The Investment Strategies of Sovereign Wealth Funds

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Sovereign wealth funds have complex objective functions and governance structures where return maximization and strategic political considerations may conflict. SWFs with greater involvement of political leaders in fund management are more likely to support domestic firms and invest in segments and markets with higher P/E levels, especially in their domestic investments. But these investments see a subsequent reversal in P/E levels suggesting that the funds engage in poor market timing. The opposite patterns hold for funds that rely on external managers. Funds that have stated domestic development goals are more likely to invest at home, especially if politicians are involved.

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1. Introduction

Sovereign wealth funds (SWFs), in addition to being major investors in corporate and real resources world-wide (Fernandez and Eschweiler [2008]), are particularly interesting to financial economists because of their ownership structure and mission. The quasi-public nature of these funds may have unique implications for their investment objectives and the governance arrangements they choose. The investment charters of most SWFs state that they seek to maximize financial returns to ensure long-term public policies, such as pension or economic development needs. But the more closely SWFs are exposed to political influences, the more they might show major distortions from long-run return maximization. As Shleifer and Vishny [1997] argue, such agency problems within large institutional investors can have wide-ranging implications for the broader economy.

These agency problems may have two primary manifestations. First, the political process can introduce short-run pressures on SWFs to accommodate public demands for job creation and economic stabilization within the country. These demands should translate into financial support for local firms or subsidies for industrial policies within the country. There are two opposing views of the consequences of these investment pressures. Advocates for government-directed investments usually rely on a view that financial markets are either not developed enough or too myopic, and thus leave many profitable investment opportunities on the table (Atkinson and Stiglitz [1980]; Stiglitz [1993]). The opposing, less sanguine view of politically directed investments suggests that political involvement can either lead to misguided policy attempts to prop up inefficient firms or industries or engage in investment activities in industries, sectors or geographies that are “hot” (Shleifer and Vishny [1994]; Banerjee [1997]; Hart, et al. [1997]). If the former, benevolent view is accurate, we would expect to find that government investments in

local firms are directed at industries that face financial constraints and subsequently perform very well. If the latter view is true, we would predict the opposite: SWF investments would be disproportionately directed to local firms, follow a pro-cyclical trend, and subsequently perform poorly.

The second distortion as a result of political involvement in SWFs' investments might stem from the appointment of politically connected but financially inexperienced managers. This hypothesis would suggest that politically influenced funds not only show a distortion in the capital allocation between home and foreign investments, but would also display poorer stock picking ability even in the international portfolio of the fund.

Since we are interested in understanding whether the investment behavior of SWFs is shaped by (short-term) political considerations, we focus on the funds' long-term investments—acquisitions, purchases of private equity, and structured equity positions in public firms—on the grounds that these distortions should be most evident here. SWFs play an important role in private equity investing. After merging three publicly available investment databases—Dealogic's M&A Analytics, Security Data Company's (SDC) Platinum M&A, and Bureau van Dijk's Zephyr—we identify 2,662 investments between 1984 and 2007 by 29 SWFs. Over the years 2003 through 2007, the aggregate value of PE transactions by SWFs in our sample was $198 billion (excluding SWF investments in private equity partnerships). Based on estimates of Stromberg (2008) and the Private Equity Council, SWF investments account for approximately 9.5% of the aggregate global PE deal value over similar time period.

Our results show that SWFs where politicians are involved in the management of the fund are more likely to invest in domestic firms, while those SWFs where external managers play an important role are less likely to show a propensity to invest at home. We see that SWFs that have political leaders playing an important role tend to invest in segments and markets with higher P/E levels. This valuation effect is particularly strong for the domestic investments of SWFs with politically connected managers. In their foreign investments, these funds do not show a stronger likelihood of investing in industries and markets with especially high P/Es. In contrast, SWFs with external (professional) managers invest in industries and markets with lower P/Es. When looking at the post-investment returns, we find that the investments of SWFs with politically connected managers tend to see a reduction in P/E levels after the investment, while investments of external manager-influenced funds on average experience an increase in the P/E levels. This trend is particularly pronounced for investments at home, which could suggest that the pressures to invest in hot markets at home are especially strong for politically connected SWFs.

Interestingly, we also find that politically connected funds are more likely to take larger stakes in the firms they invest in, while external managers take smaller equity stakes. Instead of investing in small liquid stakes, as those with external managers do, politically managed SWFs take larger and potentially controlling equity stakes in domestic firms. Again this suggests that the former investments are targeted at supporting and potentially propping up local firms, rather than optimizing the investment returns of the SWF.

It is difficult to reconcile the benevolent view of government-directed investment with some of our results. In particular, it is hard to understand why economic development needs would compel funds to invest domestically when equity prices are relatively higher, which presumably should be a time when capital constraints are less limiting. Similarly, it is hard to explain why social welfare concerns would lead politician-influenced funds to invest in the highest P/E industries, especially in light of the negative returns that subsequently characterize these sectors. While these results are only suggestive given the lack of more micro-level data, they raise a number of important questions about the investment strategies and management structures of SWFs. While we do not have exogenous variation in the political influence on SWFs, the documented correlations provide interesting initial evidence on the role of politicians in these funds. It would be difficult to reconcile our findings with an interpretation that politically directed investments of SWFs mainly function as a solution for inefficient capital allocation through private markets.

Finally, to dig deeper into the structure of political involvement, we investigate whether the stated objectives of the SWFs make a difference in their investment behavior. We find that funds which have stated strategic agendas—e.g., economic development of the country, macroeconomic smoothing, and the like—are more likely to invest at home, but only if politicians are involved in the fund. Otherwise, the stated objective per se does not seem to lead to a change in behavior. But interestingly, we find that the ex post changes in industry P/E ratios are negative for funds with stated strategic objectives independent of whether they have politically connected managers. These results strengthen the interpretation that the dual pressures on SWFs with political and financial objectives are associated with lower financial returns.

The plan of this paper is as follows. In the second section, we review relevant theoretical perspectives and the earlier studies on SWFs. Our data sources and construction are described in Section 3. Section 4 presents the analysis. Section 5 presents robustness checks. The final section concludes the paper.

2. Theoretical Perspectives and Related Work

Numerous accounts by both observers and practitioners suggest that there is substantial variation in the investment criteria and sophistication of institutional investors. In particular, practitioner accounts (e.g., Swensen [2009]) suggest that some institutions rely on overly rigid decision criteria and lack a sufficient understanding of key asset classes. Observers attribute these failures to underlying factors such as inappropriate incentives—for example, the limited compensation and autonomy that investment officers enjoy, which leads to frequent turnover and a predilection to select "safe" investments, even if the expected returns are modest—and conflicting objectives, particularly the pressures by fund overseers to invest in projects sponsored by local entrepreneurs, even if the expected investment returns (and in some cases, social benefits) are modest.

Recent papers by Gompers and Metrick [2001] and Lerner, et al. [2007] have highlighted the heterogeneity in investment strategies and ultimately returns across different types of institutional investors. However, the evidence on SWFs has been limited until recently due to many data restrictions. Several papers conduct international stock market reaction analyses to SWF investment announcements. Kotter and Lel [2008] collect 163 SWF investment

announcements and find a positive market reaction in the two days surrounding the announcement. Dewenter et al. [2010] find a positive market reaction to 196 stock purchases and negative reactions to 47 SWF stock sales. In the long term, they find slightly negative abnormal returns. Bortolotti, et al. [2010] reach similar conclusions: a positive abnormal return on the day of the announcement and deterioration in firm performance over the following two years. Knill, et al. [2010] analyze a sample of 232 SWF investments in publicly traded companies. While they find positive market reactions to announcements, the one year abnormal returns varies by SWF characteristics such as whether the SWF is from an oil-producing country, the degree of opacity, and investments in non-financial targets.

Chhaochharia and Laeven [2009] take a different perspective regarding SWF investment choices. They consider the geographical decisions made by SWFs when investing abroad in public companies. They find that funds largely invest to diversify away from industries at home, and do so mainly in countries that share the same ethnicity, language, and religion. Fernandes [2009], rather than exploring transactions, focus on SWF holdings. Using data on 8,000 firms between 2002 and 2007, he finds that the stakes in SWFs' public investments are small: at the 95th percentile of the sample, SWFs hold less than 1.5% of the company. Moreover, he finds a positive correlation between SWF ownership and firm performance and valuation.

While the papers outlined above explore SWFs through the lenses of international equity markets, our analysis's focus is their most substantial transactions (the median acquisition stake is 50% in our sample). The paper most complementary to ours is Dyck and Morse [2011], who construct a sample of SWF investments in public equity, real estate, and private equity between

the years 1999 and 2008. They find that relative to various capitalization benchmarks, there is a significant bias towards private equity. The combined private equity and real estate holdings account for almost half of SWFs' portfolios. Dyck and Morse find that substantial explanatory power can be attributed to either financial return maximization or state planning motives, demonstrating the tension between the two objectives. Our paper differs from Dyck and Morse in two dimensions. First, our focus is on SWFs' investment performance, rather than on portfolio holdings. Second, while Dyck and Morse infer funds' objectives from portfolio holdings, we take a different approach, by using SWF governance structure and stated objectives to explore how these interact with investment decisions.

3. Data Sources and Construction

To analyze the direct investment strategies of SWFs, we combine three sets of data: information on the SWFs themselves, the direct investments that the funds made, and the investment climate around the time of the transaction. The data for all the three components are drawn from publicly available sources.

SWF sample construction: We start with a preliminary sample of SWFs by combining the profiles of the funds published by J.P.Morgan (Fernandez and Eschweiler [2008]) and Preqin (Friedman [2008]). In the cases where the two databases use different names for the same SWF, we employ the fund address and related information to eliminate duplicates. We add five funds to the sample that were not included in these two compilations but are frequently described as SWFs in at least one of the investment datasets noted below. This initial search yields a

population of 69 institutions, including some SWFs that have been announced but are not yet active.

We then merge this initial sample of funds with the available data on direct investments and characteristics of SWFs. We are careful to extract investment data for both the SWFs and their "subsidiaries," which we define as entities in which SWF has at least a 50% ownership stake. The two SWF directories and the investment datasets noted below did not always explicitly note the links between SWFs and their subsidiaries. To extract transactions involving SWF subsidiaries, we supplement our list of SWF subsidiaries by employing ownership data in the *Directory of Corporate Affiliations* and Bureau van Dijk's Orbis.

SWF Characteristics: The fund profiles in the J.P.Morgan and Preqin databases contain information on the size and operations of the funds. If there is a discrepancy between the two databases, we reconfirm the accuracy of the information through web searches and newspaper articles. The key variables collected are:

- *Assets under Management*—J.P.Morgan and Preqin profiles contain estimates of fund sizes. In case of discrepancies, J.P.Morgan's estimate of assets under management is given preference. Preqin's estimate of assets under management is used only when no J.P.Morgan estimate existed.
- *The Presence of Politicians in the Managing Bodies*—The J.P.Morgan report emphasizes governance structures of funds. We read carefully the profiles, and form a dummy variable that indicates if a fund's profile contains evidence of presence of politicians in the governance of the fund. For example, Khazanah Nasional's profile indicates that the

fund's board of directors "has an eight-member Board comprising representatives from the public and private sectors. Abdullah Ahmad Badawi, the Right Honorable Prime Minister of Malaysia, is the Chairman of the Board of Directors." The Alaska Permanent Reserve Fund's profile indicates that the fund's Board of Trustees "is comprised of four public members, the Commissioner of Revenue and one additional cabinet member of the governor's choosing." Similarly, the J.P.Morgan report indicates that the board of directors of the Government of Singapore Investment Corporation (GIC) includes Lee Kuan Yew as the chairman, and Lee Hsien Loong as deputy chairman. The former is Singapore's minister mentor, and the latter is Singapore's prime minister.

- *Reliance on External Managers/Advisors*—The J.P.Morgan volume also indicates whether the governance of the fund is in the hands of a board consisting of investment professionals and/or outside business leaders. We create a dummy variable that is one if the report contains evidence that the institution relies heavily on external management or advisors.[1] For example, the J.P.Morgan profile indicates that the Hong Kong Exchange Fund "employs external fund managers to manage about one third of the Fund's assets, including all of its equity portfolios and other specialized assets." Similarly, the profile of Abu Dhabi Investment Authority (ADIA) indicates that "approximately 70% to 80% of the organization's assets are managed by external fund managers".
- *Stated Investment Goal*—The Preqin tabulation reports the stated goals of the SWF. Some funds have multiple goals. To simplify the analysis, we combine in some analyses the objectives into two groups: strategic objectives (Management of Government Assets, Acquisition of Strategic Assets, and Domestic Development) and non-strategic objectives

[1] We classify a fund as relying on external managers if the reliance is sufficiently important that it is documented in the report.

(Investment of Oil/Commodity Revenues, Currency Reserve Management, and Pension Funding). When SWFs' descriptions include objectives from both groups, we included all these transactions in the non-strategic group and verified that results are similar when included in the strategic group.

These measures, it must be acknowledged, have important limitations. First, these are reported as of 2008: we do not have a time series on the governance of or advisor usage by the funds. Second, these measures are extremely crude characterizations of the SWFs' organizational structures.

Investment Data: Information regarding SWF target investments is identified in Dealogic's M&A Analytics, SDC's Platinum M&A, and Bureau van Dijk's Zephyr. All three of these databases compile information on direct investments by institutional and corporate investors. Transactions included in the database encompass outright acquisitions, venture capital and private equity investments, and structured minority purchases in public entities (frequently called PIPEs, or private investments in public entities). The databases do not include investments into hedge, mutual or private equity funds, or open market purchases of minority stakes in publicly traded firms.

In each of the three datasets, we run multiple keyword searches for every fund in the sample. We also search for investments carried out by their subsidiaries. Finally, text fields of acquirer descriptions are searched for phrases such as "SWF," "sovereign fund," or "sovereign wealth fund." These additional transactions are examined, and if there is a match in the SWF's identity (e.g., if there is a slight misspelling of the SWF's name) and location, the entries are

added to the database. The variables we obtain about each deal are the announcement date, transaction size, share of the equity acquired, and country and industry of the target. In the case of discrepancies across the databases, we use press accounts and web searches to resolve the differences. Some of the databases include proposed deals that were not consummated. If the transactions are described in the databases as "withdrawn" or "rejected," we drop them from the analysis.

After merging the three databases, we are left with 2,662 transactions between January 1984 and December 2007 by 29 SWFs. We confirm that the bulk of the funds that are not included are either very new (indeed, some had not yet commenced operations by the end of 2007) or very small. Of the 29 institutions with transactions in our sample, 24 are profiled in either the J.P.Morgan or Preqin volumes, or in both publications. There exist 23 J.P.Morgan and 16 Preqin profiles for the funds in our sample. We describe a robustness check that seeks to assess whether selection biases affect our results in Section 5.

In the bulk of the analyses below, we also exclude 36 transactions where the targets were in Central America, South America, or Africa. This decision reflects our desire to focus on investments in the major markets—i.e., Asian, Middle Eastern, and Western countries (North America, Europe, and Australia)—where the vast majority of the investments are concentrated.

Environment Data: We also characterize the pricing and subsequent returns in the industry and the nation of the transaction. Ideally, we would have liked to analyze deal pricing

using the actual target firm's P/E ratio. However, since most SWFs' investments are in private firms, these data are not available.

The performance data which we use are:

- *Industry P/E ratios*— To obtain a measure of deal valuations, we use the weighted average of the P/E ratios of firms in the target company's industry and nation (determined by company headquarters). To calculate the P/E ratios for the target countries, we use the P/E ratios of public companies in the same industry and country from the Datastream database, dropping companies with negative P/E ratios.[2] Weighted average P/E ratios were formed for each target investment at the country-industry-year level (using market values of the firms as weights). We used industry classifications based on the Standard Industrial Classification scheme.[3] The distribution of P/E values was winsorized[4] at the 5% and 95% level in order to reduce the impact of extreme observations. We also construct an approximate performance measure for each deal: the change in the weighted mean industry-country P/E ratio in the year following the transaction.
- *Home P/E and versus Outside P/E*— To measure the P/E levels in the home nation versus outside the nation, we construct *Home P/E* and *Outside P/E* variables using the MSCI database (downloaded from Datastream). These ratios are weighted by market capitalization and measured at the country-year level. We complete missing country-level

[2] The main challenge was to get P/E ratios for Middle Eastern targets, particularly in the Persian Gulf region. In 73 cases, we could not compute a P/E ratio using the Datastream information.
[3] We use a broader definition than the 2-digit SIC level, since under this classification the number of companies per industry is very small in some target countries.
[4] Most of the affected transactions are concentrated in the Asian region. The estimators are more robust when we winsorize the extreme observations rather than trimming the sample (and thus disproportionately removing Asian region deals). Nevertheless, the results remain unchanged when we take the latter strategy and exclude outliers.

P/E ratios using the Zawya database and Datastream's P/E indexes for emerging markets. For investments made abroad, the variables *Home P/E* and *Outside P/E* correspond to the P/E level of the home country of the SWF and the target country, respectively. If investments are made at home, the *Outside P/E* variable equals the weighted average (by the total amount invested by SWFs over the sample period) P/E ratios of all countries in which investments were made by SWFs, excluding the home country.

4. Analysis

4.1. Sample statistics

Table 1 presents the descriptive statistics of the 2,662 transactions made by the 29 sovereign wealth funds in our sample. Panel A of Table 1 sorts the funds into three regions: Asia, Middle East,[5] and Western groups. The Western group includes funds from North America, Australia, and Europe. Our sample consists of seven funds in the Asian group, 15 funds in the Middle Eastern group, and seven funds in the Western group. The number of transactions of Asian funds (2,045 observations) is substantially larger than the Middle Eastern group (533 observations) and the 84 observations of the Western group.

One possible explanation for these differences in sample size is that we have only partial coverage of the deals. We believe, however, that this can only explain part of the differences. More important, we believe, are the differences in fund sizes and the willingness to engage in direct investments. For example, the average Asian and Middle Eastern funds have $132B and

[5] We add the single investment by the Venezuelan SWF to the totals for the Middle East, given the petroleum-driven nature of that economy.

$124B under management, respectively, and are substantially larger than the average Western fund ($40B). Moreover, to estimate the coverage of our sample, we compare the aggregate transaction value of our sample to the estimate in a J.P.Morgan publication (Fernandez and Eschweiler [2008]). They estimate outstanding SWF investments in alternatives (encompassing hedge funds and private equity) at the end of 2007 as $316 billion. In our sample, the aggregate transaction value in the years 2003-2007 (excluding the public investments) is $198 billion (expressed in 2008 U.S. dollars). Given that we exclude private equity partnerships and hedge fund investments, the comparison suggests we have reasonable sample coverage. Our estimate (as all analyses in this paper) relies on winsorized transaction values. Were we not to winsorize transaction values, our sample coverage is even better.

While the sample consists of transactions between the years 1984 and 2007, Panel B demonstrates that more than 97% of the transactions are after 1991. While both the Asian and Middle Eastern funds' investments go back to the mid 1980s, the Western funds' investments are more recent, beginning around 2003. Panel C shows that the average transaction size is $158 million (in 2008 U.S. dollars) and the average stake acquired by the SWFs is substantial (56.6%). Panel C also demonstrates that the average P/E level in the industry-country-year of the target of a SWF transaction is 25.6 and the typical investment segment experiences a drop of -1.2% in the mean P/E ratio in the year after the investment. For the approximately 20% of the investments in publicly traded firms, we also examine the market-adjusted returns in the six months after the transaction (see the detailed description below).

Panel D reports variables that capture the governance structure of the funds. Recall that for each fund, we develop indicator variables for whether political leaders are involved in the board and whether the fund relies on external managers. About 24% of the funds have politicians involved in the fund and 28% of the funds rely on outside managers. We see that both funds with political leaders and external managers tend to make larger investments. Interestingly, when politicians are involved, funds invest more in the home country (44% of the deals in the sample), relative to funds without their involvement (only 31% of the transactions). Funds with external managers involved invest less in the home country (8%) relative to 36% for funds that do not rely on external managers.

The final panel of Table 1 reports the stated fund objectives. Currency reserve management is the objective associated with most funds and most transactions. Funds whose stated goal is the management of government assets have the largest share of domestic investments; those whose goal is the investment of oil/commodity revenues, the fewest.

We now analyze whether the characteristics of the SWFs are associated with differences in their investment strategies, focusing on the likelihood of political interference. In particular, we focus on the impact of the governance structure of the funds—i.e., whether the SWFs rely on external managers for investment advice and whether politicians are involved in the fund—and the SWFs' stated objectives. We analyze investment strategies of SWFs, looking at their propensity to invest at home, the industry-country P/E levels at the time of the investments, the subsequent changes in the P/E ratios, and the size of the acquisition stakes of their investments.

The unit of observation in our analysis is at the transaction level (that is, for a specific SWF and target), with standard errors at clustered at the level of the nation in which the fund is based. In many regressions, we control for the year that the investment is made and the sovereign wealth fund making the investment. In most specifications, we use weighted regressions, with each observation weighted by the transaction size (transaction sizes are all expressed in 2000 U.S. dollars). Since we only have sizes for 67% of our transactions, we impute missing weights by constructing the fitted values from a regression of deal sizes on fixed effects for the investment year, target industry, target region, and fund. After adding imputed observations, we winsorize the deal size variable at the 5% and 95% level, in order to reduce the impact of extreme observations.[6]

4.2. Propensity to invest at home

In order to analyze how funds vary in their allocation of investments between the home nation and outside, we estimate a probit model. The dependent variable is a home investment dummy, which equals one if the target investment is made within the home nation of the SWF and zero otherwise. In Table 2, columns (1) and (2), we regress the home dummy on indicator variables for the presence of political leaders in the management of the fund and the reliance on external managers. We cluster the standard errors at the level of the country where the SWF is based. The displayed coefficients are marginal effects. In the specifications where year dummies are added, the sample only includes transactions from 1991 onward. All regressions are weighted by winsorized transaction sizes (expressed in 2000 U.S. dollars), as described above.

[6] In the appendix we report the results of the equally weighted regressions. We find that the results are robust, except in cases where specifically noted in the text.

In the base specification, column (1) of Table 2, we control for the home country's gross domestic product (expressed using the logarithm of GDP, in 2000 U.S. dollars), and GDP growth in the calendar year prior to the year of the investment. In subsequent regressions, we control for the year of the investment and the geographic location of the SWF (Asian, Middle Eastern, and Western). The results in column (1) show that in cases where political leaders are involved with the management of the funds, domestic investments are more common, while involvement of external managers is associated with fewer domestic investments. The magnitude of the effects is large: the coefficient on the politician dummy reflects 36% increase in the likelihood of investing at home when politicians are involved. In comparison, the coefficient on the external manager dummy is equivalent to a 26.3% lower share of domestic investments when external managers are employed. In column (2), we add transaction year fixed effects. The results change only slightly, from +36.0% to +32.9% for the politician dummy and from -26.3% to -24.7% for the external manager one.

To get a better understanding of the decision where to invest, we include control variables for the pricing levels of target markets at home and abroad, as discussed in the data construction section. In column (3) of Table 2, we repeat the regression from column (1), but add measures of the *Home P/E* level of the SWF's nation and *Outside* P/E, the P/E level of the country that the fund invests in. The results show that there is a significant correlation between the *Home P/E* level and the likelihood of investing at home or abroad. SWFs are more likely to invest at home when prices there are relatively higher. The magnitude of this effect is substantial:

an increase of one standard deviation of *Home P/E* increases the likelihood of investing at home by 4.5%.[7]

Similarly, higher P/E levels in the other countries are correlated with a lower propensity to invest at home. An increase in one standard deviation of *Outside P/E* decreases the likelihood of investing at home by 3.1%. If we add year fixed effects in column (4), the coefficient on *Home P/E* is still positive, but much smaller and insignificant. The coefficient on the *Outside P/E* becomes significant at 5% confidence level and the magnitude is larger. In column (5), we find that the results hold even when we use both the governance and valuation measures.

In column (6), we add a corruption index[8] for the country, taken from *International Country Risk Guide* (2008). This index is scaled from zero to ten, with higher numbers representing less corrupt nations. More corruption is associated with a greater emphasis on domestic investing: a decrease of one in the corruption scale is associated with a 10.8% increase in the likelihood of domestic investment. In an unreported regression, the interactions between the governance dummies and the corruption score are insignificant: e.g., political involvement with fund management is associated with a strong home bias to investments, regardless of the level of corruption in the nation.

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[7] In unreported regressions, we explore the impact of the Asian financial crisis on the likelihood to invest at home by adding a *Post-Crisis* dummy variable. We add interaction terms with Asian and Middle Eastern groups to capture differential reaction to the Asian financial crisis. While we find positive effect on likelihood to invest at home (with the effect largest at Middle Eastern SWFs), the results are sensitive to the number of post-1998 years we use to define the *Post-Crisis* variable. One important reason why the results are not very robust is that prior to 1995 our sample size is relatively limited compared to later years.

[8] Another variable of interest is the home country legal origin, and its impact on SWF investment behavior. However, this variable has very little variation in our sample, as most countries have common law legal origin.

The cross-sectional results suggest that SWFs invest less at home if their local equity markets have relatively low P/E levels.[9] One possible explanation for this pattern is that SWFs shun low-valued local markets because these financial markets are not as well developed. But this hypothesis has difficulty explaining away the fact that the propensity to invest abroad increases as the pricing level in foreign markets rises. Rather, it appears more consistent with the interpretation that SWFs engage in "trend chasing," that is, gravitate to markets where equity values are already high.

4.3. Valuation levels

In a second step, we examine whether there are significant differences in the market timing of the transactions undertaken by SWFs. In the first three columns of Table 3, the dependent variable is the weighted average (by firm value) of the P/E ratios of publicly traded firms in the industry, country, and year of the transaction. The estimation method is a weighted ordinary least squares model, using as weights winsorized transaction sizes (converted to U.S. dollars as of the year 2000). Robust standard errors, clustered by the countries in which the SWFs are based, are shown in parenthesis.

[9] We also explore whether different determinants affect domestic investments in public versus private firms. To do so, we re-estimate Table 2 separately for private and public firms. We find that the decision to invest at home in publicly listed companies is sensitive to market conditions at home and abroad, while investments at private companies are sensitive only to foreign stock market conditions. However, the differential sensitivity of private and public investments to market valuation levels cannot be unambiguously interpreted, since market valuation might be a worse measure of investment opportunities for private firms compared to public firms. Therefore, we include the results in the Appendix (see Table A-7).

As before, in each specification, we control for the level and growth of GDP in the SWF's nation, the location of the SWF, and the year of the investment. We also add controls across all specifications for whether the investment is a domestic one and the geographic region of the target company (using the broad regional classification as before). In the first two columns of Table 3, we include a dummy for the involvement of political leaders and of external managers. We find that having politicians involved is strongly associated with investments in higher-priced sectors (a premium of three to four times earnings), while external managers are associated with investments in lower-valued sectors. In column (2), we include a control for the country corruption index. SWFs based in more corrupt nations are consistently associated with investments in higher-valued industries (an added multiple of two to three times earnings).

In column (3), we include an interaction term between politicians and home investments, as well as an interaction between external managers and home investments. When including the interactions, we see that the coefficient on politicians interacted with home investment is statistically significant and economically large, reflecting a 6.9 higher P/E ratio when politicians invest at home.[10] The direct effect of the dummy for politician involvement becomes insignificant and small. We do not find a similar significant coefficient on the interaction term for the external managers and home investment. These results suggest that politicians tend to particularly invest in high P/E deals at home, while the effect is much less pronounced abroad. For external managers, there is no difference in the investment timing between domestic and foreign markets.

[10] In the equally weighted regressions, the interaction term is insignificant with smaller magnitude.

4.4. Investment performance

By themselves, these results above could be consistent with very different interpretations. First, the fact that SWFs with politicians' involvement are investing in higher P/E sectors might not be troubling. If these ratios are true reflections of the investment opportunities of the firms, these institutions may be rationally choosing sectors that are likely to perform well. This view (Gordon [1959]) was recently used by Bekaert et al. [2007] to measure countries' growth opportunities. A second interpretation relies on the assumption that markets can be inefficient and that higher P/E ratios reflect investors' overreaction (Lakonishok, Shleifer, and Vishny [1994]). This view suggests that high P/Es may reflect overpayment on the part of the SWFs.

To shed some light on these two competing interpretations, we look at the performance of investments in the industry and country in the year after the deal. If the first interpretation is true, we should see that SWFs outperform in home investments, while the opposite would hold under the second explanation.

The regressions in Column (4)-(6) in Table 3 are structured to be parallel to the first three columns, but now the dependent variable is the percentage change in the mean P/E ratio of firms in that country and industry in the year following the investment. By looking at the subsequent performance of the sector, we can address some of the interpretative challenges highlighted above. As in the previous section, we use a transaction size-weighted ordinary least squares specification.

In column (4), we see that SWFs where political leaders play a role select sectors with significant drops in P/E going forward (-3.9%). This is in contrast to the case when external

managers are involved, where P/E values increase in the year following the investment (+2.0%). We repeat this estimation in column (5), now controlling for corruption levels. While corruption by itself has no significant effect on returns, the governance measures become stronger. The coefficient on politicians becomes -4.6%, while the positive effect of external managers grows to +2.7%. When interactions with home investments are added in column (6), the interaction term between politician influence and home investments is negative and substantial, reflecting a decline of 7.5% in returns when investing at home. The coefficient is significant at the 10% threshold.[11]

The analysis suggests that SWFs with politician involvement do not select high P/E sectors because they have better private information about investment opportunities. Rather, it seems to reflect a willingness to trend chase and overpay for investments. The analysis suggests, at least weakly, that these effects are stronger when it comes to domestic investments.

In Table 4, we undertake a robustness check of the performance regressions. A key drawback of the analyses in Table 3 is that we examined the performance at the level of the chosen industry and nation as a whole, and not that of the individual companies that the SWFs invested in. The performance of these selected firms could be unrepresentative of the returns more generally, or the experience of private firms could differ from those of the public concerns whose P/Es we can trace. To partially address the first of these concerns, we examine the subset of firms that were publicly traded at the time of the SWF investment. We search the Datastream database for all target companies that were publicly traded and extract their monthly returns. We

[11] The equally weighted regressions demonstrate similar results, however, the coefficients are noisier, and in some cases insignificant.

determine the benchmark returns for the stock exchanges in which the target companies were traded and extract those returns as well. We compute cumulative abnormal returns relative to the benchmark in the six months after the transaction, which leads to a considerably larger coverage than one-year returns.

We estimate in Table 4 transaction size-weighted OLS regressions similar to those in the final three columns of Table 3, but now with the difference between the return of the target in the six months after the transaction and the return of the corresponding benchmark over the same period as the dependent variable. We use 533 observations in these estimations.

We find once again that in the basic specifications, politician-influenced SWFs are associated with lower returns. These transactions significantly underperform, generating 16% lower returns in the six months after the investments. The home investment dummy now has a significantly negative coefficient, suggesting underperformance among domestic investments. While the sample of publicly traded transactions is considerably smaller, the similarity to the results in Table 3 is reassuring.

In an unreported regression, we repeat the analysis using a measure which addresses the second concern. We use as the dependent variable the percentage change in the weighted (by firm value) average EBITDA/Assets ratio of all publicly traded firms if target is public, or if the target is private, all privately held firms in the corresponding three-digit SIC industry, country, and year of the target in the transaction.

We determine the ratios for the corresponding firms from the 2009 edition of Orbis from Bureau van Dyck, which includes financial information about private firms for many nations. The important advantage of Orbis is that it includes data on both public and private firms (in fact, most of the firms in this database are private). Unfortunately, in many cases, the information is quite scanty, so we can only obtain a ratio for the corresponding industry, country, and year for 796 firms: far worse than the P/E ratio, where we have a benchmark for 2,553 firms. The results are quite weak. In the basic regressions, the politicians variable retains a negative coefficient and the external managers one a positive one, but neither are statistically significant.

4.5. Acquisition stake

In Table 5, we explore how the size of the acquisition stakes varies in the investments that different SWFs make. Unlike the other tables in the paper, we use equally weighted regressions here, since weighting based on deal sizes will bias our results. Otherwise, the set-up of the table is parallel to the specifications in Tables 3 and 4, with an OLS specification.

In column (1), we find that the acquisition stake of SWFs with external managers present is lower by 10.9%. Investments at home are 12.2% larger, an effect that is statistically significant. Political leaders' involvement is associated with 7.9% increase in acquisition stake, although the coefficient is not statistically significant. When we control for corruption levels in column (2), we find that the coefficient on the dummy for politicians' involvement becomes significant and has a larger magnitude (a 10.7% increase). Similarly, the coefficient on external managers remains statistically significant (13.1%). In column (3), we add interaction terms with home investment dummies. Interestingly, the interaction term between politicians and home

investment dummy is insignificant; suggesting that politician-influenced SWFs' propensity to acquire larger stakes is independent of the location of the target company.

4.6. Stated investment objective

These institutions often differ in their stated investment goals. Some SWFs profess a desire to focus on more strategic objectives, such as the acquisition of useful companies or domestic development. Others aim more at the long-term return goals that are akin to those of a university endowment.

In Table 6, we repeat the analyses of Tables 2 and 3, but look specifically at the role that investment objectives play. Using the Preqin data, we define funds' objectives to be strategic if stated goals include Management of Government Assets, Acquisition of Strategic Assets, or Domestic Development. We consider the rest of the objectives as non-strategic (Investment of Oil/Commodity Revenues, Currency Reserve Management, or Pension Funding). Most funds include multiple goals, which typically fall under the same broad category. In 220 investments, fund goals included both strategic and non-strategic objectives. We included all these transactions in the non-strategic group, and verified that results are similar when these are included in the strategic group instead.

The first two columns repeat the specifications in Table 2, estimating a weighted probit model where the dependent variable is the home country indicator. In column (1), we regress a

dummy for whether the investment is at home on our standard variables plus an interaction between a dummy for whether politicians are involved in the fund and the strategic objective of the fund. We also include a dummy variable for strategic objectives. We find that the coefficient on the strategic objective indicator is insignificant and close to zero, suggesting no increase in the likelihood to invest domestically. However, when political leaders are involved, those funds which have strategic objectives show a much higher probability of investing at home: the coefficient of the interaction term between politicians and strategic objectives is significant at 1% level, and indicates a 74.5% increase in the likelihood to invest at home. We repeat the analysis in column (2), controlling for level of corruption, and find that the results are similar.

The second pair of regressions in Table 6 uses as the dependent variable the average P/E ratio in the target country, industry, and year of the transaction. We repeat the specification in Table 3, and add the direct effect for strategic objectives and an interaction term with politicians' involvement. In column (3), we find that the coefficient of the strategic objective dummy is significant at the 5% level and reflects a higher P/E ratio of 2.5. This effect is independent of having politicians involved in the SWF, as the interaction term is now insignificant. We repeat the analysis in column (4), adding interaction terms with home investment dummy. The result from the previous column remains, with the interaction term becoming bigger (3.8) and statistically significant at the 1% level. Interestingly, the interaction term of politicians and home investment dummy is still significant and positive, similarly to our previous findings. This suggests that the increased tendency of politicians to invest at high P/E ratios at home is independent of the fund's strategic objectives.

The last pair of regressions in Table 6 uses as the dependent variable the one-year change in P/E ratios. In column (5), we find that funds with strategic objectives perform poorly, with a significant drop of 1.7% in sector performance. Similarly, the direct effect of politicians' involvement is highly significant at the 1% level, with a drop of 3.8%. However, the interaction term of these two factors is insignificant and close to zero. The specification in column (6) adds interaction terms of the home investment dummy with the political involvement measure. The direct effect of strategic objectives now becomes even more significant and its magnitude gets bigger in absolute terms (-2.7%). The earlier result found in Table 3 of politician-influenced funds performing poorly when investing at home exists here as well, even when controlling for the strategic objectives of the fund. The interaction term between politicians' involvement and the home investment dummy reveals a large drop of 7.5% in such investments. Overall, this implies that the political leader-influenced investments underperform irrespective of their stated strategic objectives, and that the underperformance is particularly concentrated at home.[12]

5. Robustness Checks

As the descriptive statistics in Table 1 show, the sample is somewhat skewed in the size of the deals, and the transactions are clustered towards the end of the period under study. Moreover, there is heterogeneity in deal size across different funds. One could be worried that our results might be driven either by some of the smaller deals or the valuation trends in the years immediately before the financial crisis. Alternatively, one might worry that there is selection biases in the deals included in our sample, which is doubtless a greater problem among

[12] In equally weighted regressions, the direct effects of politicians and external managers on P/E levels and sector performance are similar to the results presented here, and the coefficients exhibit even larger magnitudes and higher statistical significance. However, the effect of strategic objectives on these measures becomes smaller and insignificant.

the smaller transactions. To verify that our results are robust to these concerns, we undertake a number of additional tests that examine different subsets of the data.

We repeat all the regressions presented in this paper using two subsamples, one which includes the largest 75% of the deals, and the other with the largest 50% of the deals. In these samples, the cutoff value is either $11 million or $68 million (in 2008 U.S. dollars), respectively. We re-run the regressions of the paper, both size-weighted and equal-weighted. Even after removing 50% of the transactions, the remaining transactions maintain the same distribution across the groups. And in both subsamples, the results remained similar to the ones reported in the paper. We also run the regressions without winsorizing the data. Finally, we repeat our analysis excluding either the last two years or the last year of the sample and find that the results remain unchanged.

Finally, we conduct simple weighted mean tests to explore the robustness of the results. The results are provided in the appendix and exhibit similar patterns to the ones described in the multivariate analysis except when noted above.

6. Conclusions

Sovereign wealth funds are distinguished by their complex set of objectives. Taken as a whole, our results lend support to the hypothesis that funds which are are exposed to political influences show major distortions from long-run return maximization. In particular, SWFs with politician involvement are more likely to invest domestically, while those SWFs where external managers play an important role are more likely to invest internationally. Politically influenced

SWFs also concentrate their funds in sectors that both have high P/E levels and then experience a drop in these levels, especially in their domestic investments, patterns that do not hold in funds that rely on external managers. Funds that have stated strategic goals are more likely to invest at home, but only if politicians are involved.

While these results are only suggestive, given the preliminary nature of the data, they raise a number of important questions about the investment decisions and management structure of SWFs. A logical extension of this analysis would be to investigate the strategies of SWFs across a wider set of asset classes. Such an analysis, however, would be challenging given the opacity of many of these funds.

More generally, we believe that much interesting work remains to be done in understanding the underlying objectives of SWFs, their investment strategies, and organizational differences, as well as the constraints they face due to internal and external pressures. For example, many reports suggest that SWFs are often employed to further the geopolitical and strategic economic interests of their governments (World Economic Forum, [2011]). A recent example is the emphasis of Singaporean SWFs on investing into India and China, which has been interpreted as being motivated by a desire to forge strategic ties with the city-state's larger and more powerful neighbors. In other cases, political considerations have led to the abandonment of prescient investment strategies, as when the Norway's Government Pension Fund caused an uproar in 2006 by shorting the shares of Icelandic banks. Thus, SWFs present an ideal setting in which to understand the interaction between finance and political economy.

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Table 1 – Descriptive Statistics

The sample consists of 2,662 investments by 29 sovereign wealth funds. It excludes transactions which were withdrawn or rejected. All descriptive statistics are equally weighted. *PE Level* is the average of the P/E ratios of publicly traded firms in the industry, country and year of the transaction. *Region Investment* equals 1 if investment was at the same region (Asia, Middle East or Western countries), but not at home country. *P/E Change* is the change in the average of the P/E ratios of publicly traded firms in the industry and country of the transaction in the year after the deal. M*arket-adjusted return* is the difference between the return of the target in the six months after the transaction and the return of the corresponding benchmark over the same period. *Deal size* variable and the P/E Ratio variables are winsorized.

Panel A: Groups

	Funds	Transactions	External Managers (%)	Politicians (%)	2008 Size ($BN)
Asia group	7	2045	42.85	57.14	132.7
Middle East group	15	533	13.33	13.33	124.76
Western group	7	84	42.85	14.28	40.874

Panel B: Transactions by Year and Group

	1992 prior	1993-1994	1995-1996	1997-1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	All
Asia group	80	85	123	151	143	168	117	114	138	168	197	229	332	2045
Middle East group	47	18	22	24	17	25	9	17	17	15	46	73	203	533
Western group	1	1	2	3	1	0	2	4	9	15	14	17	15	84
Overall	128	104	147	179	161	193	128	135	164	198	257	319	550	2662

Panel C: Transactions

	N	Mean	Median	Std. Dev
Acquisition Stake (%)	1998	56.59	50.00	39.01
Deal Size (2008 $MM)	1743	158.23	67.50	256.24
Home Investment (%)	2662	33.92	0.00	47.35
Region Investment (%)	2662	29.70	0.00	45.70
P/E Level	2642	25.60	21.46	13.48
P/E Change (%)	2632	-1.17	-0.01	11.19
Market-adjusted return	543	4.67	13.20	42.82

Panel D: Politicians and External Managers

	Politicians				No Politicians				External Managers				No External Managers			
	N	Mean	Median	Std. Dev	N	Mean	Median	Std. Dev	N	Mean	Median	Std. Dev	N	Mean	Median	Std. Dev
Acquisition Stake (%)	366	49.16	40.03	39.19	1625	58.35	50.75	38.79	203	42.19	20.00	40.28	1788	58.31	51.00	38.54
Deal Size (2008 $MM)	378	190.07	72.49	275.97	1367	147.86	66.01	248.18	219	236.41	85.48	300.38	1526	145.62	64.82	245.81
Home Investment (%)	508	44.80	0.00	49.77	2146	31.39	0.00	46.42	275	8.20	0.00	27.50	2379	36.89	0.00	48.26
Region Investment (%)	508	31.80	0.00	46.61	2146	29.32	0.00	45.53	275	44.02	0.00	49.73	2379	28.17	0.00	44.99
P/E Level	506	25.29	21.66	13.07	2128	25.70	20.51	13.59	272	19.68	21.52	13.87	2362	25.57	21.46	13.44
P/E Change (%)	502	-2.62	-0.01	11.17	2122	-0.82	-0.01	11.18	269	2.48	0.00	10.11	2355	-0.82	-0.01	11.08

Panel E: Funds' Stated Investment Objectives (Preqin 2008)

	Investment of Oil/Commodity Revenues	Currency Reserve Management	Pension Funding	Management of Government Assets	Acquisition of Strategic Assets	Domestic Development
Number of Funds	5	8	2	7	4	3
Number of Transactions	73	1833	34	460	722	178
Variable means (std. dev.)						
Home Investment (%)	11 (31)	32 (47)	32 (47)	59 (49)	33 (47)	32 (32)
Stake (%)	38 (39)	56 (38)	51 (35)	50 (40)	57 (40)	58 (40)
Deal Size (2008 $MM)	252.12 (229.98)	111.48 (167.63)	298.68 (262.95)	133.71 (186.13)	166.86 (202.5)	215.81 (231.92)
Industry P/E Ratio	21.89 (10.36)	26.66 (14.07)	23.52 (14.15)	22.41 (10.46)	25.21 (13.05)	23.2 (11.95)
Industry P/E Ratio Change	-1.5 (9.13)	-1.17 (11.77)	-3.24 (9.95)	-1.53 (8.86)	-1.68 (11.4)	-2.77 (10.21)

Table 2 – Propensity to Invest at Home

The sample consists of 2,662 investments by 29 Sovereign Wealth funds. It excludes transactions which were withdrawn or rejected. The dependent variable is a dummy denoting whether the investment target was based in the same nation as the SWF. The variables *Orig log(GDP)* and *Orig GDP growth* represent the log of the GDP in the year of the investment and the growth of the GDP in the calendar year prior to the investment in the SWF's home country. *External Managers* is equal to 1 if external managers are involved in the management of the fund, zero otherwise. *Politicians* variable is a dummy equal to 1 if politicians are involved in the management of the fund. The *Home P/E* variable is the country-level P/E ratio of home country. The *Outside P/E* variable is equal to the target country P/E ratio if investment is not in the SWF's home nation. If investment is at home, *Outside P/E* is equal to the average (weighted by the total transaction sizes of the SWF deals in the sample) P/E ratios of all other countries in which investments were made by SWFs. *Corruption Index* scales from 0 to 10, when higher corruption implies a lower score. *Region dummies* include the dummy variables, which are equal to 1 when a fund is based in Asia or the Middle East. The estimation method is a weighted probit model, using as weights winsorized transaction sizes (converted to 2000 U.S. dollars). The displayed coefficients are marginal effects. Standard errors are clustered at the SWF country. When year dummies are added, the sample only includes transactions from 1991 onward.

Dependent variable: Home Dummy						
	(1)	(2)	(3)	(4)	(5)	(6)
Politicians	0.360**	0.329**			0.422***	0.240*
	(0.176)	(0.163)			(0.127)	(0.137)
External managers	-0.263***	-0.247***			-0.265***	-0.232***
	(0.066)	(0.048)			(0.027)	(0.035)
Home P/E			0.006*	0.001	-0.002	-0.003
			(0.003)	(0.004)	(0.002)	(0.002)
Outside P/E			-0.006*	-0.007**	-0.008**	-0.008**
			(0.003)	(0.003)	(0.003)	(0.003)
Corruption Index						-0.108***
						(0.035)
Orig log(GDP)	0.046	0.069*	0.060**	0.098***	0.003	-0.021
	(0.048)	(0.042)	(0.029)	(0.033)	(0.032)	(0.028)
Orig GDP growth	-0.009*	-0.020*	-0.007*	-0.012	-0.002	-0.003
	(0.005)	(0.011)	(0.004)	(0.017)	(0.008)	(0.009)
Year dummies	No	Yes	No	Yes	Yes	Yes
Region dummies	No	No	Yes	Yes	Yes	Yes
R-squared	0.128	0.173	0.097	0.137	0.220	0.223
N	2618	2550	2618	2550	2550	2550

Table 3 – Valuation Levels and Investment Performance

The sample consists of 2,662 investments by 29 sovereign wealth funds. It excludes transactions which were withdrawn or rejected. The dependent variable *P/E Levels* is the weighted (by firm value) average of the P/E ratios of publicly traded firms in the industry, country, and year of the transaction. The dependent variable *P/E* Change denotes a one year percentage change in the value of *P/E Levels* from the year of the transaction. *Orig log(GDP)* and *Orig GDP growth* represent the log of the GDP in the year of the investment and the growth of the GDP in the calendar year prior to the investment in the SWF's home country. *External Managers* variable equals 1 if external managers are involved in the management of the fund, zero otherwise. *Politicians* variable is a dummy equal to 1 if politicians are involved in the management of the fund. *Home Investment* is a dummy variable which equals one if the target is based in the same country as the SWF. *Corruption Index* scales from 0 to 10, when higher corruption implies a lower score. *Region dummies* include dummy variables, which are equal to 1 when a fund is based in Asia or the Middle East. *Target region dummies* add dummy variables, which are equal 1 if the investment is in Asia or the Middle East. The estimation method is a weighted ordinary least squares model, using as weights winsorized transaction sizes (converted to 2000 U.S. dollars). Robust standard errors, allowing for data clustering by the countries in which the SWFs are based, are shown in parenthesis. When year dummies are added, the sample only includes transactions from 1991 onward.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	P/E Levels	P/E Levels	P/E Levels	P/E Change	P/E Change	P/E Change
Politicians	2.796**	4.111***	0.777	-0.039***	-0.046***	-0.020
	(1.027)	(1.253)	(2.604)	(0.006)	(0.008)	(0.021)
External managers	-3.390**	-4.543***	-2.443	0.020**	0.027***	0.008
	(1.258)	(1.389)	(2.510)	(0.009)	(0.008)	(0.020)
Home Investment	-5.751**	-5.430*	-0.180	-0.017	-0.019	0.024
	(2.549)	(2.774)	(5.462)	(0.012)	(0.013)	(0.039)
Corruption Index		2.032*	3.390***		-0.011	-0.018*
		(1.056)	(1.081)		(0.008)	(0.008)
Politicians × Home			6.998*			-0.075*
			(3.784)			(0.040)
External managers × Home			-0.138			0.032
			(4.456)			(0.037)
Corruption Index × Home			-1.845			-0.008
			(1.391)			(0.009)
Orig log(GDP)	1.681***	2.724***	2.871***	-0.004	-0.009	-0.013**
	(0.367)	(0.575)	(0.704)	(0.004)	(0.006)	(0.006)
Orig GDP growth	0.014	0.001	0.049	0.002	0.002	0.001
	(0.196)	(0.211)	(0.218)	(0.001)	(0.002)	(0.002)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes	Yes	Yes
Target region dummies	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.167	0.171	0.184	0.128	0.131	0.138
N	2533	2533	2533	2524	2524	2524

Table 4 – Investment Performance of Publicly Listed Firms

The sample consists of 538 publicly traded investments. It excludes transactions which were withdrawn or rejected. The dependent variable is the difference between the return of the target in the six months after the transaction and the return of the corresponding benchmark over the same period. *Orig log(GDP)* and *Orig GDP growth* represent the log of the GDP in the year of the investment and the growth of the GDP in the calendar year prior to the investment in the SWF's home country. *External Managers* variable equals 1 if external managers are involved in the management of the fund, zero otherwise. *Politicians* variable is a dummy equal to 1 if politicians are involved in the management of the fund. *Home Investment* is a dummy variable which equals one if the target is based in the same country as the SWF. *Corruption Index* scales from 0 to 10, when higher corruption implies a lower score. *Region dummies* include dummy variables, which are equal to 1 when a fund is based in Asia or the Middle East respectively. *Target region dummies* add dummy variables which are equal to 1 if the investment is in Asia or the Middle East. The estimation method is a weighted ordinary least squares model, using as weights winsorized transaction sizes (converted to 2000 U.S. dollars). Robust standard errors, allowing for data clustering by the countries in which the SWFs are based, are shown in parenthesis. When year dummies are added, the sample only includes transactions from 1991 onward.

Dependent Variable: Market Adjusted Returns (6 months)			
	(1)	(2)	(3)
Politicians	-0.166***	-0.162***	-0.167***
	(0.046)	(0.041)	(0.036)
External managers	-0.001	0.009	0.007
	(0.046)	(0.041)	(0.050)
Home Investment	-0.101**	-0.094***	0.095
	(0.033)	(0.028)	(0.292)
Corruption Index		0.044	0.052
		(0.034)	(0.033)
Politicians × Home			-0.036
			(0.055)
External managers × Home			0.259
			(0.333)
Corruption Index × Home			-0.049
			(0.068)
Orig log(GDP)	0.006	0.043	0.044
	(0.027)	(0.035)	(0.036)
Orig GDP growth	-0.014	-0.020	-0.021
	(0.010)	(0.013)	(0.012)
Year dummies	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes
Target region dummies	Yes	Yes	Yes
R-squared	0.112	0.113	0.114
N	533	533	533

Table 5 – Acquisition Stake

The sample consists of 2,662 investments by 29 sovereign wealth funds. It excludes transactions which were withdrawn or rejected. The dependent variable is the share of the target company acquired by the SWF in the transaction. *Orig log(GDP)* and *Orig GDP growth* represent the log of the GDP in the year of the investment and the growth of the GDP in the calendar year prior to the investment in the SWF's home country. *External Managers* variable equals 1 if external managers are involved in the management of the fund, zero otherwise. *Politicians* variable is a dummy equal to 1 if politicians are involved in the management of the fund. *Home Investment* is a dummy variable which equals one if the target is based in the same country as the SWF. *Target Asia* and *Target ME* are dummy variables indicating that the location of target companies is in Asia or Middle East. *Corruption Index* scales from 0 to 10, when higher corruption implies a lower score. *Region dummies* include dummy variables, which are equal to 1 when a fund is based in Asia or the Middle East. *Target region dummies* add dummy variables, which are equal 1 if the investment is in Asia or the Middle East. The estimation method is an ordinary least squares model. Robust standard errors, allowing for data clustering by the countries in which the SWFs are based, are shown in parenthesis. When year dummies are added, the sample only includes transactions from 1991 onward.

Dependent Variable: Acquisition Stake			
	(1)	(2)	(3)
Politicians	0.079	0.107*	0.136**
	(0.053)	(0.058)	(0.060)
External managers	-0.109**	-0.131**	-0.152**
	(0.050)	(0.051)	(0.057)
Home Investment	0.122**	0.129**	0.148
	(0.055)	(0.052)	(0.209)
Corruption Index		0.040	0.031
		(0.031)	(0.031)
Politicians × Home			-0.074
			(0.086)
External managers × Home			0.054
			(0.090)
Corruption Index × Home			-0.001
			(0.047)
Orig log(GDP)	-0.065**	-0.045*	-0.051*
	(0.024)	(0.025)	(0.026)
Orig GDP growth	0.019**	0.019**	0.018**
	(0.007)	(0.007)	(0.007)
Year dummies	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes
Target region dummies	Yes	Yes	Yes
R-squared	0.098	0.099	0.099
N	1916	1916	1916

Table 6 – Investment Objectives

The dependent variable *Home Dummy* denotes whether the investment target was based in the same nation as the SWF. The dependent variable *P/E Levels* is the weighted (by firm value) average of the P/E ratios of publicly traded firms in the industry, country and year of the transaction. The dependent variable *P/E Change* denotes the one year percentage change of *P/E Levels. Strategic Objectives* is a dummy variable equal to 1 if fund's objective is one of the following: management of government assets, acquisition of strategic assets or domestic development, and 0 otherwise. *Corruption Index* scales from 0 to 10, when higher corruption implies a lower score. *Region dummies* include dummy variables, which are equal to 1 when a fund is based in Asia or the Middle East. *Target region dummies* add dummy variables, which are equal 1 if the investment is in Asia or the Middle East. The estimation method is a weighted ordinary least squares model, using as weights winsorized transaction sizes (converted to 2000 U.S. dollars). Robust standard errors, allowing for data clustering by the countries in which the SWFs are based, are shown in parenthesis. When year dummies are added, the sample only includes transactions from 1991 onward.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	Home Dummy	Home Dummy	P/E Levels	P/E Levels	P/E Change	P/E Change
Politicians	-0.037	-0.085	3.030**	0.841	-0.038***	-0.023
	(0.100)	(0.072)	(1.036)	(1.795)	(0.009)	(0.015)
External managers	-0.173***	-0.154***	-3.032**	-1.615	0.015	0.005
	(0.052)	(0.050)	(1.164)	(1.582)	(0.009)	(0.014)
Strategic Objectives	-0.105	-0.115	2.476**	3.773***	-0.017*	-0.027**
	(0.102)	(0.091)	(1.041)	(1.116)	(0.008)	(0.010)
Politicians × Strategic Objectives	0.745***	0.771***	-0.326	-5.797	-0.000	0.051
	(0.101)	(0.079)	(2.907)	(3.423)	(0.016)	(0.039)
Home P/E	-0.003	-0.004*				
	(0.002)	(0.002)				
Outside P/E	-0.009***	-0.009***				
	(0.003)	(0.003)				
Corruption Index		-0.029	2.457*	3.099***	-0.014	-0.014
		(0.054)	(1.235)	(0.947)	(0.010)	(0.009)
Home Investment			-5.419*	-1.446	-0.019	0.036
			(2.892)	(4.913)	(0.014)	(0.035)
Politicians × Home				8.836*		-0.091*
				(4.242)		(0.050)
External managers × Home				0.920		0.026
				(4.258)		(0.035)
Corruption Index × Home				-1.539		-0.011
				(1.254)		(0.008)
Orig log(GDP)	0.107**	0.110*	3.148***	2.287**	-0.013	-0.006
	(0.042)	(0.065)	(1.009)	(0.984)	(0.009)	(0.011)
Orig GDP growth	0.007	0.011	0.022	0.002	0.002	0.002
	(0.008)	(0.007)	(0.220)	(0.217)	(0.001)	(0.001)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes	Yes	Yes
Target Region dummies	No	No	Yes	Yes	Yes	Yes
R-squared	0.242	0.249	0.173	0.188	0.131	0.141
N	2,505	2,505	2,531	2,531	2,522	2,522