STOCKHOLM SCHOOL OF ECONOMICS
Master Thesis in Finance
Spring 2008

SOVEREIGN WEALTH FUNDS
- A STUDY OF THE NEW POWER BROKERS

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Abstract

This thesis analyzes the extensively debated sovereign wealth fund market. The objectives are to widen the academic research on the topic by performing a market analysis and investigate whether the sovereign wealth funds are a potential threat to the countries receiving capital from the sovereign wealth funds. This is done by using a built-up theoretical framework covering three core areas of concern regarding the sovereign wealth funds - investment strategy, transparency and corporate governance. The empirical part constitutes of three sovereign wealth fund case studies (ICD in Dubai, Temasek in Singapore and the Norwegian Government Pension Fund – Global) which represents the characteristics of the overall market well. The market analysis shows that there are only a few funds which are big enough to be a potential concern to the receiving countries. Furthermore, there seems to be a correlation between democracy and transparency in the funds and the importance of the funds differs wildly among the countries. The conclusion from analyzing the SWFs potential threat is that there is one area where the SWFs may cause future reel concern. This is when there are clear corporate governance issues in emergent market funds, where the goal of the fund at least partly is to promote domestic growth. If all these factors exist, the fund’s influence in foreign portfolio companies could be used to unfairly transferring knowledge and technology to be used by the fund’s government or ruler. As the sovereign wealth fund market still is growing rapidly, an important area of future research would be to analyze the two funds which currently are starting their operations, the National Welfare Fund in Russia and the China Investment Corporation. Both will most probably start a new generation of funds where the size of the underlying country will raise new questions on how to deal with these funds.

Keywords: Sovereign wealth funds, transparency, corporate governance, protectionism

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Acknowledgements

The research conducted for this master thesis has included meetings in Singapore, Dubai, the United Kingdom and Norway. Without the generous and independent support from companies and organisations, this thesis could never have been finalized. Therefore, we would like to send our greatest appreciation to the two following organisations:

Coeli AB

SNS (Centre for Business and Policy Studies)

Furthermore, as this master thesis covers a topic where regular financial data is not always available, the input from knowledgeable and involved persons has been of crucial importance. Without them sacrificing their scarce time to meet us, the thesis would not have the quality it has today. Therefore we would like to thanks the following persons and organisations making this master thesis possible.

- Andreas Bjerke, SEB, Singapore
- Anders Ng, Nordea, Singapore
- Anna Maj Hultgård, Embassy of Sweden, Singapore
- Anonymous, Think Tank, Singapore
- Daniel Fristedt, SIS Ägarservice, Sweden
- Diaan-Yi Lin, McKinsey & Co, Singapore
- Eckart Woertz, GRC, Dubai
- Gerard Lyons, Standard Chartered, UK
- Hasan Jafri, Temasek, Singapore
- Jon Mjølhus, Formuesforvaltning, Norway
- Klas Ljungberg, Embassy of Sweden, Abu Dhabi
- Lars Bergman, Stockholm School of Economics, Sweden
- Mats Odell, Department for Local Government and Financial Markets, Sweden
- Masoud Rana, Investment Corporation of Dubai, Dubai
- Nicholas Anderson, Swedish Export Credit Council, Singapore
- Olle Rossander, Freelance Journalist, Sweden
- Per E. Larsson, Borse Dubai, Dubai
- Per Strömberg, SIFR, Sweden
- Peter Kvarfordt, Embassy of Sweden, Singapore
- Pär Ahlberger, Embassy of Sweden, Singapore
- Rachel Ziemba, RGE Monitor, USA
- Simon Edwards, Dubai Investment Corporation, Dubai
- Stefan Svanström, Department for Local Governments and Financial Markets, Sweden
- Stephen Jen, Morgan Stanley, UK
- Tom Arild Fearnley, Government Pension Fund, Norway

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ABBREVIATIONS

AuM	Asset under Management
CIC	China Investment Corporation
DIC	Dubai International Capital
DIFX	Dubai Financial Exchange
DFM	Dubai Financial Market
DPW	Dubai Ports World
FTA	Free Trade Agreement
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GIC	Government of Singapore Investment Corporation
ICD	Investment Corporation of Dubai
IMF	International Monetary Fund
KIA	Kuwait Investment Authority
NBIM	Norges Bank Investment Management
NWF	National Wealth Fund (Russia)
SWF	Sovereign Wealth Fund
CFIUS	The Committee on Foreign Investment in the United States
UAE	United Arab Emirates

1. INTRODUCTION

The introduction introduces the reader to the sovereign wealth fund market and describes the purpose of the thesis. Then, the most important concepts for the thesis are defined followed by a description of the methodology used.

1.1 Background

Sovereign wealth funds (SWF) are nationally funded investment vehicles where the assets usually originate from either commodity trading or current account surpluses. The funds have existed since the 1950s but their rate of investment and presence on the global scene have increased exponentially since the mid-90s, due to large increases in commodity prices and a rising imbalance in global trade patterns. As the SWFs have grown, so has their geographical investment horizon. In its infancy the funds mainly invested domestically or in foreign government bonds. Today they invest into a broad range of asset classes, and the numbers of SWFs have increased substantially. This has created an international debate where the countries receiving capital from the funds, perceive that the funds may be a threat to e.g. national security when investing in their markets. The concerns the receiving countries have raised is the general lack of transparency, solid corporate governance code and occasionally, very aggressive investment strategies used by the funds. For example, many of the funds invested heavily into the American and European financial markets during the recent subprime crisis. Still, there has been no direct evidence that any sovereign wealth fund has had goals other than pure financial, which many is worried of. Nevertheless, the debate is ongoing and both the EU and the U.S. have been fairly hostile against the sovereign wealth funds which partly has put market efficiency out of play as some of the funds have chosen to allocate less of the portfolio in the Western world and instead focus on other, more welcoming, markets.

Even if the SWF debate is intense, the public information about the funds is low. Hardly any academic work has been done, although some investment banks and think-tanks have conducted research on the topic. Most of this research is to generally describe the market in a brief and non-comprehensive way. Gerard Lyons is an exception, arguing that the most important aspect to mitigate potential threats from the sovereign wealth funds is to develop powerful intellectual property right laws worldwide.[3] Rozanov on the other hand sees the solution in the funds themselves, saying that the instability of many of the sovereign wealth funds is worrisome and that these countries should use the assets of the funds to provide economical and political stability in the country.[4] In another study Rozanov states that the high risk profile of some emergent market funds may just be a phase which will be overcome as the funds will get more explicit liabilities, e.g. pensions.[5] IMF agrees, but

[3] Lyons (2007)
[4] Rozanov (2008).
[5] Rozanov (2005)

underlines that most sovereign wealth funds so far have been rather conservative investors with a high fraction of outsourced asset management which reduces the potential threat.[6] Truman wants to become more hands-on and believes that all sovereign wealth funds should be rated on e.g. transparency and corporate governance in a complex framework. Funds ranking poorly should be pressured to either adapt to the demands from the U.S. or action must be taken.[7] These analyses are solid, but they are all very general and are discussing the topic on a high level. Furthermore, many of the investment banks performing analyses on the SWF market today, are partly owned by SWFs which reduces the validity of the reports. Hence, more research is needed.

As a response to the current debate on the potential threat from the sovereign wealth funds and the fact that there is a clear lack of academic research on the topic, the purpose of this thesis is twofold. The first purpose is to widen the base of academic research by conducting a market analysis of the sovereign wealth fund market. The second is to assess whether the funds are investing according to market principles or if they do have other objectives which is a potential concern for the receiving countries. This leads us to the following research question (exclusively of the market analysis).

- **Are the SWF-actors investing to maximize their returns or are they posing a threat to the receiving countries?**

The research conducted for the thesis has some important caveats. First of all, the reason to why there has been so little research on the area is due to the lack of information. The transparency among the sovereign wealth fund is low which has made it difficult to draw any numerical conclusions. To make up for this, interviews have been conducted with the sovereign wealth funds and actors working actively on the topic. Still, there are validity concerns important to mention as the reliability of the interviewees can be questioned. Some of the investment banks interviewed are partly owned by sovereign wealth funds and the funds themselves could have incentives to only communicate positive information.

It would have been interesting to include either the Russian or Chinese sovereign wealth fund as it would give a new dimension – the size of the country – to the analysis. These two funds are excluded from these study then they have not started their operations yet, even though this has not prevented China from doing a few high profile investments (e.g. Visa and Blackstone).

[6] IMF (2008:1)
[7] Truman (2008)

1.2 Definitions

In this part the two most important concepts for the thesis – "sovereign wealth funds" and the potential threat from them - will be discussed and defined to give the reader an understanding of what the two subjects stands for in the forthcoming analysis

1.2.1 Sovereign Wealth Funds

Defining sovereign wealth funds is difficult. No one seems to know where the exact borders around a SWF are yet. IMF is currently working on creating a definition which can be used internationally and most of the interviewed people for this thesis argued that the definition is one of the top-concerns today as the national investment vehicles must know whether they should adhere to future policies on sovereign wealth funds or not. Here, instead of exact defining the phenomenon, characteristics that a SWF at least must have to be considered a sovereign wealth fund is presented.

- It must be governed by a nation or a state under federal law
- The assets should not be counted as foreign exchange reserves
- There must not be any explicit liabilities
- The fund must be separated from the official monetary reserves
- The fund must have long investment horizon[8]

Lyons[9] argues that only funds which are owned by a nation should be defined as a sovereign wealth fund. This would exclude the sovereign wealth funds based in federal states, e.g. Alaska and Alberta, hence we choose to add state to the definition as well. That the SWF at least must be owned by a state or larger region is important as the current debate is rather blurred. For example the Russian energy company Gazprom is sometimes argued to be a sovereign wealth fund as it is owned by the state, but as Gazprom is a company per se, it will not be included.

The second point regarding the assets is very important to distinguish SWFs from other state owned organs. To give an example - consider China. The government of China has created a vehicle called China Investment Corporation (CIC), which, by many is considered to be a SWF. Besides CIC, China has the State Administration of Foreign Exchange (SAFE), which is a part of the central bank and has been invested in foreign treasuries for a long time. Nowadays, SAFE has broadened its investment base to include direct investments in stocks (e.g. the French oil company Total) which makes some media and politicians argue that they are a sovereign wealth fund. Still, SAFE is not considered an SWF as its money is not separated from the foreign exchange reserve although it has many of CIC's characteristics as being government owned.

[8] Partly with the input from interview with Stephen Jen
[9] Lyons (2007).

Notably, not everyone agrees with the characteristics mentioned above. For example, the U.S. Treasury argues that a SWF gets its assets from purely the official reserves. This would exclude e.g. Temasek which derived their assets from a transfer of public companies. Furthermore, characteristics such as long investment horizon and high risk are relative terms. SWFs may sometimes invest short-term to rebalance their portfolios and there is a large difference in level of risk between e.g. Temasek and the Norwegian Global Pension Fund. This makes defining the SWF-market difficult and the grey zone will inevitably always be there. Hence, the definition above should be seen as an overall guideline to what a SWF is.

1.2.2 Threat

As this thesis investigates whether the sovereign wealth funds pose a potential threat to the countries receiving capital from them, the word threat must be defined. We have chosen to divide threat into three categories – economical threat, political threat and knowledge transfer. An economical threat is explained as a distribution of economical power to the SWF countries. This threat is not in any sense illegal, but still a concern to many receiving countries. A political threat means that a sovereign wealth fund invests into companies abroad which then could be used as underlying factors by the head of state in the SWF-country in its foreign relations. Knowledge transfer means that sovereign wealth funds invest into strategic sectors abroad to give the SWF-country access to either technology or knowledge.

1.3 Methodology

This section presents the methodology used in the thesis. First, the thesis disposition will be presented, then some aspects on the data collection process is described.

1.3.1 Thesis disposition

The next chapter (chapter 2) will start by describing the development of the sovereign wealth fund market as this is crucial for the understanding of the current situation on the market. Then the market analysis will be presented. This will be done by merging the available data on the market, present and analyze it to create as a comprehensive view as possible of the sovereign wealth fund market.

A theoretical framework will then be created to divide the sovereign wealth funds into three different perspectives – investment strategies, corporate governance and transparency. These three perspectives cover the most critical issues regarding the debate, and form a base for examining the research question. The framework will then be implemented on three sovereign wealth fund case studies chosen to represent the sovereign wealth fund market. These three funds are the Investment Corporation of Dubai, Singaporean Temasek Holding and the Norwegian Government Pension Fund – Global, which all have been interviewed. First, the empirical findings on each fund will be presented and then analyzed using the theoretical framework. Finally, an overall analysis is conducted with the goal to generalize the case analysis and find an answer to the research question.

1.3.2 Data Collection Process

Collection of data have been made through sources including the data base Capital IQ, investment banks reports, official statements, speeches and reports from international institutions. The case studies are primarily based on interviews with the three funds and persons highly involved in the work of the sovereign wealth funds, e.g. think tanks, investment banks and consultants. In total, nineteen interviews have been conducted which are listed below.

- Anderson, Nicholas, Swedish Export Credit Council, Singapore
- Ahlberger, Pär, Embassy of Sweden, Singapore
- Bjerke Andreas, SEB, Singapore
- Edwards, Simon, Dubai Investment Corporation, Dubai
- Fearnley, Tom Arild, Government Pension Fund, Norway
- Jafri, Hasan, Temasek, Singapore
- Jen, Stephen, Morgan Stanley, United Kingdom
- Kvarfordt, Peter, Embassy of Sweden, Singapore
- Lyons, Gerard, Standard Chartered, United Kingdom
- Larsson, Per E., Borse Dubai, United Arab Emirates
- Lin, Diaan-Yi McKinsey & Co, Singapore
- Ljungberg, Klas, Embassy of Sweden, United Arab Emirates
- Mjølhus, Jon Olov, Formuesforvaltning, Norway
- Ng, Anders, Nordea, Singapore
- Rana, Masoud, Investment Corporation of Dubai, Dubai
- Rossander, Olle, Journalist, Sweden
- Svanström, Stefan, Department for Financial Markets, Sweden
- Woertz, Eckart, GRC, Dubai
- Ziemba, Rachel, RGE Monitor, US

The interviews have been structured in two parts. The first part included a qualitatively standardized template of questions with the objective to achieve answer to the main issues in the thesis and achieve a homogenous template of information from each case study. These questions mainly covered transparency and corporate governance issues. The second part uses a semi-structured[10] procedure where open ended questions were asked to give the respondent the opportunity to elaborate on the subject. Among these subjects, a range of perspectives have been highlighted to fulfill the objective to draw a clear picture of each fund.

2. THE RISE OF SOVEREIGN WEALTH FUNDS

1953 was the year when Dag Hammarskjöld was elected United Nations Secretary General, the year of independence in Cambodia and the death of the Soviet leader Joseph Stalin. What is less known is that 1953 also was the year when the first governmental investment vehicle, today known as sovereign wealth fund[11] (SWF), was created in Kuwait and named Kuwait Investment Authority (KIA).

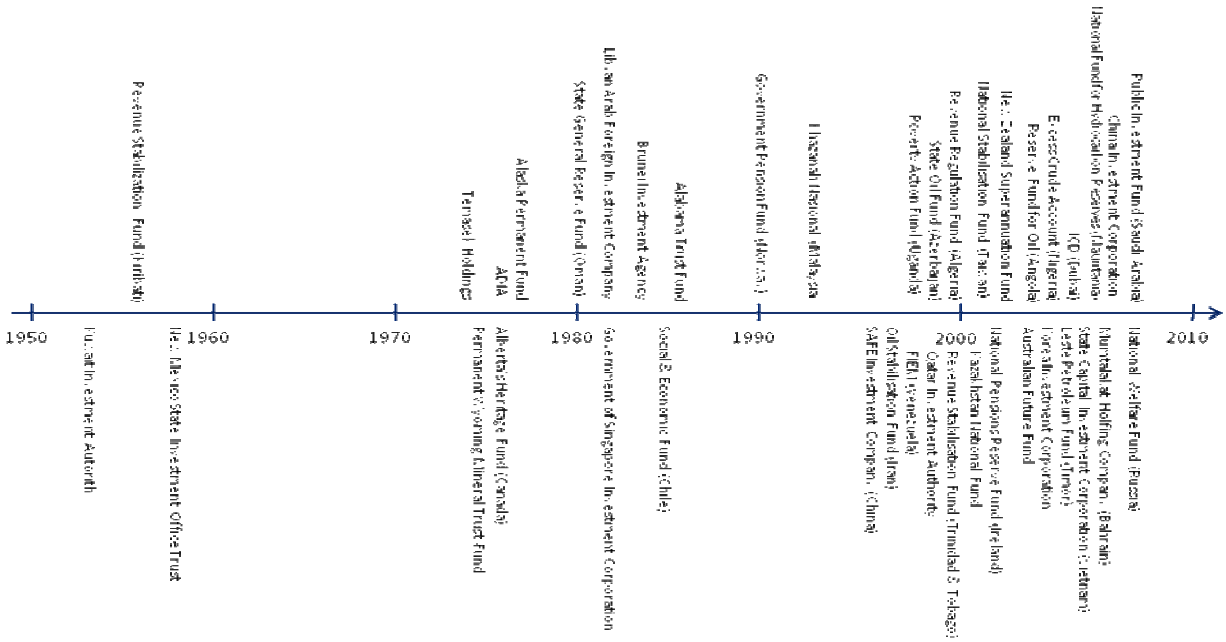

Figure 1: The start-up year for the SWFs.

It would be exaggerating to say that the start-up of KIA even got close to the media attention as the other events mentioned. During the 1950s a few more SWFs were silently created, but the real growth in number of SWFs did not start until the mid-1970s (See figure 1). The purpose of these funds was mainly to invest surpluses from sales of commodities or accumulated foreign exchange reserves originated from current account surpluses. These excess assets were not necessary for the central banks to perform interventions on the market or take other monetary actions. One alternative would be to use the funds in the home markets to promote domestic growth but as this increases the risk for

[10] Kvale (1997).

[11] Here the term *Sovereign Wealth Funds* is used generally. A more specific definition which explains the borders of the term will be introduced in chapter 1.

inflation, this is usually not an option. For example in Abu Dhabi the assets under management of the SWF Abu Dhabi Investment Authority (ADIA) is 521% of the annual GDP.[12]

The SWFs looked elsewhere to find safe investments that yielded more than having the assets invested on the money markets. Many of them still looked for assets that contributed to diversify from the volatile oil price dependence on the energy markets. The main target was the fixed income markets and particularly the government bond markets. U.S. government bonds were attractive as they were deemed as safe as it gets on the fixed income market and also because the Middle East countries could get them for attractive prices, as the U.S needed the capital infusion to finance their current account deficit.[13] From the creation of the first SWF until the beginning of the new millennium, bonds were more or less the only owned international assets held.

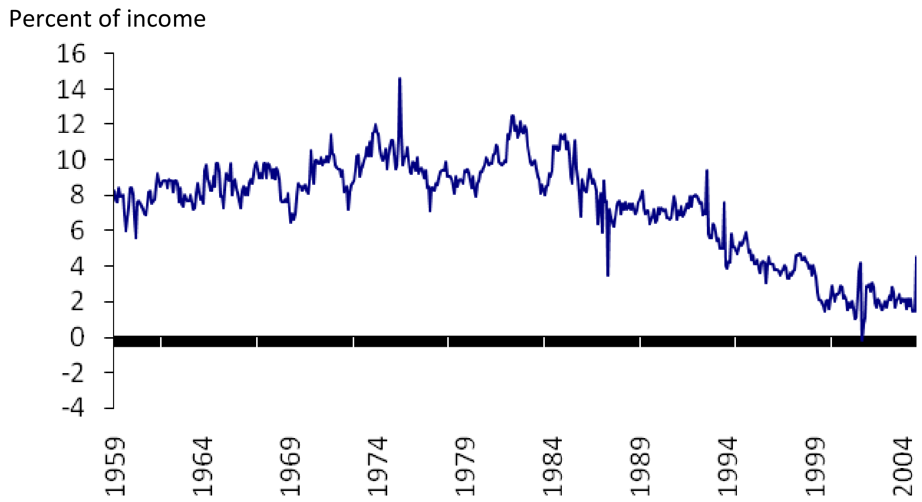

Figure 2: Individual saving rate (% of personal income) in the U.S.

During the years, these investments by sovereign wealth funds have proven valuable for the receiving countries. In the U.S., the personal saving rate has declined for years and even been negative during short periods of time after the millennium shift (See Figure 2). Combined with large current account deficits (See Figure 3), international capital invested in the U.S. has been crucial to sustain the U.S. economy.

[12] Zawya (2007).
[13] Woertz (2007).

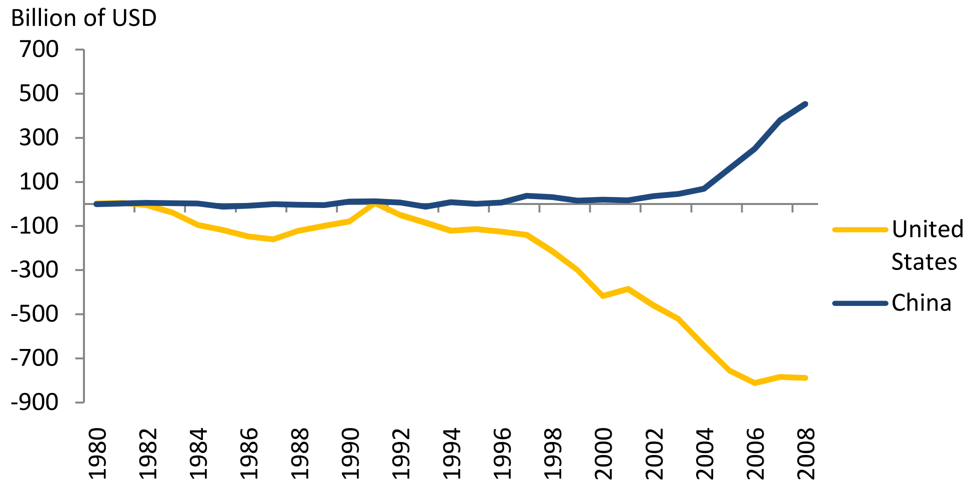

Figure 3: Current accounts / deficits for China and the United States, 1980-2008.

In the very end of the 1990s, the actors on the oil markets could look back on a decade with relatively stable oil prices. Even if the consumption of oil was high, the Brent oil had started the decade on $24 per barrel, and ended in 1999 by a price of $18 per barrel. Although a large difference in percentage units, it was still a relatively modest change in absolute terms. Since then, the oil price has skyrocketed (see figure 4). Events as the 9/11 terrorist attack, the growing demand of energy in the developing world and pure speculation have made the oil price to cross the $100 per barrel, reaching over $120 per barrel (See Figure 4) and no one seem to know where the end will be.

After recovering in 1991, the U.S. current account again started to slide in 1991, a trend that has continued ever since. By no means, the U.S. is not the only country with a current account

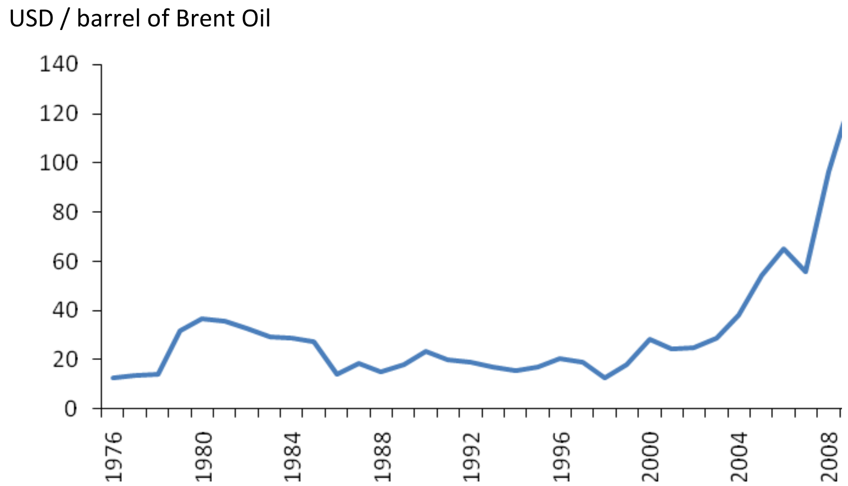

Figure 4: Price of Brent oil per barrel, 1976-2008[14].

[14] British Petroleum (2008).

deficit, but as the U.S. has been the engine for world growth, its economical development has had a large impact on the global markets. Research points out that the U.S. interest rates would be 75 bps higher today without the bond investments from foreign investors, where the sovereign wealth funds have played an important part.[15]

Highly correlated to these two trends are the SWFs. As energy prices continue to rise, more money is flowing into oil producing countries, where these governments transfer this income into their SWFs. The same goes for countries such as South Korea and China with large accumulated current account surpluses, which have given their central banks more foreign exchange reserves than necessary for the daily operations. In 1990, the SWFs were estimated to have approximately $500

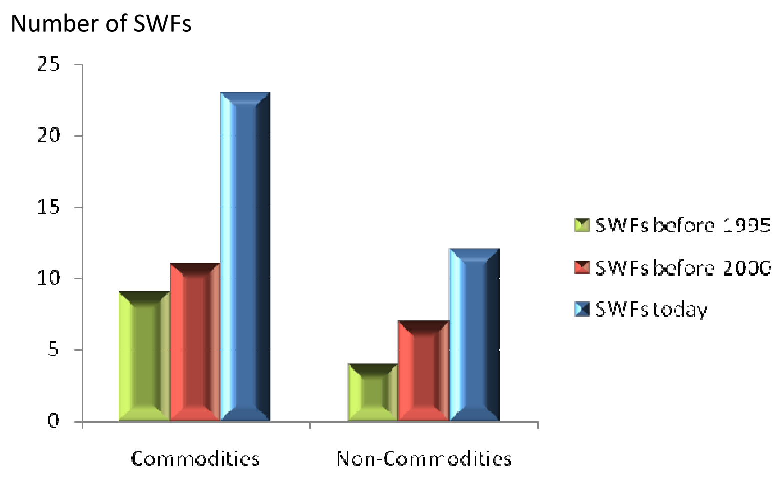

Figure 5: Number of Sovereign Wealth Funds based on commodity and non-commodity[16].

billion under management. In 2008, the same number is somewhere around $2-3 trillion, approximately the size of the total hedge fund (not including leverage) and private equity markets combined[17], but significantly smaller than the total value of the $190 trillion global security market.[18] However, the growth rate of the sovereign wealth funds is expected to be much higher than the security market on average, e.g. Morgan Stanley estimates the assets under management by SWFs to be as large as $12 trillion in 2012[19]. Most research indicates that the sovereign wealth funds soon will be larger than the accumulated foreign exchange reserves in the world, which in 2007 was estimated to be approximately $7 trillion by IMF.[20] Apart from their assets under management, the number of SWFs has skyrocketed where 20-30 new SWFs have been created over the last 15 years. Still the four largest SWFs (ADIA, the Government Pension Fund of Norway, GIC of Singapore and the Russia's

[15] Farrell et al. (2008)
[16] See Appendix 1 for details.
[17] Johnson (2007)
[18] IMF (2008:1)
[19] Jen (2007)
[20] IMF (2008:1).

Oil Stabilisation Fund) count for approximately 2/3 of the total aggregated value[21] although China Investment Corporation has the potential to grow as the Chinese central bank has very large excess reserves.

An important initial conclusion is that the phenomenon of sovereign wealth funds, which are severely criticized today, is due to large international structural trends for which the Western world to a great extent is responsible. The major part of the world's energy demand comes from the European Union and the U.S. and the U.S. has for long time had an unhealthy imbalance in its trade, which has caused monetary assets to be concentrated in other countries such as China. Hence, the sovereign wealth funds are due to an economical development started by Europe and the U.S.

As the SWFs have grown large, they have started to look at other asset classes than fixed income. The reasons are several. From an investment perspective, having all funds invested in government bonds means that the SWFs are highly exposed to interest rates movements and inflation, which is not a great extent of diversification. This means that higher returns could probably be earned without increasing the risk significantly by broadening the portfolio into other asset classes. The first natural step for the SWFs was to look into the global security markets to gain from equity risk premiums. Even if the initial investments into the stock markets were not uncontroversial, the real explosion of public attention did not occur as long as the SWFs were investing very small stakes, similar to index investing. The first equity deal which really brought the attention of media and in the corridors of Washington and Brussels, was the U.S. port deal where Dubai Ports World (DPW) acquired Peninsular and Oriental Steam Navigation Company which owned six U.S. ports. Even if there had been controversy around the funds before (for example the Kuwait Investment Authority was forced by the U.K. government to divest its large stake in British Petroleum in 1988), the port deal was the triggering event. DPW had to sell its stake after severe pressure from the U.S. congress and the public, even though they had been accepted by CFIUS.[22] What must be noticed is that Peninsular and Oriental Steam Navigation Company was not a U.S. company before the deal but was owned by a British company in the first place.

The reason to the media attention in the U.S. port deal was due to the fact that Dubai Ports World not only become minority owner but acquired the whole company. The consequence of this was that new corporate governance issues came into the spotlight, for example how active the sovereign wealth fund would be in the daily management of the company and what the investment's long-term strategic rationale was. There was also an uncertainty whether the ownership of Dubai Ports World only had financial investments in mind or if there were other objectives as well.

The DPW-deal was the trigger for the debate. In the summer 2007, the subprime crises hit the U.S market. The crises lead to larger spreads on the lending market, which made it harder to achieve

[21] U.S. treasury (2008).
[22] CFIUS assess whether an investment causes any concerns regarding national security in the U.S.

cheap financing. The result of massive CDO write offs, combined with higher interest rates for borrowing, was that many banks faced problems and could not find sources to raise capital. At the same time the sovereign wealth funds were looking for opportunities to diversify their holdings. The timing was perfect for both the banks and the SWFs and CIC, Temasek and ADIA are now part-owner of Morgan Stanley, Merrill Lynch and Citigroup respectively.[23]

Today the term sovereign wealth fund is widely debated all over the world. Actually, the term *sovereign wealth fund* was not invented until 2007 when Andrew Rozanov expressed the phrase in a well known article in the Journal of Central Banking.[24] Some people, like the Swedish Minister for Local Government and Financial Markets, Mats Odell, welcomes the SWFs and see them as contributors on the international financial markets[25]. Other see them as a mere threat to national security and corporate governance. Unarguably, the sovereign wealth funds had a major positive impact on the global financial markets during the subprime turmoil.

As no real global decision has been made on how to react to the SWFs expansions, many suggestions still circulate. Four options seem to be the most discussed which are 1) Do nothing at all and encourage free markets for real 2) Take the opposite stance and regulate the SWFs investments in the receiving countries 3) Demand that the SWFs relinquish the voting power of the shares. 4) Setting up a voluntary code of conduct on a supranational level.[26] Currently, IMF is preparing a voluntary code of conduct together with the SWF-countries and the receiving countries, e.g. the U.S. and the European Union. Sovereign Wealth Funds such as Abu Dhabi Investment Authority, Government of Singapore Investment Corporation and the Norwegian Government Pension Fund – Global have officially promised to adhere to the conduct and other SWFs has expressed their willingness to cooperate. Still, the debate continues and many argue that the code of conduct will not be enough to make the potential threat from the SWFs diminish.

3. THEORY OVERVIEW

The purpose of the theory chapter is to build up a framework for the forthcoming analysis on whether the Sovereign Wealth Funds invest to maximize returns or have other agendas. The framework will be divided into three main topics - transparency, corporate governance and investment strategy. At the end of the chapter, the final framework will be constructed and discussed.

[23] Sovereign Wealth Fund Institute (04/08).
[24] Rozanov (2005).
[25] Interview with Stefan Svanström (04/23/08).
[26] Lyons (2007).

3.1 Theory introduction

The sovereign wealth funds have one objective in common, regardless of how they operate and are regulated. This is to generate returns. Some of them have additional goals, e.g. to promote domestic growth, but to have more than one goal is nothing uncommon. Pension funds commonly want to gain returns but still adhere to ethical and environmental guidelines. The difference between the sovereign wealth funds and pension funds is that the latter normally is more diversified and does not take active stakes in companies. Instead they do have an explicit liability side which SWFs usually do not have. This makes it more difficult to assess a SWF than a pension fund as if the pension fund does not invest to match the liability side, it will soon be easy to notice as there will be lack of money to pay out.

This is not the case for the SWFs which make it hard for the outsider to understand how they actually invest and which goals they have. Some SWFs have communicated their goals and their strategies to obtain them, which have lead to that there is no controversy around them. Others have neither communicated the goals or how they want to achieve them. Hence, many of the SWFs do not have explicit controlling mechanisms like other investors on the market. Because of this, it is important for the countries receiving capital from them to get complementary information on corporate governance structure and investment strategies before deciding whether to accept the SWF as investor or not.

The conclusion is that there are three areas of the sovereign wealth funds which are important to understand to be able to assess whether the SWFs should have access to free international market and compete with pension money and other savings. First, if there is a reason to why the SWFs are less transparent to other actors on the market for a reason or if this might be due to that they do have something to hide. Secondly, how the corporate governance structure is set as this is a sign of whom actually setting the strategies. Finally how the SWFs invest, to see if there is a natural explanation to investment strategies which differ from other actors on the market. These three factors will be further discussed below.

3.2 Transparency

Transparency is necessary to obtain financial stability[27] and obtain legitimacy within the financial system. Lack of transparency entails higher costs and protectionism within the financial markets. A comparison with central banking processes can be made. Eijffinger et al.[28] argue that transparency is needed to be able to evaluate the performance of a central bank and the perceived control it gives the external stakeholders. This can be compared to the sovereign wealth fund debate where transparency at least would help the receiving countries to evaluate the SWFs themselves instead of only trusting the funds. Even if they would reach the same conclusion as the funds, they would feel more

[27] Hall, R et al. (2005).
[28] Eijffinger et al. (2002)

comfortable with the situation. As Eijffinger writes, transparency is also a tool for holding the counterpart responsible for its actions. This is an important aspect on the SWF-market as these funds usually are connected in some way to the government which makes the tools very powerful if a sanction should be needed.

The discussion about transparency addresses this issue – how these funds defines their objectives and how open they are to reveal it. To prevent fear in the market among financial institutions and politicians, there has been a huge discussion about guidelines or regulations for Sovereign Wealth Funds. In 2005, OECD launched their framework for corporate governance and transparency among state-owned enterprises. In addition, the International Monetary Fund (IMF) currently works on a code of conduct for the Sovereign Wealth Fund industry, which will include transparency guidelines. The aim is to provide the industry with standardized guidelines that these funds could follow on a voluntary basis, even though some politicians have expressed that there could be national regulations, forcing these funds to follow the guidelines if they want to invest in their countries.

To investigate whether there are objectives apart from getting returns, revealed information is a crucial issue and tells us something about the probability of a SWF having a hidden agenda. Funds that reveal nothing, have certainly easier to have hidden agendas than those which are disclosing everything. To identify what issues that are most important, the guidelines from OECD[29] for state-owned companies is a good start as the IMF work is not completed. By looking at the OECD report, there are several topics that are important in the sense of transparency. OECD recommends that the statements below should be fulfilled to obtain a good level of transparency, which includes:

- Disclosure at ownership level and at company level
- Disclosure of material information, including:
    - Investment objectives
    - Ownership and voting rights
    - Disclosure of listed companies
    - Disclosure return on investments
- Disclosure of controlling mechanisms
- Independent external audit

The framework for the transparency analysis consists of standardized questions, mainly derived from the OECD guidelines (See table 1) which will give an initial view of each fund's transparency. Although a SWF may have many of the factors asked for in the framework, this does not say anything of the quality behind the external communication and the willingness to become better. The

[29] OECD (2005).

transparency issue is a much broader issue than just the request of information. Cultural differences are one example where there are large differences between the Western world and the rest of the world. From a Western perspective everything should be as transparent as possible but this is not in line with other cultures. This and not hidden agendas, may be the reason to low levels of transparency and must therefore be included into the theoretical framework.

Question	Yes	No	N/A
Is there a public Annual Report easily available?			
Is there an annual public statement of AuM?			
Is there an annual public statement of the asset allocation?			
Is there an annual public statement of the geographic allocation?			
Is there an annual public statement of the fund's return?			
Is there an annual public statement of each investment's return?			
Are the external investment managers' mandates publically available?			
Does the SWF have regular independent audit?			
Is there a publically available audit report?			
Does the SWF publically state their objective and investment strategy?			
Does the SWF publically state the ownership structure of the fund?			

Table 1: Standardized transparency questions

The fact that the demand for transparency has increased dramatically over the last couple of years and many funds are recently founded makes it interesting to evaluate if the funds have worked towards becoming more transparent. That would give a feeling if there is an agenda for meeting the demands in the future, which in some sense highlight the intention from the funds.

As a result, the overall framework for the transparency analysis in each case study will consists of three perspectives – the culture issue, external information provided and the development over the last years regarding transparency.

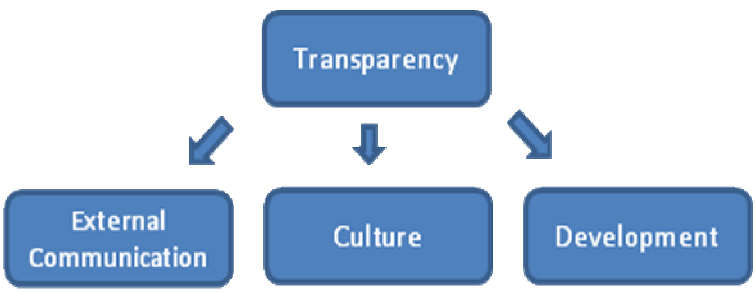

Figure 6: Transparency framework.

3.3 Corporate Governance

Corporate Governance is a topic which has gained increased attention the last years, partly as a consequence of scandals like Enron and MCI Worldcom. As Sovereign Wealth Funds lately have gained increased impact on the financial markets, many politicians have criticized the lack of explicit corporate governance strategies in these funds. Along with the increased demand on sovereign wealth funds for increased communicated corporate governance strategies, voices have also been raised arguing that many of the fairly new and large owners on the market, e.g. the pension funds, have not developed their own corporate governance control. Pension funds are usually well diversified and only minor shareholders in single companies which has lead to that ownership issues have been less prioritized. The criticism against pension funds has been fierce as many stakeholders have wanted them to take more ownership responsibility. Ironically, the problem with sovereign wealth funds and corporate governance issues is just the opposite, the politicians are afraid that the funds will be too active.

From the academic literature, Fama and Jensen (1983) argue that to achieve an effective and independent executive board, it is necessary to clearly separate the mandates between the owner and the board. To achieve this, all shareholders should state be active on the annual general meeting and vote for board members but not influence the board in the daily work. Fama and Jensen also show that the most important thing in the composition of the boards is to engage independent outstanding managers. This creates independent boards that are less affected by majority shareholders and instead creates corporate value. From this discussion it is important to analyze how the governance structure among the SWFs is set to see whether value can be lost due to a non-efficient ownership structure.

From the OECD guidelines launched in 2005, one can find the most important corporate governance topics in state-owned entities. The OECD focuses on the independence between the owner, the board and the executive management which they argue is the crucial issues for obtaining a good model of corporate governance. OECD recommends[30] all state-owned entities to follow the guidelines below.

- Clear and disclosed ownership policy
- No direct interference in day-to-day activities
- Boards should carry out their responsibilities
- Centralisation/coordination of the ownership function
- Accountability secured
- Effective exercise of ownership rights
- All shareholders should be treated equitably
- High degree of transparency towards all shareholders

[30] OECD (2005).

Without a clearly communicated corporate governance strategy in the SWF, arguments are that it is difficult to know how the funds exercise their power in the portfolio companies. Most of the sovereign wealth funds argue that they are not active investors and are not trying to influence the board and the executive management. Furthermore, some of them do not express anything at all about corporate governance and several points out that they will act like active owners and have an agenda for corporate governance. Active ownership in the portfolio companies is a prerequisite to be able to influence them to implement a potential underlying goal.

Hence, to investigate the corporate governance agenda, each case study contains an analysis which will include two sub-perspectives – each fund's ownership structure and the active ownership in the portfolio companies. The first one includes a discussion on how each fund is managed by its government, the connection between the government and the fund and if there are clearly communicated guidelines regarding these issues. The key issue in the second perspective is to identify how these funds actually operate and how their corporate governance agenda look like in their portfolio companies.

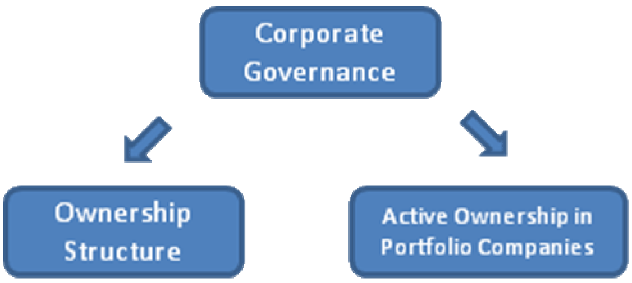

Figure 7: Corporate governance framework.

3.4 Investment Strategy

Many of the most common investment principles apply to sovereign wealth funds. As a start, geographical allocation has been known to have diversifying effects for long, although diminishing as globalisation spreads out and increases the correlation between markets.[31] Still there are benefits from international diversification. If the SWFs would choose to only invest on their home markets, the domestic industries might become less competitive internationally due to appreciated exchange rates and the risk for inflation.[32]

Another of the most important decisions for any fund is how to allocate the assets between different asset classes. By investing in different asset classes, the portfolio gains from diversification

[31] Rodriguez (2006).
[32] Gieve (2008).

as different asset classes normally[33] have less correlation among themselves, then just correlation between stocks. The goal of asset allocation is to find the efficient portfolio in the mean variance portfolio.[34] Although based on many unrealistic assumptions, Markowitz mean-variance theory is still applicable and extensively used. Although Harry Markowitz *Portfolio Selection*[35] was written in 1952 and the first sovereign wealth fund was created in 1953, it took a long time before the funds realized that they could invest their assets more efficiently by extending their number of asset classes. However, after the introduction of equity investments, the progress has been faster. Many funds have introduced private equity and infrastructure investments. These asset classes demands more risk tolerance than simple equity index investing, which increases the risk but also the potential return.

Theoretically when choosing risk level, it is of importance to match risk with time horizon. Risk tolerance is often mentioned to be correlated with time horizon of investments[36], which in terms of sovereign wealth funds implies a higher risk tolerance than normal investors. Several sovereign wealth funds have an investment objective to secure their funding for *future generations*, normally implying a longer investment horizon than the average investor. Hence, the sovereign wealth funds could allocate some of their assets into riskier asset classes to gain from liquidity premiums. On the other hand, the sovereign wealth funds have the option to outsource the active management of the portfolio to external managers. If this opportunity is used, the risks of other agendas than maximizing returns are less. Stephen Jen at Morgan Stanley argues that e.g. ADIA has 70% of its portfolio management outsourced and this is clear evidence that they are non-strategic.[37]

If there are investment objectives that distinguish from the purpose to maximize returns, it is important to identify the patterns that make such a strategy possible. Active ownership is difficult to utilize if one do not have any large, direct stakes in the portfolio companies and it is difficult to be a concern to foreign governments if you do not invest in their countries. Consequently, if a sovereign wealth fund should be considered a concern to other countries from an investment strategy perspective, they should fulfil at least one of the following statements.

- be diversified geographically into other markets than its domestic and into different asset classes than fixed income
- have high tolerance of risk
- take or aim to take direct stakes into companies on the stock market
- not have the majority of its asset management outsourced to third party managers

[33] Hall et al. (2005).
[34] Kaplan (1998).
[35] Markowitz (1952).
[36] Canner et al. (1997)
[37] Interview with Stephen Jen (04/29/2008).

By analyzing these issues for each fund, a clear picture should arise how they run their business and what their objectives are for investments. Therefore, these four perspectives will be the base for the investment strategy arm of the framework as shown in figure 8.

Figure 8: Investment strategy Framework

3.5 Framework for Analysis

The three theoretical perspectives presented above are merged into a general framework (See figure 9). The framework will be used in the next chapter to analyse whether the sovereign wealth funds are a threat or not when investing in foreign markets. After the analysis, each fund will be graded on each of the three topics included in the framework and then assessed whether there is a potential concern to a receiving country or not.

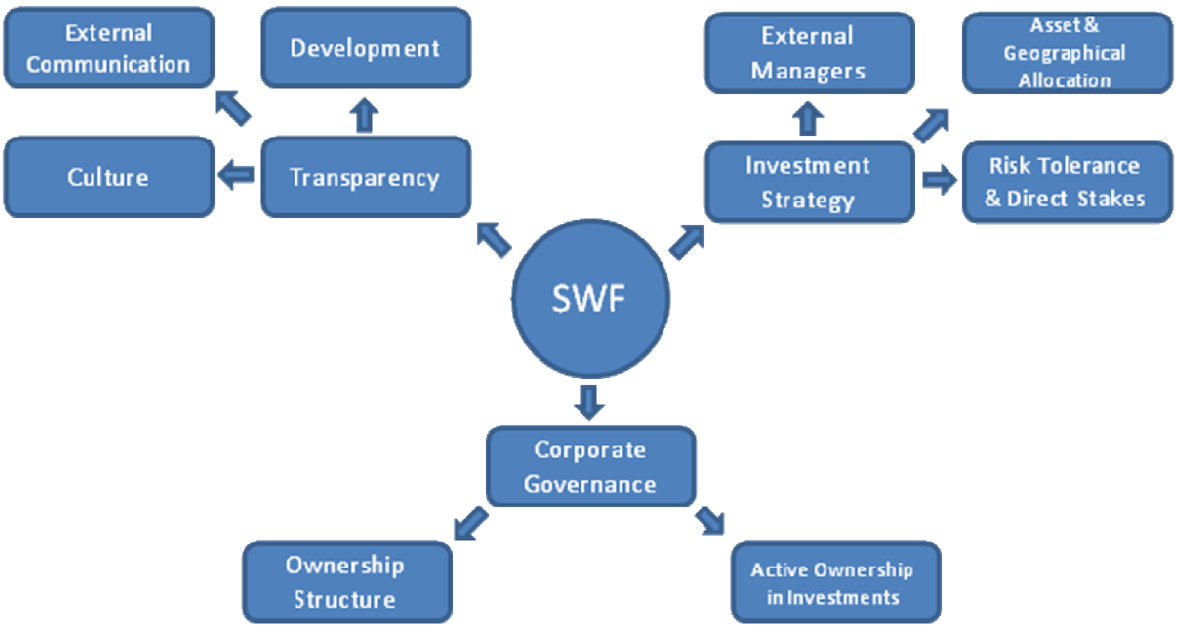

Figure 9: The Final Framework for Analysis

4. Market Analysis

The aim of the chapter is to provide a wide market description with all existing sovereign wealth funds. The market analysis is divided into three parts a) an overview of the SWF-market and its structure and future b) a benchmark analysis where the SWFs are compared to another large institutional actor – the pension funds c) an analysis of the overall transparency climate among the SWFs.

4.1 Market Overview

Figure 10: Geographical Locations of SWFs

The geographical spread of sovereign wealth funds is presented in figure 10. The most important conclusion from the map is that the sovereign wealth fund phenomenon, in contrary to the general belief, is not a regional phenomenon concentrated to the GCC-countries. Instead all continents are represented and the funds are as common in Africa and Asia as in GCC. However, when going one step further to analyze the size of the SWFs and their relative importance for each country, measured as the ratio between assets under management and the annual GDP, the picture changes. For example, the Alaska Permanent Fund which manages the oil revenue streams from Alaska's oil fields, only accounts for 0.3% of the annual GDP in the U.S. Still, as the assets remains in Alaska which is not a country, rather a clipped sovereign state it may be unfair to compare it to the country's GDP. If a comparison is made to the GDP of Alaska[38] the same ratio is 98% which is not a number to be ignored. The second clipped sovereign wealth fund, Alberta Heritage Found in Canada, ratio is 6.7% on the state level compared to 1.3% on country level.[39] Looking in figure 11, one sees that there is a strong correlation between the country size and the dependence on the sovereign wealth fund, the

[38] Palin et al. (2006)
[39] Province of Alberta Economic Outlook (2007).

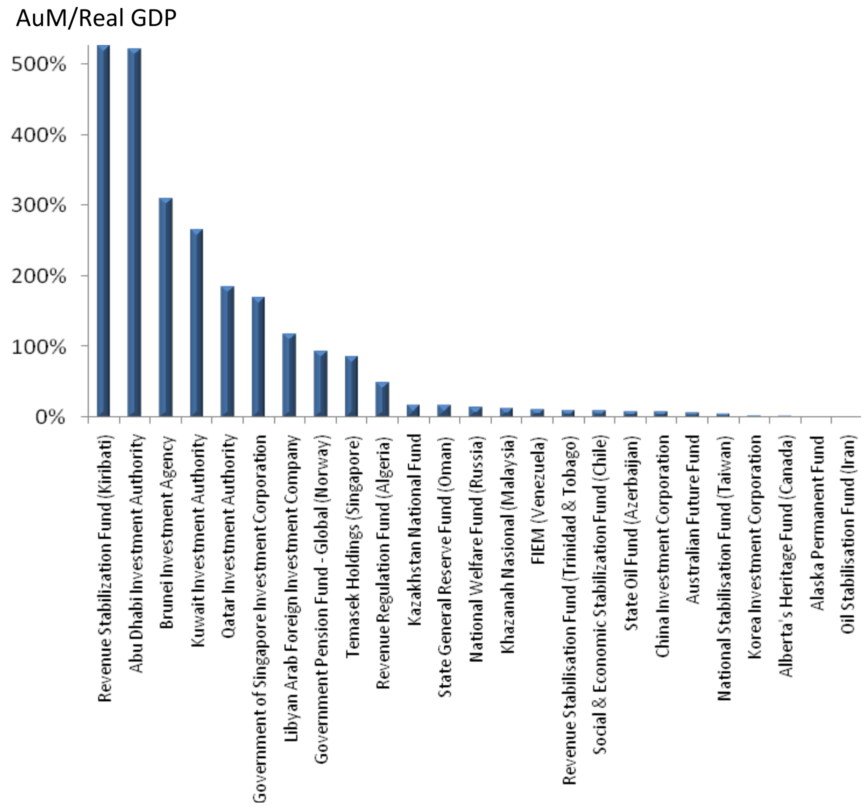

Figure 11: Assets under management in relation to its country's real GDP 2008[40].

smaller the country, the more dependent it is to its SWF. At the same time, the sovereign wealth funds with the highest assets under management to GDP ratio are commodity funds. The chart is interesting from a political perspective as it should be reasonable to assume that the higher the ratio, the more important is the progress of the ongoing debate on SWFs.

Potential international investment restrictions which affect the possibility of an efficient asset allocation only by little could have severe effects for e.g. Abu Dhabi as a country in real terms. Hence, the funds where the SWF is worth more than 50% of annual GDP should have most interest in finding a solution to protectionism in the Western world. Although not proved, the funds with high AuM/GDP ratio may be the countries where the risk for technology and intellectual property rights transfer is high as the countries themselves do not have the capacity to build up their own facilities for development.

Symbolic for the general lack of transparency on the SWF-market is that no one so far has been able to estimate the market size with any larger portion of certainty. Many attempts have been made, but particularly the sovereign wealth funds in the Middle East region are reluctant to communicate their assets under management. Instead of making a guesstimate, table 2 presents the most quoted sources for the total value of the SWF-market. Based on sometimes fragile assumptions as unknown oil production but even more importantly, how sovereign wealth funds are defined which

[40] See Appendix 2.

may result in estimating different funds, there seems to be some agreement that the SWF-market has a value between $2 trillion and $3 trillion.

Estimates of SWF-market's total AuM	**Trillion $**
Stephen Jen, Morgan Stanley	2.3 - 2.5
Gerard Lyons, Standard Chartered	2.158
IMF	2.093 - 2.968
Edwin M. Truman, Petersons Institute	2.032

Table 2: Estimates of the SWF-market[41].

When trying to estimate what the value will be in the future, the uncertainty goes from uncertain into pure speculation. To speculate about future size, there are two main drivers which must be considered, the growth and price in the underlying asset (i.e. commodity) and the willingness of the government to allocate more of its capital into the SWFs. For example China today has the highest saving rate in the world and has accumulated $1.682 trillion[42] in foreign exchange reserves. Depending on the how its current account balance will develop and how much the government is prepared to transfer to CIC, the fund has the potential to grow extremely fast. In figure 12 below, growth rates estimates are shown for selected sovereign wealth funds. CIC is not included in these analysis as it officially has not started its

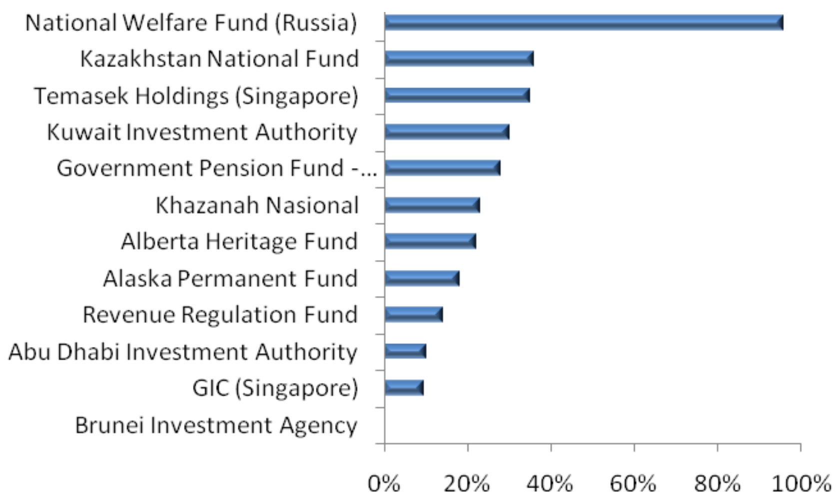

Figure 12: Estimated growth rate 2008 (selected SWFs)[43].

operations yet. As one can see from figure 12, the Russian sovereign wealth fund is estimated to be the fastest growing which naturally is dependent on future energy prices. The most quoted study for the size of the future SWF-market is Morgan Stanley which estimates the market to be approximately $12

[41] Jen (2007), IMF (2008:2), Lyons (2007), Truman (2008)
[42] IMF (2007:2).
[43] Lyons (2007), See Appendix 3 for more details.

trillion in 2015 using the underlying assumptions that total oil revenues will increase 10% annually and that non-commodity sovereign wealth funds will become as large as commodity base funds.

The uncertainty continues when trying to estimate the size of the individual sovereign wealth funds. The most sensitive numbers are the assets under management of the Middle East Funds, particularly ADIA and ICD. The Abu Dhabi Investment Authority has never revealed its assets under

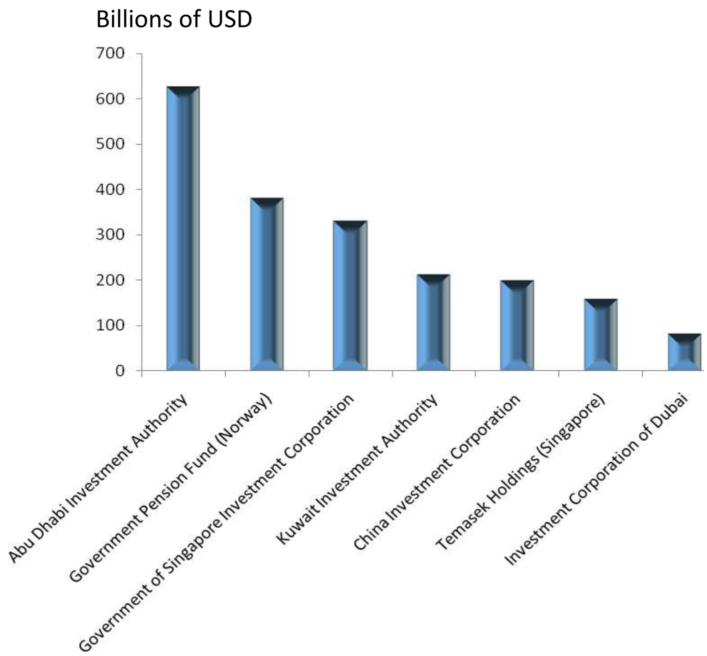

Figure 13: The seven largest SWFs and their assets under management 2008[44].

management since the start in 1976. Different estimates vary between $200 billion to $875 billion. In figure 13, ADIA's assets are estimated to $625 billion in line with Gerard Lyons at Standard Chartered's estimate[45]. The seven largest SWFs presented in figure 13 accounts for approximately 79% of the total sovereign wealth fund market. Combine this with the fast-growing Russian SWF (see figure 14) and the possibility for the Chinese government to transfer parts of the 1.682 trillion foreign exchange reserve into CIC, there will soon be eight very large funds. These eight large funds are the ones that could have the most real impact, which should give that the global community should put most of their effort approaching these funds to increase their transparency.

The remaining sovereign wealth funds have total assets of approximately $500 billion, which is not even the estimated size of ADIA. One fund rarely discussed in media and among politicians, is the sovereign wealth fund in Libya. Currently, it is the 10th largest fund and has a very unstable government behind it. The main reason for the ignorance of the Libyan Arab Foreign Investment Company is probably that they do not allocate any large fraction of their assets into the U.S. or

[44] See Appendix 1 for details.
[45] Lyons (2007).

Europe. Even if these funds are small in comparison to the great seven, they could still cause concerns among west politicians. As mentioned in the case of KIA and the fact that QIA recently tried to acquire the UK retail giant Sainsbury[46] which show that these SWFs can be very powerful, although within a limit number of target companies.

One of the most important factors for the sovereign wealth funds are its return on investments. This is also one of the least communicated figures which make it hard to draw any conclusions as only a few funds report their returns. In figure 15, the returns for eight sovereign wealth funds are presented, where data could be obtained. Worth to notice, is the

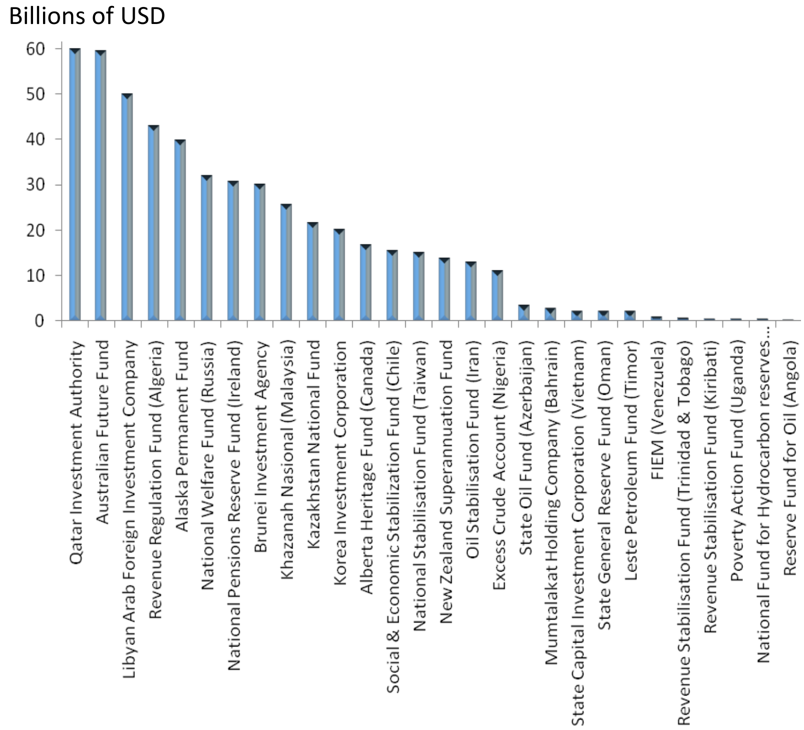

Figure 14: Assets under management for the remaining SWFs[47].

the large spread between the returns which not only indicates the skill of each fund but mainly the very different strategies they have implemented. Temasek Holdings is a pure equity house similar to a private equity house, while the State Oil Fund of Azerbaijan has 60% of its assets allocated to cash which naturally generate low returns. The Government Pension Fund is known to take a rather conservative approach where the target for equity allocation has been 40% (compared to the pension fund average of 60%, see figure 18) until recently when the threshold was set to 60%.

[46] Sovereign Wealth Fund Institute (04/08).
[47] See Appendix 1 for details.

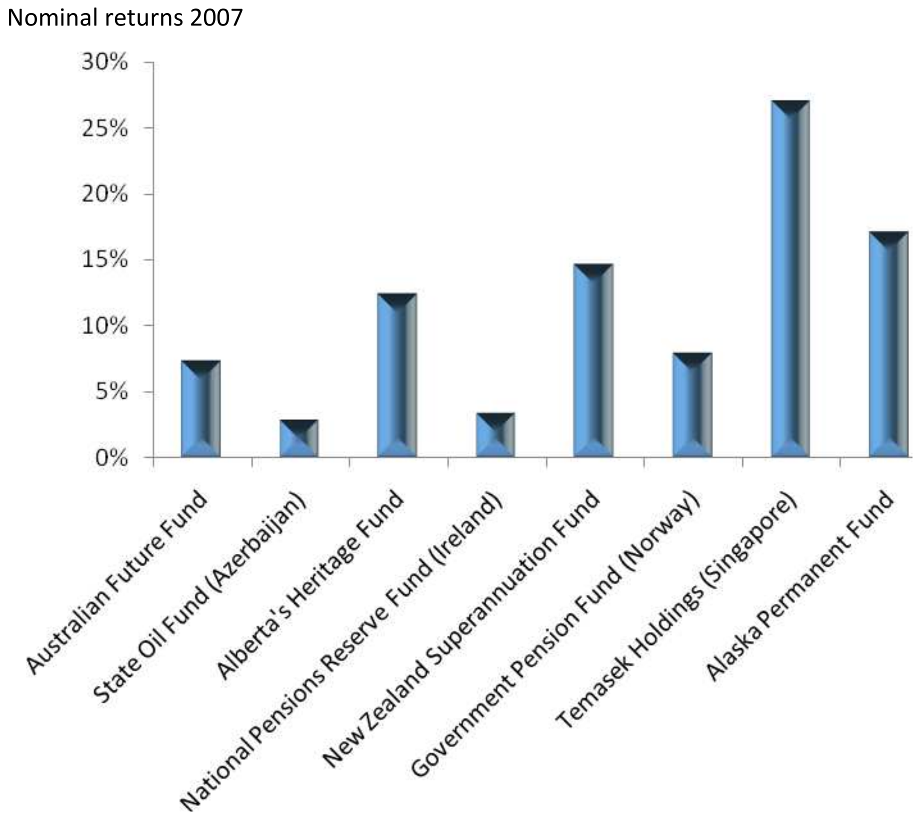

Figure 15: Nominal return for Selected SWFs in 2007[48].

4.2 Benchmark Analysis

The current debate on sovereign wealth funds is mainly concentrated around whether the SWFs pose a threat from different perspectives for the receiving countries. Although this will be analyzed in detail in the next section, it is worthwhile pointing out some facts to show the structure of the SWF-market. Even if $2-3 trillion sounds like a very large sum it must be put into perspective. Figure 16 shows the total assets for different actors on global financial markets. Indeed the SWFs are almost twice as big as the hedge fund market, but this is before considering leverage which is a main tool in the hedge fund industry. Total official reserves are three times as big as the SWFs, but estimates by Morgan Stanley show that the SWF-market will be bigger than the official reserves in 2011.[49] Still, the SWF is negligible compared to the pension and mutual fund industry which together are more than ten times the size of the sovereign wealth funds.

[48] See Appendix 4 for details.
[49] Jen (2007).

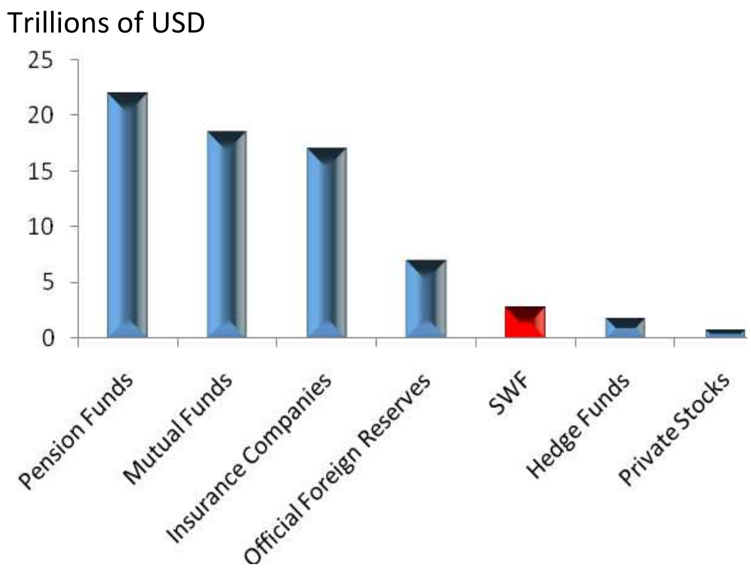

Figure 16: Total assets under management globally in different asset classes, 2006[50].

Many of the sovereign wealth funds have the objective to save for future pension fund liabilities or distribute the income from commodity sales over generations. As most of the Western world countries have a skewed age structure they will in the near future face the challenge to fund the pension liabilities as the number of pensioners will grow exponentially. Even though a number of SWFs focuses on this future liability they are not near the sizes of the rest of the pension system. Figure 17 shows the size of pension funds in selected countries together with the three largest sovereign wealth funds, which ones again show where the actual power on the market is located. The U.S. pension funds are generally considered transparent and having solid corporate governance. Still it seems obvious that it is more important to secure good active ownership strategies in the pension funds to make the U.S. companies to continue to prosper than giving the majority of the attention the relatively small sovereign wealth funds.

According to Watson Wyatt, the eleven countries with largest pension funds on average had an asset allocation of 60% equity, 26% fixed income, 7% cash and 7% alternatives in 2006.[51] The trend was for many years an increase in equity, but recently the trend seems to have peaked with a slight decline in the fraction of equities lately. Compared to the asset allocation of the sovereign wealth funds (See figure 18), it seems like the pension funds are more aggressive than the sovereign wealth funds analyzed as they have a bigger equity allocation. Interestingly, if sovereign wealth funds should be considered a threat it should be reasonable to assume that the fraction of equity should be more aggressive than pension funds that usually have a more explicit liability side to match with its assets as equity is the main tool for strategic influence. However, it must once again be stated that the

[50] Interview with Olle Rossander (03/14/08). See appendix 5 for details.
[51] Watson Wyatt Worldwide (2007). See Appendix 6 for details.

average SWF equity allocation is based on a sample which probably is distorted as none of the SWFs acting as pure equity houses are included.

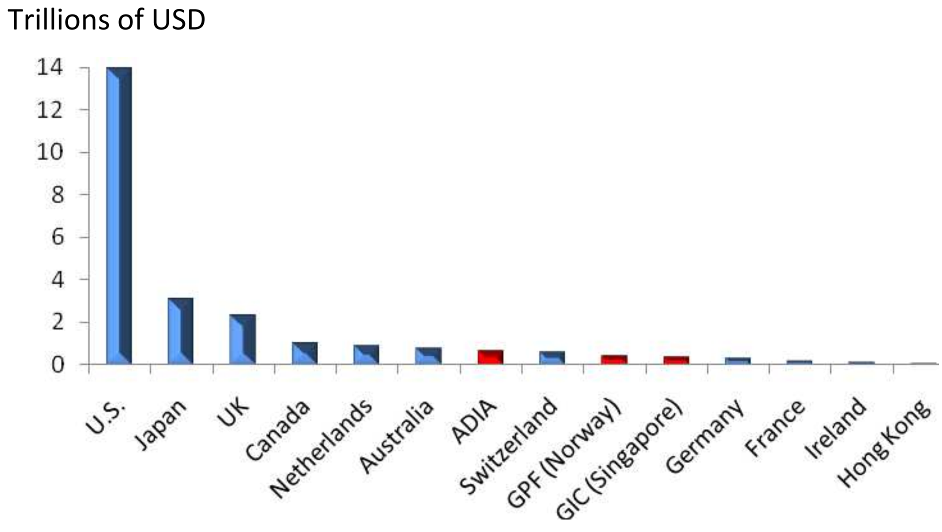

Figure 17: Assets under management for Global Pension Funds and the Three Largest SWFs, 2006[52].

On the fixed income market the sovereign wealth funds are overweighed compared to the pension funds. The reason is likely as many sovereign wealth funds' objective is to invest in a way which decreases the volatility of the underlying asset, commonly oil. However, this is a snapshot of the sovereign wealth fund's asset allocation (See figure 18). While the pension funds have been around for

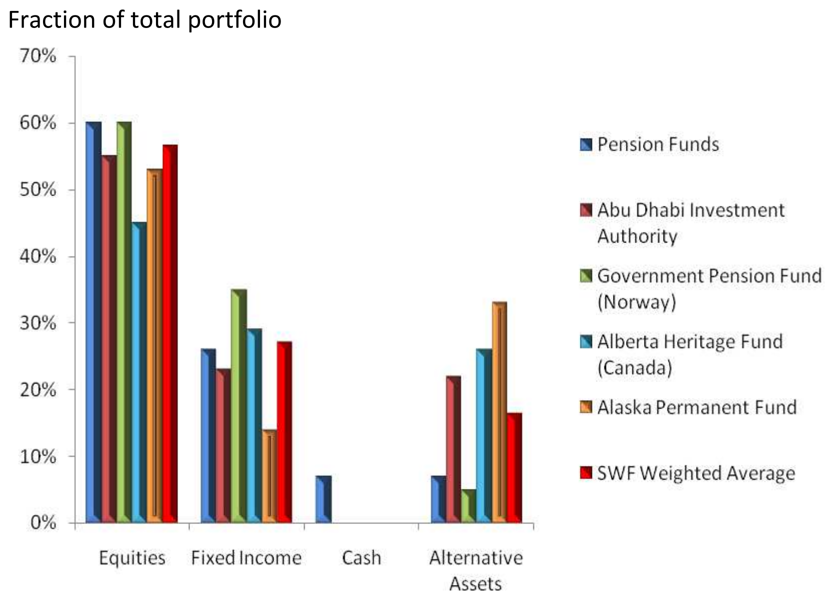

Figure 18: Comparison of Asset Allocation between global pension funds and selected SWFs, 2007[53].

[52] Watson Wyatt Worldwide (2007). See Appendix 6 for details.
[53] See Appendix 7 for details.

long time and have been able to establish their asset allocation over a longer period, many sovereign wealth funds were created after the millennium shifts and might not have reached their optimal allocation yet. Many of them, on purpose, have started conservatively to first gain investment experience. When interviewing the CFO at DIC, he pointed out the youth of the organisation and said that there still is a lot of dynamics regarding the allocation of the capital.[54]

It is possible to compare the SWFs' asset allocation against the world's total investments into equities and fixed income. Table 3 shows the relationship between the global fraction invested in equities to the total global equity and fixed income market. This ratio is 42.5% which can be compared with the weighted average of the five sample SWFs that have allocated 57% in equity. The obvious conclusion is that both pension funds and SWFs are more aggressive in benefiting from the equity risk premium than the global average and this makes sense as the SWFs have much longer time horizon than the average investor on the market, hence the SWFs can take more volatility and therefore take more risk.

World Financial Market Capitalization	**Trillion $**
World Equity Market Capitalization	50.8
World Fixed Income Market Capitalization	68.7
Equity fraction of Equity and Fixed Income	42.5 %

Table 3: World financial market capitalization[55].

The last asset class, alternative investments, is a much larger part of the SWFs portfolios then the pension funds'. The explanation is partly as many of the SWFs are invested into real estate, this is particularly common in the Middle East, where the SWFs commonly help domestic growth. On the other hand, the pension funds have had much longer time to elaborate and learn about new asset classes. Perhaps the demand for public scrutiny restricts the pension funds from taking stakes in e.g. the hedge fund and private equity industry which maybe not is the case of sovereign wealth funds. Normally, pension funds have a lot of restrictions, based on the demand to fulfil their liabilities in the future. This is not the case of sovereign wealth funds, then they be definition do not have any strict liabilities.

The future of the global pension funds and the SWFs look quite different. Both of them have two kinds of revenue streams, the returns from investment being the common denominator. However, the second income is different. The pension funds are looking into a period when large outflows of money will be necessary to meet the pension obligations of the aged population. As this structural shift is getting close, it is not strange that the pensions funds have stopped their increased exposure to long time horizon investments as equity even if the equity risk premium could mitigate the need of raising

[54] Interview with Simon Edwards (04/16/08).
[55] Watson Wyatt Worldwide (2007).

pension payments for the public. As the age structure tends to get older, it will be harder to finance the outgoing payments with the lower income streams from the smaller younger generation. The SWFs second source of income comes from commodities or current account surpluses which has a very different income structure than pension payments. The volatility is much higher than pension payments which make the SWF to reach out for assets uncorrelated to energy prices. These income streams are also likely to continue to increase which makes it important for the SWFs to consider the allocation of capital, the future capital inflows and not only the current funding.

In sovereign wealth fund market analysis made before, it is the rule to categorize the funds into two groups, commodities and non-commodities. While the first category is straightforward the second category is a negative screening, not actually saying anything about where the assets come from. Table 4 shows that only four out of twelve funds that are categorized as non-commodity based, get their assets from reserves. This distinction is important as the income stream to the funds says something about the funds purpose and actions. The Irish National Pensions Reserve Fund for example, allocates one percent of the annual GDP to cover up for future pension payments and New Zealand's fund has a similar strategy. The National Stabilisation Fund of Taiwan uses savings and debt mainly to retain the stability of the domestic financial markets which commonly can be affected by large influential private investors. By understanding these income streams one can better assess whether the SWF are something that politicians should fear for. For example can the funds mentioned above hardly be accused for being a risk for national security in the U.S. and Europe.

Non-commodity Specification of Asset Input	
Brunet Investment Agency	Manages Brunei's foreign exchange reserves
Government of Singapore Investment Corp.	Reserves accumulated from savings
Temasek Holdings (Singapore)	Transfer of public companies and annual profits
Khazanah Nasional (Malaysia)	Budget surplus and debt
China Investment Corporation	Transfer from foreign reserves
Australian Future Fund	Budget surpluses and divestment of Telstra Corporation
National Stabilisation Fund (Taiwan)	Debt, postal savings and pension fund assets
Korea Investment Corporation	Transfer of foreign ex. reserves and gov. capital infusion
National Pensions Reserve Fund (Ireland)	One percent of annual GDP
New Zealand Superannuation Fund	$2 billion allocated annually from the government
State Capital Investment Corporation (Vietnam)	Debt and transfer of public companies
Poverty Action Fund (Uganda)	Foreign Aid

Table 4: Specification of non-commodity SWFs

4.3 Transparency

So far no one can really argue that any sovereign wealth fund directly has used its market power to abuse a specific country. The discussion is more concentrated on the future potential risk coming from the SWFs investing abroad. Transparency will be analyzed specifically for each case study below. Here the focus will be on the general transparency on the market and analyze to what extent transparent operations are a part of the SWF-market.

A first analysis can be made by summarizing the sovereign wealth funds after the Linaburg-Maduell Transparency Index.[56] The index categorizes each SWF into a scale 1-10 where one is equal to a very transparent fund[57]. Briefly, the index states ten prerequisites for being a transparent SWF and then analyzes each SWF after these criteria.[58] The result is shown in figure 19. More than every fifth fund gets a transparency rating of ten which indicates very low transparency. As the index criteria are based on external communication tools, e.g. whether the fund has a fully working home page, these funds are everything but transparent. There is no information on how they invest, what returns they have earned or what the objective of the fund is. The countries with funds having a transparency rating of one are Algeria, Angola, Brunei, Kiribati, Libya, Mauritania, Nigeria, Qatar and Trinidad & Tobago. These are rather small funds which may explain the lack of transparency as they may not have enough capacity to adhere to the transparency demands.

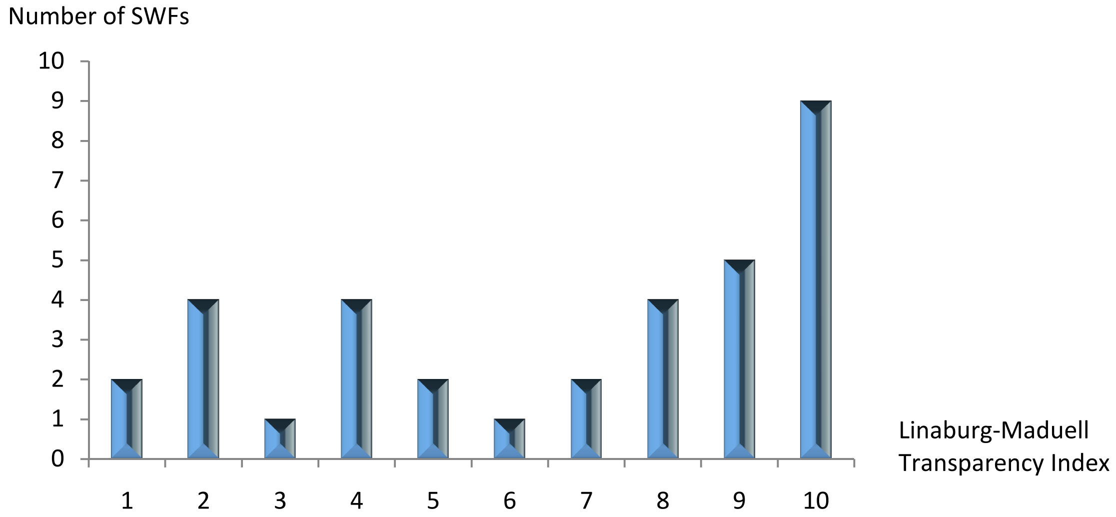

Figure 19: Number of SWFs per transparency ranking (10 highest)[59].

Six funds get the excellent rating of one or two. These are the funds in Norway, New Zealand, Alaska, South Korea, Australia and Azerbaijan. From the perspective of the research performed for this thesis,

[56] Linaburg-Maduell (04/08), See Appendix 10 for details.
[57] Normally, the Linaburg-Maduell transparency index is reverse with a transparency index of ten for the most transparent fund, but according to a better visual effect, it is reversed in this study. There is no implications for the analysis.
[58] See Appendix 1 for details.
[59] Linaburg-Maduell (04/08), See Appendix 1 for details.

this in line with the experience the authors have had except South Korea which do have a rather extensive home page but does not communicate returns, asset allocation, geographical allocation or other basic information. The figure shows another interesting tendency on the market. On transparency, the SWFs could be divided into two clearly separate classes, transparent and non-transparent funds. The chart has a v-shape, i.e. either is the fund highly transparent or it is not transparent at all. It seems like the SWFs deliberately have decided whether they want to be transparent or not as there are not many funds with an average score. The question is how the funds on the left hand side will react to the new demand for transparency? So far, the only non-transparent actor which has showed by action that they will improve in the area is ADIA which, together with GIC, GPF and U.S. Treasury, signed a letter of understanding on principles for investments both for the SWFs and the receiving countries.[60]

If assuming the Government Pension Fund of Norway would not be transparent, it is doubtful whether they would face as much criticism from the EU and the U.S. anyway. A part of the perceived threat from the Western world is probably more based on the cultural differences and the stability of the countries in which the SWF operates. The latter can be analyzed by adding a ranking of the level of democracy in the country to the already mentioned Linaburg-Maduell Transparency Index. In figure 20, the transparency index is complemented by World Auditor's democracy ranking which considers the level of democracy, corruption and press freedom in each country.[61] The country ranked as number one is the country, on average, with highest level of democracy, press freedom and lowest

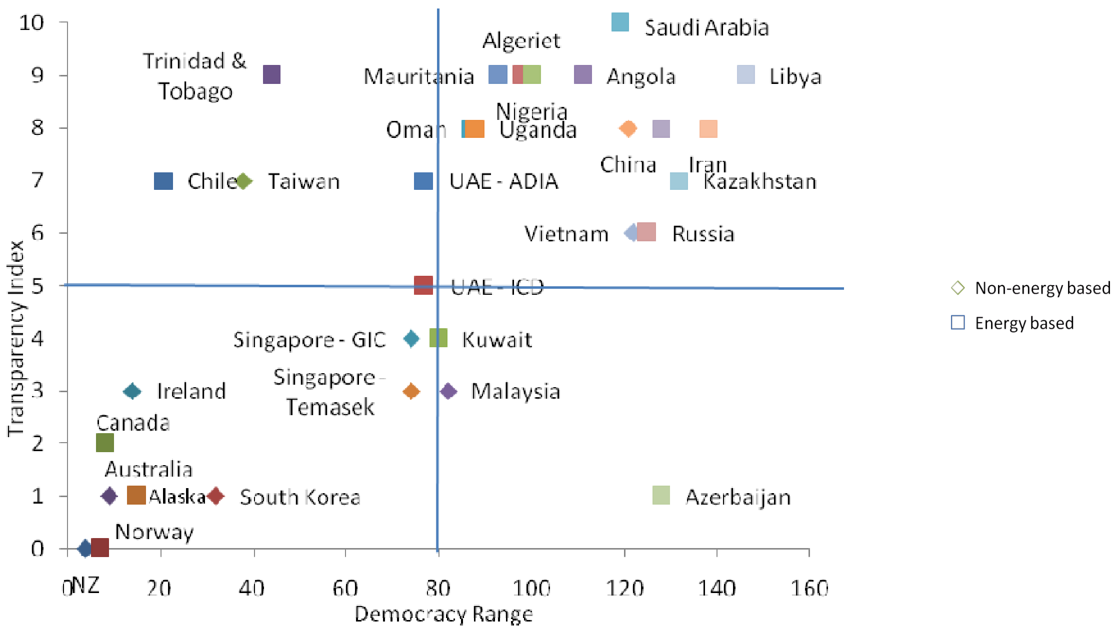

Figure 20: Transparency & Democracy ranking[62].

[60] Biberovic (2008).
[61] World Audit (04/08).
[62] See Appendix 1 for details.

level of corruption. Not surprisingly there is strong correlation between these two factors. The SWFs with high transparency, with the exception of Azerbaijan, are also in top of the democracy league. In the upper right box there are thirteen SWFs with both low transparency and democracy rating. It would be easy to say that these funds are the ones which politicians address as threats, when investing in foreign assets, but this conclusion would be to go too far. It could instead mean that the SWFs country has been plagued by war and poverty without the abilities to become transparent as for example in the case of Uganda. But low levels of democracy and press freedom are usually a sign of unstable governments where corruption flourish and politicians may pursue their own agendas instead of the peoples will. Investment Corporation of Dubai and Abu Dhabi Investment Authority are on the fringe and should be acknowledged as well as potentially unstable SWFs as very little differs them from the SWFs to the lower left of the model. From that perspective there is a risk factor in these fifteen SWFs. The conclusion is that half of the funds can be seen as a potential risk factor when making this transparency and democracy analysis.

To summarize the market analysis and the threat debate, it is obvious that the lack of transparency is an obstacle to evaluate some of these funds. Several of them are based in non-democracies which make western politicians frightened when they invest in their countries. It seems like people and politicians are frightened of the unknown, instead of the actual funds. Until today (2008), there is no evidence that these funds have act improperly, even if that is not a pledge for the future.

5. Case Studies

This section presents the case studies. Each fund will first be presented individually, starting with the empirical part. The empirical part is divided, in line with the theoretical framework, into three parts, investment strategy, transparency and corporate governance. After the empirical part the individual fund is analyzed. In the end, a general analysis is performed to generalize and draw conclusions from the case study.

5.1 Introduction to the Case Studies

The case studies study three specific sovereign wealth funds, with the aim to answer the second research question, i.e. whether sovereign wealth funds' investments pose a potential concern or not to the countries receiving capital from the SWFs. The first SWF in the study is the sovereign wealth fund of Dubai, named Investment Corporation of Dubai (ICD). The second SWF is Temasek Holdings, one of two Singaporean sovereign wealth funds. Finally, the last SWF will be the Government Pension Fund of Norway.

The analysis will be structured as follows. Each case study starts with a brief presentation of the country and the SWF itself. Then empirics from the interviews and secondary sources will be presented and analyzed from the three perspectives in the theoretical framework presented in section 3.4. When each fund has been analyzed the findings will be analyzed on an aggregated level to be able to generalize the findings to the sovereign wealth fund market overall.

5.2 Investment Corporation of Dubai

Name	**Investment Corporation of Dubai**
Country	United Arab Emirates
Year Started	2006
Country Government	Emirate
Democracy Rank	4
Type of SWF (Input)	Energy Based
AuM ($bn)	82[63]
Transparency Rating	5
Nominal Return 2007	n/a
Since Inception	n/a

Table 5: Presentation of the Investment Corporation of Dubai.

Dubai is one of seven emirates included in the United Arab Emirates (UAE). Until oil was founded in the 1960s the emirate was an undeveloped country with no real assets. Today only three percent of the total GDP originates from extracting oil and gas in Dubai and the oil is estimated to run out in less than ten years. However Dubai's ruler, H.H. Sheik Mohammed bin Rashid al Maktoum, and his precursors have successfully diversified the economy. In 2008, Dubai's largest contributors to the GDP growth are general trade, financial services, tourism and the many free zones that have been created to promote growth and attract foreign investments.[64] The real GDP growth in 2007 was 7.4% and the inflation 11%[65], driven by the booming real estate sector. Even if it has become better lately, press freedom and political opinions are in some sense restricted[66]. Economical welfare is generally very high for the locals while the approximately 80% of the inhabitants are guest workers without the benefits of the local people.[67]

[63] This figure is highly uncertain as it has never been officially revealed. The source is: Truman (2007).
[64] Country Report UAE (2008).
[65] IMF (2007:1).
[66] Country Report UAE (2008).
[67] Country Report UAE (2008).

Investment Corporation of Dubai was founded in 2006 and has been an important factor for the success of Dubai.[68] It has several subsidiaries (see figure 21) where each one has a specific function. Dubai Holdings manages H.H. Sheik Mohammed bin Rashid al Maktoum personal assets, Borse Dubai is responsible for both the domestic and international financial markets, Tatweer is the strategic and operational driver of Dubai Holdings and Dubai World is responsible for specific areas such as the economic free zone. DIC under Dubai Holdings is a pure private equity house while Dubai Group is an investment office with focus in six different kinds of investment areas, e.g. insurance and Islamic investments.[69] For this thesis, ICD and DIC have been interviewed and there will be references to both these organisations. DIC will be used as an example of being a subsidiary to ICD and by using both, important differences will be highlighted. However, it is the whole organisation, i.e. ICD, which will be referred to in the general analysis.

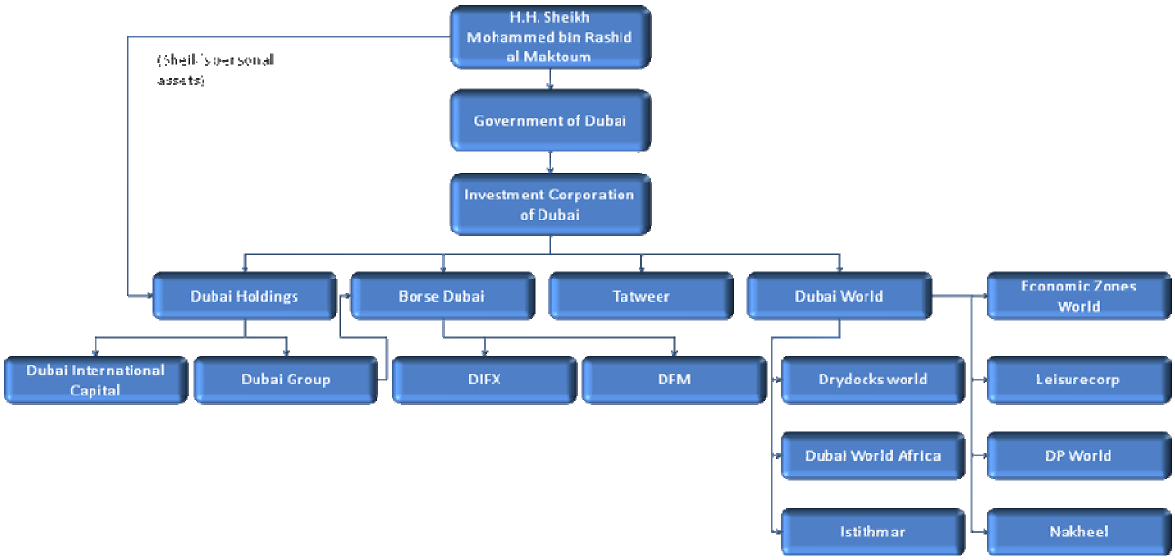

Figure 21: The structure of ICD[70]

5.2.1 Investment Strategy

Large investments by ICD	Fraction of ownership
Nasdaq OMX Group	44%
Mauser	100%
Travelodge	100%
DaimlerChrysler	2%
Och Ziff Capital Management Group	51%

Table 6: Large holdings of ICD, 2008.

[68] Website of International Corporation of Dubai (03/11/08).
[69] Website of Dubai Group (03/11/08).
[70] Website of SWF Institute (04/08), ICD (03/08), DIC (03/08), Dubai Holdings (03/08), Borse Dubai (04/08) & Dubai World (05/08).

The overall investment strategy for ICD is to achieve superior return on investment which benefits the whole community of Dubai[71]. When it comes to geographical and asset allocation they argue that they do not have any specific targets for different continents or asset classes at all.[72] However, that the restrictions imposed by the Western world affects the geographic allocation becomes rather obvious after Sultan bin Sulayem, head of Dubai World, expressed that forcing higher transparency on the SWFs would deter them from investing in Europe.[73] Also the CEO of Istithmar (subsidiary to ICD) mentions that they are looking elsewhere than the U.S. for future investments due to the cold welcoming from the States.[74] DIC's CEO Sameer al-Ansari has similar thoughts as he prefers investing in the UK as the uncertainty is too high in the U.S.[75]

DIC has four areas of investments, Private Equity, Global Equities, Emerging markets and the last area of investments, called the Chairman's Office. The main business within DIC is secondary buyouts. The Chairman's office includes all investments which do not fit in under the other asset classes and are defined as: *"other types of investments that are of long-term strategic interest to the group".*[76] Examples of investments which have been managed under this department are the 9.9% investment in Och-Ziff Capital Management Group, one of the largest alternative asset managers in the world and the failed Liverpool FC deal. Except becoming more active in their investments, DIC says that they also will develop their domestic private equity investments which have been rather ignored. There is large potential in many of the family owned businesses in Dubai which could be targets for DIC in the near-future. Further on, they also regrets that many of the investments made by DIC have become high profile in the media debate which is not an explicit strategy. They point out that DIC does not strive to make high-profile investments.[77] Stephen Jen at Morgan Stanley also believes the high profile acquisitions are a mistake as it upsets the rest of the world. The sovereign wealth funds should instead focus on adding liquidity to the market and behave like usual funds, Jen argues.[78]

DIC declares that there is a strategy to invest abroad, although many of the investments have been opportunity driven. Even if guidelines for investments are set, it seems like many investment decisions still are made ad hoc which raises concerns over what the implicit strategy is. Subsidiaries of ICD have done several investments in Europe, the acquisition of OMX in cooperation with Nasdaq by Borse Dubai is one example, Mauser and Orient Express Hotels others. Per E Larsson argues that there were three reasons for the acquisition of OMX – to acquire technology, knowledge and the politically neutral brand of OMX.

[71] Interview with Masoud Rana (04/17/08).
[72] Interview with Masoud Rana (04/17/08).
[73] Financial Times (04/29/2008).
[74] Arabian Business (05/19/2008).
[75] Reuters (04/16/2008).
[76] Dubai International Capital (03/09/08).
[77] Interview with Simon Edwards (04/12/2008).
[78] Interview with Stephen Jen (04/29/08).

Regarding investments, Woertz argues that it does not matter whether the sovereign wealth funds in Dubai would have strategic objectives with their investments, as they are so small relative to the rest of the world. The debate should instead focus whether Russia is the real concern.[79] Woertz also presents data showing that in 2005 only 70% of the cumulative investable funds in Dubai could be traced which means that 30% of the assets are invested in a way unknown to the public.[80]

5.2.2 Transparency

Issues regarding transparency have been highlighted in the Middle East the last couple of years. The fact that Dubai and the whole UAE currently are facing huge investments and inflows of capital has increased the attention from Europe and the U.S. UAE's position in the Middle East where many antagonists to the U.S. are located, is one of the main reasons to why the transparency debate has been so intense in the U.S. and why the sovereign wealth funds in the region are having problems when investing in the U.S.

The lack of transparency in the region is explained by the SWFs by culture habits of not revealing governmental information and the relative infancy of the sovereign wealth funds. The CEO of Borse Dubai, Per E. Larsson acknowledges that there are differences in how to perceive transparency between cultures. The Middle Eastern culture is not used to discuss governmental issues and have transparency like many Western countries and this is not because and the argument is not that they reject it, it is just how different cultures shape people.[81] This is confirmed by Stefan Svanström at the Department for Local Government and Financial Markets who argue that revealing total funding are not custom in the Middle East.[82] Per E Larsson do argue that the management for the SWFs in Dubai understand the Western world's demand for transparency.[83] He continues by saying that it is more a matter of time before the transparency will be high as most of these funds in the UAE are very young organisations. ICD was founded in 2006 and DIC in 2004. In line with these arguments, DIC mentioned that there is a mandate from the top management to become more transparent to meet the demands from the western world.[84]

Stephen Jen at Morgan Stanley believes that there is a strong correlation between the function of the government and transparency. If the government is a monarchy or has one leader who takes all important decisions, the transparency will naturally be low. However, he also argue similar to Per E. Larsson that many of the sovereign wealth funds, e.g. ICD, are young and not yet have built up their confidence which is why they are not transparent or more direct "they are a six months old

[79] Interview with Eckart Woertz (04/18/2008).
[80] Woertz (2007).
[81] Interview with Per E. Larsson (04/16/08).
[82] Interview with Stefan Svanström (04/23/08).
[83] Interview with Per E. Larsson (04/16/2008).
[84] Interview with Simon Edwards (04/16/08).

billionaire".[85] The CFO of DIC, Simon Edwards, agrees that the youth of the organisation is a main reason for the lack of transparency but think this is due to that they have not had time yet to setup all necessary function, prioritizing to get the investment operations going first.[86]

Gerald Lyons, on the other hand, argues that the rulers in the Middle East simply do not see the assets from the oil industry as public money, i.e. a cultural difference in how to view governmental assets.[87] The minister for finance in Norway, Kristin Halvorsen agrees with the cultural difference, arguing that it might be hard for Middle East and Asian sovereign wealth funds to become as transparent as the Government Pension Fund as the transparency is closely connected to the transparency of the Norwegian society.[88] The fact that the capital inflow to DIC comes from the H.H. Sheik Mohammed bin Rashid al Maktoum himself, raise the question about the definition of the government. A normal private investor should never be forced to reveal the amount it invests into a fund. On the other hand H.H. Sheik Mohammed bin Rashid al Maktoum is the governor and the chairman of the ICD, which makes it reasonable to include his assets in the pool of sovereign assets.

Simon Edwards at DIC clearly pointed out that the western request for transparency is good for the industry, but it needs more discussion what an appropriate level of transparency is. Regarding the willingness of revealing more information, they pointed out that they are puzzled about the demand on transparency when many hedge funds and private equity companies are not forced to reveal sensitive information. Is nationality the only reason for this demand? Eckart Woertz at GRC has a similar view, explicitly saying that the whole transparency debate is skewed and only serves the western world's own purposes.[89] The overall picture of ICD regarding transparency is that very few things are made public and these things are only mentioned briefly making it difficult to draw any conclusions from it.

When assessing ICD using the transparency framework it becomes obvious that there is still much to ask for from ICD (see table 7). There is no public annual report and no statements at all regarding returns, asset under management or allocations. Basically the only thing that is available is a list of portfolio companies and the ownership of the fund. As almost no information at all is provided it is hard to argue that ICD is transparent. As said before, ICD mainly blame this on the infancy of the organisation. Still, no information, from which conclusions can be drawn, on how they invest, how they implement their overall strategy or if they are taking strategic positions are revealed. For DIC the situation is slightly different. Recently they have published a corporate brochure including asset under management ($12 billion) and other information[90], although not near the information provided by Temasek or the Norwegian Government Pension Fund. In the interview with Simon Edwards it was also revealed that DIC believes they will have approximately $30 billion in assets under management

[85] Interview with Stephen Jen (04/29/08).
[86] Interview with Simon Edwards (04/16/08).

in five years. Even if this of course is a good development, the umbrella organisation ICD is very non-transparent, hence the transparency rating is low.

Question	Yes	No	N/A
Is there a public Annual Report easily available?		●	
Is there an annual public statement of AuM?		●	
Is there an annual public statement of the asset allocation?		●	
Is there an annual public statement of the geographic allocation?		●	
Is there an annual public statement of the fund's return?		●	
Is there an annual public statement of each investment's return?		●	
Are the external investment managers' mandate publically available?			●
Does the SWF have regular independent audit?		●	
Is there a publically available audit report?		●	
Does the SWF publically state their objective and investment strategy?	●		
Does the SWF publically state the ownership structure of the fund?	●		

Table 7: Transparency assessment Dubai[91].

5.2.3 Corporate Governance

In the constructed framework, two issues regarding corporate governance issues are important, the structure of the fund and how active the fund is in its portfolio companies. Starting with the first issue, the situation for ICD is rather complex. ICD is directly governed by the government of Dubai where H. H. Sheikh Mohammed bin Rashid al Maktoum is the governor. At the same time, H. H. Sheikh Mohammed bin Rashid al Maktoum personal assets' are managed by one of ICD's subsidiaries, Dubai Holdings. The tie between the ruling families in Dubai and the sovereign wealth funds is not something new. Eckart Woertz et al.[92] at the Gulf Research Center in Dubai argues that the sovereign wealth funds originates from the family business and were running by the ruling families before they were incorporated into what is nowadays called sovereign wealth funds. Hence, the tie to the power in Dubai is close.

ICD and DIC mentioned that H. H. Sheikh Mohammed bin Rashid al Maktoum himself is the overall leader of all state-owned entities in Dubai. Furthermore, H. H. Sheikh Mohammed bin Rashid al Maktoum is the chairman of the board in ICD, which should imply direct decision rights in the operations by the ruler. This is not in line with the OECD demand of separation between the board and its sovereign assets[93]. Stefan Svanström, at the Department for Local Government and Financial Markets in Sweden, argues that is not possible to assess ICD and its subsidiary on any factors except

[87] Interview with Gerard Lyons (04/29/08).
[88] World Economic Forum (01/2009).
[89] Interview with Eckart Woertz (04/18/08).
[90] Dubai International Capital (03/09/08).
[91] Truman (2007:2) & Sovereign Wealth Fund Institute (03/04/08).
[92] Woertz et al. (2007)
[93] OECD (2008).

historical actions. He highlight that there is important to remember that there are not any historical evidence of bad corporate governance where the SWFs have abused their position. Hence, one way of evaluate a sovereign wealth fund before a deal is by case-by-case basis.

Turning to the active engagements in the portfolio companies, DIC is a pure equity house with the strategy to add value through active ownership. DIC defines themselves as an active owner, even though they currently are facing a start-up phase, since the organization was launched in 2004. They take relatively big stakes in companies and try to add value through active ownership. Similar to other sovereign wealth funds in the region, the organization is new, a bit understaffed and all guidelines for operations are not in place. As the organization is very young and understaffed, they admit that they currently not practice any active management. They argued that the current small organization is an obstacle to manage active ownership. However, the CFO of DIC mentioned that there would probably be more active engagements in the portfolio companies in the future when the organization has come in place.[94]

DIC admits that the agenda for active ownership currently is focusing on finding highly qualified board members to their portfolio companies. By engaging independent board members from their network, the intention is to achieve a high level of professionalism and work according to the OECD guidelines for corporate governance. They have appointed several business leaders as board from Europe and the U.S., e.g. from Sony, BMW and GlaxoSmithKline. As examples the CEO of Borse Dubai is Swedish, the CFO of DIC and the CEO of ICD are both English. According to DIC itself, the advantage of having western people within the organizations are that the western habits transform into the companies naturally and the work towards increased transparency accelerates.

5.2.4 Analysis

The lack of transparency in ICD is often explained to be derived from the cultural differences between the Middle East and the West, combined with the fact that these funds very young organizations. The cultural difference is of course an important aspect that the Western world must take more into consideration. Nevertheless, it must be stated that if ICD wants to invest on the Western markets, they must follow the rules set up by the EU and the U.S. as much as Western countries must adapt if they want to invest into the Dubai region where many restrictions on foreign investments exist. ICD and DIC promise to follow the demands from the West and become more transparent. However, so far there has been very little information provided. For example the transparency assessment showed that ICD does not even reveal the most basic information to the public. The CFO for DIC and representatives for ICD state that they have the mandate to become much more transparent. The question to be raised is but why this has not resulted in revealing the assets under management, the true investment returns and asset allocation?

[94] Interview with Simon Edwards (04/16/08).

The question is if not Lyons is right when arguing that the assets in Dubai are closely tied to H. H. Sheikh Mohammed bin Rashid al Maktoum and not perceived as public money. It might as well be true that a SWF's transparency cannot become much better than the underlying country's history of sharing information with its people. Even if there seems like the transparency debate at least has made the key persons to more transparent, the truth is that ICD today is a highly non-transparent fund which increases the suspicions among politicians. Nevertheless, one must also understand the criticism from ICD and DIC on how transparent they must be. Many voices argue that The Government Pension Fund of Norway is the brilliant example of transparency. The implication is that the Norwegian fund is not an active investor which makes it easier to reveal more information. DIC on the other hand which act similar to the European and U.S. private equity industry has much more to loose by revealing information on the Norwegian level, then its competitors do not face high demands for transparency.

The structure of ICD is a very important factor in this case. The internal organizational structure where H. H. Sheikh Mohammed bin Rashid al Maktoum himself is the chairman of ICD, does not adhere to the policies for state owned entities by OECD, saying that there should be a clear distinction between the government and the sovereign investment vehicle. ICD is officially a separate entity from the government of Dubai, but as long as the ruler of the government at the same time is the chairman of the sovereign wealth fund and lets the fund invest his personal assets, it is impossible to argue that the fund is totally independent. Departments such as the Chairman's office also raise doubts on the true agenda. Liverpool FC may very well be a solid investment but the obvious question is whether this kind of investment is not more of a PR-investment than a pure financial investment?

The ICD tries to adhere to good corporate governance policy, by hiring independent board members and reputable expats with extensive experience from the financial industry. Simon Edwards at DIC argues that the expats would never accept working for an employer with an underlying agenda to take strategic or political stakes in companies, but it is hard to believe that all hired people know what the long-term strategy is behind every investment. When DIC will become more active in their portfolio companies in the future, which in many ways can improve badly run companies by bringing in experienced managers, the issue of corporate governance is even more important. The combination with a diffuse corporate governance policy of ICD and lack transparency makes the active strategy a source of concern for Western world companies, which do not know what to expect.

It must be noted that there is so far no evidence at all that ICD is doing investments with the goal to achieve strategic or political goals. However, it can be argued that a stop of investing in the U.S. due to the hostile investment climate, can be seen as the use of political power as the U.S. Dubai knows how important the investments from the Middle East are to the U.S. economy. On the other hand it can also be seen as a mere answer to the restrictions set up by the U.S. and that the returns coming from investments on the U.S. market are not attractive enough for ICD and the risk of public criticism, when going through national security checks by CFIUS.

As much of the money in ICD directly or indirectly can be traced back to H. H. Sheikh Mohammed bin Rashid al Maktoum, one may question who is taking the final decision to take opportunity driven investments? It does not seem reasonable that ICD could do these large investments without approval from the owner of the money, at least not as long as the management's mandates are not clearly defined in public.

To conclude, transparency is very low in ICD and nothing, except words and mandates given to incoming expats, shows that it will be different in the future. From a corporate governance perspective, ICD has unclear connections to H. H. Sheikh Mohammed bin Rashid al Maktoum in Dubai and manages his personal assets. This implies that the potential risk for investment decisions not only derived from return maximization is increased. The fact that it is hard to separate if the investment decisions coming from the sheikh's office or not due to the low transparency, makes the corporate governance structure of ICD unclear, and make it impossible to reject that investments with potentially political or other strategic objectives could be done. No evidence so far shows that though. ICD has pure asset management but also rather odd entities such as the chairman's office where all other investments are done. Hence, under current conditions it is fairly hard to categorize the ICD in terms of potential concern to receiving countries, but it is likely to believe that the low level of transparency is related to the young organization.

5.3 Temasek Holdings

Name	Temasek Holdings
Country	Singapore
Year Started	1974
Country Government	Republic
Democracy Rank	4
Type of SWF (Input)	Public Companies
AuM ($bn)	159
Transparency Rating	7
Nominal Return 2007	27%
Since Inception	19%

Table 8: Presentation of Temasek Holdings

Singapore is a small country with approximately 3.6 million inhabitants (excluding non-permanent residents). The country's most important industries are petrochemicals, electronics, financial services and tourism. The current account surplus was SGD 57.7 billion and there is no national debt.[95] In

[95] Country Report Singapore (2008).

1965, Singapore was declared independent after being a British colony and a federation with Malaysia for a few years. Since then, Singapore has gone from being a poor country with no real areas of excellence to become a centre for trade, financial services and tourism. Labelled as a democracy, it is clear that there are differences from a Western democracy which are important to acknowledge. In World Audit's annual democracy report[96], Singapore gets a poor rating in all three categories (democracy, corruption and press freedom) and the Swedish Embassy relates Singapore to *"not being a reel democracy"*[97].

Temasek started its operations in 1974 when governmental companies valued to S$350 million ($254 million using today's exchange rate) were transferred to Temasek's balance sheet.[98] Today the value of the portfolio is approximately $159 billion. It is an exempt private company[99] with investment focus on equity. They have one shareholder which is the ministry of finance. Temasek is not the only SWF in Singapore. GIC is an even larger sovereign wealth fund but differs substantially from Temasek as GIC gets its assets from the foreign exchange reserves.

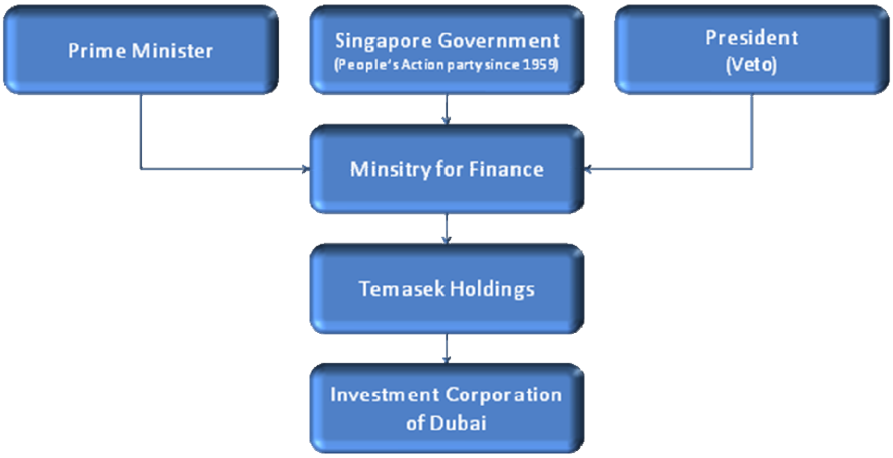

Figure 22: Structure of Temasek Holdings.

5.3.1 Investment Strategy

Large investments by Temasek	Fraction of ownership	Sector
Standard Chartered	19%	Financials
Bank of China	16%	Financials
Merrill Lynch	9%	Financials
Lai Fung Holdings	20%	Financials
ICICI Bank	9%	Financials
Barclays	3%	Financials
Air China	7%	Consumer Services

Table 9: Major investments Temasek Holdings

[96] World Audit (2008).
[97] Country Report Singapore (2008).
[98] Temasek Review (2008).
[99] Means that the company has less than 20 shareholders and is exempted from filling in audited financials with the public registry.

Temasek differs from many other sovereign wealth funds by being a pure equity house. They are complemented in Singapore by GIC which has more of a conservative investment strategy. Another difference is that GIC uses a benchmark while Temasek does not and instead acts more like a private equity house although without the presence of debt.[100] What is similar to other funds is that the ultimate goal of the fund is: *"To create and maximise long-term shareholder value as an active investor and shareholder of successful enterprises"*[101].

Of the overall portfolio, investments in Singapore responds to 38% of Temasek's total portfolio and one of their investment objectives apart from maximizing returns is to promote growth within the country. An anonymous think tank argued that apart from promoting domestic growth this is a way of gaining technology advantages. As Temasek has a very long time horizon, they are not afraid of taking large and illiquid positions, even if they not exclude short-term positions. Temasek argues, similar to Warren Buffet[102], that there is no reason to take a one percent stake in a company if you really believe in it - in other words a different view on diversification compared to other SWFs and funds generally. They argue that they in many ways are the antithesis to the rest of the market as they are taking a long perspective on their investments, have a lot of assets and do not use leverage in their deals which would make them attractive as investors.[103] From Temasek's perspective, the long term strategy gives them the opportunity to gain from liquidity premiums not available for other private equity firms on the market with a shorter view. One area they find very attractive is early stage

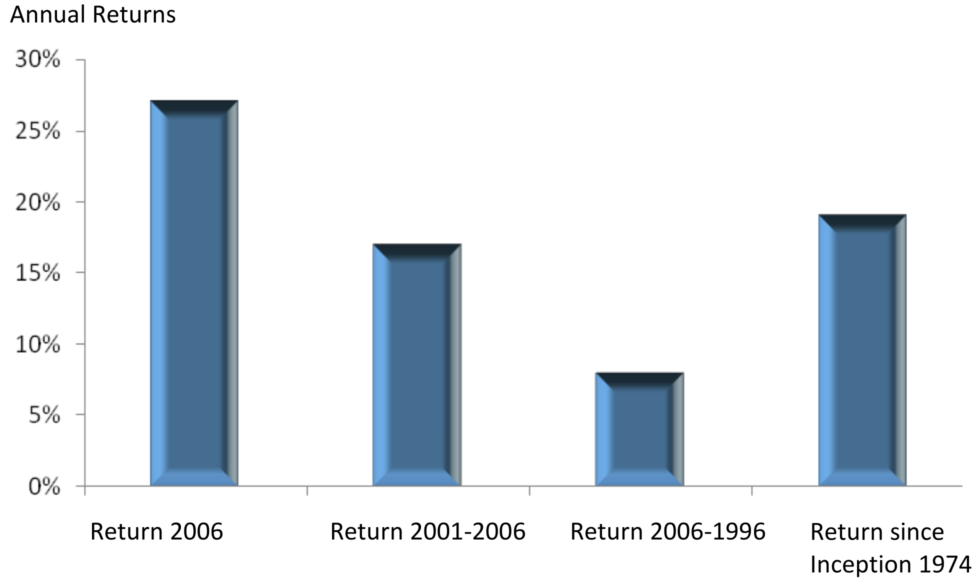

Figure 23: Temasek's Nominal Returns[104].

[100] Interview with Hasan Jafri (04/11/08).
[101] Temasek (04/08).
[102] Berkshire Hathaway (03/08).
[103] Anonymous think tank.
[104] See Appendix 8 for details.

companies where they can get large stakes for a discounted price as the risk is high. This investment strategy is similar to the strategy of the very successful Yale Endowment. Highlighting the fact that Temasek is defined as an equity house could though make them a concern to western politicians. The fact that they invest to get large equity fractions in companies gives them access to companies. Truman sees Temasek as one of eight potentially risky sovereign wealth funds, as these funds have the strategy to be active in their investments and hence potentially could have agendas other than risk return maximizing.[105]

Temasek has four overall investment themes which they follow. These are Transforming Economies, Thriving Middle Class, Deepening Comparative Advantage and Emerging Champions. The target geographic allocation in the long run for Temasek is one third each in OECD, Asia and Singapore. Today the allocation to Singapore is quite overweighed while the OECD countries are underweighted. The allocation to Asia has been increasing the last years. The focus on Asia is something Temasek clearly states will continue as the Chinese and Indian markets continue to grow. 52% of the portfolio is invested in listed shares where Temasek has more than 20% of the total market capitalization. Approximately 18% is invested into unlisted assets.[106] The portfolio is tilted towards telecommunications and financials where the $4.4 billion subprime bailout of Merrill Lynch probably is the most high profile investment together with the 19.3% stake in the U.K. bank Standard Chartered.

5.3.2 Transparency

Temasek is one of the most transparent sovereign wealth funds in the market and has become substantially more transparent just during the last year. In 2004, the CEO of Temasek, Ms Ho Ching, announced a new policy regarding transparency which target was to demystify Temasek and make it more available to the public[107]. The same year, Temasek published its first annual report containing extensive information compared to what is revealed by other sovereign wealth funds. According to Temasek[108], the reason why they have become so transparent is the transparent culture within the firm and an attempt to meet the requirements from the market. It is noticeable that the GIC, which is the other Sovereign Wealth Fund in Singapore, does not provide any financial statements at all. Both of them are entities connected to the ministry for finance and the government of Singapore. The explanation to why there is such a large difference in transparency between GIC and Temasek is unknown and raises a question about the intention from the government concerning transparency.

As mentioned before, there are culture differences between Asia and Europe / U.S. which are pointed out by Temasek's representatives. They declare that they try to respond to Western demands and that these attempts have affected their portfolio companies to increase their level of transparency

[105] Truman (2007:1).
[106] Temasek Review (2007).
[107] CFO Asia (11/04).
[108] Interview with Hasan Jafri (04/11/08).

as well. Furthermore, they argue that they are not assured that the Norwegian model of transparency is the superior one[109]. The argument is that becoming as transparent as the The Government Pension Fund in Norway would put Temasek in a less competitive situation compared to other market players[110], which is a similar argument mentioned in Dubai. Temasek is though working for more transparency and is trying to meet the requirements from Europe, the U.S. and the IMF.[111]

When assessing Temasek using the transparency framework, their score is very different from ICD's. Temasek has published most basic information needed to at least get a comprehensive overview of the company with the exception of returns on individual investments. The question regarding external managers has been left blank as Temasek to our knowledge does not use any external parties.

Question	Yes	No	N/A
Is there a public Annual Report easily available?	●		
Is there an annual public statement of AuM?	●		
Is there an annual public statement of the asset allocation?	●		
Is there an annual public statement of the geographic allocation?	●		
Is there an annual public statement of the fund's return?	●		
Is there an annual public statement of each investment's return?		●	
Are the external investment managers' mandates publically available?			●
Does the SWF have regular independent audit?	●		
Is there a publically available audit report?	●		
Does the SWF publically state their objective and investment strategy?	●		
Does the SWF publically state the ownership structure of the fund?	●		

Table 10: Transparency assessment Temasek.

5.3.3 Corporate Governance

Temasek is an exempt private company which means that they have less than twenty shareholders and do not need to fill in public audited financials even if they have chosen to. In 1991 the Singapore constitution was amended to give the president an independent role to safeguard Singapore's reserves and assets. In practise this means that the President must approve changes in the board of Temasek and also appoints the new CEO. The board must get approval from the president to draw on the country's past reserves.[112] The official picture of Temasek is a completely separate entity which only receives overall guidelines from the government, with the overall task to achieve good returns on its investments.

[109] Interview with Hasan Jafri (04/11/08).
[110] Interview with Hasan Jafri (04/11/08).
[111] Interview with Hasan Jafri (04/11/08).
[112] Israel (2008).

However, there are concerns about the corporate governance structure. Since 2004, the prime minister's wife, Ho Ching, is executive director at Temasek. The fact that one of the largest institution and a national investment vehicle is run by a person closely connected to the power deviates from the guidelines from OECD. Several people interviewed, raised the question about the independence of the management board, as it is almost impossible to talk about total independence with such tight connections. OECD states that it should be clear communicated guidelines from the government and that no involvement should be done by the power on a daily basis.

As an active owner, Temasek helps their portfolio companies to find board members by providing a short list of candidates from their network. Temasek argue that they never force the portfolio company to appoint the recommended persons. A person interviewed, at one of Singapore's most influential think tanks, on the other hand argued that Temasek's recommendation to board members rarely get refused.[113] The reason is simply that Temasek is such a large institution in Singapore and closely connected to the power, which makes it complicated for domestic companies to refuse the proposed candidates. In the global financial market, Temasek is quite a small player so their impact in electing board members is more correlated to their equity stake in the portfolio companies. It should be noted that in the high profile investment into Citigroup, Temasek relinquished their possible opportunity to nominate a candidate for the board.[114]

Temasek has a rather unique liability side for being a sovereign wealth fund. What differs is that the inflow of money is neither coming from natural resources nor current account surpluses. Instead, the starting assets were public companies which were transformed into private companies under Temasek. The implication of this is that the liability side is rather undefined and depends on the need of the Singapore government. Dividends are paid out to the ministry of finance but the size could vary after the ministry's need, combined with the current need of Temasek. However, the latter is less prioritized.

Several years ago, Temasek made a bond issuance which is highlighted as an important corporate governance action. Even if the primary goal was to raise money, it also gave Temasek an official credit rating which in some sense means being watched by the credit rating companies. By surveillance actions taken by the agencies, Temasek indicate it will push the organisation even further in the attempt to improve their business. They argue that the credit rating agencies have the same role of surveillance as Stortinget (the parliament in Norway) has on the Government Pension Fund[115].

5.3.4 Analysis

Temasek should be praised for its commitment to transparency and scores well on almost all questions in the transparency assessment. The only factor from the framework that they do not adhere to is

[113] Anonymous think tank.
[114] Interview with Hasan Jafri (04/11/08).
[115] Interview with Hasan Jafri (04/11/08).

returns on specific investments. This is interesting as returns on different deals are the only demand in the framework that demands more than an overall level of transparency. It seems clear that Temasek is willing to cooperate on transparency issues but will not go any further than what is requested by the European Union and the U.S. There is nothing wrong with this strategy as most companies implement what is necessary, but not more.

When combining the transparency issues with corporate governance issues, questions can be raised. While Temasek is transparent, the other sovereign wealth fund in Singapore, GIC, is very much the opposite, not revealing much information. This might change as GIC was one of the few sovereign wealth funds that signed a letter of understanding together with the U.S. Treasury to become more transparent. The reason to why GIC is less transparent, could be that they have not been in focus from the international community as they are more passive investors than Temasek. Temasek's equity focus has probably put them in the spotlight of the debate as being one of the sovereign wealth funds which may be a potential risk the Western politicians, according to Truman[116]. This discrepancy between the two founds in Singapore make it hard from an outside perspective to evaluate the government's standpoint in the question of transparency.

Similar to ICD, the distinction between the government and the corporate structure of Temasek is not perfectly clear. Although nothing can be proofed, it is strange that so many people with connections to the powerful families in Singapore are active in Singapore and GIC. Let's assume that this is just a pure coincidence that the best person to lead Temasek is the prime minister's wife. Would it not instead be better to choose the second best leader for Temasek to avoid suspicions? No proof of political involvement in Temasek has been found, but on the other hand, it is very difficult to identify such involvements, which leaves the concern without an answer.

Compared to ICD's structure, Temasek has three distinctive factors which distinguish them. They publish the official corporate structure which gives an overview of different actor's potential influence. Furthermore there is no mix between personal and government assets which is the case in Dubai even if government connected people work actively in Temasek. Finally, there are thresholds to protect the assets to be used by corrupt politicians with their own agendas. For example, the fact that it is not possible to withdraw reserves from the sovereign wealth funds accumulated during the same term of office makes it difficult to use the assets right away. However, it should be noticed s that there has not been any larger changes politically between the elections in Singapore as the same party has had the power in the country since its independence in 1965.

Regarding investment strategies, Temasek is one of the most active actors on the sovereign wealth funds market with large stakes in many international banks. The two industries Temasek have the highest exposure to are financial services and telecommunications, where at least the latter usually is considered to be a sector with national security concerns. The investments into the banks have had a

[116] Truman (2007:2).

stabilizing effect on the financial markets but being an active owner taking large stakes also means that there is a risk that Temasek might be destabilizing for the markets in the future. If the markets are on the top of a business cycle with potentially overvalued companies Temasek may want to cash out on their investments. Rumours of this happening or actual action, e.g. if they sell of their large stakes in the banks, could cause the shares to drop more than what is reasonable as investors speculates that Temasek has inside information about the companies.

The government receives dividend from Temasek if needed which means that there is no short-term needs to rebalance the portfolio if it has become skewed to a specific sector or country. This makes potentially strategic investments possible, especially in combination with Temasek's connection to the ruling family in Singapore. Exactly like ICD, Singapore also has an objective to promote domestic growth and many interviewed persons state that this means taking strategic positions which gains Singapore in the long run.

The conclusions for Temasek are as follows. Regarding transparency Temasek has come a long way and is in the forefront of the development. Almost all key information requested by the Western world is provided and the fund has shown great understanding for the transparency requests and has developed rapidly to adhere to these demands. The corporate governance structure gives mixed results. As Temasek is transparent, they show the corporate governance structure and how they are connected to the government in Singapore. The question to ask is about the unclear connections between the ruling family and the fund. The fact that Temasek also seems to practice a demand in the portfolio companies to appoint board members recommended by Temasek, results in a mixed perceived risk regarding corporate governance. The investment guidelines are loose and investment decisions seem quite often to be taken on an ad hoc basis. The relatively large stakes Temasek has taken in e.g. Standard & Chartered shows that they do have the financial muscles to do strategic investments if they would like to. So finally, no evidence could be shown regarding political investments or influence of politicians, but only the fact the Temasek is an equity house with loose guidelines and close connections to its sovereign gives the question about being a concern to receiving countries.

5.4 Government Pension Fund – Global

Name	**Government Pension Fund - Global**
Country	Norway
Year Started	1990
Country Government	Democracy, constitutional monarchy
Democracy Rank	1
Type of SWF (Input)	Energy Based
AuM ($bn)	380
Transparency Rating	10
Nominal Return 2007	7,90%
Since Inception	6,49%

Table 11: Presentation of the Government Pension Fund - Global

Norway is a country with approximately 4.8 million inhabitants located in the northern part of Europe. Labeled as a democracy for a long time, Norway is ruled by the prime minister which is elected every fourth year. To be able to rule, the prime minister must have the majority of the seats in the parliament. Norway is considered one of the most open countries in the world and is today highly dependent on its oil resources although the parliament has decided to use these assets as little as possible in the annual fiscal budgets.

During the 1960s, Norway discovered large oil reserves in the North Sea, which later gave them the opportunity to become a major player on the international energy market. From the mid-90ts, Norway has been one of the top-ten oil suppliers in the world, giving the country large extra income. In 1996, the surplus income from oil exports exceeded necessary government investments in the oil sector, which made the government to do its first allocation of capital from the government to the Norwegian oil fund – today named the Government Pension Fund - Global. In the beginning of the millennium the Norwegian oil production reached its peak and is expected to decline rapidly over the next years. Over the last twelve years, further capital injection into the fund from the government combined with returns from investments has made the total assets equalizing approximately $300 billion today.

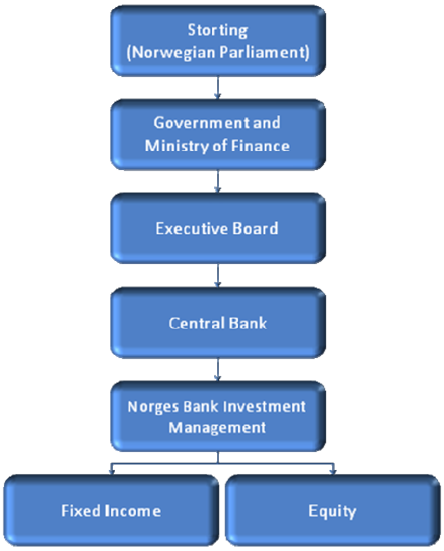

Figure 24: Structure of the Government Pension Fund - Global[117].

5.4.1 Investment Strategy

The overall responsibility of the fund is allocated to the ministry for finance, which sets the guidelines and overall objectives for the fund with a mandate from the Norwegian parliament. The operational management is however allocated to Norges Bank Investment Management (NBIM). The guidelines from the parliament and ministry for finance regulate the investment strategy and asset allocation for the Government Pension fund. [118] The target allocation for equities was recently raised from 40% to 60% and the fixed income stake decreased from 60% to 40% and will decline to 35% this year when 5% real estate is added to the portfolio. The fund is evaluating a possible investment strategy into private equity, but there are problems with this asset class as the private equity industry is not as transparent as the Government Pension Fund wants to be in their investments. The most important investment restriction is that the fund is not allowed to invest into Norwegian companies. The reason is that this would spur inflation but also that this might create a debate arguing that the Norwegian government wants to subsidy domestic companies, giving international actor a competitive disadvantage. Recently an investment office opened in Shanghai. Official sources state that it was opened to learn more about the Asian markets where the fund is underweighted compared to its benchmark. The benchmark used by the fund consists of FTSE All World for the fraction of equity and Lehman Brothers fixed income[119] for the fixed income investments. The use of external managers accounts for 20% of total asset under management, but this 20% counts for almost 50% of the risk in the portfolio.

[117] Annual Report NBIM (2008).
[118] Sovereign Investment Council (2008).
[119] Lehman Global Aggregate fixed income indices

In 1996, when the first allocation from the ministry for finance was made to the fund, all capital was invested in fixed income-related securities. Two years later, a shift in the guidelines was made and investments in equities were allowed. To diversify the portfolio further, real estate and corporate bonds were accepted asset classes from 2007 and the discussions continues whether the fund should be allowed to invest into new asset classes[120]. The fund does not take any major stakes in the target companies as the maximum owner stake in a company is 10%. In reality the fund on average holds less than 1 % of the market cap in each company. The reason for not taking more active stakes is that they have guidelines to be a diversified investor and does not believe in excess returns from large passive investments.

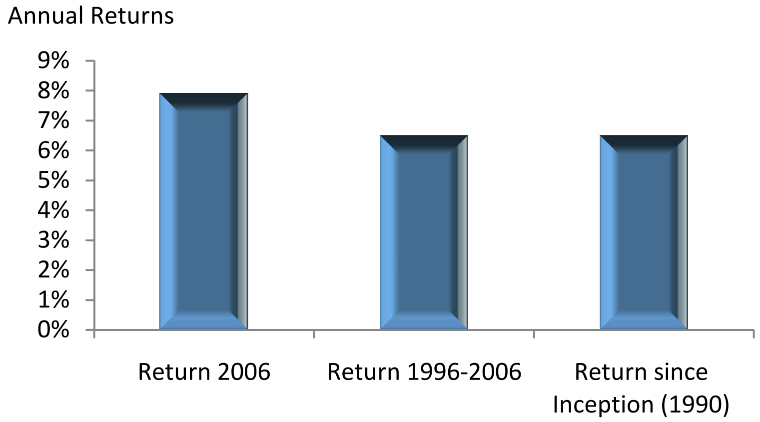

Figure 25: Government Pension Fund's returns[121].

In terms of risk tolerance, the pension fund has allocated a lot of resources to evaluate models to maintain its risk level equally to its index. There is a debate in Norway arguing that it is better to lower the risk and not loose money instead of taking high risks which should give higher returns. It is noticeable that the outlined investment horizon for the fund is set to 50-100 years which should make it possible for the fund to be exposed to higher risk than normal asset managers.[122]

In the overall communicated forecasts, the management of the fund clearly states that they are not sure that equity over a long period of time generates the level of superior returns that we have seen for the last twenty years. The argument is that equity returns tend to reverse to the mean, where fixed income securities do not, according to Tom Fearnley[123]. Hence, the fund does not expect equity returns in the long term at the levels that we have seen that last 20 years. The fund has achieved a 6% nominal return over the last 10 years with an annual return on equity and fixed income investments by 7.0% and 5.1%, respectively.

The investment strategy with small stakes in a large number of companies does not normally create any public debate. An exception to this occurred in 2006 when the fund started to short-sell

[120] Interview with Tom Fearnley (05/09/08).
[121] See Appendix 9 for details.
[122] Interview with Tom Fearnley (05/09/08).
[123] Interview with Tom Fearnley (05/09/08).

Icelandic government bonds, speculating that the overstretched Icelandic financial industry would decline more. The issue became hot on national political levels and the Icelandic prime minister complained officially, arguing that the action was violating the agreement between the Nordic countries to enhance financial stability in the Nordics.

5.4.2 Transparency

The Norwegian fund is often discussed as the primary example of sovereign wealth funds transparency as they are considered to publish all necessary information annually. The annual report is a comprehensive review of its investments, strategy, ownership structure and mandates. Apart from sole asset information, there are additional parts describing its mandates and the ownership structure of the fund. The decision tree of the fund and its connections to the government are clearly defined together with extensive information about guidelines and intentions. Hence the overall picture of the structure is easy to follow, which has made the Norwegian fund considered best in class. The reason for the transparency in the sovereign wealth fund derives from the society in Norway which is regarded as one of the most open democracies in the world. There is not really an option for the Government Pension Fund to be anything else than transparent as this would result in an outcry from the parliament and the people of Norway.

Regarding its portfolio companies, information is provided for all stakes and also an agenda for corporate governance issues within its portfolio companies. Even though the fund mainly have small stakes in companies and are not allowed to exceed a 10% stake in any single company they have a clearly defined agenda for active ownership. Active voting on annual meetings is included in the strategy for active ownership as well as direct communication with the management board. From 2008, it is even possible to get information how the fund voted in different issue on the annual meetings, which is a very far from the level of transparency in the other two case studies. The issue of the Norwegian fund is not to be more transparent, it is more about an accurate level of transparency. Temasek and ICD argued that they will not be as transparent as Norway as there is a potential downside when taking large stakes in companies as hedge funds may take speculative positions against them. This should not be a major problem for the Government Pension Fund as the stakes is maximum 10% of the company but shows that too much transparency can result in negative implications as well.

One of the reasons why the Norwegian fund does not invest larger stakes in the portfolio companies is due to the problem of negative publicity similar to the criticism against Temasek's large stakes in financial institutions.[124] Tom Fearnley from the fund expressed that the appropriate level of transparency will be a future issue and argued that no other investor like pension funds or hedge funds are requested to have the same level of transparency. To fulfill the market requirements of

[124] Interview with Tom Fearnley (05/09/08).

transparency the Government Pension Fund has stated a target level which should make it easier for external stakeholders to predict future step of the fund in terms of corporate governance[125].

The assessment in the transparency framework of the Government Pension Fund shown in table 12 is straight forward. The fund simply adheres to all the basic demands of transparency in the framework.

Question	Yes	No	N/A
Is there a public Annual Report easily available?	●		
Is there an annual public statement of AuM?	●		
Is there an annual public statement of the asset allocation?	●		
Is there an annual public statement of the geographic allocation?	●		
Is there an annual public statement of the fund's return?	●		
Is there an annual public statement of each investment's return?	●		
Are the external investment managers' mandates publically available?	●		
Does the SWF have regular independent audit?	●		
Is there a publically available audit report?	●		
Does the SWF publically state their objective and investment strategy?	●		
Does the SWF publically state the ownership structure of the fund?	●		

Table 12: Transparency Assessment of the Government Pension Fund – Global.

5.4.3 Corporate Governance

The Norwegian way of handling corporate governance issues differs a bit from other Sovereign Wealth Funds as the owner of the fund, the ministry for finance, has set up very specific guidelines regulating the corporate governance issues. The active management of the fund is allocated to the Norges Bank Investment Management and officially there is no operational involvement from the ministry for finance. NBIM is a division within the central bank and has its own right to operate the fund within the range of guidelines set by the ministry for finance which includes issues regarding investment strategy, risk tolerance, transparency, asset allocation and ethical guidelines. Due to the fact that the NBIM is responsible for the operational management of the fund, these regulations from the ministry for finance are very specified in certain areas, which restrict NBIM to act as an individual asset manager.

In addition to these guidelines, the parliament of Norway has created several boards and committees to advice and supervises the NBIM to ensure quality operations within the organization. The Supervisory Council is the committee, subordinated the parliament, which's task is to control and review NBIM's operations. Furthermore, there are other committees for ethical and environmental issues which have been created the last years, to secure that NBIM acts in accordance with stated principles.

[125] NBIM Annual Report (2008).

The active ownership of the Government Pension Fund must be divided into several parts. The overall strategy regarding active engagements in companies is to be an active owner that uses its ownership rights, e.g. voting on annual meetings, having a direct dialogue with the management boards and promote cooperation with the company owners in strategic issues. The fund defines itself as a very active owner and uses its voting rights at 90% of the annual meetings (out of 3,700 portfolio companies) and have discussions with the boards within a several number of the portfolio companies. From 2007, the fund provides information about their voting positions, and summarizes the real number of voting processes to slightly above 42,000, out of 3,700 portfolio companies.

Regarding active ownership through direct communication with the management boards in the portfolio companies, the fund clearly states that they are trying to have a frequent dialogue to ensure that the company strategy match the fund's guidelines. The fund states that they primarily initiates discussion with boards in companies which deviate in strategy and argues for the advantages in there standpoints. Fund representatives in these discussions actively tries to pursue company boards that do not agree with the fund guidelines to change their minds and start working in accordance with the fund opinion[126].

On an overall basis, the main issue for the fund regarding corporate governance issues today is to implement more ethical and environmental perspectives on the business in the portfolio companies. The problematic part according to official statements[127] is to get acceptance for these guidelines due to the fact that implementing these guidelines is often costly, although studies show that corporate social responsibility affects corporate brands positively[128].

5.4.4 Analysis

The Norwegian way of managing its Sovereign Wealth Funds is seen as the role model for other sovereign wealth funds to follow. As the Government Pension Fund is very highly regarded within both transparency and corporate governance it is hard to find weaknesses to highlight. What must be remembered is that the fund has been given the role as a role model by the Western world as the fund clearly has implemented Western world influenced transparency and corporate governance.

There is however some areas where the Norwegian fund may cause controversy. Two examples are the negative screening process of potential investments and the active persuasion of portfolio companies. Some countries have reacted negatively that the Government Pension Fund has pointed out companies through its screening process and labeled them more or les unethical. Furthermore, arguing that the fund should try to affect companies to follow the environmental and ethical guidelines set up by the fund may put the company management in embarrassing situations where they are accused for being non-environmentally friendly, when the truth is that they have been

[126] NBIM Annual Report (2008).
[127] NBIM Annual Report (2008) & Interview with Tom Fearnley (05/09/08).
[128] Holding Associates (2007).

forced to make a trade-off between e.g. employment and negligible environment returns which the fund is not aware of as they are such a small shareholder. What must be questioned is whether the costs of being an active voter might be larger than the benefits from it and in a broader perspective, is it reasonable to demand from a sovereign wealth fund to have costs not related to maximizing returns? As is widely known, the fixed costs when portfolio investing in mutual funds or pension funds is very important for the long run return, but has the Norwegian people really had the opportunity to choose between returns and social corporate responsibility outside the general parliament elections where the Government Pension Fund is only one of many important issues?

The government Pension Fund is a good example of Stephen Jen's opinion that it will be hard for a sovereign wealth fund to become more transparent and better in corporate governance issues than the underlying country. Norway is one of the most open democracies in the world and is ranked as number one in World Audit's democracy index.[129] The political landscape is stable and anyone who wants can run for the prime minister position. As the strategy of the Government Pension Fund is not written into the constitution this means that the strategy of the fund could be changed if a different party wins the election. This could of course potentially mean that the fund could implement a much more active strategy but this chance must be seen as very remote.

It is many times argued that there is no real evidence when sovereign wealth funds really have caused problems for the receiving country. Actually, the Government Pension Fund is one of the very few examples when a sovereign wealth fund was acting destabilizing on the market. The shorting of the Icelandic financial markets increased the crisis on Iceland and although no conclusions should be drawn from this mistake, it shows what the sovereign wealth funds potentially can do when looking for short term returns instead of taking the wider picture into account.

The Government Pension Fund is slowly moving into new asset classes. The slow pace when considering new asset classes and geographic areas is actually important as the affected actors on the market have time to adapt to the change. This reliability is important for the market as the capital flows from the fund are large and sudden movements as in other sovereign wealth funds may cause concerns what the underlying reason to the rapid change was. What one may question is the rather low return on the total portfolio. Of course this is connected to the chosen risk level, but would it not be reasonable for a fund with indefinite time horizon to take higher risk?

The conclusion which can be drawn after analyzing the Government Pension Fund is that there are no threats whatsoever coming from the Norwegian wealth fund. The fund has historically always invested in line with its benchmarks and rebalancing its portfolio often. The transparency is probably higher than necessary and the corporate governance structure is clearly defined and there have not been any deviations from it to date. They are also taking their responsibility as an owner by voting actively.

[129] World Audit (2008).

Although it is understandable that not all countries agree on the fund's policies in e.g. ethics, the stakes taken in companies are still small enough to not cause any real concerns.

The transparency demand that the Norwegian fund face is quite problematic related to returns on investments. The guidelines are to be as transparent that external stakeholders can predict their next move, which might make it possible for hedge funds to take opposite positions in the market. This is clearly a challenge for the future.

Norway has a negative screening process which is conducted on all portfolio companies to identify firms which act morally wrong regarding labor, ethics and environmental issues. If no progress is made in the discussion with the management regarding these issues, the fund has guidelines which state that it is possible to withdraw from that investment. When rejecting companies for one of these reasons a public debate may occur and it might upset feelings in the company's home country.

To conclude, the potential risk with the Norwegian Global Pension Fund as a sovereign entity that will have a strategically agenda seems to be much less than some of the other players in the market, even though the fund continually expand their acceptable asset classes and recently has increased the allowed equity stake in a single company to 10%. Transparency is extremely high, the corporate governance well defined, both in the fund's ownership structure and how they act in their investments, and the investment strategy is based on diversification, not active stakes. Hence, Norway scores low on each category in the framework.

6. FINAL ANALYSIS

The debate in the Western world on Sovereign Wealth Funds has mostly concerned the fear of foreign investments and the potential threat coming from these sovereign investment vehicles. In media and the political debate, very few advantages of investments derived from the sovereign wealth funds have been expressed. On the other hand, one must remember that the sovereign wealth funds stabilized the market and in some sense saved the global financial markets during the recent subprime prime crisis by bailing out the large investment banks. Due to this fear, demands for international policies for how the sovereign wealth funds should invest have grown up to increase the accountability and transparency of the funds. Today, the sovereign wealth funds' transparency is generally low even if some funds such as Temasek has improved lately and even the Abu Dhabi Investment Authority recently published their first annual report. It is very important to also state that the sovereign wealth funds do not yet have any global guidelines to follow so it is hard for them to know how to act to adhere to the Western politicians' demands.

The Government Pension Fund of Norway is the leading actor in transparency and corporate governance together with e.g. the New Zealand Superannuation fund and the Alaska Permanent Fund.

The overall picture of the market, derived from the conducted market analysis, is that the Western sovereign wealth funds are more open and transparent than the funds in Asia and the Middle East. Still, there is a growing understanding in these parts of the world for enhanced transparency, although it in some cases may be due to that the funds want to continue to have access to the Western financial markets. It is likely that the funds in the emergent market will become increasingly transparent and in some cases the funds are one of the most transparent institutions in its home country. This perspective must be considered by the Western world as well when discussing further transparency.

However, there is also a general criticism against too much transparency. Both ICD and Temasek points out that there will be a limit for how transparent they will accept to be as they do not want the transparency to affect their market operations. If the Western world wants these sovereign wealth funds to become as transparent as Norway, they must probably state an example and demand the same openness from the European and U.S. hedge fund and private equity markets. Instead, the governmental institutions should negotiate how the funds can be transparent enough but still retain some factors unrevealed to the public.

It is important to address the perceived fear which many politicians and other stakeholders have. The attempts from OECD and IMF are a solid start but they have important limitations to what can be achieved. There is a clear risk that the code of conduct will be too general and that it will be very hard to pose sanctions on the funds when the policies are not followed which may cause the conflict to once again continue on a bilateral level. The only reasonable way to achieve a true agreement is to lift the debate to higher levels.

In the end, as a SWF is sovereign by definition, it will be hard to achieve sound corporate governance if the government or ruler in the country has another agenda. It is in the end the government in each country which decides on the sovereign wealth funds strategy. In Norway the guidelines are set by the parliament, at Temasek the government does this and in ICD they are set by the government which has close connections to the Sheikh himself. It is unclear how closely connected the ruler and the sovereign wealth fund is to each other which is the reason to why a more explicit governance code is necessary to straighten out the prejudices on the market. Today the discussion is very focused on which of the sovereign wealth funds which will sign the code of conduct or not. However the question is whether the discussion should not focus on the sovereign wealth funds' governments and their intentions instead? As the perceived risk many times comes from the risk that leaders in the sovereign wealth funds will use the fund for political purposes, a signed code of conduct where the fund itself promise to create solid corporate governance will not be enough. An agreement on a higher level is needed to get all doubts away.

A pattern which can be seen after analyzing both the market and the three case studies are that sovereign wealth funds in emerging countries seem to accept more risk in their investments. The underlying purpose does not always seem to be higher risk and higher expected return per ser but to promote the domestic growth by investing into sectors where the country wants to develop. These kinds of investments are rare when turning the attention to the sovereign wealth funds in the developed world. The Government Pension Fund, analyzed in this study, has not done any investments which could be seen as strategic in this sense. They never take any large stakes and the fact that they are active in ownership issues, is more due to promoting sound corporate governance and ethics than actually changing the company's core strategy. There are examples of sovereign wealth funds similar to the Norwegian in the Middle East, e.g. ADIA but even if they mainly are asset managers they also have direct stakes in large companies which are the difference compared to the Government Pension Fund.

To broaden the perspective further, consider China. China has one large competitive advantage compared to the Western world, its cheap labor, which make many European and U.S. companies outsource their production to China. This gives high growth rates and a large current account surplus. Other emerging markets as Singapore and Dubai do not have these explicit advantages. The oil production will soon end which means that Dubai needs to prepare for the post-oil era by developing the infrastructure, services and production in the country as fast as possible. By allocating the investments made by the sovereign wealth funds into crucial areas of competence, the sovereign wealth fund can promote this transformation of the economy. The country simply does not have time to develop their own knowledge but tries to step up in the value chain directly by acquiring whole companies, which is normal business strategy, and to attract companies to invest in e.g. Dubai.
Both Dubai and Singapore were undeveloped countries 50 years ago. In Singapore the sovereign wealth funds are not mainly responsible for the great development but it has through active investments helped spurring the local economy. In Dubai, the funds have had greater impact and many of the subsidiaries to ICD have reel impact on the daily projects in Dubai. The financial industry in Dubai is one example of what the sovereign wealth funds can create. The home bias is much higher for Temasek (38% of invested capital) and ICD (percentage unknown, but it is substantial according to the people interviewed for the thesis) than for the Government Pension Fund in Norway which is not allowed to invest anything at all in their home market. The funds in Norway, Alaska and New Zealand tend to focus on enhancing the value for future generations instead as the main challenge there is the aging population and pension liabilities. From a political point of view, the sovereign wealth fund may be perceived as a threat when the corporate governance structure in the funds are not clear and the funds invest small, but significant stakes into companies which gives the owner access to the company.

What this analysis points out is that the question whether sovereign wealth funds investments are a threat to the receiving countries or not depends on how you define threat. From a pure market economy perspective the funds make the markets more liquid and efficient. What might happen is that some countries, where the active sovereign wealth funds are located, benefits from their investments and therefore will grow faster than the rest of the world. From a market perspective this is nothing to fear but from a national political view it might be a risk that some countries (read the U.S. and Europe) may suffer economically. On the other hand this is signs of an efficient market. Countries, as well as companies, must continuously transform to adapt their skills to the ever-changing environment, protectionism is not the right answer.

Where there might be a reel risk is when sovereign wealth funds with active investment strategies and the goal to promote domestic growth, take large stakes in foreign companies in sensitive sectors. In combination with undefined distinctions between the government and the fund and unclear ownership of the sovereign wealth fund this is a situation where the sovereign wealth fund potentially is a threat. There is then a risk that the fund is used to other purposes such as technology transfer which may harm the competitiveness of the receiving countries unfairly. Intellectual property rights are not properly developed globally but if countries come to respect them, this could be one solution to the problem.

7. CONCLUSIONS

This thesis had two initial purposes. First, to map the sovereign wealth fund market and secondly, to examine whether the sovereign wealth funds have other investment objectives than maximizing returns.

The market analysis showed that sovereign wealth funds are spread over the world and that there are a few actors which dominate the market in terms of AuM. The size of the sovereign wealth fund market is approximately $2-3 trillion and is growing fast. Still the sovereign wealth fund market is small compared to other actors on the financial markets. What can be concluded is that there is a strong correlation between the level of democracy in respective SWFs country and the level of transparency in the sovereign wealth funds and that there has been a large investment flow into the banking sector lately due to the subprime crisis. The importance of the SWFs also differs when measured as AuM/GDP where the range is from 0% to over 500%. From the small sample it can be seen that pension funds generally are a bit more aggressive in equity allocation than sovereign wealth fund, but there are several reasons why this might be the case, e.g. that the SWFs have not reached their target equity level yet as many actors are new on the market and that there is a strong bias as many pure equity SWFs are missing in the data. However, this shows that the lack of transparency is higher in more aggressive funds which is an interesting conclusion.

From the case studies, it can be concluded that sovereign wealth funds in small emergent markets are much more aggressive in their investment style than SWFs in the developed world. This seems to be due to the goal of these emergent country SWFs to promote domestic growth and attract foreign business to the country. Furthermore they seem to compete to become the regional hub for trade and services which cannot be fulfilled without having access to the best technology and know-how. The goal of domestic growth is rarely the goal for SWFs in developed countries, instead future generations are usually somehow the goal which reflects the more passive investment approach. This fact leads to one out of two conclusions answering the question whether the SWFs have alternative objectives than maximizing returns. To grow rapidly and become a competitive nation the SWFs in emergent markets need to rapidly get access to technology and knowledge which usually takes a long time to develop. The sovereign wealth funds can be seen as one tool in the toolbox to climb in the value chain. Hence there is a potential threat that sovereign wealth funds in emergent markets use its power and assets to gain technology and knowledge. Knowledge is perhaps most interesting as intellectual property rights law is not protected to the same extent as in the Western world.

The second conclusion is that there is a risk of alternative objectives from the sovereign wealth funds in emerging markets as they are in practice connected to the ruling families in the country. These might not only have risk/return maximization as a goal but also empire building and other personal agendas. As long as there is not a clear difference, both in official statements and in action, it cannot be stated for sure that there are not other strategies, e.g. domestic growth as concluded above, which are not in line with efficient asset management.

Hence, there is a potential threat of knowledge transfer by the SWFs in emergent markets, but no clear political threat, as defined in this thesis, has be found. The potential economical threat exist but should not be a reason to regulations if one believes in efficient markets.

8. FUTURE RESEARCH

The sovereign wealth fund market is currently an area of extraordinary growth and much will happen in the near future. Based on the findings in the thesis several potential research topics where further research is needed can be found.

This thesis has tried to use case studies of different kind of SWFs to be able to generalize the conclusions for the sovereign wealth fund market. The case studies have been as representative as possible in this kind of studies. However, recently China and Russia have started their own sovereign wealth funds. This means that there is another factor coming in which is not represented by our case studies. This is the size of the country, not only in population, but economically and military as well. It would be interesting to analyze how the Chinese and Russian sovereign wealth fund could become another kind of SWF-actor with larger possibilities to be a threat. Interesting perspectives would be to see how the pressure on transparency and solid corporate governance is put forward when the counterparts are two super powers. The last time there were two super powers around, it lead to a cold war lasting for decades.

Secondly, this thesis has not conducted any econometric analysis on the sovereign wealth fund’s performance. The reason has been simple, there is not enough public data to be able to draw any statistically significant conclusions. As many funds now seem to reveal more information it may be possible in the near future to analyze how the performance of the sovereign wealth funds really are and if the funds which are taking opportunity driven investments, e.g. in investment banks, earn excess returns compared to more diversified SWFs as the Government Pension Fund of Norway.

REFERENCES

Articles & Reports

Biberovic, N. (2008). *A Common European Approach to Sovereign Wealth Funds – Continuity of the Status Que?*, Gulf Research Center, Dubai.

Country Report Singapore (2008). Embassy of Sweden, Singapore.

Country Report UAE (2008). Embassy of Sweden, United Arab Emirates.

Farrell, Diana et al. (2008). *The New Role of Oil Wealth in the World Economy*. McKinsey Global Institute.

IMF (2007:1). Global Financial Stability Report - October 2007.

IMF (2007:2). Regional Economic Outlook – Middle East and Central Asia - October 2007.

IMF (2008:1). Sovereign Wealth Funds – A Work Agenda.

IMF (2008:2). *Time Series Data on International Reserves and Foreign Currency Liquidity*.

Jen, S. (2007). *How Big Could Sovereign Wealth Funds Be by 2015?*. Morgan Stanley, UK

Johnson, S. (2007). *The Rise of Sovereign Wealth Funds*. Finance & Development Volume 44, no 4

Kaplan, P (1998). *Asset Allocation Models Using the Markowitz Approach*. The Chicago Graduate School of Business. U.S.

Lyons, G. (2007). *State Capitalism: The Rise of Sovereign Wealth Funds*, Standard & Chartered. UK.

Markowitz, Harry M. (1952). *Portfolio Selection*. Journal of Finance 7 (1): 77-91.

Palin, S (2006). *Alaska Economic Performance Report 2006*. The Department of Commerce. The State of Alaska. US.

OECD (2005). *OECD Guidelines on Corporate Governance of State-Owned Enterprises*. OCED. Paris. France.

Rozanov, A (2005). *Who Holds the Wealth of Nations?*. Central Banking. Volume XV. Number 4. May 2005.

Rozanov, A (2008). *A liability-based approach to sovereign wealth*. Quarterly Journal of Central Banking. vol 18 (3). February

Truman, E (2007:1). *A Scoreboard for Sovereign Wealth Funds*. Peterson Institute for International Economics. US.

Truman, E. (2008). *A Blueprint for Sovereign Wealth Fund Best Practises*. Policy Brief no. PBOB-3.

Watson Wyatt Worldwide (2007). *2007 Global Pension Asset Study*.

Woertz, E. (2007). *A New Age of Petrodollar Recycling*. Gulf Research Center. Dubai

Woertz et al. (2007). *Strategic Foreign Investment of GCC Countries*. Gulf Yearbook 2006-2007. Gulf Reseach Center, 2007

Literature

Eijffinger et al (2003). *International financial integration*. Vol. 2. Cheltenham. UK

Hall et al (2005). *Macroeconomics: Theory, Performance, and Policy*. W.W. Norton & Company. UK

Kvale, Steinar (1997). *Den kvalitativa forskningsintervjun*. Studentlitteratur. Lund. Sweden.

Interviews

Nicholas Anderson, Swedish Export Credit Council in Singapore, 04/12/08.

Andreas Bjerke, SEB Singapore, 04/14/08.

Simon Edwards, Dubai International Capital, Dubai, 04/16/08.

Tom Fearnley, Government Pension Fund, Norway, 05/09/08.

Hasan Jafri, Temasek Holdings, Singapore, 04/11/08.

Stephen Jen, Managing Director & Chief Currency Economist, Morgan Stanley, UK, 04/29/08.

Per E. Larsson, CEO, Borse Dubai, Dubai, 04/16/08.

Diaan-Yi Lin, Partner, McKinsey & Co, Singapore, 04/15/08.

Klas Ljungberg, Counsellor of Commercial Affairs, Embassy of Sweden in United Arab Emirates, 04/17/2008.

Gerard Lyons, Chief Economist & Group Head of Global Research, Standard Chartered UK, 04/29/08

Anders Ng, Nordea Singapore, 04/11/08.

Peter Kvarfordt, Trainee, Embassy of Sweden in Singapore, 04/14/08.

Olle Rossander, Freelance Journalist, Sweden, 03/14/08.

Stefan Svanström, Political Adviser for Minister for Local Government and Financial Markets Mats Odell, Ministry of Finance, Sweden 04/23/08.

Masoud Rana, Senior Analyst, Investment Corporation of Dubai, Dubai 04/17/08.

Eckart Woertz, Program Manager Economics, Gulf Research Center, Dubai 04/18/08

Rachel Ziemba, Lead Analyst Sovereign Wealth Funds, RGE Monitor, U.S., 04/24/08

Speeches & Public Interviews

Israel, C (2008). *Temasek Holdings: A Dependable Investor in the United States*, House Financial Services Committee, US

Gieve, J (2008). *Sovereign Wealth Funds and Global Imbalances*, Deputy Governor, Bank of England, United Kingdom.

Truman, E. (2007:2). Sovereign *Wealth Fund Acquisitions and Other Foreign Government Investments in the United States: Assessing the Economical and National Security Implications.* Testimony before the Committee on Banking, Housing and Urban Affairs. Washington, U.S.

Electronic Sources

Alaska Permanent Fund 2007 Annual report. Accessed 04/08.
http://www.apfc.org/iceimages/ReportsPublications/2007_AR.pdf

Alberta Heritage Fund 2006-2007 Annual Report. Accessed 04/08.
http://www.finance.gov.ab.ca/business/ahstf/annrep07/report.pdf

Aktieservice, hosted by SIS Ägarservice, Sweden. Accessed 04/08.
http://www.aktieservice.se

Australian Future Fund 2006-2007. Accessed 05/08.
Annual Report, http://www.futurefund.gov.au/__data/assets/pdf_file/0014/1409/Future_Fund_Annual _Report _2006-07_internet.pdf

Berkshire Hathaway. Accessed 03/08.
http://www.berkshirehathaway.com/

Borse Dubai. Accessed 04/08.
http://www.borsedubai.ae

British Petroleum. Accessed 04/08.
http://www.bp.com

CapitalIQ, hosted by Standard & Poor's, UK. Accessed 04/08.
http://www.capitaliq.com

Council on Foreign Relations. Accessed 03/15/2008.
http://www.cfr.org/publication/9918/

Dubai International Capital. Accessed 03/09/08.
http://www.dubaiic.com/en/chairmans-office/chairmans-office.html

Dubai Holdings. Accessed 03/08.
http://www.dubaiic.com

Dubai Group. Accessed 03/15/08.
http://www.dubaigroup.com

Dubai World. Accessed 05/08.
http://www.dubaiworld.ae

Investment Corporation of Dubai. Accessed 03/11/08.
http://www.icd.gov.ae

National Pensions Reserve Fund 2006 & 2007 Annual Reports. Accessed 05/08.
http://www.nprf.ie/Publications/2008/PressRelease30APR08.pdf
http://www.nprf.ie/Publications/NPRF_Annual_Report_2006.pdf

NBIM (Norges Bank Investment Management) 2008 Annual Report. Accessed 04/28/08.
http://www.norges-bank.no/Pages/Report____65332.aspx

New Zeeland Superannuation Fund. Accessed 05/11/08.
http://www.nzsuperfund.co.nz

Province of Alberta Economic Outlook (2007). Accessed 05/08.
http://www.pnreap.org/workshops/PNREC_2007/presentations/2007_PNREC_Alberta_Outlook.ppt

Rodriguez, I (2006) *International Diversification*. Lecture 11. Course: Investments. Stockholm School of Economics, Stockholm, Sweden

Sovereign Investment Council. Accessed 04-05/08.
http://www.sovereigninvest.org/

Sovereign Wealth Fund Institute. Accessed 03/04/2008.
http://www.swfinstitute.org

State Oil Fund of Azerbaijan 2006 Annual Report. Accessed 04/08.
http://www.oilfund.az/download2/OilfundEn_2006.pdf

Temasek Holdings. Accessed 04/08.
http://www.temasekholdings.com.sg, 04/08.

Temasek Holdings (2008), Information Fact Sheet. Accessed 05/15/08.
http://www.temasekholdings.com.sg/media_centre_information_factsheet.htm

Temasek Review 2007. Accessed 03/29/08.
www.temasekholdings.com.sg/pdf/Temasek%20Review%202007_Full.pdf

U.S. Treasury (2007). Remarks by Acting Under Secretary for International Affairs Clay Lowery on Sovereign Wealth Funds and the International Financial System. Accessed 04/08.
http://www.ustreas.gov/press/releases/hp471.htm

U.S. Treasury (2008). Report to Congress on International Economic and Exchange Rate Policies: Appendix III May 2008. Accessed 05/08.
http://www.treas.gov/offices/international-affairs/economic-exchange-rates/pdf/2007_FXReport.pdf

World Audit, World democracy ranking 2008. Accessed 04/08.
http://www.worldaudit.com

World Economic Forum. Accessed 01/08
http://www.weforum.org/en/index.htm

Newspapers

Arabian Business, 05/19/08. *Istithmar Chief Snubs* US.
http://www.arabianbusiness.com/519682-istithmar-chief-snubs-us-?ln=en

CFO Asia, 04/11/08. *Translucent Temasek.*
http://www.cfoasia.com/archives/200411-05.htm

Financial Times, 04/29/08. *Gulf investor warns of EU over-regulation*.
http://www.ft.com/cms/s/0/037675ec-162f-11dd-880a-0000779fd2ac.html

Holding Associates, 08/12/07. *Measuring the Impact of CSR on Brand.*
http://www.holding.com/articles/CCIEE.html

Reuters, 04/16/2008. *Dubai's DIC says investing in UK easier than in US*
http://www.reuters.com/article/privateEquity/idUSL1623062120080416

Singapore Window. 05/04/08
http://www.singapore-window.org/sw04/040812e1.htm

Zawya, 05/02/08. *Guide to Sovereign Wealth Funds.* Accessed 03/08.
http://www.zawya.com/story.cfm/sidZAWYA20071031053357

APPENDIX 1: SUMMARY OF SWFS

Name of SWF	Country	Region	Year of Origin	Type of Government	Democracy Ranking***	Type of SWF	AuM (Bn	Transparency Rating**
Abu Dhabi Investment Authority	United Arab Emirates	Middle East	1976	Emirate	77	Energy Based	625	3
Alabama Trust Fund	USA	North America	1986	Republic	15	Energy Based	3,1	8
Alaska Permanent Fund	USA	North America	1976	Republic	15	Energy Based	39,8	9
Australian Future Fund	Australia	Pacific	2004	Democracy, const.l mon.	9	Budget Surplus	59,6	9
Brunei Investment Agency	Brunei	Asia	1983	Sultanate	n/a	Energy Based	30,0	1
China Investment Corporation	China	Asia	2007	Republic	121	Current Account	200,0	2
Excess Crude Account	Nigera	Africa	2004	Republic	100	Energy Based	11,0	1
FIEM	Venezuela	South America	1999	Republic	128	Energy Based	0,8	2
Government of Singapore Investment Corp.	Singapore	Asia	1981	Republic	74	Current Account	330,0	6
Government Pension Fund - Global	Norway	Europe	1990	Democracy, const.l mon.	7	Energy Based	380,0	10
Investment Corporation of Dubai	United Arab Emirates	Middle East	2006	Emirate	77	Energy Based	82****	5
Kazakhstan National Fund	Kazakhstan	Asia	2000	Republic	132	Energy, metals	21,6	3
Khazanah Nasional	Malaysia	Asia	1993	Democracy, const.l mon.	82	n/a	25,7	7
Korea Investment Corporation	South Korea	Asia	2005	Republic	32	Current Account	20,0	9
Kuwait Investment Authority	Kuwait	Middle East	1953	Emirate	80	Energy Based	250,0	6
Leste Petroleum Fund	Timor	Asia	2005	Republic	n/a	Energy Based	2,0	7
Libyan Arab Foreign Investment Company	Libya	Africa	1981	Military Dictatorship	146	Energy Based	50,0	1
Mumtalakat Holding Company	Bahrain	Middle East	2006	const.l mon.	n/a	Energy Based	2,6	n/a
National Fund for Hydrocarbon reserves	Mauritania	Africa	2006	Republic	93	Energy Based	0,3	1
National Pensions Reserve Fund	Ireland	Europe	2001	Democratic	14	Pension/Budget	30,8	7
National Stabilisation Fund	Taiwan	Asia	2000	Republic	38	n/a	15,0	3
National Welfare Fund	Russia	Europe	2008	Republic	125	Energy Based	32,0	4
New Zealand Superannuation Fund	New Zealand	Pacific	2003	Democracy, const.l mon.	4	Pension/Budget	13,8	10
Oil Stabilisation Fund	Iran	Asia	1998	Republic	138	Energy Based	12,9	2
Poverty Action Fund	Uganda	Africa	1998	Republic	88	Energy Based	0,4	2
Qatar Investment Authority	Qatar	Middle East	2000	const.l mon.	n/a	Energy Based	60,0	1
Reserve Fund for Oil	Angola	Africa	2004	Republic	111	Energy Based	0,2	1
Revenue Regulation Fund	Algeria	Africa	2000	Republic	98	Energy Based	43,0	1
Revenue Stabilisation Fund	Trinidad & Tobago	Caribbean	2000	Republic	44	Energy Based	0,5	1
Revenue Stabilization Fund	Kiribati	Pacific	1956	Republic	n/a	Phosphates	0,4	1
Social & Economic Stabilization Fund	Chile	South America	1985	Republic	21	Metals	15,5	3
State Capital Investment Corporation	Vietnam	Asia	2005	Republic	122	n/a	2,1	4
State General Reserve Fund	Oman	Middle East	1980	Monarchy	87	Energy Based	2,0	2
State Oil Fund	Azerbaijan	Europe	1999	Republic	128	Energy Based	3,4	9
Temasek Holdings	Singapore	Asia	1974	Republic	74	Current Account	159,0	7

APPENDIX 2: AUM/GDP FOR THE SWFS

Assets under management / Real GDP 2008

Fund	Country	AuM / Real GDP
Revenue Stabilization Fund (Kiribati)	Kiribati	526,0%
Abu Dhabi Investment Authority	United Arab Emirates	521,0%
Brunei Investment Agency	Brunei	309,0%
Kuwait Investment Authority	Kuwait	265,0%
Qatar Investment Authority	Qatar	185,0%
Government of Singapore Investment Corporation	Singapore	169,0%
Libyan Arab Foreign Investment Company	Libya	117,0%
Government Pension Fund - Global (Norway)	Norway	93,0%
Temasek Holdings (Singapore)	Singapore	85,0%
Revenue Regulation Fund (Algeria)	Algeriet	49,0%
Kazakhstan National Fund	Kazakhstan	16,0%
State General Reserve Fund (Oman)	Oman	16,0%
National Welfare Fund (Russia)	Russia	14,0%
Khazanah Nasional (Malaysia)	Malaysia	12,0%
FIEM (Venezuela)	Venezuela	11,0%
Revenue Stabilisation Fund (Trinidad & Tobago)	Trinidad & Tobago	9,0%
Social & Economic Stabilization Fund (Chile)	Chile	8,7%
State Oil Fund (Azerbaijan)	Azerbaijan	8,0%
China Investment Corporation	China	8,0%
Australian Future Fund	Australia	6,0%
National Stabilisation Fund (Taiwan)	Taiwan	4,0%
Korea Investment Corporation	South Korea	2,2%
Alberta's Heritage Fund (Canada)	Canada	1,1%
Alaska Permanent Fund	USA	0,3%
Oil Stabilisation Fund (Iran)	Iran	0,0%

APPENDIX 3: ESTIMATED GROWTH RATES

Estimated Growth Rate for selected SWFs

Fund	**Country**	**Growth rate in 2007**
National Welfare Fund	Russia	96,0%
Kazakhstan National Fund	Kazakhstan	36,0%
Temasek Holdings	Singapore	35,0%
Kuwait Investment Authority	Kuwait	30,0%
Government Pension Fund - Global	Norway	28,0%
Khazanah Nasional	Malaysia	23,0%
Alberta Heritage Fund	Canada	22,0%
Alaska Permanent Fund	USA	18,0%
Revenue Regulation Fund	Algeriet	14,0%
Abu Dhabi Investment Authority	United Arab Emirates	10,0%
Government of Singapore Investment Corporation	Singapore	9,5%
Brunei Investment Agency	Brunei	0,0%

APPENDIX 4: NOMINAL RETURNS IN 2007

Reported nominal return in 2007

Fund	**Country**	**Nominal return**
Australian Future Fund	Australia	7,4%
State Oil Fund	Azerbaijan	2,9%
Alberta's Heritage Fund	Canada	12,4%
National Pensions Reserve Fund	Ireland	3,3%
New Zealand Superannuation Fund	New Zealand	14,6%
Government Pension Fund	Norway	7,9%
Temasek Holdings	Singapore	27,0%
Alaska Permanent Fund	USA	17,1%

APPENDIX 5: AUM FOR DIFFERENT ASSET CLASSES

Assets under management globally in different asset classes

Asset Class	AuM (trillions of USD)
Pension Funds	**22**
Mutual Funds	**18,5**
Insurance Companies	**17**
Official Foreign Reserves	**7**
SWF	**2,7**
Hedge Funds	**1,8**
Private Stocks	**0,8**

APPENDIX 6: AUM FOR 3 LARGEST SWFS & PENSION FUNDS

AuM (By country)	AuM ($ billion)
U.S.	13 963
Japan	3 084
UK	2 338
Canada	1 027
Netherlands	873
Australia	743
ADIA	625
Switzerland	565
GPF (Norway)	380
GIC (Singapore)	330
Germany	312
France	158
Ireland	112
Hong Kong	62

APPENDIX 7: ASSET ALLOCATION COMPARISON

Comparison of Asset Allocation between global pension funds and selected SWFs

	AuM ($ bn)	Equities	Fixed Income	Cash	Alternative Assets
Pension Funds		60%	26%	7%	7%
Abu Dhabi Investment Authority	625	55%	23%	0%	22%
Government Pension Fund (Norway)	380	60%	35%	0%	5%
State Oil Fund (Azerbaijan)	3,36	0%	40%	60%	0%
Alberta Heritage Fund (Canada)	16,6	45%	29%	0%	26%
Alaska Permanent Fund	39,8	53%	14%	0%	33%

APPENDIX 8: TEMASEK'S RETURNS

Temasek's Returns	
2006	27%
2001-2006	17%
1996-2006	8%
1974-2006	19%

APPENDIX 9: GPF'S RETURNS

Government Pension Fund's returns	
2006	8%
1996-2006	6%
1974-2006	6%

APPENDIX 10: LINABURG – MAUDELL TRANSPARENCY INDEX

Point	Principles of the Linaburg-Maduell Transparency Index
+1	Fund provides history including reason for creation, origins of wealth, and government ownership structure
+1	Fund provides updated independently audited annual reports
+1	Fund provides percent ownership of company holdings, financial returns, and geographic locations of holdings
+1	If applicable, the fund provides size, composition, and return of foreign exchange reserves
+1	Fund provides guidelines in reference to ethical standards, investment policies, remuneration policies, and enforcer of guidelines
+1	Fund provides clear strategies and objectives
+1	If applicable, the fund clearly identifies subsidiaries and contact information
+1	If applicable, the fund identifies external managers
+1	Fund manages its own web site
+1	Fund provides main office location address and contact information such as telephone and fax