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"THE IMPACT OF SOVEREIGN WEALTH FUNDS ON GLOBAL CAPITAL MARKETS — A FOCUS ON TARGETED FIRMS VALUE AND IMPLICATION OF SANTIAGO PRINCIPLES"

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ABSTRACT

In light of the growth of popularity of sovereign wealth funds and potential problems associated with investments, the Santiago principles were founded to guide the sovereign wealth fund investment processes. Despite their envisaged importance, very little is known empirically about the valuation impact of SWF investments, especially following the inception of the Santiago principles. The present study sought to examine the impact of sovereign wealth funds on global capital markets after the inception of the Santiago principles, focusing on targeted firm's value. The event study established that sovereign wealth funds have an impact on the value of targeted firms. There was a positive reaction following the announcements of the sovereign wealth fund acquisitions, which was most prominent within a 20-day window. However, the impact is found to dissipate rapidly so that it is difficult to ascertain the significant implications of the abnormal average price deviations following the announcement day. This can be inferred to imply that the effects of acquisition announcements are not often long lasting. In regards to transparency, domestic and OECD effect the evidence is mixed and mostly rejected because since Santiago Principles are voluntary in nature, we believe that Sovereign Wealth Funds have not yet taken the framework seriously enough as to have predictable and consistent results and findings.

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1. Introduction

Sovereign wealth funds (SWF) are the product of the defense mentality emerging economies implemented after their economies have been affected by the disastrous consequences of several past crises (IMF, 2008). The size of assets under the control of SWFs has grown from $500 billion in 1995 to about $3.3 trillion in 2007 and recently has reached the mark of $7 trillion assets under management. Further, fuelled by rising oil revenues and trade accounts surpluses, several countries have recently established new SWFs. Therefore, the issue of SWFs as global financial players on financial markets is a topic of rising importance, due to their rapid growth (Gieve, 2008). However, obscurity and protectionist behavior drew a great deal of attention to government investment vehicles which were known for aggressive and politically motivated investment decisions (BIS, 2008c). In light of the growth in popularity of sovereign wealth funds and potential problems associated with investments, the Santiago principles were founded to guide the sovereign wealth fund investment processes. Furthermore, despite their envisaged importance, very little is known empirically about the valuation impact of SWF investments, especially following the inception of the Santiago principles. The present study seeks to examine the impact of sovereign wealth funds on global capital markets after the inception of the Santiago principles, focusing on targeted firm's value. As a result, the current study intends to answer the following research question:

"Do sovereign wealth funds, following the inception of the Santiago principles, have greater positive impact on targeted firm value ?"

The motivation behind the current study lies within the inherent gap of researchers debating on the topic of SWFs importance within the capital markets as an investment vehicle and it's stabilization effect. Butt, Shivdasani, Stendevad and Wyman (2008) observe that a

number of benefits have accompanied the growth of sovereign wealth funds. One of the benefits include serving as a source of capital and strengthening unstable balance sheets of crucial financial institutions , especially following the global financial crisis. Truman (2007) established that SWFs positively support operational returns and market values. Additionally, a great deal of other researchers such as Brav et al. (2008) argue that SWFs positively affect target firm's stock price due to a herding effect. While Thomsen et al., (2006) argued that SWFs deteriorate firm performance and consequently its value, due political and strategic motives behind the investments. In part, this follows that sovereign wealth funds have been characterized by lack of disclosure, notably those form the Middle East and China, which have caused worry for risks that this may pose. Some countries such as Singapore and Norway are committed to disclosing sovereign wealth funds, but many of world largest sovereign wealth funds limit disclosure of investment objectives, asset size, investment portfolios, and annual accounts. This implies that the investment motives and consequences of such sovereign wealth funds cannot be well understood (Johnson, 2015). It is often difficult to ascertain the actual impact on capital markets because of limited disclosure and mixed objectives that characterize sovereign wealth funds, yet relevant research has been inconclusive. With the inception of Santiago principles, it remains of particular interest to assess the impact of sovereign wealth funds on the value of targeted companies, for potential investors and governmental agencies to assess the effectiveness of the framework.

Due to lack in availability of SWFs investments data and absence of unified database, to answer the current research question stipulated poses few challenges. First of all, the data regarding SWFs has been allocated via several different sources including SWFI web-site and DataStream. Apart from the official SWF list we had to identify the most important subsidiaries

that are under control of each SWF, since SWF tend to channel their investments via their subsidiaries to stay away from media scrutiny. Based, on the list of all the SWFs and its subsidiaries we gathered financial variables from several databases in order to build a complete picture of SWF investments. The SWF impact on target firms has been analyzed by the use of Market Model which calculates cumulative abnormal returns for the short-term impact analysis. On the other hand, for long-term impact the study will be using buy-and-hold abnormal returns (BHAR).

The findings of the present study indicate that SWFs impact on target firm in the period preceding the implementation of Santiago principles had no significance due to SWFs obscure and politically motivated investment decisions which the market disapproved (Johnson, 2015). However, since the implementation of Santiago principles which brought a set of stringent rules, has seen SWFs amend their investment behavior and governance overall. Such transformation has been positively absorbed by the markets and hence the positive sentiment has been reflected by increasing cumulative abnormal returns on most SWF transactions (Santiso, 2008). On the other hand, in relation to long-term performance we established that SWFs do not create any value for target firms, be it prior or post Santiago principles. This is consistent with the popular notion that block holders tend to do poorly in the long-run (Fotak et al., 2009). The reason for that is imposition of additional costs, conflict of interests and asset transfer abroad (Thomsen, et al., 2006). Furthermore, we found mixed evidence regarding framework's implication on transparency index, cross-border and non-oecd investments. Due to the slow and bureaucratic integration of sovereign wealth funds into the modern transparent financial world.

The present research is believed to add value to the academic literature on the impact of large investment vehicles and shareholders, by providing new evidence regarding the benefits

associated with the implementation of Santiago Principles. In addition, based on the findings of the Santiago Principles impact the research would improve the trust the market and researchers have in sovereign wealth funds and developed guidelines. Nonetheless, while Santiago principles remains a voluntary regulation framework we will be finding further contradictory findings because voluntary implementation still implies that there is room for alternative ways of investing which will not be seen as fraud upon but merely as a deviation from the original framework.

2. Literature Review

The following chapter will focus on explaining what SWFs are, their most notable characteristics and what investment strategies they praise in the era before and after Santiago principles implementation. Lastly, the chapter will conclude with what has been SWFs impact on financial markets so far.

2.1 Sovereign Wealth Funds: The Definition

Borgne and Medas (2013) define sovereign wealth funds as funds that are owned by the state for macroeconomic purposes, SWFs hold, manage and invest state's account surpluses. Such account surpluses arise from realized budgetary surpluses from states that have already cleared the international debt. The income derived from sovereign wealth funds can then be used for a number of purposes such as helping future generations or as a rainy day fund. Aslund (2011) documents notable characteristics of sovereign wealth funds. Sovereign wealth funds are described as vehicles that manage public funds, and are particularly targeted at cross-border investments, which are higher risk-return combinations, compared to other safer investment such as government bonds.

Sovereign wealth funds arise in countries that have more or less weak and unstable private sectors, as well as characterized by legacies of state ownership (Gomes, 2008). Sovereign wealth funds can be broadly categorized into two categories: non-commodity and commodity sovereign wealth funds. Commodity sovereign wealth funds are derived from export or oil revenues, while non-commodity sovereign wealth funds are derived from foreign exchange reserves and foreign monetary transfers. It is also worth noting that sovereign wealth funds are not managed like central banks or foreign exchange reserves. In contrast to central banks, sovereign wealth funds do not have a primary responsibility of maintaining stability of country's

currency or currency supply. Furthermore, sovereign wealth funds are flexible in the sense that they can extend the horizons of investment to risky investments (Åslund, 2011).

The main differences between SWFs and other sophisticated investment vehicles such as mutual, hedge and pension funds extend beyond their size. SWFs in contrast to other funds have no specific liabilities to be paid to shareholders. Thus, they have less incentives to be transparent about their investment and management practices which makes them more obscure (Aizenman and Glick, 2008). Which also leads us to believe that they invest for different purposes other than financial return. First of all, due to lack of operating constraints and leverage, SWFs can afford higher exposure to risk as well as investment for longer horizons as compared to traditional hedge funds and mutual funds which have high risk propensity and specific financial obligations to be met periodically. Secondly, due to private ownership of most of traditional funds (hedge and mutual funds) the incentives have to be aligned between owners and managers. Whereas, for SWFs access to public funds leaves them investing under their own discretion (Curzio and Miceli, 2010). Apart from that, considering that sovereign wealth funds are not subject to capital requirements, they have a tendency of liquidating less rapidly in cases of market deteriorations.

Currently the total number of SWFs is around 40 funds. The biggest SWFs are located in Asia and Middle East, accounting for 38% and 37% of SWF market size respectively. In comparison to other investors, SWFs are large and more than double the size of the Hedge Fund and Private Equity industry combined (Butt et al., 2008). As you can see from the Figure 1.1 below, SWFs have been increasing in size and assets under management and there are no signs that they will slow down anytime soon. Nowadays, SWFs' political involvement, high risk and loss tolerance, and their size make them an important class of investor (Maslakovic, 2008).
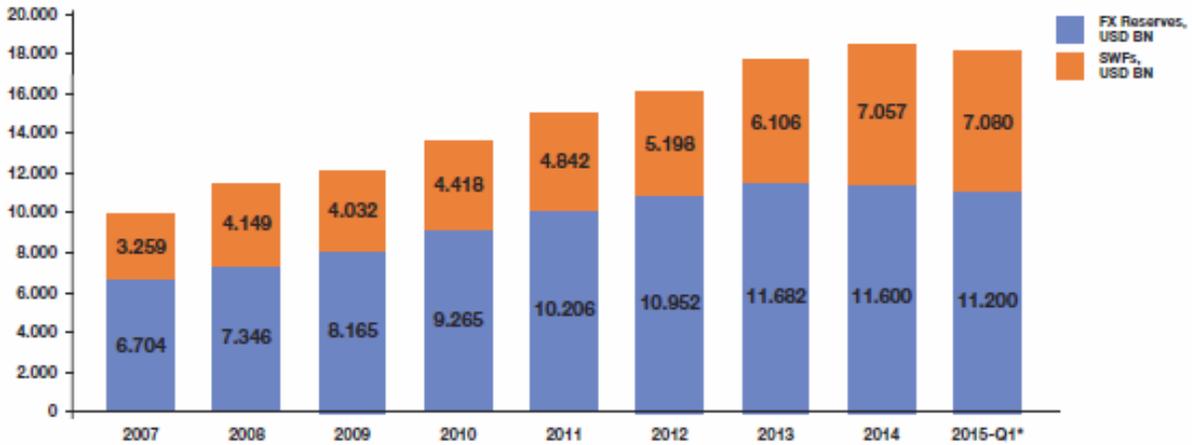
Figure 1.1: Aggregate Sovereign Wealth Fund Assets under Management (2007-2015). Source: SWF Annual Report (2015).

2.2 Investment Strategies

It was firmly believed that SWFs follow a conservative investment strategy and that they are buy-and-hold investors (Fry et al., 2011). Although as we have discussed earlier, most of the SWFs have explicit investment and return objectives by investing into developed and developing markets, including United States and China in more risky assets than central banks' FER, such as (Equity and Real Estate). Considering that traditional reserve managers strive to preserve values of holdings, reserve assets remain safe as liquid investments offer low returns. Nevertheless, sovereign wealth funds are characterized by a different set of objectives - they strive to consolidate higher returns on their holdings through diversification of currencies and arrays of assets (Ahmadov et al., 2010). The arrays of assets are different to other funds asset classes, since the investment objectives of SWFs are considered within the national framework. Where investment strategy shifts subtly from maximizing fund returns to diversifying national wealth away from oil. So building portfolios that are not correlated with the price of oil will better protect national wealth and reduce downturns (Balding, 2012).

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On the other hand, securing higher returns is subject to high levels of risks. Through diversification of foreign exchange income, sovereign wealth funds are focused on spreading the risks within their portfolios across an array of assets, as well as currencies (Alsweilem et al., 2015). The SWF's strategies seem to vary from fund to fund, as there is no common strategy that would distinguish SWFs from other institutional investors.

However, it is argued that some sovereign wealth funds do not always serve commercial purposes because they are politically motivated (Johnson, 2015). The tendency to serve political interests at the expense of commercial interests follows from the fact that the Governments own sovereign wealth funds, in which a significant number are authoritarian regimes (Osborn, 2011). Political involvement into decision making leads SWFs to invest home more heavily as social needs are more sensitive. This makes them accept investments with lower financial return in exchange to a higher social benefit. Alternatively, higher domestic investments are a sign of poor investment decisions, since funds are prone to home bias, political or agency considerations (Bernstein et al., 2009). This contradicts the traditional portfolio which suggests that international diversification is necessary to improve portfolio's risk-return characteristics (Bessler and Wagner, 2007). Although as Bernstein et al. (2009) argued, SWFs are mostly trend chasers. They invest at home when domestic equity prices are high and invest abroad when foreign prices are higher. Apart from that, Chhaochharia (2008) added that SWFs are likely to invest abroad seeking higher returns and asset diversification which improves their risk-return tradeoff. One of the concerns investing abroad for SWFs is that they might target strategic industries, based on political interests of their home country.

Aggressive investments plans, with focus on maximizing returns raises concerns regarding SWFs investment strategies. Apart from home bias, political connections and high risk

tolerance SWFs are also know for other characteristics. Aggressive block capital shifts in SWFs portfolios creates a herding effect by transmitting a positive/negative sentiment onto the market, since the market interprets investment vehicles as a knowledgeable investor with a solid investment strategy (Fry et al., 2011). The magnitude of the impact is dependent on the information content, the signal and the size of the trade being sent to the smaller traders (Corsetti et al. 2004).

Overall, SWFs deep pockets, absence of leverage and financial liabilities, make them a one of a kind investor that can potentially either stabilize or destabilize financial capital markets by irrational, aggressive and sizeable investments.

2.3 Sovereign Wealth Fund's Market Impact

Many economists and theorists argue that sovereign wealth funds could have both positive and negative effects on global financial markets, affecting the capital flow, pricing of bonds and equities (ECB, 2008). On the other hand, some theorists argue that SWFs are not large enough and only have a share of 2% of total size of global equity and bonds markets, and therefore, we should not pay such a big attention to them (Kotter and Lel, 2010). Nevertheless, many other economists argued that even if the size of SWFs is not large enough to influence the pricing of bonds or equities on its own, they might as well have an effect of herding, affecting the equity price by driving the sentiments of investors (Miceli, 2011).

Empirically, there are mixed evidence to the effect that SWFs have on the target firms in terms of creating value via improved governance, knowledge, and experience. Researchers such as Chen et al., (2007) find that SWFs are able to provide benefits to firms via monitoring. While Thomsen et al., (2006) find a negative relation between block holder ownership and firm performance, by transferring assets out of the country (Shleifer and Vishny 1997). Dewenter et

al. (2009) stated that SWF investments and ownership can have a two-fold effect on firm value. One being a positive effect by affecting firm value via signaling and monitoring, and the other is negative by losses from the tunneling activities and private benefits of control.

2.3.1 Short-term Impact

According to past research, following the announcement of SWF investments the share price of the target company can move in several different directions. In the short-term, the first possible scenario is that the stock price follows closely the market index of the target's domestic index. This happens if SWF has acquired a small stake in the target firm or the news is integrated earlier due to prior new leaks. Secondly, there is a chance that the investment announcement is short-lived. This happens when a target's stock outperforms the market index 'abnormal' price change during the event window period. The reason for such an abnormal return effect is two-fold. It can be due to either a liquidity effect where the price increases in response to a sharp rise in demand of shares, or SWFs has relaxed any financial constraints that a target firm might have had. This happens whenever a SWFs purchases a large stake at a company (Raymond, 2008).

In general, most of the researcher believe that the SWF investment announcement stock impact is short-lived. Brav et al. (2008) find that SWFs have a short-term positive impact on target firm's stock prices, because investors see SWFs as information producers and hence can originate the effect of herding as mentioned earlier. Furthermore, Chhaochharia and Leaven (2008) via a event study examined that SWF announcement effect is positive on target firm's share price, especially when the firm is in financial distress. Apart from that, Sojli and Tham (2010) finds that the market also reacts positively to SWFs investments due to the expectation of increased corporate monitoring and future increases in business internationalization. Consistent with the above mentioned arguments Kotter and Lel (2008) indicates that short-term positive

market reaction of SWF investments is driven by liquidity effect produced by block purchases. Another explanation is that the market views SWF investments as a profit-oriented investor. Apart from that, SWF transparency plays an important role in positive market reaction.

Based on the above-mentioned study conclusions, SWFs are likely to have abnormal positive effect on stock prices in the short-term but as Balding (2012) argues, cumulative abnormal returns are very short-lived and the trend returns to its business as normal scenario as the SWF investment does not change corporate performance in the long-run.

2.3.2 Long-term Impact

In relation to long-term impact a SWF can have on target firm's shares is two-fold. First of all, the market expect a SWF to have significant financial resources, and leverage over the governance of the company and hence profitability. Such characteristics have potential to improve firm's revenue and hence firm value. On the other hand, if SWF is following certain strategic goals inconsistent with company's profit maximization goals then it would negatively impact the firm value (Raymond, 2008).

Furthermore, SWFs that purchase the controlling stake and voting rights at a target firm bring a negative impact on the target firm in the long-run. Whereas, if SWFs purchase a minority stake at the firm the effect is different. Dewenter et al. (2010) finds that size of the investment block can play a role in the impact of monitoring. They found that there are gains of monitoring for block holders owning less than 40% of the target firm, and decreasing positive returns above this limit.

The outcome of the long-term impact on the share price and the firm value is directly dependant on the strategic goals SWF has in relation to that company. Chhaochharia and Leaven (2008) discussed that in the long-run if SWF goals do not coincide with the long-term goals of

the firm's internal management then it has a deteriorating effect on the firm's value even though SWF offer a better monitoring role. On the hand, Kotter and Lel (2008) found that target firms do not experience any positively significant change in their firm value in the three year period after the SWF investment. However, Sojli and Tham (2010) in relation to long-term impact argue that due to heavy media scrutiny of SWFs as investors, SWFs try to minimize the extraction of personal benefits or conflicts with the target firm management and focus on creating value. SWFs provide expertise, investment opportunities and market access for the target firms which otherwise would not have access. Additionally, as they are politically connected they can provide government contracts to the target firms, which gives them more deals and revenue.

2.4 Sovereign Wealth Funds and Santiago Principles

In light of the growth in popularity of sovereign wealth funds and potential problems associated with investments, such as obscurity and political non-economic incentives, the Santiago principles were founded to guide the sovereign wealth fund investment processes.

The principles main purpose is to provide a clear guidance for SWFs activities, making sure that their investment decisions are based on economic and financial risk-return considerations. It is important that SWFs follow a financially and economically oriented path, contributing to the overall transparency and stability of the investment climate (Behrendt, 2010). As previously discussed, SWFs are subject to certain inherent risks that sometimes overshadow their benefits. Notably, controversies on sovereign wealth funds have been reported, which arises from different approaches on how international economy should be operated. Every sovereign wealth fund can attract billions of profit, which significantly enhances economy by facilitating acquisition of more shares in the market; furthermore it facilitates strong influence over the companies of interest. Essentially, it is inferred that sovereign wealth funds not always serve

economic purposes because they are politically aligned. It has been noted that sovereign wealth funds are featured by lack of transparency, especially, those from china and Middle East countries. This aspect has leads to lack of trust among countries that is why countries like Singapore and Norway are working towards transparency in sovereign wealth funds business. Majorly, the world largest sovereign wealth funds keep their objectives undisclosed, which include their asset size and investments. In respect to this, the plans of such sovereign funds cannot be understood (Johnson, 2015). This element is geared towards serving political interests at the expense of economic interest because sovereign wealth funds are government owned.

The Santiago framework consists of three major areas of concern. The first part requests SWFs to disclose their legal framework and policy purpose. It is the first step in to encouraging SWFs to be more transparent and clear regarding their overall strategy (Behrendt, 2010).

The second part of Santiago framework focuses on institutional frameworks and governance structures. The main idea of this section is to distance the political aspirations of the government as the owner of SWF on one side, and its operational management on the other. In that way, the framework intents to remove any political influence from the decision-making by segregating the duties within the SWF. Apart from that, instead of economic incentives the decisions should be made based on future operating performance of the fund, for which the management is reponsible (Behrendt, 2010).

The third and the last section requests the SWFs to disclose their investment policies, including information about investment themes, objectives, horizons and strategic asset allocation. As a result, SWFs would have to disclose any decisions that are not based on economic considerations. In that was the framework discourages SWFs to pursue non-economic investments as it will negatively impact the market value of the firm. Hence, it will base their

investment decisions based on financial and economic incentives which in terms of target firm is aimed at profit maximization (Behrendt, 2010).

Based on the overall aim of the framework, the consequences of the Santiago Principles suggest that SWFs would if not eliminate but at least improve on the biases and affects its investments have on the financial market, in particular on the target firm. As the framework improves on SWFs transparency, governance and strategic policies, biases and negative market impacts are expected to fade away. Since the market and investors begin to perceive SWFs as reliable investment vehicles. Despite their envisaged importance, very little is known empirically about the valuation impact of SWF investments, especially following the inception of the Santiago principles.

3. Hypothesis Development

Based on prior research, researches have documented that Sovereign Wealth Funds have an impact on firm stock price within the event window around the investment announcement. This is due to several reasons why it happens. It is either because the announcement generates a liquidity effect where share price spikes up due to higher demand, which it turn is augmented by the herding effect (Kotter and Lel, 2008). Otherwise, it is due to relaxed financial constraints that SWFs brings to the table with its deep pockets (Raymond, 2008). Nevertheless, after the introduction of Santiago principles in 2008, there is hardly any evidence regarding its effect on the abnormal returns within the event period. We are led to believe, that since the passage of the Santiago framework, the positive abnormal effect on the share price has increased because the framework encouraged the funds to be more transparent, invest according to risk-return and profitability incentives rather than strategic political motivation. Hence, we believe that since the passage of Santiago Principles have a greater positive abnormal impact on the target firm shares.

H1: SWF have a positive impact on stock price and shares of firms in short-term following the inception of Santiago principles.

Many researchers and critics argue that SWFs are sophisticated and knowledgeable investors with solid expertise base who invest in firms and utilize their governance in order to increase the value of the firm in the long run. However, many academics such as (Fotak et al., 2009) find that the long-run performance of equity investments by SWFs tends to be poor. In addition, Demsetz and Lehn (1985) found that large shareholders are not well diversified and therefore demand an unnecessary reduction in company risk, forcing the company to be overly conservative and possibly pass up new investment projects. However, Sojli and Tham (2010) in relation to long-term impact argue that due to heavy media scrutiny of SWFs as investors, SWFs

try to minimize the extraction of personal benefits or conflicts with the target firm management and focus on creating value. SWFs provide expertise, investment opportunities and market access for the target firms which otherwise would not have access. Additionally, as they are politically connected they can provide government contracts to the target firms, which gives them more deals and revenue. Hence, we have hypothesized that SWF increase the value of the shares they invest in the long run following the inception of the Santiago principles.

__H2: SWF increase the value of shares in the long-run, after passage of Santiago Principles.__

SWFs for several decades have been the center of attention of several regulatory bodies due to their lack of transparency, secrecy, and politics. Therefore, in the wake of 2008, several regulatory bodies have decided to introduce and tighten the GAPP (Santiago Principles) relative to SWFs, due to considering investments as a potential for higher returns as opposed to looking at them as a political move. On the other hand, investments by more transparent SWFs have a larger cumulative abnormal return, suggesting that voluntary SWF disclosure might serve as a signaling device to investors (Kotter and Lel, 2008). However, some argue that investment behaviors of low-level governance SWFs may be more speculative and unexpected. This may trigger larger market impact upon the announcement of their actions (Udaibir et al., 2010). Nevertheless, lack of transparency decreases market trust in investor's decisions which in turn decreases the demand for target firm's stock eliminating the liquidity effect (Raymond, 2008). Based on previous research we stipulate the third hypothesis as follows:

__H3: SWFs that are more transparent generate higher abnormal returns on investments.__

Fernandes (2011) states that SWF may use cross-border investments to help the economic development in their home country; for example, by trying to persuade the target company to build offshore facilities. However, many researchers argue that the passage of Santiago

Principles, which tightens the rules, related to SWFs investment governance and transparency might reduce the number of SWF investments abroad since there might be political or other none the less important incentives in their decision-making. We hypothesize that since the passage of Santiago Principles, cross-border investments have decreased.

H4: *Since the passage of Santiago Principles, cross-border investments have decreased.*

Prior to Santiago Principles, Bernstein et al. (2009) believed that political involvement into SWF decision-making made them more home biased because instead of investing based on financial and economical grounds SWF invested based on priorities. This made them accept investments with lower financial return in exchange to a higher social home country benefit. Since the passage of Santiago Principles, the framework ensured that under SWF governance all investment decisions are made independently of political and other exogenous pressures. Independence in operational and professional management has to be embedded in the governance structure of SWF (Gelb et al., 2014). Therefore, instead of irrational investment decisions SWF would have a clear and solid investment plan based on feasible financial goals. As a result, since the emerging market is riskier, cheaper and more volatile, thus any block investments made by the SWF would have a greater impact on the firm share price. Hence, we hypothesize the following:

H5: *SWF investments have a greater positive impact on domestic firms as opposed to foreign investments since the passage of Santiago principles*

SWFs are a complex investment vehicle with high risk tolerance in their decisions, meaning that they chase risky investments with higher than average investment returns. As we can see on the figure below, SWFs investments into risky assets outweigh their investments in safe assets.
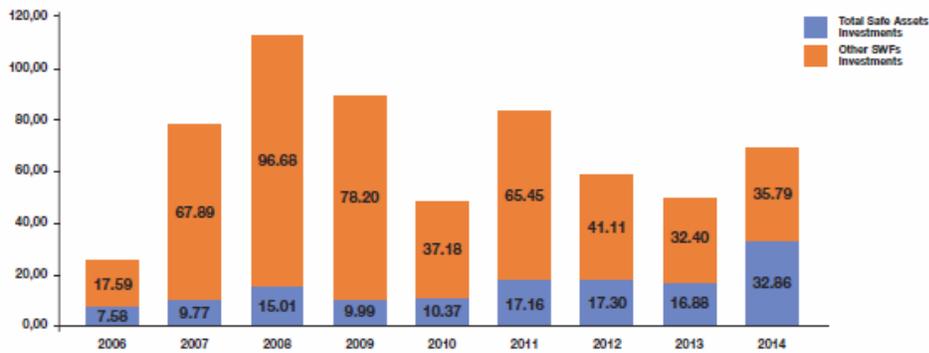
Figure 2.4: SWFs investments in safe vs. risky assets. Source: SWF Annual Report (2015)

Most of the time, risky investments offering higher returns are located in emerging market economies. Fry et al. (2011) argues that investments in non-OECD regions are riskier than in the OECD region due to its volatility and uncertainty. Apart from that, based on the explanation in the previous hypothesis, investments in non-OECD states would generate even higher returns due to the Santiago principle effect. Overall, we believe that investments in emerging economies are received better. Hence, we come up with the following hypothesis:

H6: Investments in non-OECD regions generates higher returns as opposed to investments in OECD states since the introduction of Santiago principles

4. Research Design

The purpose of the following chapter is to shed light on how the overall thesis approaches the answers the earlier stipulated hypotheses. First we will discuss the model employed in calculating the financial metrics in question, consequently developing the appropriate regression model and finally determining the sampling of data.

4.1 Research Approach

Under the current study we will utilize positive empirical approach since we are interested in establishing the way in which the things are at a specific period of time, in our case cumulative abnormal returns level in certain time frame. Furthermore, within the positive empirical approach as a sub-set we utilize quantitative approach in order to by the use of numerical data under statistical analysis establish trends in data and formulate facts.

4.2 Research Methodology

To identify the impact of investment announcements on the stock return of the targeted firms, the current study will undertake an event study methodology approach. Under the event study method the aim is to identify the impact of certain events on the value or price levels of the sampled firms. The current study identifies three different crucial dates which will be tested for its impact on abnormal returns (Rumor, Announcement, Completed). We cannot directly observe positive impact of stock prices. To be able to test whether announcements have a positive effect on stock prices we will have to estimate the abnormal returns prior and after the event date. Therefore, for every set of firm observation, we use daily stock price levels under a specific event window which are then matched to a specific estimation window for which the price levels of the target firm country's financial stock index will be used.

4.3 Measuring Cumulative Abnormal Returns

As we have discussed earlier, we cannot directly observe the direct impact of event dates on stock price levels and returns. In testing for the impact of sovereign wealth funds on stock prices, we consider that one of the simplest ways of testing the associated hypothesis is by looking at some of the approaches adopted by past studies. The efficient markets have the tendency of processing information immediately (Chhaochharia and Laeven, 2008). The arrival of new information should then be reflected in the share price of a firm. This way, it is possible to detect the abnormal deviations from the expectations by examining the value of the share at the time of announcements. We define abnormal deviations as the differences between the real changes in the share prices and the normal deviations, which are assessed based in a market model that controls for sensitivity of market developments as well as market share variations. The market model is a statistical model that relates the return of a given security to the return of the market portfolio or index. Hence, the abnormal returns are the difference between realized returns and benchmark returns. The parameters of market model are also evaluated by the data of company and market returns for the period. The market model is given by:

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_{jt}$$

Where;

R_{mt} is the return on a market index on day t,

β_j measure the sensitivity of firm j to the market (the measure of risk)

α_j measures the mean return explained by the market and ε_{jt} is a statistical error term.

The predicted return of firm for a day in the event period is the return given by the market model on that day using the estimates obtained from model above.

$$R_{jt}^* = \alpha_j^* + \beta_j^* R_{mt}$$

In this case, R_{mt} is the return on the market index for the actual day in the event period. Next step in the model is to calculate the residuals on each day

$$r_{jt} = R_{jt} - R_{jt}^*$$

For each day in the even time the residuals are averaged across firms to produce the average residual for the day, AR_t, where N is the number of firms in the sample and

$$AR_t = \frac{1}{N} \sum_{j}^{r} jt$$

This empirical research will be finalized with the calculation of the cumulative average residuals, CAR, where

$$CAR = \frac{1}{N} \sum_{t-1}^{T} R_{jt}$$

We have chosen Market Model among many other models, as our main model in estimating abnormal returns because it eliminates the portion of the return that is related to the variation in the market's return and hence the variation of the abnormal returns is reduced. This increases the ability to detect the effects of events (MacKinlay, 1997). Even though the market model is a one-factor model, it has been identified by (Brown and Wamer, 1980) as a powerful and successful model in estimating abnormal accruals. There are many other multi-factor models that seem to perform better. Although the benefits from employing multi-factor models are limited due to the marginal explanatory power of additional factors. Additionally, due to limited availability of data since SWFs are more discrete, in our case we have to resort to Market Model (MacKinlay, 1997).

Furthermore, apart from the Market Model and Cumulative Abnormal calculation we will apply Buy-and-Hold abnormal returns calculation (BHARs). It is necessary for the purpose of

identifying whether SWFs do indeed create any long-term value for the companies they invest in. BHAR is superior in estimating because CAR only measures the average periodic abnormal returns and thus is biased in long-term estimations (Barber and Lyon, 1997). The calculation of long-term buy-and-hold abnormal returns is as follows:

$$BHAR_{it} = \prod_i^N (1 + R_{it}) - \prod_i^N (1 + R_{mt})$$

Where R_{it} is the return on the security i in a specific period t, and R_{mt} is the return on the benchmark, which in our case is the stock index of the target firm.

4.4 Empirical Model

The hypothesis developed are tested by regressing the cumulative abnormal returns and the characteristics of the SWF undertaking the investment. We will be estimating a linear regression between the independent variable (cumulative abnormal returns) and explanatory variables. The statistical model is as follows:

$\Delta CAR_i = \beta_0 + \beta_2 TRN_{2i} + \beta_3 CROSS_{3i} + \beta_5 HOME_{5i} + \beta_6 OECD_{6i} + \beta_7 COMM_{7i} + \beta_8 GAPP_8 i + \beta_9 CRISIS_9 i$

The control variables in the current study represent are chosen based on their importance in prior research in order to maintain internal validity ay a high level. Therefore, the current study has identified that transparency (TRN) which is included based on the fact that a more transparent SWF earns a higher return on its investment since the market absorbs the news of a transparent SWF investing as being more positive than of a more enigmatic SWF. Cross-border investing (CROSS) is important because since the passage of Santiago principles it is believed that cross-border investments by SWF have decreased due to higher regulatory scrutiny. Domestic (HOME) investments tend to generate higher returns since SWF are more familiar with the market and hence invest more successfully. (OECD) denotes a region of countries with

higher stability and less risky financial markets which in turn lowers the investment return generated on every investment. It is believed that commodity (COMM) enriched SWFs are even more risk tolerant than non-commodity enriched SWFs since their funds are generated due to abundance and availability of natural resource such as crude-oil. (GAPP) denotes the implementation of Santiago Principles as a regulatory framework which is the main dependant variable. Lastly, crisis (CRISIS) as control variable is important because it is crucial to control for the crisis period (2007-2009) due to the collapse of financial system and hence distort abnormal returns if not controlled for.

4.5 Data and Sample

In investigating the impact of sovereign wealth funds on targeted firm value following the inception of the Santiago principles we acknowledge that the process of data collection of sovereign wealth funds can be described as a challenging process. This follows that many sovereign wealth funds have a tendency in providing limited public information. Thus, the present study hopes to use four primary sources of information in order to gather enough of appropriate information concerning investments of sovereign wealth funds. First of all, we have resorted to SWFI website to gather the names of the major SWFs around the world. Using that information we established the subsidiaries SWFs use for investing via DataStream. For example, the government pension fund of Norway has as a subsidiary The Norges Bank via which it channels its investments. After having established a fuller picture of SWF and its subsidiaries we gathered all the necessary investment information made by SWF via Zephyr and DataStream databases. Furthermore, we have used ThomsonOneBanker for target firm financial data outside North American and CRSP database for firms within North America. Overall, after

combining the information from the several databases our initial and final samples are as follows:

Total Initial Sample	2878
Pending	-24
Post-poned	-3
Withdrawn	-17
Rumours (Analyst, Expired or Withdrawn)	-424
Sub-Total	_2410_
Unlisted firms	-1056
Minority stake under 10%	-215
Share buy back	-117
Acquisition increase	35
minority stake increase	-445
Capital Increases under 5%	-16
Insufficient Observations	-262
TOTAL № TRANSACTIONS	**334**

Table 4.1: Sample

Our initial sample consisted of 84 SWFs, but after gathering transaction data, 34 funds were excluded from the sample since no investment data had been found. As a result the final sample was left with 50 SWFs actively participating in investing around the globe. As we can see on the Table 4.1 a lot of transaction data has been dropped mainly due to withdrawn investment decisions, private firms and insufficient stake acquired to make any impact on the share price of targeted firms. Finally, we have extracted Index information for every target firm region from DataStream making it 44 indexes worldwide.

The sample starts from the year 2000 until the most recent investment transactions in 2014. As you can see on the Figure 4.2 below the most prominent and important investments made by SWFs start from the year 2000 onwards. Anything before year 2000 has not been documented or lacks sufficient information required to carry-out the current analysis.
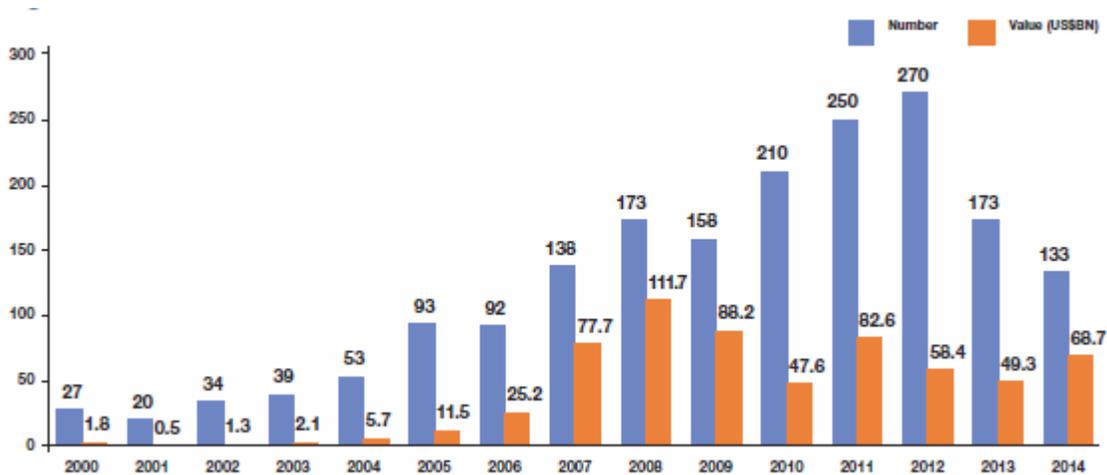
Figure 4.2: SWF investments since 2000. Source: SWF annual report, (2015).

4.6 Event Periods

In an event study, as we can see on the Figure 4.3 below, is a typical time line for an event study. The estimation window does not overlap with the event window so that the estimated parameters of the normal return model are not influenced by returns around the event (MacKinlay, 1997).
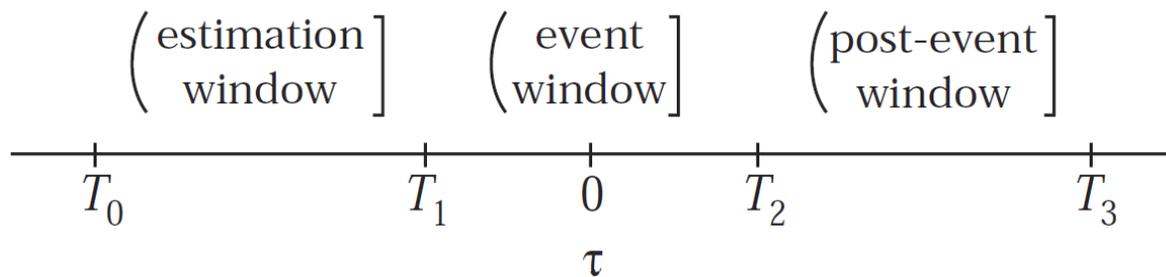
Figure 4.3: Event study time line.

Therefore, the choice for our event window is spit into five categories [-30,+30] [-20,+20] [-10,+10] [-5,+5] [-2,+2] [-1,+1] [0,0] in order to test in which event period category the cumulative abnormal returns are most prominent and statistically significant. On the other hand, the market model parameters are estimated before the event windows. As an estimation window we will use one category [-200,-21] in order to avoid any events related to the transaction that

might influence the normal return estimate. Hence, this increases the robustness of the normal

market return measure to gradual changes in its parameters (MacKinlay, 1997).

5. EMPIRICAL RESULTS AND ANALYSIS

5.1 Descriptive Statistics

variable	N	mean	sd	p25	p50	p75
CAR	12285	0.0080	0.3559	-0.1512	-0.0247	0.1097
CROSSBORDER	12285	0.7846	0.4111	1	1	1
TRANSPARENCY	12285	8.1641	2.4650	6	10	10
SANTIAGO	12285	0.6308	0.4826	0	1	1
OECD	12285	0.4923	0.5000	0	0	1
COMM	12285	0.4205	0.4937	0	0	1
HOME	12285	0.2154	0.4111	0	0	0
CRISIS	12285	0.3385	0.4732	0	0	1

Table 5.1: Descriptive statistics of Independent and Dependent variables

In the Table 5.1 above we can see that CARs mean and median (0.0080) and (-0.0247) are close to each other which means that the distribution of data points is fairly evenly distributed over the total sample. The mean and the median for CARs is close to 0 because the event window used for the calculation of cumulative abnormal returns is [-30,+30]. We will later observe that within the event window of [-2,+2] the CARs are the most present. After which the effect of abnormal returns fades away since the market quickly absorbs the investments decision news as coined by Efficient Market Hypothesis (Fama, 1991). After all the information has been absorbed Fama and French (1988) argues that stock prices tend to mean-revert to its mean which explains why our mean in the sample is close to 0. However, in our sample selection the reversion happens much faster than argued by the academics. From this point on we will test the hypotheses stipulated earlier, and discuss the statistical output based on academic facts.

5.1.1 Testing hypothesis 1

As we can see on the Table 5.2, significant event dates have been split into 3 categories as mentioned in the methodology. We can clearly see that cumulative abnormal returns within the event windows under rumor and announcement split have no statistical significance since the p values are very high and hence we have no confidence in rejecting the null hypothesis which states that SWFs do not have an impact of stock prices in the short-term. However, if we look at the last category 'By Completed Date' we can

By Rumor Date				
date	caar	%CAAR	t-test time-series	prob.
(-30...30)	-0.0142	-1.42%	-0.7212	0.4708
(-20...20)	-0.0011	-0.11%	-0.0672	0.9464
(-10...10)	0.004	0.40%	0.3494	0.7268
(-5...5)	0.0097	0.97%	1.1614	0.2455
(-2...2)	-0.0029	-0.29%	-0.5195	0.6034
(-1...1)	-0.0069	-0.69%	-1.5781	0.1146
(0...0)	-0.0009	-0.09%	-0.3503	0.7261
By Announcement Date				
date	caar	%CAAR	t-test time-series	prob.
(-30...30)	0.021	2.10%	0.9344	0.3501
(-20...20)	-0.0042	-0.42%	-0.2261	0.8212
(-10...10)	0.0097	0.97%	0.7361	0.4617
(-5...5)	0.0144	1.44%	1.5079	0.1316
(-2...2)	0.0032	0.32%	0.4923	0.6225
(-1...1)	0.0009	0.09%	0.1851	0.8532
(0...0)	-0.0066	-0.66%	-2.3154	0.0206
By Completed Date				
date	caar	%CAAR	t-test time-series	prob.
(-30...30)	0.0089	0.89%	0.3636	0.7161
(-20...20)	0.0211	2.11%	1.048	0.2947
(-10...10)	**0.0293**	**2.93%**	**2.0401****	**0.0413**
(-5...5)	**0.0412**	**4.12%**	**3.9554*****	**0.0001**
(-2...2)	**0.0352**	**3.52%**	**5.0187*****	**0.0000**
(-1...1)	**0.0337**	**3.37%**	**6.1992*****	**0.0000**
(0...0)	**0.0291**	**2.91%**	**9.2728*****	**0.0000**
p<0.1=* p<0.05=** p<0.01***				

Table 5.2: Descriptive CAR Statistics

observe that in the event window periods [-10,+10] [-5,+5] [-2,+2] [-1,+1] [0,0] the CARs are positive and highly statistically significant with p-values<0.01 for [-5,+5] [-2,+2] [-1,+1] [0,0] windows and p-value<0.05 for [-10,+10] window. Additionally, if we look at the Graph 5.3

below the CAARs have been the most prominent from the event date T=0 up until T+6 after which the effect of positive sentiment has gradually dropped.
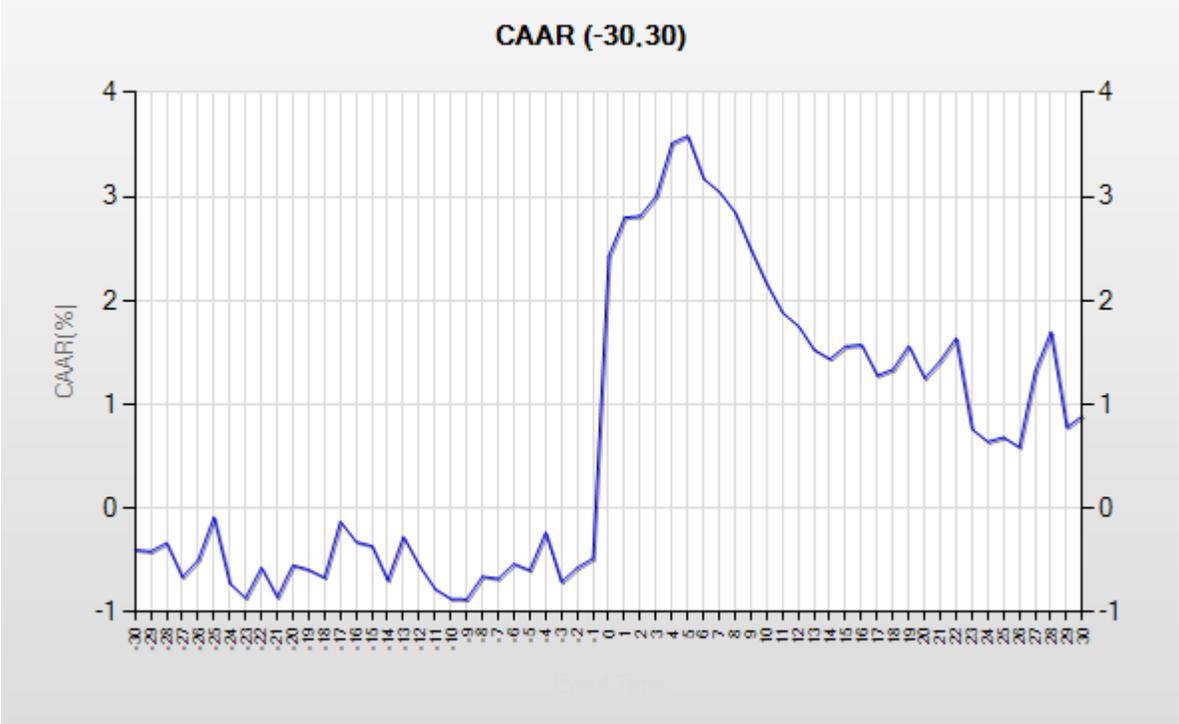
Graph 5.3: Cumulative Average Abnormal Returns

As a result, we can confidently conclude that SWFs do have a positive impact of target company's stocks in the short-term after the event date.

Furthermore, if we look at the split between post- and pre - Santiago Principles period as shown on the Table 5.3 below it is evident that in the post - Santiago Principles period SWF's investments have had high abnormal returns around the event period which are statistically significant with a 99% confidence level. As opposed to the pre - Santiago Principles which ends in year 2008, SWF investments have not experienced success in positively affecting target's share price in the short-term around the event period. Although, we have included a new event windows in the pre- period to identify what has happened to abnormal returns.

As we can see abnormal returns window has shifted from the event date T=0 to [+1,+5] event window, with p-value<0.05 which suggests that abnormal returns have not been generated within the expected event window but has shifted to later dates after the event date.

Based on the results above we can conclude that Santiago Principles have promoted an increase in abnormal returns generation since its implementation. As we can see on the Table 5.5 below, the mean for cumulative abnormal returns has increased since the passage of Santiago principles,

CAARs post - Santiago Principles				
date	caar	CAAR%	t-test time-series	prob.
(-30...30)	0.0196	1.96%	0.3787	0.7049
(-20...20)	0.0514	5.14%	1.2119	0.2256
(-10...10)	**0.0972**	**9.72%**	**3.2006***	**0.0014**
(-5...5)	**0.1063**	**10.63%**	**4.8392***	**0.0000**
(-2...2)	**0.1069**	**10.69%**	**7.2126***	**0.0000**
(-1...1)	**0.1174**	**11.74%**	**10.2266***	**0.0000**
(0...0)	**0.1211**	**12.11%**	**18.2735***	**0.0000**

CAARs pre- Santiago Principles				
date	caar	CAAR%	t-test time-series	prob.
(-30...30)	0.0195	1.95%	0.6145	0.5389
(-20...20)	0.0218	2.18%	0.8387	0.4016
(-10...10)	0.017	1.70%	0.9161	0.3596
(-5...5)	0.0235	2.35%	1.7494	0.0802
(-2...2)	0.0173	1.73%	1.9112	0.0560
(-1...1)	0.0123	1.23%	1.749	0.0803
(0...0)	0.0014	0.14%	0.3575	0.7207
(1...5)	**0.0199**	**1.99%**	**2.1912****	**0.0284**

p<0.1=* p<0.05=** p<0.01=***

Table 5.4: CAARs pre and post Santiago Principles

where 1 denotes time period after the implementation of Santiago principles and 0 otherwise, from (-0.0083) to (0.0175) respectively.

SANTIAGO	N	MEAN	p50	p25	p75
0	4536	-0.0083	-0.0366	-0.2128	0.1138
1	7749	0.0175	-0.0125	-0.1113	0.1046
Total	12285	0.0080	-0.0247	-0.1512	0.1097

Table 5.5: Table summary statistics CARs by Santiago Principles

5.1.2 Testing hypothesis 2

To test whether SWF create any value for firms in the long-term we have applied the buy-and-hold abnormal returns method (BHAR), testing the results under the scenario of

Full - Sample					
date	bhar	t-statistic	prob.	skewness-adj.	p-value
(0...360)	-0.0077	-0.122	0.9029	-0.0829	0.9339
(0...270)	0.3651	0.8902	0.3734	1.299	0.194
(0...180)	0.0889	1.5976	0.1101	1.9282	0.0538
(0...90)	0.0152	0.5548	0.5790	0.625	0.532
(0...45)	0.0207	1.065	0.2869	1.1743	0.2403
Pre Santiago Principle					
date	bhar	t-statistic	prob.	skewness-adj.	p-value
(0...360)	-0.042	-0.2881	0.7733	-0.2009	0.8408
(0...270)	0.0324	0.2897	0.7702	0.3406	0.7334
(0...180)	**0.1729**	**1.6001**	**0.1096**	**1.8742***	**0.0609**
(0...90)	0.0669	1.3659	0.1720	1.4935	0.1353
(0...45)	0.024	0.682	0.4952	0.761	0.4466
Post Santiago Principle					
date	bhar	t-statistic	prob.	skewness-adj.	p-value
(0...360)	0.0073	0.097	0.9227	0.141	0.8878
(0...270)	0.5271	0.8984	0.3690	1.3083	0.1908
(0...180)	0.0038	0.0707	0.9437	0.1436	0.8858
(0...90)	0.0183	0.4975	0.6188	0.5928	0.5533
(0...45)	**0.0371**	**1.4104**	**0.1584**	**1.684***	**0.0922**
p<0.1=* p<0.05=** p<0.01=***					

Table 5.6: BHAR pre- and post- Santiago Principles

the following event widows [0,+45] [0,+90] [0,+180] [0,+270] [0,+360]. We test for evidence in two different groups pre- and post- Santiago Principles period. As we can infer from the Table

5.6 below, there is no evidence to support the evidence that SWFs create long-term value for the firms that they invest in. The p-value for the t-statistics and for skewness adjustment are too high implying that we cannot be at least 95% confident that it did not happen by chance. As a result, we fail to reject the null hypothesis which states that SWFs do not create value for the firms they invest in, in the long-run. However, if we look at the skewness adjusted test statistics then we can see that there is some statistical significance with p-value<0.1 for pre- Santiago sample period where BHARs are statistical significant in the event window [0,+180] and in post- Santiago sample in the event window [0,+45]. Although, such results still suggest that over the long-run [0,+360] there is no value created for target firms. Such evidence is consistent with the findings by Fotak et al. (2008) who argue that SWFs do not create any long-term positive impact on target companies due to imposition of additional costs and of conflicting interests between SWFs and internal management.

5.1.3 Testing hypothesis 3 to 6

So far, we have concluded that SWFs do indeed have a positive short-term effect on the share value of the target firms, especially after the introduction of Santiago principles, where the magnitude of abnormal returns has amplified. However, on the other hand we have determined that SWFs do not create any long-term value in the companies that they have invested in and hence we did not reject the null hypothesis. In respect to the third hypothesis, we try to identify whether investment Truman transparency index has a positive effect on abnormal returns. If we look at Table 5.7 we can see that CAR as an independent variable has a negative correlation with Transparency as a dependent variable, with coefficient (-0.0168). However, based on the Table 5.7 we are left with inconclusive result where TRANSPARENCY as an independent variable has

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no significant effect on CARs within the event window. As a result, we are unable to reject the third null hypothesis, as there is no at least a 95% confidence level shown in the p-values.

Nonetheless, there is still a negative correlation. The reason for that is, since the transparency increases and SWFs announce the decision earlier than the completion date the news are absorbed by the market before the event window in question. This conclusion is consistent with the efficient market hypothesis which states that information is absorbed immediately (Fama, 1991).

VARIABLES	CAR
CROSSBORDER	0.034
	-0.2911
TRANSPARENCY	-0.0168
	-0.1849
SANTIAGO	0.038
	-0.3969
OECD	0.0224
	-0.5887
COMM	-0.0629
	-0.2299
CRISIS	-0.0298
	-0.095
Constant	0.12
	-0.307
Observations	12,285
R-squared	0.02
Standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

Table 5.7: Multivariate Regression Output

	CAR	CROSS	TRANSPAR	SANTI	OECD	COMM	CRISIS
CAR	1						
CROSS	0.0201**	1					
	0.0262						
TRANSPAR	-0.0738***	0.1614***	1				
	0	0					
SANTI	0.0350***	0.0644***	0.2018***	1			
	0	0	0				
OECD	0.0276***	0.4411***	0.0884***	0.0732***	1		
	0.0022	0	0	0			
COMM	-0.0418***	0.3200***	-0.1747***	0.1351***	0.2417***	1	
	0	0	0	0	0		
CRISIS	-0.0553***	-0.2580***	-0.1883***	-0.3510***	-0.1624***	-0.0493***	1
	0	0	0	0	0	0	

***p<0.01   **p<0.05   *p<0.1

Table 5.8: Power Correlation Matrix

For the fourth hypothesis we are trying to test whether cross-border investments have decreased after the passage of Santiago principles. What we can observe in the Table 5.8 above is that cross-border investments have actually increased after the passage of Santiago principles because cross border variable is positively correlated with Santiago variable with coefficient (0.0644) at 99% confidence level. Hence, we cannot reject the null hypothesis that cross-border investments drop after the passage of Santiago principles. Especially, if we look at the Table 5.9 below we can see that the mean for cross-border investments increases after the passage of Santiago principles from (0.7500) to (0.8049).

CROSSBORDER					
SANTIAGO	N	mean	sd	p50	p75
0	4536	0.7500	0.4331	1	1
1	7749	0.8049	0.3963	1	1
Total	12285	0.7846	0.4111	1	1

Table 5.9: Tabulated statistics output by Cross-border

Therefore, instead of protectionist stance of SWFs in relation to the introduction of Santiago principles which academics have warned about, has a taken an opposite direction. As, the IMF first deputy Managing Director, John Lipsky argued that the framework will help to maintain the free flow of cross-border investment and sustain an open financial system. Santiago principles will aid in mitigating the risk of protectionist pressures on their investments (IMF Survey Magazine, 2008).

VARIABLES	Pre - Santiago Principles CAR	Post - Santiago Principles CAR
TRANSPARENCY	-0.0316	-0.0033
	-0.3098	-0.6042
OECD	0.213	-0.0364
	-0.3195	-0.4745
COMM	-0.2762	-0.0132
	-0.2364	-0.7638
CRISIS	-0.041	-0.0194
	-0.6376	-0.712
HOME	-0.0855*	0.036
	-0.0769	-0.4016
Constant	0.2495	0.0675
	-0.3061	-0.3968
Observations	2,875	5,401
R-squared	0.087	0.013
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

Table 5.10: Multivariate regression output pre- and post- Santiago principles

In the fifth hypothesis the study purports to test whether SWF have more positive impact on domestic investments as opposed to foreign investments after the passage of Santiago principle. As we can see on the Table 5.10 above, before the Santiago framework there was a negative relationship between abnormal returns and investments into the HOME state with coefficient (-0.0855) statistically significant with p<0.1. On the other hand, since the implementation of Santiago principles abnormal returns reversed into the positive correlation with home investments with coefficient of (0.0360), but with a very high p-value. This means that we cannot reject the null hypothesis as there is not enough evidence to support it. However, we can still observe a change from negative to positive correlation from before to after Santiago principles respectively. Hence, we can partially accept that on domestic firms has improved since the passage of Santiago Principles.

The reasons why SWFs has improved on domestic investments is because before the implementation of Santiago principles as Gelb et al., (2014) believes SWFs invested at home mostly due to political reasons and elite capture, and not looking for positive return generation, which in other words is called home bias. This made them accept investments with lower financial return in exchange to a higher social home country benefit. Since the passage of Santiago Principles, the framework ensured that under SWF governance all investment decisions are made independently of political and other exogenous pressures. Independence in operational and professional management has to be embedded in the governance structure of SWF (Gelb et al., 2014). Therefore, instead of irrational investment decisions SWF would have a clear and solid investment plan based on feasible financial goals.

VARIABLES	Non-OECD CAR	OECD CAR
TRANSPARENCY	-0.0138*	-0.0108
	-0.0967	-0.5407
SANTIAGO	0.1493**	-0.0943
	-0.05	-0.4638
COMM	-0.0433	-0.1016
	-0.2782	-0.1524
CRISIS	0.0112	-0.1293
	-0.8283	-0.3329
HOME	-0.0041	-0.1738***
	-0.8894	-0.0072
Constant	0.0234	0.2613
	-0.7543	-0.3485
Observations	4,077	4,199
R-squared	0.058	0.045
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

Table 5.11: Multivariate regression output non- and OECD investments

The last hypothesis intends to establish whether after the passage of Santiago principles there has been a shift in abnormal returns generation from the OECD countries into non-OECD member states. As we can see on the Table 5.11 above after the introduction of Santiago principles the abnormal return has increased for the non-oecd member states with coefficient (0.1493) significant at 95% (p-value<0.05) confidence level. Whereas, for oecd member states there is a negative relation of Santiago principles to abnormal returns (-0.0943), however statistically insignificant due to a very high p-vlaue. Additionally, if we look at the Table 5.12 below we can see that since the introduction of Santiago principles the mean for non-OECD is higher (0.0389) than the mean of OECD member states being (-0.0022). This means that after Santiago framework introduction the non-OECD member states have generated higher abnormal

returns as compared to OECD states. We can also see that there has been an actual reversion of abnormal returns from OECD to non-OECD states.

OECD					
SANTIAGO	N	mean	p50	p25	p75
0	2016	0.0583	-0.0302	-0.2371	0.1182
1	4032	-0.0022	-0.0289	-0.1061	0.0852
Total	6048	0.0179	-0.0302	-0.1561	0.0983
non-OECD					
SANTIAGO	N	mean	p50	p25	p75
0	2520	-0.0616	-0.0424	-0.1742	0.1115
1	3717	0.0389	0.0186	-0.1138	0.1232
Total	6237	-0.0017	-0.0080	-0.1215	0.1194

Table 5.12: Tabulated statistics output OECD and non-OECD

Such reversal could be due to stability, and maturity of developed (OECD) markets played a role in SWFs generating lower abnormal return. Because lower risk, dropping interest rates and higher capital requirements have smoothed-out the impact of positive abnormal returns. Whereas, in relation to the previous hypothesis, due to government encouragement for SWFs to invest domestically. Apart from that, as Santiso (2008) stated that emerging economies are now better and wiser at stewardship of their national wealth. This is the point where after the financial meltdown, SWFs are asking themselves if it is any longer wiser to invest in short-term liquid assets of industrial countries. By now, many SWFs have diversified actively towards other emerging regions coining them as development finance institutions (Santiso, 2008). Furthermore, as Fry et al. (2011) simply put that since investments in non-OECD regions are riskier than in the OECD region due to its volatility and uncertainty, they would offer a higher risk premium and hence higher returns.

5.3 Summary of Results

The chapter focused on testing and analyzing sampled data in order to establish whether the

hypotheses established can be either accepted or rejected with the highest degree of certainty

possible. As we can see on the Table 5.13 below we have accepted one hypothesis, partially

supported were two hypotheses and three out of six hypotheses were rejected due to lacking of

sufficient evidence and statistically insignificant p-values.

Hypotheses	Accept / Reject
H1: SWF have a positive impact on stock price and shares of firms in short-term following the inception of Santiago principles.	Accepted
H2: SWF increase the value of shares in the long-run, after passage of Santiago Principles.	Rejected
H3: SWFs that are more transparent generate higher abnormal returns on investments.	Rejected
H4: Since the passage of Santiago Principles, cross-border investments have decreased.	Rejected
H5: SWF investments have a greater positive impact on domestic firms as opposed to foreign investments.	Partially Supported
H6: Investments in non-OECD regions generates higher returns as opposed to investments in OECD states.	Partially Supported

Table 5.13: Hypotheses summary

The main notion of the accepted/partially supported hypotheses is that SWF as a

government financial vehicle within the periods in pre- and post- development of Santiago

framework has had a change in the way they invest. Primarily, after the implementation of

Santiago principles SWFs increased the positive effect of the investments they undertake which

the current study measured in abnormal returns. The framework has also promoted SWFs in

undertaking a higher proportion of investments domestically and in emerging markets. This is

due to the fact that Santiago principles was officially implemented during the financial crisis of 2008 and hence, such coincidence inflicted additional skepticism and precautions of SWFs towards the developed world. SWFs then began to seek higher returns away from mature and established markets.

On the other hand, three hypotheses have been rejected because Santiago principles did not affect certain SWFs behaviors the way we and other academic literature would have expected. First of all, we did not find any statistical significance of SWFs improving target value in the long-term in the pre- Santiago principles period neither in the post- period. Additionally, we would have expected SWFs with higher Truman transparency index to generate higher abnormal return within the event window, but we had to reject that notion. The reason for doing so was related to the fact that transparency involves timely information disclosure and update, which happens throughout the process. Every time both parties come closer to agreement the news are absorbed piece by piece by the market which softens the abnormal return effect as expectations of acquisition or a merger are highly likely.

Lastly, we rejected the hypothesis that Santiago principles decrease cross-border investments since the framework instead of imposing a more protectionist behavior on SWFs has promoted higher flow, transparency and open financial system.

6. CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

6.1 Conclusion

The purpose of this study was to answer the following research question:

Do sovereign wealth funds, following the inception of the Santiago principles, have greater positive impact on targeted firm value ?

The research question was developed based on the notion that SWFs as an important but obscure player in the global financial system have been relatively unregulated and unmonitored until 2008. In that year, has been a key step towards higher transparency, governance and regulation of SWFs in the global financial system. As a result, the research question is interested in answering whether the implemented GAPP-Santiago principles has had any effect on the investment appetite, diversification and overall behavior of SWFs.

Based on previous research academics such as Johnson (2015) argued that SWFs political motivation, obscurity and aggressiveness contributed to market disapproval as we established via abnormal returns pre-Santiago period. As Sun and Hesse (2009) argued, such popularity and threat to financial system distortions has seen the lobbying of Santiago principles in guidance of SWF fund investments processes approved. As a result, we have identified that in post-Santiago period the markets has positively reacted to the framework improving trust the market and other financial players have towards SWF investment decision.

On the other hand, researchers such as [Fotak et al., 2009; Demsetz and Lehn, 1985] find that long-term performance equity investments by block holders tend to be poor. This is due to the argument that SWFs purposes are not well diversified due to imposition of additional costs and of conflicting interests between SWFs and internal management. However, the study believed that Santiago framework would have changed the pattern in negative long-term returns.

Based on the findings we observe that even after the passage of Santiago principles, large long-term investments do not positively influence firm-value in the long-run.

Furthermore, the currency study tested for whether Transparency index, cross-border, domestic and non-OECD investments had a positive impact on abnormal short-term returns after the approval of Santiago principles. Kotter and Lel (2008) believed that transparency would act as a positive signaling effect to investors, which would positively reflect on abnormal returns. However, more transparent SWFs experience lower abnormal returns, since market absorbs investment information bit by bit building up investment expectations. As a result, the abnormal return impact is smoothed out. In relation to cross-border investments, we would expect a decrease in the portion out of the total investments due to stricter rules on investments reporting and disclosure which most SWFs prefer to keep in secret. However, we observed that instead there has been a boost in cross-border investment due to ease and openness in cross-country capital flow (IMF Survey Magazine, 2008).

The concluding remark to the study is that domestic and non-OECD investment impact has been positively correlated with Santiago principles. Such findings are partially due to an economic collapse of 2008. Many financial players have lost confidence in investments within the developed markets, apart from that the interest rates have been on a steady drop without offering any attractive opportunities. As a result, SWFs from the developing markets have established an intelligent investment environment within their own states, coining themselves as development finance institutions (Santiso, 2008).

6.2 Limitations

The present study is subject to certain limitations within sampling. First of all, the most of obvious was the lack of complete data regarding sovereign wealth investments within the available databases. There is no unified database that would give all the necessary data, and certain dates within the databases had not been accurate and did not represent the reality. Due to such an important limitation, the method used has been restricted to one particular model, because for any other estimation model to be used we had to improvise on certain estimates which were not available. Such practice would have misrepresented the findings.

6.3 Recommendations for future research

Given the status quo, it would be very interesting to develop a multi-factor model which would implement several factors in relation to behavioral finance since SWFs are investment vehicles that act at times irrationally and based on unorthodox decisions. In other words, it would be interesting to more accurately estimate and explain the reasons why SWFs behave in a certain way and not otherwise. Furthermore, it would be of further interest to quantify the impact Sovereign Wealth Funds have on the economy as a whole. Because many theorists have argued that SWFs have the potential to impact the economies of different states but it lacks practical evidence. Apart from that my thesis is limited to observing publicly listed target firms that SWFs have invested in. It leaves room to actually estimate the degree of influence SWF have on private and public firms.

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APPENDICES

APPENDIX A

Fund	Country	Volume (US$ bn)	Compliance Rank	Inception	Origin	Transparency Index
Government Pension Fund	Norway	824.9	98	1990	Oil	10
Abu Dhabi Investment Authority	UAE	773	78	1976	Oil	6
China Investment Corporation	China	746.7	74	2007	Non-Commodity	8
Kuwait Investment Authority	Kuwait	592	75	1953	Oil	6
Government of Singapore Investment Corporation P	Singapore	334	81	1981	Non-Commodity	6
Temasek Holdings Pte. Ltd	Singapore	193.6	84	1974	Non-Commodity	10
National Wealth Fund	Russia	73.5	47	2008	Oil	5
Reserve Fund	Russia	65.7	47	2008	Oil	5
Qatar Investment Authority	Qatar	256	18	2005	Oil and Gas	5
Libyan Investment Authority	Libya	66	N/A	2006	Oil	1
Australian Future Fund	Australia	95	93	2006	Non-Commodity	10
Alaska Permanent Fund	United States	53.9	94	1976	Oil	10
National Pensions Reserve Fund	Ireland	23.5	95	2001	Non-Commodity	10
Economic and Social Stabilization Fund	Chile	15.2	66	2007	Copper	10
Korea Investment Corporation	Korea	84.7	79	2005	Non-Commodity	9
State Oil Fund	Azerbaijan	37.3	72	1999	Oil	10
Alberta Heritage Savings Trust Fund	Canada	17.5	73	1976	Oil	9
Oil Stabilization Fund	Iran	62	N/A	2011	Oil and Gas	5
Superannuation Fund	New Zealand	20.2	97	2003	Non-Commodity	10
Pula Fund	Botswana	5.7	64	1994	Diamonds and Minerals	6
Petroleum Fund of Timor-Leste	East - Timor	16.9	73	2005	Oil and Gas	8
Heritage and Stabilization Fund	Trinidad and Toba	5.5	81	2000	Oil	8
Pension Reserve Fund	Chile	7.9	66	2006	Copper	10
Future Generations Reserve Fund	Bahrain	11.1	28	2006	Non-Commodity	10
Fund for Future Generations	Equitorial Guinea	0.08	N/A	2002	Oil	
Oil Revenue Stabilization Fund	Mexico	6	40	2000	Oil	4
		TOTAL = $4,387				

Non - Compliant	Country	Volume (US$ bn)	Compliance Rank	Inception	Origin	Transparency Index
SAMA Foreign Holdings	Saudi Arabia	668.6	0	N/A	Oil	4
SAFE Investment Company	China	547	0	1997	Non-Commodity	4
Hong Kong Monetary Authority Investment Portfolio	HK - China	417.9	0	1993	Non-Commodity	8
China Social Security Fund	China	236	0	2000	Non-Commodity	5
Investment Corporation of Dubai	UAE - Dubai	183	0	2006	Non-Commodity	5
Abu Dhabi Investment Council	UAE - Abu Dhabi	110	0	2007	Oil	N/A
Samruk-Kazyna JSC	Kazakhstan	77.5	0	2008	Non-Commodity	N/A
Kazakhstan National Fund	Kazakhstan	77	0	2000	Oil	2
International Petroleum Investment Company	UAE - Abu Dhabi	66.3	0	1984	Oil	9
Mubadala Development Company	UAE - Abu Dhabi	66.3	0	2002	Oil	10
Revenue Regulation Fund	Algeria	50	0	2000	Oil ang Gas	1
Khazanah Nasional	Malaysia	41.6	0	1993	Non-Commodity	9
Brunei Investment Agency	Brunei	40	0	1983	Oil	1
		TOTAL = $2,581				

APPENDIX B

Name	Country Code	Country
ATX - AUSTRIAN TRADED INDEX	AT	Austria
S&P/ASX 100	AU	Australia
S&P 500 COMPOSITE	BM	Bermuda
BRAZIL BOVESPA - TOT RETURN IND	BR	Brazil
S&P/TSX COMPOSITE INDEX	CA	Canada
FTSE EUROTOP 100 E	CH	Switzerland
SHANGHAI SE COMPOSITE	CN	China
MDAX FRANKFURT	DE	Deutschland
OMX COPENHAGEN (OMXC20)	DK	Denmark
EGYPT EGX 30	EG	Egypt
IBEX 35 - TOT RETURN IND	ES	Spain
OMX HELSINKI (OMXH)	FI	Finland
FRANCE CAC 40	FR	France
FTSE 100	GB	United Kingdom
HANG SENG	HK	Hong Kong
IDX COMPOSITE	ID	Indonesia
ISEQ 20	IE	Ireland
S&P BSE (100) NATIONAL	IN	India
FTSE MIB INDEX	IT	Italy
NIKKEI JASDAQ AVERAGE	JP	Japan
KOREA SE KOSPI 200	KR	Korea
KUWAIT KIC GENERAL	KW	Kuwait
KAZAKHSTAN SE KASE	KZ	Kazakhstan

COLOMBO SE ALL SHARE	LK	Sri Lanka
MOROCCO ALL SHARE (MASI)	MA	Morocco
EURONEXT 100	MC	Monte Carlo
FTSE BURSA MALAYSIA KLCI	MY	Malaysia
AEX ALL SHARE	NL	Netherlands
S&P/NZX 50	NZ	New Zealand
OMAN MUSCAT SECURITIES MKT	OM	Oman
KARACHI SE 100	PK	Pakistan
WARSAW GENERAL INDEX - TOT RETURN IND	PL	Poland
PORTUGAL PSI-20	PT	Portugal
QATAR SE INDEX	QA	Qatar
RUSSIAN MICEX INDEX	RU	Russia
SAUDI TADAWUL ALL SHARE (TASI)	SA	Saudi Arabia
OMX STOCKHOLM (OMX30)	SE	Sweden
STRAITS TIMES INDEX L	SG	Singapore
BANGKOK S.E.T.	TH	Thailand
TK ISE NATIONAL 100 SHARE PRICE INDEX NADJ	TR	Turkey
TAIWAN SE WEIGHED TAIEX	TW	Taiwan
NASDAQ COMPOSITE	US	United States
HOCHIMINH SE VIETNAM INDEX	VN	Vietnam
FTSE/JSE ALL SHARE	ZA	Zambia
ZIMBABWE SE INDUSTIRAL	ZW	Zimbabwe