]	-0.008 [0.024]	-0.022 [0.013]
SWF Age	-0.006 [0.008]	-0.001 [0.010]	-0.007 [0.011]	-0.125** [0.027]	-0.000 [0.006]	-0.001 [0.001]	-0.001 [0.002]
SWF Opaque	0.204* [0.101]	0.086 [0.176]	0.131 [0.175]	0.906** [0.105]	0.180 [0.092]	0.039** [0.002]	0.354** [0.004]
Civil Law	0.172* [0.084]	0.165* [0.070]	0.261* [0.118]	0.390** [0.123]	0.386** [0.101]	0.032 [0.057]	0.019 [0.011]
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	286	284	251	62	138	119	98
Log Likelihood	-161.1	-161.1	-139.1	-21.08	-65.70	-46.96	-33.99
Pseudo R-squared	0.117	0.113	0.123	0.469	0.263	0.376	0.457

Figure 1
Private targets as a proportion of all SWF targets over time

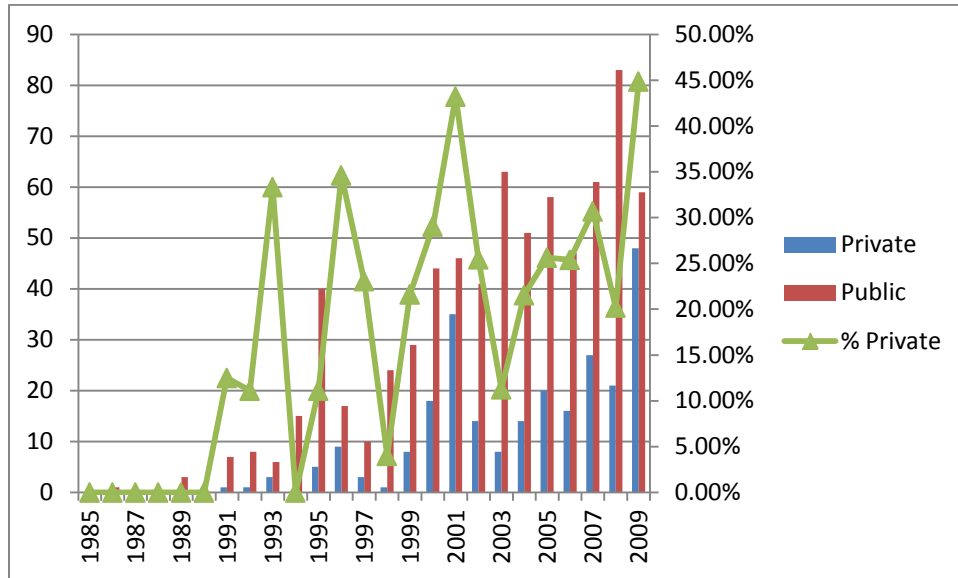


Figure 1 displays SWF investment in public and private targets from 1986 – 2009.