

Cross-border Majority Investments of GCC Sovereign Wealth Funds: a Threat for the Economy?

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Abstract

In this paper we examine the investment strategy of sovereign wealth funds (SWFs) of the Gulf Cooperation Council (GCC) countries. GCC SWFs are considered as relatively opaque investors and strongly politicized, raising some concerns for perceived political and security risks. We investigate what are the drivers of majority cross-border equity acquisitions made by GCC SWFs over the period 2006-2015. Using a logit model and an ordered logit, we test if usual determinants of SWFs investments still stand when we look at influential ($> 10\%$) or majority ($> 50\%$) acquisitions made by GCC SWFs. We find that GCC SWFs' do not consider financial characteristics of the targeted firms when they acquire large cross-border stakes but rather the characteristics of the country (countries in the European union and/or countries with a high level of shareholders protection), suggesting that their motives may go beyond pure profit maximization. We also find that transparent funds are more likely to take influential or majority stakes and that they do so predominantly in non-strategic sectors. Overall, our results indicates that even if GCC SWFs don't seek only for financial returns, acquiring majority stakes is not a lever for GCC governments to get strategic interests in the targeted country.

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Keywords: Sovereign Wealth Funds; Cross-border Majority Acquisitions; Ordered logit model ; GCC.

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1 Introduction

Defined by the IMF (2004) as "government-owned investment funds set up for a variety of macroeconomic purposes" such as stabilisation, saving for future generations and investments in socio-economic projects, sovereign wealth funds (SWFs) have sharply grown over the last decade, with resources estimated to be USD 7.3 trillion in June 2017, thanks to high oil prices, financial globalisation and sustained global large imbalances.¹ SWFs have recently attracted considerable public attention. While the size and rapid growth of SWFs suggest that they have become major players in the world, buying large stakes in companies and giving government's exposure to sectors they may otherwise be unable to achieve, their objectives and behavior are not well understood. In particular, the opaqueness surrounding their structure and activities is a major concern in host countries, as it is unclear whether SWFs behave like governments or institutional investors: "*the prospect of significant investments by SWFs potentially giving foreign countries control over important parts of an investee country's economy has emerged as a political issue*" (Greene and Yeager, 2008).

This is particularly the case of SWFs originating from the Gulf Cooperation Council (GCC) countries², by which the amount accumulated has dramatically increased since 10 years due to the increasing prices of commodities such as oil and natural gas. SWFs of GCC countries manage around 40% of SWFs global assets. The SWFs of these countries are broadening their investment portfolios and focusing on achieving higher returns. Consequently, they have invested all over the world during the last decade with the bulk of them focused on Developed countries and in particular Europe. It has become common news to hear that one of these GCC funds is in the process of buying, planning to buy or investing in a major institution in western countries.

A revealing example is the full acquisition by Qatar Investment Authority (QIA) in 2011

¹According to the Sovereign wealth Fund Institute, the assets managed by these funds were estimated to be USD 3,2 trillion in September 2007, which means that the size of these funds has more than doubled since the beginning of the financial crisis (source: www.swfinstitute.org).

²GCC member states are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. The United Arab Emirates is a federation of seven emirates, including Abu Dhabi, Dubai and Ras al-Khaimah, which all have their own SWF.

of the popular football club Paris St. Germain. The same SWF has played the part of deal-maker with the Glencore acquisition of Xstrata in 2013 and with Glencore again by buying stakes in Russian oil company Rosneft in December 2016. In June 2016, the Public Investment Fund (PIF) of Saudi Arabia has announced to have taken a USD 3.5 billion stake in the taxi company Uber, in order to diversify the economy of the country by investing in sectors less dependent on oil. These examples illustrate well the fact that the motives of GCC funds can be other than pure profit maximisation of the financial investment and reveal their capacity to take the control or to be able to influence companies involving the strategic national interests.

While there is an extensive literature that investigates the determinants of SWFs investment decisions (see [Amar et al. \(2015\)](#); [Ciarlone and Miceli \(2014\)](#); [Knill et al. \(2012\)](#); [Kotter and Lel \(2011\)](#); [Megginson et al. \(2013\)](#) among others) only few papers address the question of the determinants of cross-border majority purchases. [Karolyi and Liao \(2017\)](#) analyze cross-border majority acquisitions of government-led acquirers, [Heaney et al. \(2011\)](#) analyse the determinants of Temasek Holding's level of investment and [Murtinu and Scalera \(2013\)](#) show that SWFs are more likely to use investment vehicles when they take cross-border majority stakes. This is, however, a key question as it is clear that SWF activism, i.e. the acquisition of large or majority acquisitions, attracts more hostility and generates more severe political opposition by host-country governments ([Murtinu and Scalera \(2013\)](#)) as was for example illustrated in 2006 by the failed attempt by Dubai World Ports to acquire P&O. Cross-border majority purchases also bring regulators to require a higher level of transparency as evidenced recently by the EC Regulation dated 11 July 2017 that forces SWFs to provide more information when buying a significant control position in European companies. This question matters in the ongoing opportunity-threat debate, as it indicates what role SWFs want to take in their targets, and whether it differs across sectors, firms or countries.

The aim of this paper is to fill this gap in the literature by identifying the drivers of

majority acquisitions of SWFs originating from the GCC member states. Though SWFs are generally seen as heterogeneous investors with respect to their source and size of assets, organizational structure, governance, risk factor and their objectives, GCC SWFs present some key characteristics that make them a distinct group among SWFs. First, they are funded by commodity revenues (mostly oil) meaning that their proceeds are extremely dependent on oil prices. Second, they are considered as relatively opaque investors and strongly politicized. Third, they come from autocratic countries. Finally, they are located in a same region, with common language and religion.

In particular, we study what determines the GCC SWFs' decisions to take control or large stakes in foreign firms. More specifically, we shed light on the real intention of SWFs when they decide to acquire a majority stake: Do GCC SWFs take cross-border majority stakes based on the financial health of the targets? Based on the sectors, potentially strategic ones? Based on country specific characteristics (political or macroeconomic ones)? Using an original large-scale database including both data on announced cross-border stakes done by GCC SWFs between 2006 and 2015, macroeconomic data on target countries as well as financial data on listed target firms, we use an ordered logit approach to explain the motivation of GCC SWFs to take cross-border large ($> 10\%$) or majority ($> 50\%$) acquisitions.

Our paper has several key findings. We first find that financial characteristics of the target have no role in the control decision. Taking a majority stake is a specific decision going beyond investment decision, where data tell that financial dimension play only a minor role, if any. Then, we find that transparent GCC SWFs are more likely to acquire large stakes and that they do so predominantly in: i) countries of the European Union; ii) countries with a high level of shareholders protection; iii) and in non-strategic sectors. These results altogether suggest that even if the motivations behind GCC SWFs majority acquisitions are other than pure profit maximisation, taking large stakes is not a mean for governments to acquire strategic interests abroad.

The paper is organized as follows. The next section introduces the hypotheses for analyz-

ing GCC SWFs cross-border investment decisions abroad. Section 3 provides some details regarding the data. Section 4 presents the methodology and Section 5 reports our empirical findings.

2 Review of literature and hypotheses

There is an extensive literature that investigates to what extent SWFs investment decisions differ from those of other institutional investors. [Bernstein et al. \(2013\)](#) explain that the presence of politicians inside the board of SWFs could lead to the search of strategic objectives and finally to financial and political destabilization. [Dyck and Morse \(2011\)](#) show that a part of SWFs portfolio is oriented toward the development of their domestic countries, indicating that investment decisions of SWFs are distorted by political considerations. [Chhaochharia et al. \(2009\)](#) find that SWFs show strong biases compared to other investors. More specifically, they find that SWFs are more likely to invest in countries that share a common culture and that they display industry biases, investing predominantly in oil company stocks. [Knill et al. \(2012\)](#) find that SWFs are more likely to invest in countries with which they have weaker political relations, implying that SWFs may invest, at least partly, for non-financial motives.

The findings that SWF investment decisions are dissimilar to those of traditional institutional investors can be explained by several factors. First, SWFs are sovereign-owned institution, which may be managed either by the ministry of finance or by a board composed of government officials. Unlike other funds, the politics or the structure of the fund owned/controlled directly by the government may influence asset allocation decisions. Second, in terms of social welfare, governments have broader goals than wealth maximisation of the firm, such as the development of the national economy or the maximisation of the employment level. Third, according to the natural resources curse theory (see among others [Sachs and Warner \(1995, 2001\)](#), [Sala-i-Martin and Subramanian \(2003\)](#) or [Smith \(2004\)](#)), countries with weak institutions generally have natural resource wealth that leads to resource

dependency and rentierism. Even if the declared objective of these SWFs is to ensure that the proceeds from natural resources rents will be channeled through a transparent, accountable and professionally managed fund, they may be a mean for these autocratic countries to embezzle natural resources revenues in order to invest abroad (Carpantier and Vermeulen (2014)).

While there is an extensive literature that investigates the determinants of SWFs investment decisions, only few papers address the question of the determinants of cross-border majority purchases. Karolyi and Liao (2017) analyze cross-border majority acquisitions of government-led acquirers but don't focus on SWFs. Heaney et al. (2011) analyse the determinants of the level of SWFs investment, but their analysis focus on the Singaporean fund, Temasek Holdings. And Murtinu and Scalera (2013) show that taking cross-border majority stakes is one driver of the use of investment vehicles by SWFs.

Large or majority acquisitions raise very specific questions for the following reasons. First, a large acquisition, or a majority acquisition, potentially signals an activist stance and willingness to engage in effective corporate governance activities. Second, it can be part of a general commercial or industrial development strategy of the home country of the SWF. It allows the development of joint ventures and eases the strengthening of expertises or industrial complementarities relevant from the home country perspective (typically the downstream integration of energy value-chain). Third it signals that the investment might go beyond passive portfolio management and mean-variance optimization framework, which is quite obvious knowing that SWFs are government-owned entities.

Given these features, we now specifically analyse the determinants of SWF majority acquisitions through 4 key hypotheses.

H1 - GCC SWFs take cross-border majority stakes without considering the financial characteristics of the target.

As documented by [Bernstein et al. \(2013\)](#), the presence of politicians inside the board of the SWFs (which is the case for all GCC SWFs) leads to the search of strategic objectives not necessarily related to financial characteristics. An abundant literature ([Chhaochharia et al. \(2009\)](#), [Ciarlone and Miceli \(2014\)](#), [Dyck and Morse \(2011\)](#), [Johan et al. \(2013\)](#), [Knill et al. \(2012\)](#) among others) has shown that politically related factors drive SWFs investment decisions.

At the same time, part of the literature shows that SWFs investment decisions are also financial ([Fernandes \(2011\)](#), [Kotter and Lel \(2011\)](#), [Megginson et al. \(2013\)](#)). [Fernandes \(2011\)](#) shows that SWFs tend to act as prudent investors, taking stakes in large firms with proven profitability. Furthermore, his results indicate that SWFs investments are not a mean of gathering corporate intelligence. Finally, given their long term investment horizon, SWFs are found to show no preference for liquid stocks. [Kotter and Lel \(2011\)](#) find that SWFs tend to invest in large firms located in financially developed countries, exhibiting financial difficulties. They then deduce that SWFs are similar to institutional investors in their preference for target characteristics. [Megginson et al. \(2013\)](#) analyze the determinants of SWFs investment from the country perspective. They test if SWFs are purely commercial investors facilitating cross-border corporate investments or if their investment strategies are biased by political objectives. Their results suggest that SWFs make investment decisions principally for commercial purposes.

To the extent that control decisions potentially go beyond pure portfolio risk-return management, we expect the financial factors to have a low weight, if any, in the decision process. In other words, we test whether GCC SWFs take cross-border (full or partial) acquisitions based on financial variables, meaning that the decision of cross-border acquisition is, or not, oriented towards risk-return and profit maximisation objectives.

H2 - GCC SWFs take the degree of financial and economic development of the target country into account before taking large or majority stakes.

Several papers study the impact of target country economic, financial and institutional development on the SWFs investment strategies. Some authors (Megginson et al. (2013) and Amar et al. (2015) among others) find that the economic development do not explain SWFs investment decisions. On the contrary, Knill et al. (2012) find that SWFs are more likely to invest, and for larger amounts, in countries that have a level of economic development close to their. Ciarlone and Miceli (2014) find that SWFs tend to invest in countries that have a higher degree of economic development which is consistent with Karolyi and Liao (2017) who show that government-controlled investments flow from emerging to developed economies. Furthermore, the financial openness of the target country is one of the drivers of SWFs investments. Amar et al. (2015) and Ciarlone and Miceli (2014) show indeed that SWFs are more likely to invest in countries that are financially opened. Finally, some authors find that the level of investors protection significantly explain SWFs investment decisions. Knill et al. (2012) show that SWFs are more likely to invest in a country with a high level of investors protection, but when they do so, they tend to invest smaller amounts, which is consistent with Ciarlone and Miceli (2014) but not with Megginson et al. (2013) who find that a higher level of investors protection leads to higher amounts.

If the literature tells us that economic development, financial openness and the level of investors protection matter in SWFs investment decisions, the way these factors impact the decision is not unanimously accepted. These different results in the literature may be explained by the heterogeneity of this group of investors. As we use here a homogenous group of SWFs (i.e. the GCC SWFs), we would like to test whether GCC SWFs take cross-border majority acquisitions by considering the economic and financial development of the target country, respectively measured by the GDP per capita, the real effective exchange rate, two financial openness indexes (Chinn-Ito index and FDI restrictiveness index) and by a proxy for minority shareholders protection (the anti-self dealing index).

H3 - GCC SWFs are more likely to take majority equity stakes in countries where there are bilateral trade agreements.

Majority acquisitions are expected to be part of a broader partnership between countries. We consider the impact of bilateral trade, financial or political agreements between SWF's and host countries on the acquisition decision. In line with [Hoeckman and Kostecki \(2009\)](#) and [Murtinu and Scalera \(2013\)](#), we refer to bilateral trade agreements as reflection of political relations and decisions among countries. As explained by [Murtinu and Scalera \(2013\)](#), international trade agreements first allow the government to signal a credible lasting commitment to liberal economic policies, limited intervention in the domestic economy and peaceful relations. Second, trade agreements are useful to reinforce political power.³ GCC countries have free trade agreements with some countries such as Singapore (GSFTA), or some European countries (The EFTA is a free trade agreement between GCC countries and Iceland, Lichtenstein, Norway and Switzerland). The existence of bilateral trade agreements between SWF's and target countries should facilitate the entrance of SWFs in foreign countries by reducing the risk perception related to SWFs investments and therefore by mitigating the potential fear against their acquisitions.

Some papers find that SWFs tend to invest in countries that are identified as trade partners ([Megginson et al. \(2013\)](#), [Knill et al. \(2012\)](#)). In the same way, [Murtinu and Scalera \(2013\)](#) find that bilateral trade agreements reduce the use of corporate investment vehicles for SWFs wishing to take cross-border majority acquisitions.

Related to this literature, we expect GCC SWFs to be more likely to take majority acquisitions overseas in countries where there are bilateral trade agreements.

³An example is the trade agreement between the US and 11 Asia-Pacific countries (the Trans-Pacific Partnership), where the exclusion of China by the US reveals the political nature of this agreement.

H4 - GCC SWFs target cross-border companies operating in strategic industries.

The hostility of the host countries' public opinion and governments towards SWFs can be explained by the fact that SWFs might seek stakes in strategic sectors as defense, finance, telecommunication, energy or transportation (Dyck and Morse (2011)). This is the reason why many governments want to hinder foreign SWFs investments when the target is a strategic infrastructure or a sensitive firm operating in a strategic sector (Karolyi and Liao (2010), Knill et al. (2012)). Fernandes (2011) gives some examples of regulatory/enforcements efforts in order to hinder SWF investments: *"The German government has announced that it would introduce controls on investments by SWFs, especially if they seek stakes in strategic sectors. French President Nicolas Sarkozy has announced that he would use his country's state-owned bank (Caisse des Dépôts et Consignations) to help protect French companies against potential takeover threats posed by SWFs"*.

As explained by Murtinu and Scalera (2013), the risk of political and financial destabilization for the host country is higher when the target investment is a strategic infrastructure. Two deal-level characteristics can explain the fear of the host country: i) the sector of the foreign target company; ii) the degree of control on this company. The larger the SWF's control on target firms operating in strategic industries, the more hostile host countries will be.

According to the literature on SWFs (Karolyi and Liao (2010), Bernstein et al. (2013), Murtinu and Scalera (2013)), three factors contribute to increase the probability of cross-border majority acquisitions in strategic industries: i) the undemocratic and authoritarian nature of the countries where SWFs originate from; ii) the high level of foreign currency reserves; iii) the involvement of politicians in the board of SWFs. As GCC combines the three factors, we expect that GCC SWFs target cross-border companies operating in strategic industries.

Furthermore, according to the portfolio allocation theory, SWFs may be used to diversify the industrial base of their home country by targeting foreign industries in which their country is under-represented. The political motives of cross-border SWFs acquisitions in

strategic industries can therefore be explained by the search of a greater industrial diversification or a better access to lower-cost resource inputs. Regarding resource-rich countries like GCC, these countries are dependent on revenues from sales of energy, which makes these economies extremely vulnerable to changes in oil prices. It is fundamental for these countries to diversify their revenues by targeting foreign industries in which the country is under-represented (Sturm et al. (2004)). Therefore, the search of a greater industrial diversification may be a result of reducing dependency on oil revenues but also the search of strategic industrial gains in order to control access to technologies with the aim of maximizing long-term returns (Seznec (2008)). We then complement the sectoral focus by testing whether cross-border acquisitions are under-represented in energy sector.

3 Data and descriptive analysis

3.1 The SWF sample

According to the IMF (2004), "Sovereign wealth funds are government-owned investment funds set up for a variety a macroeconomic purposes". Considering this definition, we conducted a comprehensive search of all existing GCC SWFs and ultimately get 15 entities. We find 7 SWFs in the United Arab Emirates, 3 SWFs in Saudi Arabia, 2 SWFs in Oman, 1 in Bahrain, 1 in Kuwait and 1 in Qatar. Names, inception dates, estimated size are reported in Table 1. We then conducted a search of all wholly-owned subsidiaries of these funds using the online database Thomson Reuters Eikon and the funds' websites, which are also reported in the same Table. 1 also reports the Linaburg-Maduell transparency index (the higher the index, the more transparent the SWF) and the announced main objective(s) of the funds.

3.2 Investment data

We use Thomson Reuters Security Corporation's (SDC) Platinum Mergers and Acquisitions database to collect data on announced cross-border acquisitions done by GCC SWFs directly

Table 1: GCC SWFs characteristics

This table describes GCC SWFs' main characteristics. Column (3) gives the date of the creation of each fund. Column (4) gives the list of each fund's wholly-owned subsidiaries, based on the authors' researches. Column (5) gives the assets under management of each fund in USD billion. Column (6) gives the Linaburg-Maduell transparency index of each fund.^a Column (7) gives the objective(s) of the funds, based on the SWFs websites.

Country	Name	Creation	Wholly-owned Subsidiaries	AUM	Transparency index	Objective(s)
Bahrain	Bahrain Mumtalakat Holding	2006	Atbahrain B.S.C; Bahrain Real Estate Investment; Gulf Aviation Academy	11.1	8	Reserve investment fund
Kuwait	Kuwait Investment Authority	1953	Reserve fund for future generations; General reserve fund; Saint Martins Property Co	592	6	Reserve investment fund
Oman	Oman Investment Fund	2006		6	4	Reserve investment fund
Oman	State General Reserve Fund	1980		9	4	Saving; Reserve investment fund; Domestic economic support
Qatar	Qatar Investment Authority	2005	Qatar Airways; Qatar holding llc; Qatar Sport Investments	256	5	Reserve investment fund
Saudi Arabia	Kingdom Holding Company	1980		25	nc	Domestic economic support
Saudi Arabia	Public Investment Fund	2008	Sanabil Investment	160	4	Domestic economic support
Saudi Arabia	SAMA Foreign Holding	1952		632.3	4	Reserve investment fund
UAE	Abu Dhabi International Petroleum Investment Company	1984	CEPSA ; Nova Chemicals Corp.; Aabar investment	66.3	9	Reserve investment fund
UAE	Abu Dhabi Investment Authority	1976	Harina Company Limited ; Lux-inva SA; Tawreed Investments	773	5	Reserve investment fund
UAE	Abu Dhabi Investment Council	2007	Al Hilal Bank PJSC	110	nc	Reserve investment fund
UAE	Abu Dhabi Mubadale Development Company	2002	Mubadala Capital and Real Estate; Mubadale Capital LLC; Mubadala Commercial Finance; Mubadala Petroleum; Mubadala technology	66.3	10	Domestic Economic Support
UAE	Emirates Investment Authority	2007		15	3	Reserve investment fund
UAE	Investment Corporation of Dubai	2006	Dubai Holding ; Dubai World; Isithmar world; Dubai Ports World; Dubai world Africa service; Dubai Airport Free Zone Authority; Emirates airlines; Emirates Group; Emirates national oil co LTD; National Bonds Corporation	183	5	Reserve investment fund
UAE	RAK Investment Authority	2005	Al-ghail power	1.2	3	Domestic economic support

^aThe Linaburg-Maduell transparency index was developed at the SWF Institute by C. Linaburg and M. Maduell. It rates SWFs according to their level of transparency from 1 to 10. The higher the index is, the more transparent the fund is. For more details on the index construction, see: <http://www.swfinstitute.org/statistics-research/linaburg-maduell-transparency-index/>.

or by their wholly-owned subsidiaries. We double checked this list and complete the missing acquisitions by using the online database Factiva. We collect a number of data items, including information about the targeted firms (name, country), information about the SWFs (name, subsidiary, country), the date of the transaction, the pre- and post-acquisition share of the SWF in the targeted firm and the deal value, if disclosed. This search yields a sample of 163 cross-border acquisitions from GCC SWFs in 28 target countries over the period 2006-2015.⁴

Once the investment decision is made, the SWF decides what degree of control it wants. We identify three levels of investments, with thresholds at 10% and 50%. The first threshold follows the definition of Foreign Direct Investments (FDIs) according to which *"a FDI (...) reflects the objective of a resident in one economy obtaining a lasting interest in an enterprise resident in another economy. (...) A direct investment relationship is established when the direct investor has acquired 10 percent or more of the ordinary shares or voting power of an enterprise abroad"* (Patterson et al. (2004)). The second threshold is set at the majority stake. So, the first category of deals includes transactions where the SWFs take shares of the target such that its total holdings remain inferior to 10% (minority deals). The second category collects the transactions leading to stakes equal or larger than 10%⁵, but inferior to 50%, with SWFs viewed as large and influential minority shareholders. Following Karolyi and Liao (2010), we identify a third level of investment which includes transactions where the SWFs take shares such that the holdings are at least 50% of the target (control/majority deals). The variables taking the total number of minority, influential and majority deals are below labelled as *DEALS - 10%*, *DEALS + 10%* and *DEALS + 50%*, while the variable *DEALS* takes the total number of transactions.

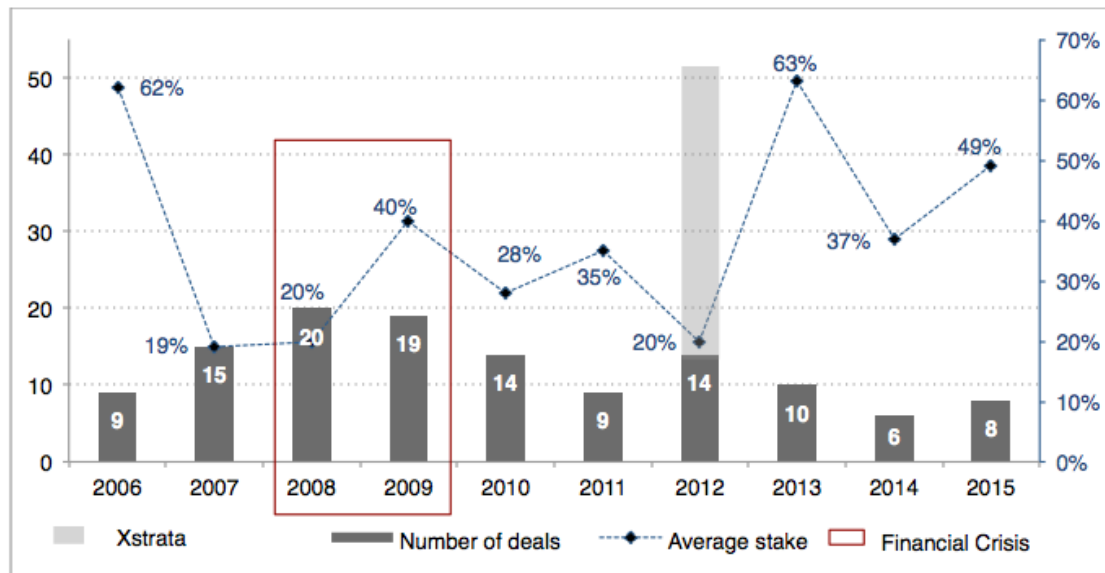
Figure 1 shows the evolution of GCC SWFs foreign investments over the period 2006-2015. This figure reveals that GCC SWFs have a tendency to acquire large stakes as the

⁴As most GCC SWFs were created in 2005 or later, our study focus on GCC SWFs acquisitions between 2006 and 2015.

⁵10% is also the relevant threshold used in the European legislation for defining "qualifying holdings" (Article 92 of Directive 2001/34/EC)

Figure 1: Evolution of GCC SWFs Foreign Investments

This Figure presents the number of deals and the average post-acquisition stake of cross-border investments led by GCC SWFs over the period 2006-2015. The graph excludes investments of Qatar Investment Authority in Xstrata which consists in 39 acquisitions of less than 1% of the firm.



average post-acquisition share is larger than 19% every years. During the financial crisis (2008-2009), SWFs made more investments but acquired smaller stakes. This is linked with the large number of investments made in financial institutions such as Qatar Investment Authority investing in Barclays Bank or Abu Dhabi Investment Authority investing in Citigroup. After the crisis, the number of acquisitions decreased but the average stake increased. In 2013, 2014 and 2015, the average post-acquisition share was higher than 30%.

Table 2 gives the geographic distribution of GCC SWFs cross-border acquisitions and cross-border majority acquisitions. Europe gathers the largest number of transactions with 77 DEALS among 124⁶ around the world over the period 2006-2015. These transactions in Europe are mainly majority transactions as 32% are DEALS+10% and 32% are DEALS+50%. North America and East and Southeast Asia are also places where GCC SWFs invest with respectively 16 and 13 transactions over the period. In North America, these transactions are mainly minority investments (63% of DEALS-10%) whereas in East and Southeast Asia, GCC SWFs tend to take larger stakes with 62% of DEALS+10% and 15% of DEALS+50%.

⁶We exclude the 39 acquisitions of less than 1% of the capital of Xstrata made by the Qatari SWF in our analysis. The sample consist then in 124 acquisitions in 28 targeted countries.

Table 2: Geographic repartition of GCC SWF cross-border investments

This table presents the number of deals and majority deals by target region of cross-border investments led by GCC SWFs over the period 2006-2015. *DEALS* represents the total number of deals involving GCC SWFs. *DEALS - 10%* represents the number of deals in which the post-acquisition stakes owned by the SWFs is lower than 10%. *DEALS + 10%* represents the number of deals in which the post-acquisition stakes owned by the SWFs is higher or equal to 10% and lower than 50%. *DEALS + 50%* represents the number of deals in which the post-acquisition stakes owned by the SWFs is higher or equal to 50%.

Region target	DEALS	MINORITY DEALS-10%	DEALS+10%	DEALS+50%
Africa	3 100%	3 100%	0 0%	0 0%
Central Asia	6 100%	3 50%	1 17%	2 33%
East and Southeast Asia	13 100%	3 23%	8 62%	2 15%
North America	16 100%	10 63%	3 19%	3 19%
Oceanic Bassin	8 100%	4 50%	2 25%	2 25%
South America	1 100%	0 0%	1 100%	0 0%
Europe	77 100%	27 35%	25 32%	25 32%
Total	124 100%	50 40%	40 32%	34 27%

GCC SWFs don't invest much in Central Asia and the Oceanic Bassin with only 6 and 8 transactions between 2006 and 2015, equally distributed between minority and majority acquisitions. It is noticeable that among all regions, Africa and South America don't attract GCC SWFs as there are only 4 transactions in these regions over the period 2006-2015.

3.3 Explanatory variables

We employ a number of variables that should potentially explain the decision to acquire minority/majority stakes for GCC SWFS. These variables relate to macroeconomic and institutional target country factors, firm-level characteristics as well as the type of investment sectors. Details on variables construction and source are presented in Table 3.

What are the factors driving GCC SWFs decision to acquire large stakes? We employ a set of macro and firm/country/SWF-specific variables, all directly related to our four hypotheses and inspired from the set of usual controls used in the literature on SWFs investments. Details on variables construction and source are presented in Table 3.

Table 3: Description of the variables

Variables	Description	Source
GDP	GDP per capita of the target country of year $t - 1$	The World Bank
CRISIS	Dummy variable equals to 1 in 2008 and 2009, and 0 otherwise	Authors' analysis
UE DUMMY	Dummy variable equals to 1 if the target country is in the Europe, and 0 otherwise	Authors' analysis
ANTISELF	Anti-self dealing index of the target country. The anti-self dealing index is a measure of legal protection of minority shareholders against expropriation by corporate insiders.	Djankov et al. (2005)
FTAFORCE	Dummy variable equals to 1 if there is a free-trade agreement in force between the country of the SWF and the target country, and 0 otherwise	Governments' websites
FTANEGO	Dummy variable equals to 1 if there is a free-trade agreement in force or under negotiations between the country of the SWF and the target country, and 0 otherwise	Governments' websites
ASSETS	Mean of the total assets in $t - 1, t - 2, t - 3$ of the targeted firm	Orbis database
ROA	Mean of the ROA in $t - 1, t - 2, t - 3$ of the targeted firm	Orbis database
DEBT/ASSETS	Ratio between the mean of the long term debt in $t - 1, t - 2, t - 3$ and the total assets in $t - 1, t - 2, t - 3$ of the targeted firm	Orbis database
LIQUIDITY	Mean of the liquidity ratio in $t - 1, t - 2$ and $t - 3$ of the targeted firm	Orbis database
DEBT	Mean of the long term in $t - 1, t - 2$ and $t - 3$ of the targeted firm	Orbis database
LARGE	Dummy variable equals to 1 if the SWF manage more than USD 100M, and 0 otherwise	SWF Institute
TRANSPARENT	Dummy variable equals to 1 if the Lindaburg-Maduell Transparency index of the SWF is higher than 5 and 0 otherwise. The index ranges between 0 and 10. The higher the index is, the more transparent is the SWF	SWF Institute
SUBSIDIARY	Dummy variable equals to 1 if the acquisition was made by a subsidiary of the SWF and 0 otherwise	Factiva (mainly)
FDI	FDI Regulatory Restrictiveness index of the targeted country, measuring statutory restrictions on foreign direct investment	OECD
logREER	Logarithm of the consumer price index-based real effective exchange rate of the targeted country in $t - 1$	Bruegel Database
logKAOPEN	Logarithm of the normalized KAOPEN index of the targeted country in $t - 1$. Initially introduced by Chinn and Ito (2006), this index measures a country's degree of capital account openness.	Chinn-Ito website
OIL PRICE	Logarithm of the average crude WTI crude oil price in year $t - 1$ (DCOILWTICO)	FRED database
POLITY	Dummy variable that equals 1 if the Polity IV index is negative (the country tends to be autocratic) and 0 otherwise. The Polity IV index is an assessment of the level of authority of a regime. The index ranges from -10 to 10. The higher the index is, the more democratic is the country	Polity IV Project

Target firm/sector-level variables:

In order to test whether target firm-level variables are determinants of minority/majority acquisitions for GCC SWFs (Hypothesis 1), the variables collected for each of the targeted firms included in the sample can be allocated to the broad classifications, performance, risk and liquidity. Returns on assets (*ROA*) is used in order to capture target

firm performance, *LIQUIDITY* is the liquidity ratio of the target firm, *DEBT* is the long term debt level of the firm and *DEBT/ASSETS* is the ratio of long term debt on assets. These four financial variables are based on the three years preceding the investment in order to take into account the information available at the time of the investment.

In addition to variables that are related to the financial performance of the firm, we also use the target firms' sectors as explanatory variables (*LUXURY*, *FINANCE*, *ENERGY*, *INDUSTRY* and *METAL*). Even if we are conscious that most of the major funds are not so transparent and thus it is hard to measure such stakes, we would like to test whether GCC SWFs have an incentive to target cross-border companies operating in strategic industries as explained in Hypothesis 4.

Country-level variables:

In order to test whether the economic development of the target country matters in the GCC SWFs-led acquisition activity (see Hypothesis 2), we include several country-level variables that have been shown in the literature to be related to international investment choices of SWFs (Fernandes (2011)). We use the anti-self-dealing index of the target country (*ANTISELF*) constructed by Djankov et al. (2008) measuring the level of shareholders protection. The FDI restrictiveness index of the target country (*FDI*) measures restrictions practiced by the target countries on foreign direct investment. The Chinn-Ito financial openness index of the target country (*KAOPEN*) initially introduced by Chinn and Ito (2006) measures the target country's degree of capital account openness. Like Hay and Milelli (2014), a regional dummy (*EU DUMMY*) for countries in the European Union is also included. This dummy variable equals to 1 if the target country is in the EU and 0 otherwise.

As macroeconomic performance indicators, the GDP per capita (*GDP*) of the target country and the real exchange rate of the target country (*REER*) are also included.

In order to test whether GCC SWFs are more likely to take majority stakes in countries

where there are bilateral trade agreements (Hypothesis 3), two proxies of bilateral trade agreement are considered: *FTA FORCE* which is a dummy variable equals to one if there is a free trade agreement in force between the SWF's country and the targeted firm's country, and 0 otherwise and *FTANEGO* which is a dummy variable equals to one if there is a free trade agreement under negotiation or in force between the SWF's country and the targeted firm's country, and 0 otherwise.

At last, in order to test if there is a political dimension in GCC SWFs cross-border majority acquisitions decision, we use an index assessing the level of authority of the regime of the targeted country, the Polity IV index (*POLITY*).

SWF-level variables

Finally, we include variables measuring characteristics of each GCC SWF, including its size (*SIZE*) measured by the value of the assets under management of the fund, the variable *TRANSPARENT*) which is a dummy variable equals to 1 if the Linaburg-Maduell Transparency index of the fund is higher than 5 and 0 otherwise and a dummy called *SUBSIDIARY* indicating if the transaction is made using a subsidiary of the fund.

At last, we include two control variables: the WTI oil prices (*OILPRICES*) because commodity trade resources may be the main driver of GCC SWFs strategies and a dummy variable that identifies the subprime crisis (*CRISIS*), equals to 1 if the transaction occurs in 2008 or 2009, and zero otherwise.

4 Empirical Part

4.1 Logit Analysis

4.1.1 The model

We use the Logit model of discrete choice in modelling the determinants of GCC SWFs large or majority cross-border acquisitions. The probability of having a large or a majority GCC SWFs stake is defined as follows:

$$Prob(Y_{ij} = 1|X) = \Lambda(X\beta), \tag{1}$$

where Y_{ij} is a dummy variable equals one if the fund i takes 10% and more (resp. 50% and more) of stake in a cross-border firm j . β is a $K \times 1$ vector and X the vector of explanatory variables described above (Target firm/sector-level variables, country-level variables and SWF-level variables). Lambda is the logistic function.⁷

4.1.2 Results

Results of Logit models are reported in table 4. This analysis focuses on what best explains the likelihood of having an influential (10% or more) stake or a majority (50% or more) stake by GCC SWFs. We present in each case the results of the full and the parsimonious model.

Concerning firm-level factors, we do not find some evidence that GCC SWFs take cross-border majority stakes considering the financial characteristics of the target, which confirms hypothesis 1. Except for the variable ROA , all the variables concerning the financial characteristics of the cross-border target firm are not significant. Consistent with [Kotter and Lel \(2011\)](#) and [Bernstein et al. \(2013\)](#) who find that SWFs invest in distressed firms, we find that GCC SWFs prefer to take cross-border majority acquisitions in firms with low profitability (ROA). This result reveals that GCC SWFs are passive shareholders with a

⁷Given the limited dependent variable, we use Logit model, but reported results are robust to the use of Probit regressions

Table 4: Logit Models: influential stakes and majority stakes

This table reports results for the Logit models with robust errors. In model (1) and (2) (resp. (3) and (4)), the endogenous variable (Y_{ij}) is a dummy variable equals one if the fund i takes 10% and more (resp. 50% and more) of stake in a cross-border firm j is and 0 otherwise. In our general-to-specific approach, variables selection is done relying on the AIC and BIC criteria.

	INFLUENTIAL STAKE		MAJORITY STAKE	
	(1)	(2)	(3)	(4)
Constant	-31.101 (22.310)	-10.404 ** (4.823)	-46.154 (31.364)	-53.445 ** (21.209)
TRANSPARENT	1.411 (0.903)	1.192 * (0.669)	0.920 (1.016)	
SUBSIDIARY	0.157 (0.577)		-0.161 (0.663)	
EU DUMMY	2.094 ** (0.950)	1.188 ** (0.467)	1.000 (1.667)	1.582 ** (0.714)
ANTISELF	1.999 (1.466)		3.712 * (2.216)	3.836 *** (1.270)
OILPRICE	1.985 (1.301)	2.276 ** (1.095)	1.274 (1.765)	2.575 ** (1.278)
ROA	-0.010 (0.022)		-0.035 * (0.023)	-0.030 * (0.018)
DEBT/ASSETS	-1.062 (0.980)		-1.810 * (1.127)	
LIQUIDITY	-0.008 (0.066)		0.059 (0.074)	
DEBT	0.003 (0.007)		-0.000 (0.009)	
ASSETS	-0.001 (0.003)		0.002 (0.004)	
CRISIS	0.452 (0.649)		-1.956 ** (0.811)	-1.378 ** (0.601)
FTA FORCE	3.298 (2.047)		<i>omitted</i>	
FTA NEG0	0.203 (0.714)		<i>omitted</i>	
FDI	5.752 (10.980)		0.215 (35.008)	
logREER	4.008 (4.512)		8.156 (5.708)	8.321 ** (4.010)
GDP	-0.000 (0.000)		0.000 (0.000)	
logKAOPEN	0.506 (1.591)		-0.943 (4.518)	
LUXURY	0.547 (0.721)		2.046 ** (0.872)	1.591 ** (0.630)
FINANCE	-2.346 ** (0.970)		-1.576 (1.055)	-1.408 * (0.848)
ENERGY	-1.443 * (0.870)	-1.200 * (0.585)	-0.813 (0.856)	
INDUSTRY	-0.708 (0.950)		-1.443 (1.825)	
METAL	-0.109 (1.357)		-0.865 (1.762)	
SIZE	-2.225 (3.504)		-7.990 (6.323)	
POLITY	0.322 * (0.175)		0.057 (0.270)	
Log-likelihood	-61.398	-68.087	-50.215	-55.138
AIC	172.797	146.173	148.431	128.276
BIC	240.759	159.766	213.023	152.498

* Significant at 10%; ** significant at 5%; *** significant at 1%.

Robust standard-errors are between parentheses.

long-run investment horizon.

Regarding hypothesis 2 which stresses that GCC SWFs take cross-border acquisitions by considering the economic and financial development of the target country, the significance of *REER*, *ANTISELF* and *EU DUMMY* clearly reveal that country factors are essential in the GCC SWFs acquisition decision process. *REER* is positively related to majority acquisitions, suggesting that these funds are more likely to take majority stakes in countries where the real effective exchange rate is high, i.e. where there is a loss of price competitiveness. In the same way, we find that GCC SWFs are more prone to take the control of a firm in countries where there is a high quality of investors protection, unlike [Karolyi and Liao \(2010\)](#) who find that cross-border majority acquisitions of government-led acquirers are weakly related to anti-self dealing index differences. Related to these results, the variable *EU DUMMY* is significantly positive in both models, meaning that GCC SWFs target countries of the European Union when they take influential (10% or more) or majority (50% or more) stakes. This result is consistent with [Hay and Milelli \(2014\)](#) who find that Europe is the privileged destination for Middle Eastern SWFs.⁸

Unlike [Megginson et al. \(2013\)](#) and [Knill et al. \(2012\)](#), we do not find some empirical support that the presence of bilateral trade or political agreement between Gulf SWF's and target countries facilitate influential or majority acquisitions in target countries as expected in hypothesis 3 (the variables *FTA FORCE* and *FTANEGO* are never significant).

In order to analyse the political motivation of GCC SWFs, we have tested whether these funds seek majority stakes in strategic sectors as explained in the hypothesis 4. We find that the dummy *LUXURY* is significantly positive in the second model, meaning that GCC SWFs are more prone to take majority stakes in the luxury sector. This sector can be considered as strategic because it is representative of the national flagship. On the other hand, the variables *FINANCE* and *ENERGY* are negatively related to influential and/or majority acquisitions made by GCC SWFs. Concerning the financial sector, our result can be

⁸GCC SWFs have several partnerships with European companies. For example, the SWF of Abu Dhabi has partnerships with Airbus and Total from France, Siemens from Germany or Rolls-Royce from UK.

explained, first by regulatory/enforcements efforts made by developed countries (especially american and european countries) in order to hinder SWFs majority acquisitions in this sector, and second by the large size of firms operating in this sector (a high invested amount may however correspond to a minority stake). In the same way, we find that cross-border influential acquisition (more than 10%) of Gulf SWFs are under-represented in the energy sector, indicating that resource-rich countries, that are extremely dependent on revenues from oil, try to diversify their revenues by targeting foreign industries in which the country is under-represented.

Concerning the SWF-level variables, we find that the probability for GCC SWFs of taking an influential (10% or more) stake in a cross-border industry is positively related with the transparency of the fund. A transparent SWF reduces the likelihood of hostility and political pressure from the host country's government increasing therefore the probability of influential stake. The result is in line with [Murtinu and Scalera \(2013\)](#) who find that opaque SWFs are more likely to invest cross-border through an investment vehicle than transparent SWFs in order to show a passive investment approach and reduce the political pressure in the host country.

Turning to our control variables, we unsurprisingly see that oil trade resources are a driver of GCC SWFs large acquisitions. [Hay and Milelli \(2014\)](#) also find that the number of acquisitions has followed the same orientation than crude oil prices. Interestingly, our results show that GCC SWFs have limited their cross-border majority acquisitions (50% or more) during the financial crisis.

4.2 Ordered Logit Analysis

4.2.1 The model

The Logit Analysis described above explains the acquisition decision process of GCC SWFs by considering the decision of taking a large stake in the target firm (10% and more) or a majority stake (50% and more) as distinct decisions. This model does not allow to explain in

a same model *the degree* of acquisition decided by these funds: are the determinants of taking minority, large or majority stakes in a cross-border firm the same for SWFs? SWFs have three choices in their investment decision process: they decide to stay minority shareholders (stake of less than 10%) in the foreign industry; they take more than 10% but less than 50% in order to have a significant influence on the management of the cross-border enterprise; or they decide to take the control of the firm (more than 50%). In order to test more than two categories of acquisition degree, the values of each category having a meaningful sequential order, the choice of an ordered-Logit model (Wooldridge (2010), Long and Freese (2014)) is justified.⁹ Number of studies such as Ederington (1985) or Poon (2007) conclude that this model is superior in explaining and predicting corporate characteristics such as bond or credit rating.

The ordered-Logit model is described as follows:¹⁰

$$Y_{ij}^* = X\beta + e, \quad e | X \sim \Lambda\left(0, \frac{\pi^2}{3}\right) \quad (2)$$

$$\begin{cases} Y_{ij} = 1 & \text{if } 0 < Y_{ij}^* \leq a_0 \\ Y_{ij} = 2 & \text{if } a_0 < Y_{ij}^* \leq a_1 \\ Y_{ij} = 3 & \text{if } a_1 > Y_{ij}^* \end{cases} \quad (3)$$

where Y_{ij}^* is an unobserved continuous variable representing the degree of acquisition of the fund i in a cross-border firm j ; Y_{ij} is the partitioned ordered response taking on values $\{1, 2, 3\}$ if 1) stake of the SWF i in the target firm j is minority; 2) stake of the SWF i in the target firm j is influential or 3) stake is majority. X is a vector of explanatory variables, a the threshold parameters and Lambda the logistic function.

⁹Ordered logit models rely on the parallel regression assumption. A more general model, so-called generalized ordered-Logit model (Long and Freese (2014)) relaxes this assumption. We performed a Wald test developed by Brant (1990) in order to discriminate between the ordered-Logit model and the generalized ordered-Logit model. Results suggest that the ordered-Logit model best fit our data. Results are available upon request.

¹⁰Appendix 1 provides more details about the model

4.2.2 Results

Table 5 reports the results of ordered Logit models with, in the first column the estimates of the most general model and in the most rightwards column, results of the parsimonious model. To complement these results, we estimate the marginal effects of the parsimonious model. These results are presented in Table 6.

The results of the general parsimonious ordered-Logit model confirms the results of both Logit models on various aspects. First, regarding financial characteristics of the targeted firm, we find, once again, that the variables capturing the financial health of the targeted firm are not significant. It means that the financial variables that were found to be informative for cross-border investments (Avendano (2012); Fernandes (2011) and Kotter and Lel (2011) find that SWFs are more prone to invest in large firms in terms of total assets; Kotter and Lel (2011) show that the firms with low return on assets are more likely to be targeted by SWFs) are not informative for decisions related to the degree of control in the case of GCC SWFs.

Considering the economic and financial development of the target country, we find again that they are more prone to take the control of a firm in countries where there is a high quality of investors protection: a positive variation of the *ANTISELF* is associated with a decrease in the probability of minority investment of 0.397% but an increase of the probability of majority acquisition of 0.30. GCC SWFs are keen on taking majority stakes in the European Union: when the *EU DUMMY* is set equal to 1, it decreases the probability of minority investment by 0.28 while it increases the probability of taking an influential (resp. majority) stake by 0.08 (resp. 0.20).

Moreover, GCC SWFs do not target strategic sectors when taking majority stakes as the variables *FINANCE*, *ENERGY* and *INDUSTRY* are negatively related to influential and majority stakes. When the targeted firm operates in one of these sector, it increases the probability to take a minority stake by more than 0.40. This may suggest that GCC SWFs taking cross-border acquisition is not a way for these countries to acquire strategic

Table 5: Ordered logit estimation

This table reports results for the ordered Logit model with robust errors. The endogenous variable (Y_{ij}^*) is an unobserved continuous variable representing the degree of acquisition of the fund i in a cross-border firm j ; Y_{ij} is the ordered response taking on values $\{1, 2, 3\}$ if total holdings after the deal of the SWF i in the target firm j are 1) inferior to 10%; 2) larger or equal to 10% but smaller than 50% or; 3) larger or equal to 50%, respectively. Model (1) includes all possible explanatory variables while column (5) reports results of the parsimonious model. In our general-to-specific approach, variables selection is done relying on the AIC and BIC criteria.

	(1)	(2)	(3)	(4)	(5)
TRANSPARENT	1.100 *	0.968	1.089 **	1.200 **	1.256 **
	(0.781)	(0.625)	(0.522)	(0.488)	(0.565)
SUBSIDIARY	0.199				
	(0.579)				
EUDUMMY	1.860	1.980 *	1.407 ***	1.288 ***	1.298 ***
	(1.252)	(1.049)	(0.425)	(0.408)	(0.435)
ANTISELF	2.371 *	2.290 ***	1.987 ***	1.971 ***	1.261 *
	(1.329)	(0.887)	(0.752)	(0.707)	(0.764)
OILPRICE	2.070	2.070 *	2.059 *	1.903 *	2.199 **
	(1.310)	(1.113)	(1.066)	(1.027)	(1.109)
ROA	-0.027	-0.028			
	(0.032)	(0.028)			
DEBTASSETS	-1.752	-1.517	-1.102		
	(1.343)	(1.005)	(1.115)		
LIQUIDITY	0.027				
	(0.080)				
DEBT	0.002				
	(0.008)				
ASSETS	-0.000				
	(0.003)				
CRISIS	-0.668	-0.694	-0.560		
	(0.573)	(0.459)	(0.389)		
FTA FORCE	1.547	0.660			
	(2.123)	(1.106)			
FTANEGO	-0.208				
	(0.793)				
FDI	8.098	6.236			
	(15.884)	(9.334)			
logREER	3.457	3.389			
	(4.098)	(3.333)			
GDP	-0.000				
	(0.000)				
logKAOPEN	0.368				
	(2.011)				
LUXURY	1.115	1.094 *	1.129 **	0.987 *	
	(0.682)	(0.641)	(0.560)	(0.538)	
FINANCE	-1.974 **	-2.193 ***	-1.454 **	-1.422 **	-1.630 **
	(0.841)	(0.799)	(0.709)	(0.684)	(0.691)
ENERGY	-1.129	-1.037	-1.105 **	-1.114 **	-1.626 **
	(0.803)	(0.646)	(0.526)	(0.518)	(0.645)
INDUSTRY	-0.605	-0.599			-1.012 *
	(0.922)	(0.690)			(0.574)
METAL	-0.217				
	(0.962)				
SIZESWF	-4.656	-5.113	-5.100		
	(4.138)	(3.800)	(3.458)		
POLITY	0.234	0.198			
	(0.149)	(0.160)			
Constant cut 1	28.100	27.988 *	9.805 **	9.922 **	10.459 **
	(20.684)	(16.285)	(4.759)	(4.585)	(5.024)
Constant cut 2	29.732	29.612 *	11.471 **	11.532 **	11.952 **
	(20.674)	(16.261)	(4.818)	(4.634)	(5.076)
Log-likelihood	-103.842	-104.646	-118.424	-121.388	-110.076
AIC	259.685	245.291	260.848	260.777	238.151
BIC	330.365	294.384	294.692	286.159	262.618

* Significant at 10%; ** significant at 5%; *** significant at 1%.

Robust standard-errors are between parentheses.

interests abroad. On the other hand, it may be a consequence of the regulations aiming at preventing SWFs to take significant stakes in strategic sectors.¹¹ Contrary to the results of the Logit model, results of the ordered Logit model indicates that GCC SWFs don't take into account the fact that the target firm operates in the luxury sector when deciding the degree of control they want.

In line with the results of the Logit analysis, our third hypothesis according to which GCC SWFs are more likely to take majority stakes in countries where there are bilateral trade agreements, is not supported by our estimates, as both proxies for bilateral trade agreements are found clearly non-significant. These results are consistent with [Johan et al. \(2013\)](#) who find that being a trade partner is not significant to explain SWFs investment choices. This result indicates that SWFs differ from other institutional investors in their investment strategies as [Roque and Cortez \(2014\)](#) show that bilateral trade contributes significantly to increase institutional investors' international equity investments.

Table 6: Marginal effects at means of the ordered logit parsimonious model

This table reports Conditional Marginal effects for the ordered Logit parsimonious model with robust errors presented in Table 5. Conditional Marginal Effects, also called Marginal Effects at the Means, are the Marginal Effects when all other variables equal their means. With binary independent variables, the marginal effects show how $P(Y = 0, 1, 2)$ (probability of a minority, influential or majority stake) changes when the categorical variable varies from 0 to 1, holding all other variables at their means. For continuous variables, the marginal effect measures the instantaneous rate of change of $P(Y = 0, 1, 2)$. In this case, dy/dx gives the change in probability for a country to take a minority, influential or large stake for an infinitesimal increase of the variable, holding all other variables at their means.

	Predict Y=0 Minority Stake		Predict Y=1 Influential Stake		Predict Y=2 Majority stake	
TRANSPARENT	-0.307	***	0.011		0.295	**
EUDUMMY	-0.286	***	0.085	**	0.201	***
OILPRICES	-0.462	*	0.110		0.352	*
ANTISELF	-0.397	**	0.095		0.302	**
ENERGY	0.418	***	-0.169	**	-0.250	***
FINANCE	0.424	***	-0.204	**	-0.220	***
INDUSTRY	0.291	**	-0.120		-0.171	***

Not surprisingly we find that more transparent funds are more likely to take influential or majority stakes abroad. When a fund is transparent, the likelihood to take a minority stake decreases by 0.30 while the likelihood to take a majority stake (more than 50%) increases

¹¹Such regulations are in place in many developed countries such as the United States or the European Union Countries.

by 0.29. The hostility towards SWFs comes from the opaqueness of some of these investors. Consequently, transparent SWFs have no trouble taking influential stakes in cross-border companies.

At last, results of the ordered logit model confirm, unsurprisingly, that oil trade resources are a driver of GCC SWFs majority acquisitions. GCC SWFs are, indeed, financed by the proceeds from petroleum.

5 Conclusion

While there is an extensive literature that investigates the determinants of SWFs investment decisions, only few papers address the question of the determinants of cross-border majority purchases. This is, however, a key question as it is clear that SWF activism generates more hostility by host-country governments. Using a unique database of 163 cross-border acquisitions from GCC SWFs in 28 target countries over the period 2006-2015, we aim to fill this gap in the literature. More precisely, we test if the usual determinants of SWFs investments stand in the case of majority acquisitions made by a distinct group among SWFs formed by GCC SWFs.

Several insights emerge from our analysis. First, firm-level characteristics are not relevant to explain GCC SWFs cross border majority acquisitions. They rather rely on country level characteristics when deciding to take an influential or a majority cross-border stake. More precisely, they prefer investing in countries presenting a high level of shareholder protection, preferably in the European Union.

Second, GCC SWFs don't target strategic sectors when taking influential or majority stakes, indicating that acquiring large stakes is not a way for GCC countries governments to get strategic interests in the country.

Third, more transparent SWFs are more likely to take large cross-border stakes. It may be explained by the fact that the hostility towards SWFs comes from the opaqueness sur-

rounding some funds and that their regulatory response to SWFs large investments depends on how transparent the fund is. This indicates that SWFs, wishing to be involved in foreign firms management, should improve their degree of transparency. Finally, they don't prefer to take large stakes in countries where there are bilateral agreements. This result indicates that SWFs differ from other institutional investors in their investment strategies.

Overall, our results shed new light on SWFs investment strategy, indicating that even if their objectives may go beyond pure profit maximization, acquiring majority stakes is not a lever for governments to get strategic interests in the targeted country. These results may be of interest for the regulator seeking the optimal regulatory response to the activism of SWFs.

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Appendix 1 - The Ordered Logit Model

Let Y be the ordered response taking on values $\{1, 2, 3\}$ if total holdings after the deal of the SWF in the target firm are 1) inferior to 10%; 2) larger or equal to 10% but smaller than 50% or; 3) larger or equal to 50%, respectively. The ordered logit model for Y conditional on explanatory variables X can be derived from a latent variable model. Assume that a latent variable Y^* is determined by:

$$Y^* = X\beta + e, \quad e | X \sim \text{Logistic}\left(0, \frac{\pi^2}{3}\right) \quad (4)$$

where β is $K \times 1$ and X does not contain a constant.

Let $\alpha_1 < \alpha_2$ be unknown cut points, and define:

$$\begin{cases} Y = 1 & \text{if } Y^* \leq \alpha_1 \\ Y = 2 & \text{if } \alpha_1 < Y^* \leq \alpha_2 \\ Y = 3 & \text{if } \alpha_2 > Y^* \end{cases} \quad (5)$$

As Y^* crosses unknown thresholds α , we move up the ordering of alternatives. For example, with a very low Y^* , i.e. smaller than α_1 , we get a minority stake. For a very high Y^* , i.e. larger than α_2 , we get a majority stake. Given the standard logistic assumption for e , we can derive the conditional distribution of Y given X , so the choice probabilities are:

$$\begin{cases} P(Y = 1 | X) = P(Y^* \leq \alpha_1 | X) = \frac{1}{1 + \exp(X\beta - \alpha_1)} \\ P(Y = 2 | X) = P(\alpha_1 < Y^* \leq \alpha_2 | X) = \frac{1}{1 + \exp(X\beta - \alpha_2)} - \frac{1}{1 + \exp(X\beta - \alpha_1)} \\ P(Y = 3 | X) = P(\alpha_2 > Y^* | X) = 1 - \frac{1}{1 + \exp(X\beta - \alpha_2)} \end{cases} \quad (6)$$

The cut-points α and the parameters β are estimated by maximum likelihood. The interpretation of the β s are of limited interest as they relate to Y^* while our focus is on the categorical variable Y . The partial effects of X_k on the probabilities are the following:

$$\begin{cases} \partial P(Y = 1 | X) / \partial X_k = - \left(\frac{\exp(X\beta - \alpha_1)}{(1 + \exp(X\beta - \alpha_1))^2} \right) \beta_k \\ \partial P(Y = 2 | X) / \partial X_k = \left(\frac{\exp(X\beta - \alpha_2)}{(1 + \exp(X\beta - \alpha_2))^2} - \frac{\exp(X\beta - \alpha_1)}{(1 + \exp(X\beta - \alpha_1))^2} \right) \beta_k \\ \partial P(Y = 3 | X) / \partial X_k = \left(\frac{\exp(X\beta - \alpha_2)}{(1 + \exp(X\beta - \alpha_2))^2} \right) \beta_k \end{cases} \quad (7)$$

The partial effects on $P(Y = 1 | X)$ and $P(Y = 3 | X)$ are unambiguously determined by the sign of β_k , while the sign is not conclusive for the effect on the intermediate category. Since partial effects are conditional on specific values for X , we will follow common practice by setting the variables at their average values.