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**“Sovereign Wealth Funds:
the emergence of state owned financial power
brokers”**

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List of Acronyms

CIC	Chinese Investment Corporation
GIC	Government Investment Corporation (Singapore)
HKMA	Hong Kong Monetary Authority
IMF	International Monetary Fund
IPE	International Political Economy
KIA	Kuwait Investment Authority
OECD	Organisation for Economic Co-operation and Development
SAFE	State Administration of Foreign Exchange (China)
SAMA	Saudi Arabian Monetary Agency
SWF	Sovereign Wealth Fund
SWFs	Sovereign Wealth Funds
UAE	United Arab Emirates

Introduction

International Political Economy (IPE) studies the dynamics between politics and economics on a global scale (Heywood 2004:216; Cohn 2000; Underhill 2000:3; Frieden and Lake 2000:1). This area of study – originally a subfield of International Relations – is relatively new in modern science, established in the late 1960s and 1970s (Cohn 2000:9; Frieden and Lake 2000:1). Various events and factors of that time, such as the oil crisis of 1973, which could not be solely attributed to market based economic considerations, contributed to a new interest in IPE (Frieden and Lake 2000:2). Furthermore, this period witnessed a fundamental change in the global economic order, from an international economic framework coined by Keynesianism¹ to an economic framework coined by a Neo-liberalism². For many scholars, such as Keohan and Nye (1977:83) and Gowa (1983:15), the end of the ‘dollar-gold exchange regime’ – one pillar of the Bretton Woods system – on 15 August 1971 marked the end of the post war economic order which was dominated by Keynesianism. While monetary authorities of many states in that era preferred stable exchange rates which enabled a rapid expansion of trade (Pauly 2000:120), after 1971 major economies, such as the US and Japan, shifted to floating exchange rates. But what explains this preference?

Governments were increasingly faced with capital transactions exceeding their official reserve holdings and thereby making currency peg adjustments more difficult (Eichengreen 2008:2). Higher capital mobility, combined with a growing scale of capital transactions, forced some of the major industrial powers, in particular the US and Japan, to float their exchange rates (Eichengreen 2008:1,134,135). In contrast, Goodman and Pauly (2000:281) argue that governments removed their capital controls not because of increased capital mobility but because of “...changes in the structures of international production and financial intermediation...” Nevertheless, all would agree that with the break down of this system in 1971 it became possible for countries with excess of money, in particular states of the Middle East in the 1970s, and Japan in the 1980s, to recycle surplus money³ through the international

¹ In this context, the term Keynesianism refers to a particular set of policies “recommended by Keynes [...] in particular of government intervention in the economy in order to stimulate demand” (Scruton 2007:368).

² The term Neo-liberalism “refers to a set of market-liberal economic policies” (McLean and McMillan 1996:368).

³ In the case of the Middle East: money derived from high oil prices. In the case of Japan: money derived from export activities.

financial system into international investments (flowing into the US and other states) (Krugman/Obstfeld 2000:8). In this context international finance has occupied its central position in economics and become one of the core fields in the study of IPE.

The financial arena can be characterised as a place where investors, banks or other institutions intermediate between savers and borrowers (Oatley 2008:238; Bryant 1987). Bryant (2003:23) refers to financial intermediation as the “...entire complex process through which the myriad independent decisions of individual [...] savers and individual [...] investors are reconciled.” Through this intermediation, surplus resources – that is, resources which are not consumed – can be transferred from savers to borrowers (Oatley 2008:238; Solomon 1982:4; Bryant 2003:3). Similarly on a larger scale, “[i]nternational financial transactions transfer resources from high-saving to low-saving countries” (Eichengreen 2004:281).

However, this intermediation between savers and borrowers on an international scale was challenged in the period before 1971. This period (1945-1971), heavily influenced by Keynesianism, was characterised by capital controls and pegged currencies, which made the exchange of money among individuals of different countries difficult (Oatley 2008:238). Consequently, this period characterised by low international financial transactions was different from the era after 1971. After 1971 the financial sector has grown more rapidly than the real economy in terms of volume. According to Helleiner (2005:152), “International flows of money [in 2005] dwarf the cross-border trade of goods.”⁴ In other words, financial links have been growing faster than trade links. This indicates a rapid increase in economic interdependence, in particular finance, among countries (Bryant 2003:7).

Although nations continue to be politically independent, they are “...economically and financially interdependent” (Solomon 1982:6). Whereas the political world is still organized around nation states, the economic world does not necessarily mirror these political borders (Talbot 2003:xi; Bryant 1987; Bryant 2003). Countries are increasingly economically linked together through growing international capital flows (Krugman and Obstfeld 2000:8; Pauly 2000:119; Bryant 1987:3; Bryant 2003:4).

⁴ “Daily turnover on foreign exchange markets more than doubled from [US]\$590 billion in 1989 to [US]\$1.210 billion in 2001 compared to daily world exports of approximately [US]\$25 billion” (McGrew 2005:212).

The deepening of international financial linkages has resulted in economic interdependence among nations. Consequently, international factors increasingly influence domestic policies of states (Pauly 2000:119). Open capital markets which allowing money to flow across borders make it increasingly difficult for governments to pursue exclusive national priorities, such as financing welfare (Pauly 2000:123). This shift towards open capital markets was supported by neo-classical economics that emphasises the market's central role in the allocation of capital among actors.

Neo-classical ideas, which underline the superior role of private actors in the allocation process of resources, have become state of the art in economics since the 1970s. Hence, their proponents, most notably Friedman and Hayek, disqualify governmental involvement in economics. This normative disqualification of state participation in economics, combined with technological advances and international economic integration established in the late 1980s and early 1990s, created an atmosphere where numerous commentators, such as Ohmae (1995) and Reich (1991) predicted the end of nation state leading to a borderless world.

However, states continue to be the central actor in international politics (Thompson and Hirst 1996: 2). Similarly, governments sustain their involvement in some areas of economics. One of the most dynamic areas – at least for the last ten years until 2007 – in international finance has not been under private surveillance, but under governmental control. States controlled at the end of 2007 more than US \$3 trillion via so called sovereign wealth funds (SWFs) (Maslakovic 2008:1). SWFs can be defined in the widest sense as separate pools of government owned or government controlled international assets which are, in most cases, funded either by commodity revenues – most notably oil – or exchange surpluses (Truman 2008:1,2). Hence, the future size of SWFs is predicted by the amount of available external surplus. According to Jen (2007:1), Aizenman and Glick (2008:1), and Lyons (2007:1) these government related pools of capital will continue in the next five to ten years so as to reach a volume of US \$12-14.4 trillion. A more careful estimation made by Fernandez (2008:9,10,11), which integrates a decline in oil prices over a longer period and diminishing foreign exchange surpluses of Asian economies, predicts further growth of SWFs to approximately US \$5 trillion by 2012. In particular, oil exporting countries which will be confronted with the question of “what to do with the \$4.7 trillion- \$8.8 trillion⁵ [...] by 2020” are keen to diversify their overall investment portfolio through SWFs on an international level

⁵ based on an oil price of \$50-\$100 a barrel

(Rodenbeck 2008:68). Barber (2008:147), who emphasizes that the “...big winners in financial services in 2009 will be those best able to mobilise capital and spot undervalued assets,” indicates in the same breath that SWFs might be such a potential winner. These findings suggest that although SWFs were also hit by the financial crisis at the end of 2008 because of large international investments, they will continue to play a major financial role due to their huge asset volume.

The volume of SWFs combined with other factors, in particular some of their investments, is widely discussed from a number of perspectives, but most specifically in terms of their objectives and implications. Numerous commentators from a variety of backgrounds ranging from economists to politicians, and organisations such as the IMF or a variety of think tanks (e.g. Brookings Institute, Peterson Institute, and more), influence the SWF debate. Consequently, this heterogeneity of observers involved in the debate mirrors, to some extent, the diversity in opinions over many topics related to SWFs. For instance, there is no consensus as to whether the investments of SWFs are motivated by political agendas. While there are those such as Summers (2008: [1]) who indicate that investments made by SWF might also be driven by political rather than economic concerns⁶, others, most notably Sulayem (Khalaf 2008: [1]), take the position that SWFs are solely driven by economic and not political motives⁷.

Such disagreements even extend to the question of their impact on the international financial system. SWFs have become so large, particularly by the end of 2007, that they have implications for financial stability. On the one hand, one faction led by the IMF (2008a: 12,13) takes the position that SWF have a stabilizing effect on the international financial system since they are long term investors: “In the recent financial turmoil, SWFs have demonstrated that they can have a stabilizing influence on markets” by injecting capital into the market, in particular banks (IMF 2008:10). SWFs were responsible for 71 per cent “of total bank capital raised since Nov. 2007” (Srinivasan 2008:24) (see Appendix A). According to Aizenman and Glick (2008:22) “[b]etween November 2007 and January 2008, SWFs from emerging markets injected more than [US]\$44 billion of capital into needy financial

⁶ “For example, perhaps a state- owned fund wants an airline to fly to its country. Perhaps it wants a bank to do extensive business in its country (Summers 2008:[1]).”

⁷ “These investment funds are not run by governments. I invest because there is a return and I will sell and I do not need to take permission from the government whether I’m buying or I’m selling (Sulayem cited by Khalaf 2008: [1]). “

institutions in advance economies...”. Hence, there is evidence that SWFs have had a stabilizing effect in the past. Nevertheless, on the other hand, some observers, such as Gardner and Wroughton (2008: [1]) emphasize that “S[s]ome countries where the sovereign funds invest, like the United States, are worried that the funds [...]could be a destabilizing factor in international markets.” Many SWFs lack transparency concerning their objectives and investment strategies. This has led some authors, such as Summers and Johnson (2007: [1]), to alert that SWFs could “encourage capital account protectionism” since some countries want to protect politically sensitive areas of their economies. Public announcements from high government officials, such as German Chancellor Merkel to “protect European companies from unwanted foreign takeover” (Merkel cited by Raphaeli and Gersten 2008: [2]), confirm those fears. Similarly, the US “is in the process of adopting legislation that would tighten scrutiny of investments by foreign governments that raise security concerns” (Mattoo and Subramanian 2009 :21).

The current size of all SWFs – approximately US \$3 trillion – is large if compared, for example, to the US GDP of approximately US \$12 trillion (Johnson 2007: [1]). But, by comparing the volume of SWFs assets with the volume of global traded securities – worth approximately US \$165 trillion in 2007 – the picture changes (Johnson 2007). Hence, much of the literature (Kimmit 2008:[1]; Johnson 2007; IMF 2008a:6) takes the position that though SWFs are significant players, their asset size represents only a fraction of the total international financial assets. Furthermore, there is an overall consensus that the portfolios of SWFs differ from traditional reserve holdings in that sense that SWF assets are more diversified (see Chapter 3) than traditional reserve holdings (IMF 2008a: 4,9). By diversifying their assets into more complex investments – such as private equity or hedge funds – SWFs take advantage of international finance. These findings illustrate vast discordance among commentators about many central issues related to SWFs.

A variety of disciplines, in particular economics and economic geography⁸, influence and investigate the discourse about the phenomenon of ‘SWFs’. However, there has been no work about that topic in the field of IPE. It must be remembered that politics and economics cannot be clearly separated, especially in the case of SWFs, since there is no broad consensus as to whether their investments are motivated by economics or politics. Thus, an IPE perspective,

⁸ The Department of Geography at the University of Oxford pursues extensive research – under Professor Clark – about SWFs.

embracing both economic and political variables on a broader scale, enables a more comprehensive analysis of SWFs in a political context. An analysis which embraces politics and economics is more adequate to describe such a complex phenomenon. Furthermore, such a description must also attempt to build a theoretical framework which explains connections among central elements related to SWFs. According to Strange (1988:11), theory must explain some aspects which are not explainable by 'common sense'. For instance, to those who assume that SWFs are purely economically driven, some of the investments of SWFs seem paradoxical: Why do some of the SWFs invest in lower yielding domestic assets when they could have had a higher rate of return by investing internationally? Thus, assumptions combined with common sense cannot explain important aspects of SWFs. Some institutions, most notably the IMF, have introduced categorisation schemes (see Appendix B) which reveal important facets of SWFs. Nevertheless, such categorisations are often built on assumptions and 'common sense', rather scientific evidence. Therefore, this thesis closes this gap by establishing a coherent scientific categorisation built on evidence, rather than presumptions, in order to explain some dynamics of SWFs.

The phenomenon of SWFs is consistent with more than one interpretation. Thus an empirical survey, which integrates historical dynamics and applies known theories to new terrain seems a plausible solution in order to understand competing ideas about SWFs. To research SWFs, an analysis of official documents, and second by an analysis of the political economic context of the historical trajectory of SWFs support this empirical work. However, given that nearly all of the SWFs are located in states with a non-democratic character, precise information or data of SWFs is hard to locate, or to deduce from the governments' propaganda released in periodicals.

It should be emphasized that economic level analyses alone do not possess sufficient leverage to reveal the forces that contribute to the emergence and behaviour of SWFs. An adequate understanding of SWFs and their dynamics requires the incorporation of both economic variables and political context. Although having criticized a purely economic approach in order to understand SWFs, it should be stressed that economic analysis is a substantial element in this work. However, it is maintained that pure economic analysis by itself is not satisfactory to explain the complex phenomenon SWFs. This thesis serves as a complement, rather than as an alternative, to the current SWF debate which is dominated by economics. It investigates the dynamics which influence SWFs in a political world. By doing that, it is

automatically acknowledged that other variables, such as politics, significantly influence SWFs.

After the introduction, Chapter 1 positions the current debate in a historical context. It begins by investigating the enormous public attention SWFs have received between 2007-2008. Then, it steps back to analyse whether SWFs are a recent phenomenon by addressing the political context under which the first SWFs emerged. This historical discussion emphasises that the economics of the first SWFs were heavily influenced by politics. Political factors created the economic basis for the first SWFs which can be traced to the Middle East.

Given the background in the earlier chapter, Chapter 2 shifts from historical insights associated with the Middle East to the current situation. SWFs, originally a regional phenomenon, have become a global issue. In contrast to the past, the present picture of SWFs is more complex in terms of their funding, objectives and investments. Chapter 2 analyses this diversity among SWFs by introducing a framework which captures the geographical, economic, and governmental diversity associated with SWF into a coherent historical categorisation.

Having discussed the observable differences among SWFs, Chapter 3 analyses the differences between SWFs and other financial institutions. Chapter 3 introduces a coherent categorisation of SWFs and other government-related investment vehicles, such as central banks and public pension funds. Although, there are intersections between SWFs and other financial actors, Chapter 3 explains how and why these actors should be clearly separated. Furthermore, Chapter 3 begins the process of adapting the fundamental ideas of Chapter 2, which emphasises the heterogeneity of SWFs. It indicates similarities among central elements related to different types of SWFs. Furthermore, Chapter 3 indicates a strong correlation between the variable ‘investment allocation’ – whether foreign or domestic investments – and the variable ‘investment patterns’ – whether portfolio or direct investments.

This thesis establishes a coherent categorisation and operational definition of SWFs by integrating economic and political variables into an empirical IPE framework. It is demonstrated that politics, in other words state involvement, shapes the economic basis of many SWFs. Although the patterns of state involvement differ from country to country, they can be distinguished: systems where states are involved in economics through direct

participation (e.g. as entrepreneurs), and systems where states are involved in economics through indirect participation (e.g. regulation). This differentiation between direct and indirect involvement mirrors SWFs which either participate passively (through portfolio investment) or actively (through direct investment) in the economy. Consequently, there are a number of important implications for the future practice, in particular for both sectors: private as well as the public sectors, in dealing with SWFs.

1. Historical Trajectory of Sovereign Wealth Funds

The issue of Sovereign Wealth Funds has received increasing attention since December 2007. SWFs have been one of the dominating issues in the financial press since 2007 and other media. In contrast to other financial investors, the involvement of SWFs in other non-financial related areas may be more visible. Hence, a wide range of commentators are involved in the discourse, ranging from economists and financial experts to politicians, since SWFs are related to governments through the ownership or management structures. But this current debate has also attracted public interest through provocative media coverage proclaiming the “Invasion of Sovereign Wealth Funds” (*The Economist* 2008 [1]) to some extent reminiscent of the Japanese investment debate⁹ in the 1980s. Through, the sudden emergence of SWFs in the media world it seems that this player emerged from nowhere.

Although there is currently wide research about several aspects of SWFs, most research exclusively focuses on the actual processes of SWFs, neglecting the interesting history of this phenomenon. Little is known about the historical circumstances under which SWFs emerged. But an understanding of past reveals important insights into the current phenomenon of SWFs. An adequate account of historical aspects reveals that SWFs can hardly be explained solely on an economic basis. Most of the economic issues related to SWFs are heavily intermingled in a political context. Therefore, this chapter proposes an overview of some historical International Political Economic circumstances which were pre-conditional for the emergence of the first SWFs. By looking back at history in order to analyse the political context in which the first SWFs emerged, further analysis about current tendencies is possible. While the first section of this chapter concentrates on the question of whether SWFs are a new phenomenon, the subsequent section locates this question in a comprehensive historical overview about the political economic context in which the first SWF appeared.

⁹ Farrell (1997) provides a comprehensive overview about the Political Economy of Japanese Foreign Direct Investment in Real Estate in the period 1985-1994.

1.1. A New Phenomenon?

The phenomenon of SWFs has received considerable attention from media, politicians and business since the end of 2007. The topic of SWFs has been one of the dominating issues in regard to financial newspapers, such as *The Financial Times* (Figure 1). In 2007 *The Financial Times* published 595 articles about SWFs, whereas the number of articles in 2008 concerned with that topic amounted to 1150. In contrast, SWFs were hardly covered in the years before 2007. Hence the question of whether the political prominence of 2007 and 2008 mirrors the economic prominence is a serious one (see Figure 1 and Graphic 12).

Figure 1. *Number of Articles related to SWFs in The Financial Times*

Year	Number of articles
2003	4
2004	17
2005	7
2006	7
2007	595
2008 until June	1150

Source: *The Financial Times* Online 2008

Figure 1, for instance, indicates that SWFs were doing business before 2007 without much public attention. Rozanov (2005:1) explains the rise in public interest due the massive growth in SWFs and their asset volume over the last decade. The major implication is that SWFs now have to operate in the limelight of public attention, where the media follows carefully every step of sovereign investment. Of course, the coverage of the last 20 months comprises only one part of the much older phenomenon of SWFs. Therefore, in order to have a better understanding of this phenomenon, it is useful to try to put the current events into a historical context. History reveals something about the economic and political circumstances under which the first SWFs emerged.

1.1.1. The first Sovereign Wealth Funds

History reveals that the first traces of SWFs can already be found in the early 1950s. This period was characterized by emancipating developing states which demanded more power over domestic economic matters. The preconditions for the first SWF evolved in that context. The 1950s marked a clear transformation in the power relationship between private international oil companies and governments in favour of the latter (Penrose 1968:248-264). In this era, for instance, especially in oil producing countries, more government pressure towards higher oil taxes on multinational petrol enterprises emerged (see Tétreault 1995; Tugwell 1975; Petras et al. 1977). The higher income from an increase in oil taxation automatically resulted in a dramatic increase in state revenue, which was in some countries the basis for the creation of SWFs.

At that time three states – Venezuela, Saudi Arabia, and Kuwait – had a significant influence in the development of that type of investment vehicle. In the first instance, Venezuela played a central role in making the first step in the late 1940s by leading in the design of new means of appropriating surplus from oil profits and placing limitations on corporate business (Tugwell 1975:3). Under the administration of a military junta after 1945, the tax rate per barrel was raised by the government up to 50 per cent (Petras et al. 1977:13). As a consequence, Venezuelan oil income rose from 98 million Bolivares in 1940, to 901 million Bolivares in 1950 which meant a 920 per cent oil revenue increase (Tugwell 1975:167). At the same time production rose only 299 per cent from 502.3 thousand Barrels in 1940 to 1.498.0 thousand Barrels in 1950 (Tugwell 1975:183). However, most of the oil revenue was subsequently invested, not in a fund but into a growing state sector that boosted import substitution industrialisation. Although Venezuela did not as a consequence create a SWF, it did indeed play a role by impressing the Saudi Arabians who went one step further.

In the second instance, Saudi Arabia followed in Venezuela's footsteps in creating the preconditions which were essential for the first SWF. Although the early Saudi Arabian example does not comply fully with the IMF category of SWF, it is important for a comprehensive appreciation of that topic to understand the historical circumstances under which this SWF precursor evolved. While there are those, such as Truman (2008:2), Blundell, Jermo, Yu-Wei (2008) or agencies like Reuters (2008), who list the Saudi Arabian Monetary Agency

(SAMA) in ratings among other SWFs, others, most notably Goldman Sachs (2007:239), exclude the SAMA from their SWF ratings. Nevertheless, Saudi Arabia was the first Middle Eastern country in the early 1950s that raised the corporate oil tax in the same 50:50 fashion as Venezuela had done before. This action nearly doubled the Saudi governmental revenue from US \$56,7million in 1950 to US \$110 million in 1951 (Young 1983:21). Confronted with this huge increase in governmental revenue, King Abd al-Aziz, supported by his Finance Minister Shaykh Abd Allah Sulayman, officially asked the US government for financial advice in December 1950 (Young 1983:27). In the wake of this enquiry, the US sent a mission comprised of financial experts under the direction of Arthur N. Young to Saudi Arabia. Young's team created the *Saudi Arabian Monetary Agency* (SAMA) which had the same generic tasks as a Western national bank, such as providing monetary stability, financial and economic research, but also had fiscal functions such as centralizing the government revenues (Mallakh 1982:294-297). Young specifically emphasized in his 1952 *Report on Establishment of the Saudi Arabian Monetary Agency* the assignment of the SAMA to handle the enormous oil revenues in the countries interest:

In particular foreign exchange has become a major problem. At least four-fifths of the revenue now is in foreign currency, mainly from oil. Wise handling of foreign exchange transactions as well as wise use of the funds is vital to the country's stability and progress (Young 1983: 135).

However, it is extremely difficult to find empirical data about the diverse investments, because SAMA operates under Islamic law that forbids any interest payments. If SAMA is accepted as the first SWF, then this contradicts Paul Kimmitt (2008) who claims that Kuwait was the first country with a SWF. Nonetheless evidence suggests, while Venezuela and Saudi Arabia were substantial precursors for the creation of a SWF, the Kuwaiti Fund was the first genuine SWF.

The Venezuelan and Saudi Arabian examples prompted Kuwait to impose an oil tax. The Kuwait government established the Kuwait Investment Office in 1953 with the official purpose of "investing the surplus oil revenue in order to provide a fund for the future and reduce its reliance on its single finite resource" (KIA 2008 [1]). Accordingly, the Kuwait Investment Office was a product of the high oil revenues in the 1950s. According to Al-Atiqi (2005:3), a member of the Kuwait Petroleum Council, the state oil revenue increased tenfold

from 0.4 million Kuwaiti Dinars in 1947 to 4.0 million Kuwaiti Dinars in beginning 1950s. This increase in oil revenues can be explained by the implementation of oil taxes on the one hand, and a substantial increase in the output rate, on the other hand. While the implementation of oil taxes can be ascribed to the domestic government, the dramatic increase in the output rate was the result of a crisis in Iran. The Kuwaiti oil supply was stimulated from 125.7 million barrels to 273.4 million barrels (Baker 1986:142) because of the political crisis in Iran, where Prime Minister Mossadeq nationalised the oil industry. The nationalist Mossadeq insisted that the agreements with Anglo-Iranian Oil Company (later British Petrol) were not in the national interest of Iran (Sampson 1993). As a consequence of this nationalisation, BP mobilized its government to implement an embargo against Iranian oil and increased its exploitation activities in neighbouring Kuwait (Sampson 1993: 158-163). This circumstance helped Kuwait to become the largest single Middle Eastern oil producer between 1953 and 1966 (Merip 1975:5).

The high oil revenue of that time was the basis of a Kuwaiti welfare state and the foundation of power of the ruling family (Tetreault 1995:3). According to Tetreault (1995:3), in order to sustain the welfare state that provides the citizens of Kuwait with one of the highest living standards in the world, the Shaikh agreed to establish the Kuwait Investment Office (KIO) in London. Basically, the idea was that a part of the oil income should be put in the KIO in order to ensure enough revenues to maintain the welfare state at times when oil price is low (Monroe 1954:281). Thus, the geographic aspect of having huge amounts of oil combined with a state that was determined to benefit from the oil wealth through active involvement, led automatically to high oil revenues which were subsequently invested in the 1953 SWF.

In conclusion, the first SWF created by Kuwait was heavily influenced by the actions of other countries, in particular Venezuela and Saudi Arabia. These actions of implementing high unilateral oil tax on multinational companies in Venezuela and Saudi Arabia, combined with the threat of expropriation or, in other words nationalisation, of international private operating oil firms, illustrate the increasing demands of politics over economics. This chapter has shown that the environment in which the first SWF evolved has seen a strengthening of certain states less willing to compromise with private business. In fact the decision to implement a 50:50 oil tax which laid the basis for establishing the Kuwait Investment Office can be characterised as highly political. Thus the Kuwait Investment Agency, the first true SWF, was the product of heavy political influence in a period where countries increasingly referred to their sovereign

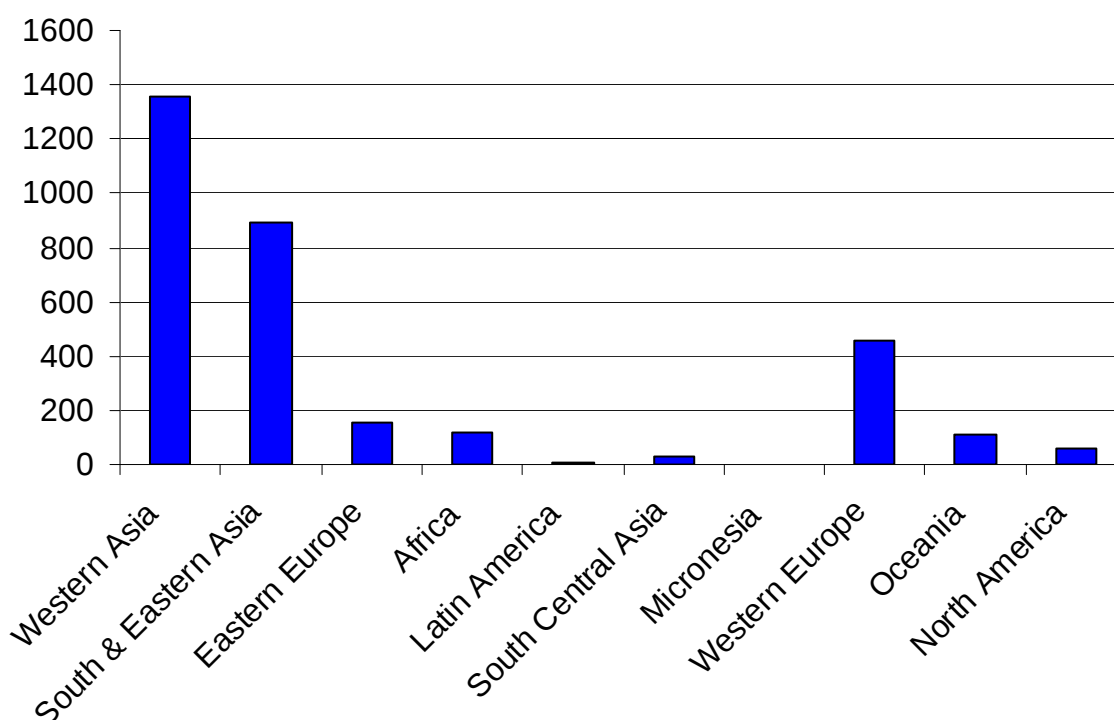
rights of consuming and distributing national wealth among their citizens. However, this historical example should not encourage the assumption that SWFs are automatically the outcome of more state influence, since most of the SWFs which have emerged in the post 1970s are characterised by less state influence.

This chapter has explained some of the political economic factors involved in the establishment of the first SWFs. Whereas the first traces of Sovereign Wealth can be located in oil producing countries of the Middle East, the situation has been changing over time contributing to a more complex picture. The following chapter shows that SWFs can hardly be described as a phenomenon confined to oil rich countries of the Middle East transferring abundant petro dollars into such investment vehicles.

2. Sovereign Wealth Funds among other Sovereign Wealth Funds

The previous chapter demonstrated that the origins of SWFs can be traced to a particular geographical region. Western Asia, better known as the Middle East, possesses some of the oldest SWFs, including the first: the Kuwait Investment Office established in 1953. But since the early 1970s the situation has altered to a more complex one, since a couple of Western countries such as the US, Norway, and some Asian countries, in particular Singapore and China, have been establishing SWFs. In fact, at the end of 2007 the picture had changed dramatically. As Graphic 1 shows, SWFs are spread internationally: at the beginning of the 21st century these investment vehicles are represented on every continent.

Graphic 1. *Sovereign Wealth among Regions in Billion US \$*



Sources: Volume of SWFs calculated on the basis of Fernandez (2008:21); division of regions on the basis of United Nation's (2000) classification.

The diversity of countries mirrors to some extent the diversity of funds. The term SWF is often used as an umbrella term to describe a quite heterogeneous group of actors. According to Truman (2008) this term describes a diverse group of separate capital pools, including international assets, related directly or indirectly to the governments to achieve a mixture of economic, financial and political objectives. Therefore, some kind of categorisation has to be established to group these different actors along similar lines. However, there are different ways to bring order in this diversity, such as comparing their size or their objectives¹⁰, to categorize or typify SWFs. The most common way to discriminate SWFs from each other refers to their different sources of funding. General distinctions can be made between SWFs financed by commodity revenue, such as oil, and SWFs financed by non-commodity revenue, in particular exchange surpluses (IMF 2007:45; Fernandez 2008:4,5; Beck and Fidora 2008:6,7; Jen 2007:1; O'Neill 2007:237; Aizenman and Glick 2008).

This analysis integrates this distinction between commodity revenue based and export surplus based funds into a framework that distinguishes between OECD and non-OECD countries. However, this chosen dichotomy of OECD versus non-OECD countries requires some further explanation. This dichotomy not only refers to a distinction between states which are 'in and out' of a certain international organisation. Rather, it also covers additional analytical dimensions – geographical, economic and governmental – which are important for a more comprehensive understanding of the SWF phenomenon. This heuristic categorisation of OECD versus non-OECD states investigates whether global dynamics have different impacts on SWFs of various states. In other words, are there similar dynamics involved among all SWFs regardless of location? Nevertheless, by adopting OECD non-OECD categorisations, some conceptual problems remain.

While OECD countries can be described as a homogeneous group which share a lot of similarities, non-OECD countries can be specified as a quite heterogeneous cluster. Therefore in order to narrow the latter category, only non-OECD countries with SWFs are considered. Immediately upon doing that, a large number of non-OECD countries which have no SWFs, such as India, South Africa, and Brazil, are eliminated. Consequently, the remaining states of this category with a SWF are grouped under the label non-OECD. However, the label non-OECD continues to comprise a quite heterogeneous group of countries. But for the purpose of this analysis a simplification is necessary, because only such a dichotomy allows the

¹⁰ The IMF (2007) and Fernandez (2008) differentiate SWFs according to various objectives.

comparison of the three dynamical dimensions – geographical, economic, and governmental – associated with the emergence of SWFs. These crucial dynamics are described by Setser (2008:2) who emphasizes that “capital has flowed [...] from poor countries to rich countries, from fast growing countries to slow growing countries, [...] and increasingly, from autocracies to democracies.” Similarly, Eichengreen (2008:190) describes the situation where “savings in poor countries were financing consumption in one of the richest [the US].” Graphic 2 illustrates the flow of capital described by Setser (2008). The following sections show that the dynamics on these levels – of geography, economy, and government – match the dichotomisation of OECD versus non-OECD in a coherent way.

However, this particular pattern of capital flow – from non-OECD to OECD countries – refers only to capital associated with surplus capital (e.g. such as current account surplus). According to Lane and Milesi-Ferretti (2005:8) “a number of emerging markets – particularly Asian countries, together with Russia – have been on average net capital exporters...” In the long term perspective, capital flows in the form of FDI from industrial countries to emerging markets continue to outnumber the capital flows from emerging markets to industrial countries (Lane and Milesi-Ferretti 2008:8,9).

Graphic 2. *Surplus Capital Flows (until 2008)*

Dimension	non-OECD	OECD countries
Geographic	non western →	western
Economic	emerging →	industrialised
Government	autocracies →	democracies

Section 2.1. focuses on the geographical dimension, by initially giving an overview of SWFs among macro regions. Subsequently it will be shown that the dichotomy of OECD- non-OECD states fits in that picture, that is, this dichotomy of OECD versus non-OECD can be justified in a geographical sense. Section 2.2. examines the economic dimension, which reflects to some extent, the highly industrialised countries associated with the OECD, and the emerging markets associated with the category non-OECD countries. Finally, Section 2.3. concentrates on the governmental dimension between OECD and non-OECD countries. While all OECD countries have a strong commitment to democracy and liberal market capitalism (OECD 2008 [1]), most of the non-OECD states have in common that they are non-democratic (Figure 2).

However, in the first instance the categorisation of OECD versus non-OECD countries covers a geographical dimension, since the largest assets of sovereign wealth are concentrated in countries in Western Asia and South Eastern Asia which are non-OECD countries members, excepting South Korea.

2.1. Geographical Aspects

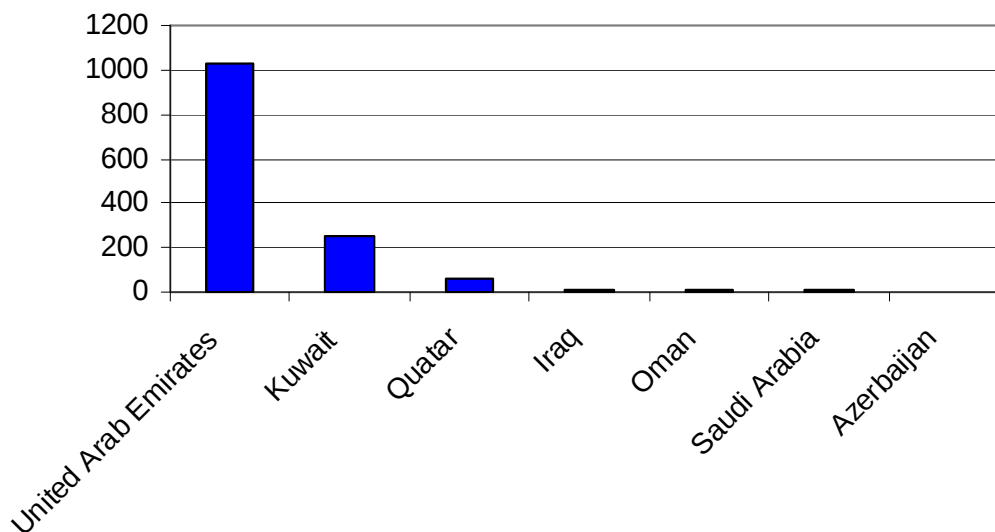
SWFs of particular regions – most notably Western Asia, often associated with the Middle East, and South and East Asia – have experienced dynamic growth in the last ten years. That growth has resulted in an increasing imbalance of SWF assets among regions in general, and states in particular. For instance, sovereign wealth assets associated with the states of Western Europe, and North America together account only for approximately less than one quarter of the total worldwide SWF volume¹¹. Graphic 1 illustrates that SWFs are internationally spread. At the same time it clearly shows the uneven asset allocation of these funds. Western Asia and other parts of Asia are the dominant players in sovereign wealth investment, whereas the highly industrialised regions of North America and Western Europe play a relative small role. Graphic 1 only depicts the uneven distribution of SWF assets among regions, but within those regions the roles of countries vary to a great extent as well.

Chapter 1 has already shown that some of the oldest and largest SWFs are concentrated in countries of Western Asia, in particular Kuwait and the United Arab Emirates. Countries of this region share one main characteristic, namely massive oil wealth which is partly transferred into their SWFs. Graphic 3 shows that the two dominant states in the sovereign wealth sector in this region are the neighbouring oil producing countries: the UAE, and Kuwait. Together both Gulf nations share more than 90 per cent of the SWF assets of this region¹². Although oil prices are highly volatile, commentators, in particular Rodenbeck (2008:68), estimate that these countries will be confronted with an inflow of oil money between US \$4.7 trillion and US \$8.8 trillion at the end of the next decade. Similarly Fernandez (2008:10) calculated that SWFs of oil exporting countries would continue to grow, even in the context of low oil prices of between US \$50-70 per barrel. That raises the question for these countries of whether to spend that money at home or abroad. According to Rodenbeck (2008:68), despite monumental domestic investment projects – such as the UAE Palm Island – there is plenty of money left to be invested into SWFs in order to diversify the international portfolio of these countries. Hence, to date Western Asia can be described as the biggest geographical pool of sovereign wealth in the world. This region will remain a substantial financial player in the SWF sector in the next decade.

¹¹ Calculated on basis of data from Fernandez 2008:21.

¹² Calculated on data from Fernandez 2008:21.

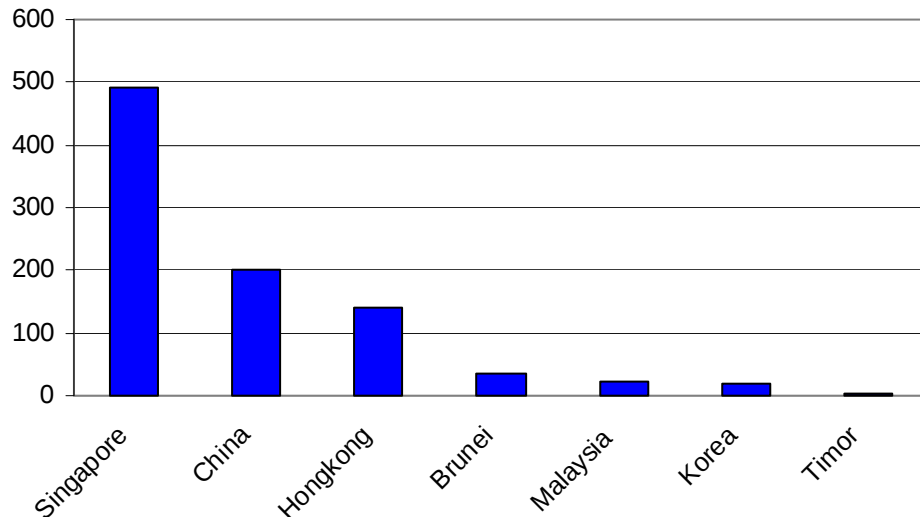
Graphic 3. *Sovereign Wealth in Western Asia in Billion US \$*



Sources: Highest estimates from Fernandez (2008:21); *The Economist* (2008d).

Western Asia is followed by the region of South and Eastern Asia, where most of the sovereign wealth assets are concentrated in two states: the city state Singapore and China/Hong Kong (see Graphic 4). These countries have in common that they finance their SWFs with surplus capital generated from export activities. Eastern Asia, for instance, has experienced a rapid growth of sovereign wealth, especially with the foundation of the first Chinese SWF in 2007. In that year China established one of the largest SWFs by transferring US \$200 billion from its exchange reserve overhang into the Chinese Investment Corporation (CIC 2008: [1]). However, by the end of 2008 the situation looks different. The financial crisis combined with an economic downturn in some of the main export markets of China – most notably the US and Europe – has impacted China’s exchange reserve surplus. Nevertheless, there is little evidence that this might result in a general disappearance of SWFs in Asia. Rather, the recent events on the international financial markets have different consequences for certain countries. Whereas China’s exports to the US amount only to 8 per cent of the Chinese GDP, Singapore is, with 30 per cent, more dependent on the US market (Woodall 2008:55). But at the same time Woodall (2008:55) admits that China’s growth in GDP in 2009 – of approximately seven per cent – is substantially lower than in 2007. These findings suggest that capital inflows into SWFs might decrease in times of lower export activities, but that does not mean that SWFs will dissolve. Fernandez (2008:10) would also agree that even a substantial drop in the current account surpluses in some Asian countries would not automatically lead to a disappearance of SWFs in this region.

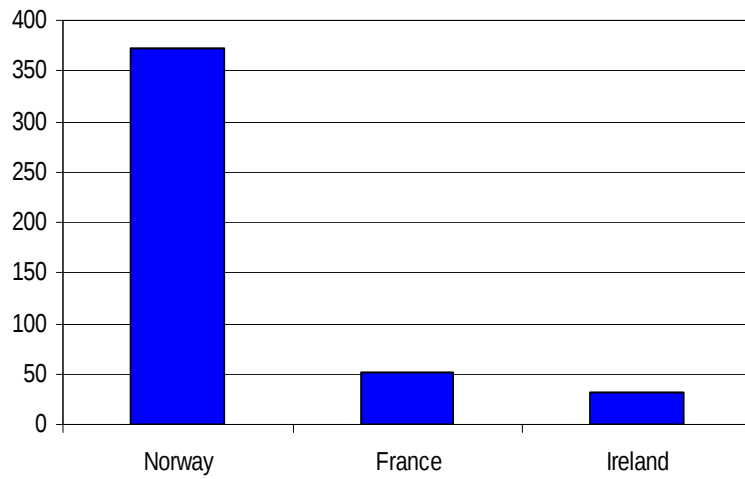
Graphic 4. *Sovereign Wealth in South & Eastern Asia in Billion US \$*



Sources: Highest estimates from Fernandez (2008:21), Truman (2008).

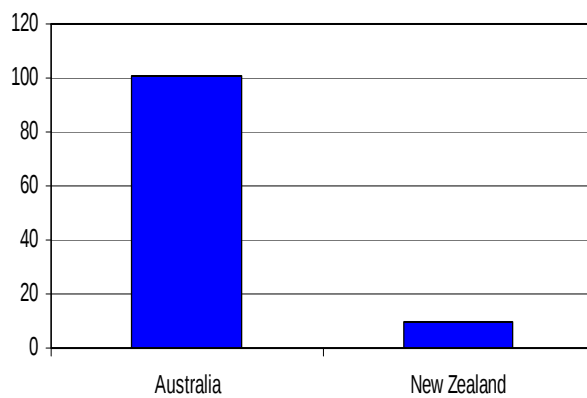
Europe (Western and Eastern Europe) comprises two remarkable players – Norway’s Pension Fund Global and the Russian Stabilisation Fund – in the field of sovereign wealth investment. The Norwegian fund – located in an OECD country associated with the ‘West’ – is the second largest global SWF with a volume of more than US \$250 billion (see Graphic 5). The Norwegian government finances its fund through oil and gas revenues. In contrast, other Western European countries, such as Ireland and France, fund their SWF mainly through fiscal transfers, comprising capital generated through privatisation, as in the case of France (Fernandez 2008:43; Truman 2008:2). In a similar fashion, Graphics 6, 7, and 8, show the disequilibrium in SWF assets among countries within the regions of Oceania, Africa and North America.

Graphic 5. *Sovereign Wealth in Western Europe in Billion US \$*



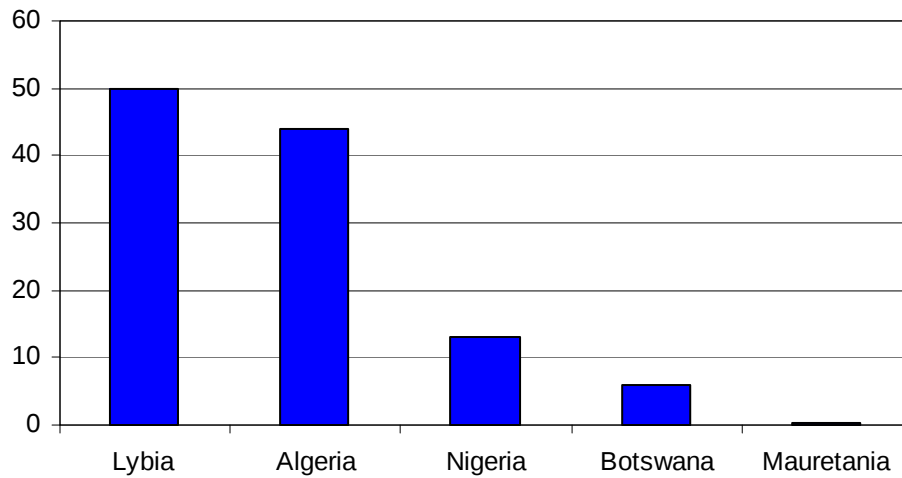
Source: Fernandez (2008:21).

Graphic 6. *Sovereign Wealth in Oceania in Billion US \$*



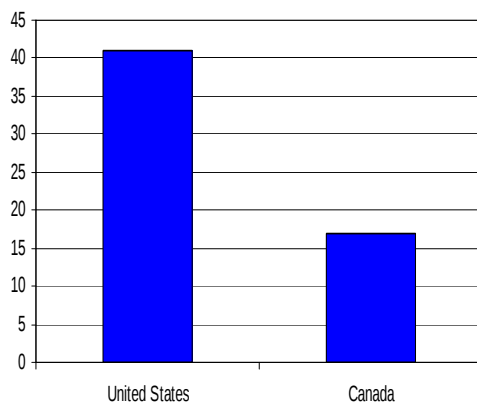
Source: Fernandez (2008:21).

Graphic 7. *Sovereign Wealth in Africa in Billion US \$*



Source: Highest estimates from Fernandez (2008:21).

Graphic 8. *Sovereign Wealth in North America in Billion US \$*



Source: Fernandez (2008:21).

The previous sections have illustrated a geographical imbalance among regions and, within those regions, between countries. Data confirms that there is a high concentration of sovereign wealth in a small number of non-Western countries¹³. Some of the funds of these states possess further growth potential partly due to high commodity prices or foreign exchange reserves accumulated through heavy export activity. For example, the State Administration of Foreign Exchange which manages China's foreign reserves possesses assets of more than US \$1800 billion (SAFE 2008 [1]), much more than it would need for its balance of payments

purposes (El-Erian 2008:195). This overhang of reserve money could be easily invested in a SWF. Setser (2008:209), Aizenman and Glick (2008:3), and Eichengreen (2008:16) would agree that China was holding at the end of 2007 more reserves than it would actually needed for liquidity purposes. Liquidity in that context refers to the “ability to meet temporary deficits in its balance of payments without resort to fundamental corrective measures” (Arndt 1947:37). However, some countries associated with the West – most notably Japan¹⁴ – may be potential big players in the field of sovereign wealth investment in the future (*The Economist* 2008c: [1]). That means the geographical allocation of SWF assets among western states associated with the OECD and non-OECD countries can change over time.

According to Fieldhouse (1999:1), OECD states are, in contrast to non-OECD states, often associated with the vague geographical notion of ‘the West’. In the case of OECD countries with SWFs, the geographical split of ‘the West’ versus ‘Rest’ could be justified – at least until 2007 – since Western Europe, Oceania and North America comprise more than 95 per cent¹⁵ of the sovereign wealth assets of OECD members. The remaining five per cent of SWF assets associated with OECD countries are located in South Korea and Mexico. Thus, only a small part of SWF assets associated with OECD countries is located in non-Western states. Comparison of Graphic 9 with Graphic 10 illustrates that by rearranging the states associated with the OECD into a single category, there is little change in the overall picture. As a result this differentiation mirrors, to some extent, a geographical dichotomy of countries associated with the West and a variety of other countries.

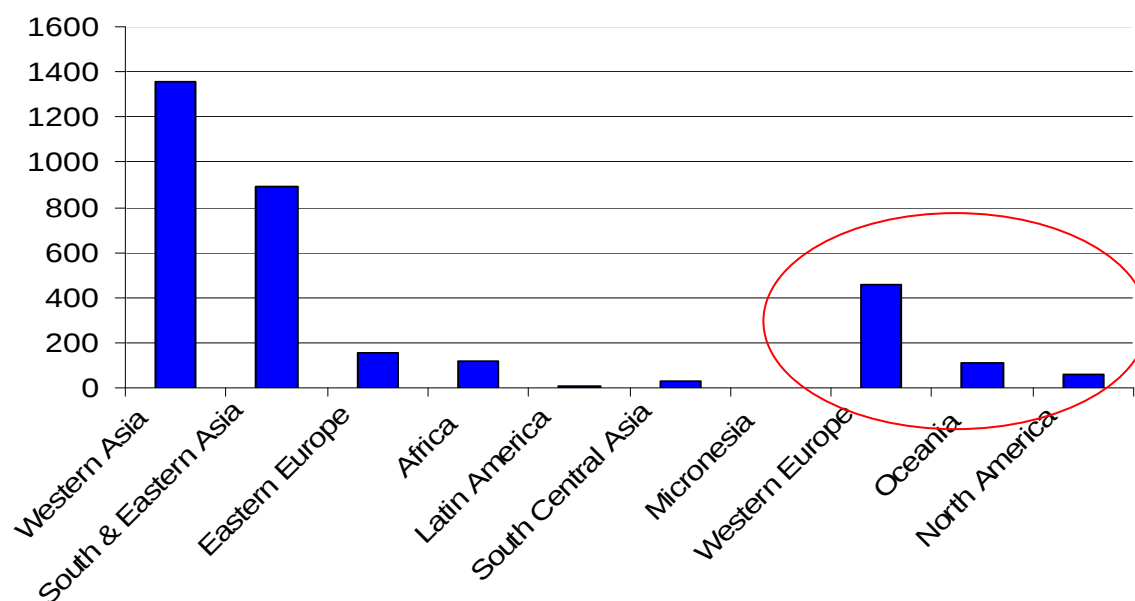
However, a geographical distinction between the ‘West and the Rest’ is highly problematical because of the dilemma of how to determine what makes the West and the Rest. This distinction, originally used by novelists, most notably Kipling in his ‘The White Man’s Burden’ (1899), to describe the superior position of Europe over other countries, highlights that the conception of ‘West’ scarcely refers to a mere geographical description. But this dichotomisation is justifiable if an economic dimension is added. Scholars, such as Adelman (1998:13,14), frequently use the term OECD as a synonym for highly industrialised rich countries.

¹³Except Norway which has the second largest SWF.

¹⁴ According to *The Economist* (2008c [1]) Japan considers the transfer of pension fund assets into a SWF.

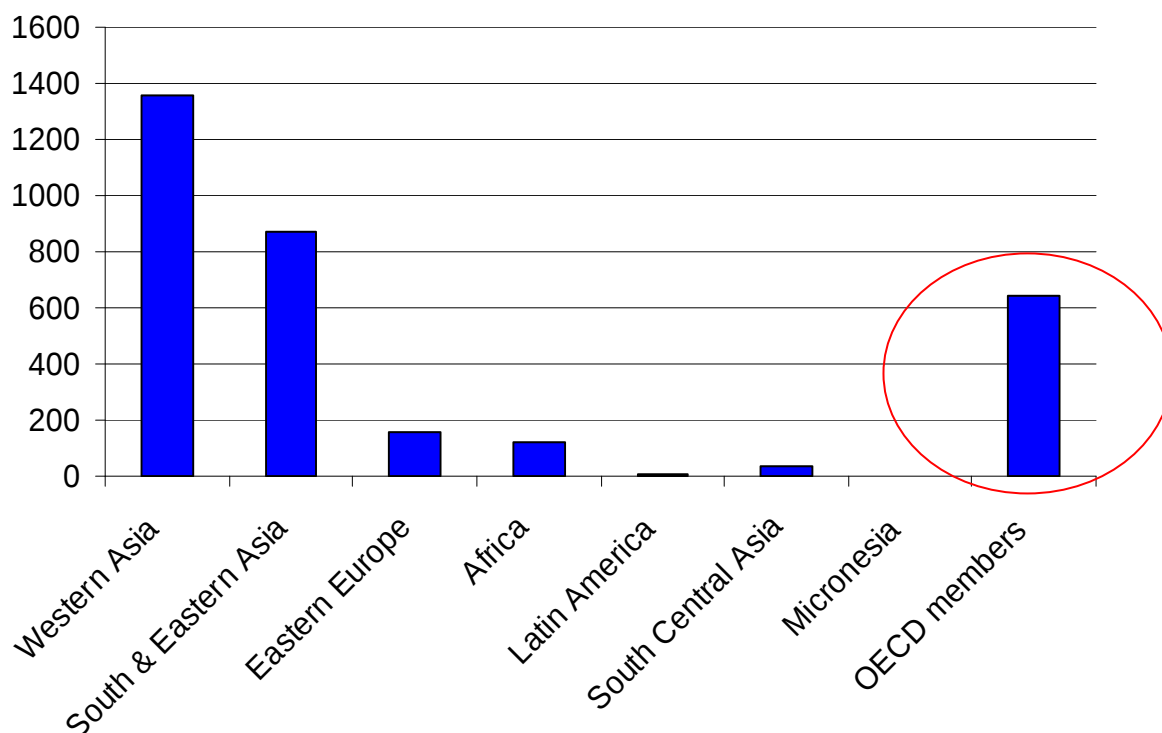
¹⁵ Calculated on data from Fernandez 2008:21.

Graphic 9. *Sovereign Wealth among Regions in Billion US \$*



Sources: Volume of SWFs calculated on the basis of Fernandez (2008:21); division of regions on the basis of United Nation's (2000) classification.

Graphic 10. *Sovereign Wealth assets among OECD and non-OECD states in Billion US \$*



Sources: Volume of SWFs calculated on the basis of Fernandez (2008:21); division of regions on the basis of United Nation's (2000) classification; OECD (2008b).

2.2. Economic Aspects

The previous section has shown that a distinction between OECD and non-OECD countries on pure geography is problematic. Therefore, these geographical flaws are complemented by adding an economic dimension. Here again OECD countries constitute a quite homogeneous bloc of highly industrialised countries, whereas non-OECD countries constitute a more heterogeneous bloc; on the one hand, comprising emerging markets – the so called ‘BRICs’ consisting of [Brazil], Russia, [India], and China (O’Neill 2001 [1]) – on the other hand, comprising OPEC members – such as the United Arab Emirates, Kuwait, Qatar, and Nigeria – but also other developing countries, most notably Angola or Kiribati. But, if wealth among countries is measured by the comparison of Gross Domestic Product (GDP) – describing the value of goods and services produced within a country in a certain period – the three richest countries in terms of GDP continue to be OECD members: the US, Japan and Germany (IMF 2008 [1]). Consequently, these findings would suggest that such a dichotomisation on the economic dimension between OECD countries and non-OECD countries can be justified.

However, there are also highly industrialised non-OECD countries, such as Singapore with a GDP per head exceeding that of Switzerland, the Netherlands or Sweden (*CIA Factbook* 2008). Although there is as strong correlation between wealthy countries and the OECD, wealth creation also happens independently from an affiliation with the OECD. But still, the most developed states are affiliated with the OECD, an organisation with a strong commitment to market economy and democracy (OECD 2008:10). That leads directly to the third point: government. In contrast to most of the non-OECD states, OECD members consist exclusively of democracies (OECD 2008:10).

2.3. Governmental Aspects

While both OECD and non-OECD countries play the same economic game ‘capitalism’, they play this economic game under a different set of political rules. All OECD countries with SWFs are democracies, whereas nearly all non-OECD states with SWFs are controlled by autocratic governments (see Figure 2). According to Freedomhouse (2008; see Figure 2), 100 per cent of the OECD countries with SWFs can be characterised as free, whereas only 12 per cent of non-OECD countries with SWFs are described as free¹⁶. But does the form of government – whether democracy or autocracy – have implications for SWFs? Evidence shows that there is at least a strong correlation between the form of government and the characteristics of SWFs affiliated with these states. In order to evaluate the characteristics and practices of SWFs, Truman (2008:8,9) constructed a SWF scoreboard which is divided along different categories¹⁷ which measure transparency, accountability, and the behaviour of SWFs. Glick and Aizenmann (2008: 16) underline the relationship between democracy and the SWF scores on the Truman chart.

The data of Figures 2 and 3 support, to a limited extent, the assumptions and figures of Glick and Aizenmann (2008:12), and Aizenman and Glick (2008:10), that countries with SWFs tend to have less democracy. On the one hand, Figure 2 outlines that most of the SWFs are located in non-OECD countries. Nearly all SWFs associated with non-OECD countries are ruled by non-democratic governments. But on the other hand, a substantial part of sovereign wealth can be located to OECD countries which are in all cases democratically ruled states (see Figure 2). Keech (1995: 10) suggests that the form of government – whether democratic or autocratic – has economic implications. While goals in a democracy are “...defined and redefined within the democratic political process”, in autocratically ruled states, these goals are often set “outside of it...” (Keech 1995:10). Similarly, Aizenman and Glick (2008:12)

¹⁶ The status – Free, Partly Free, and Non Free – is determined by a combination of political and civil liberty rights (Freedomhouse 2008).

¹⁷ The scoreboard embraces four categories:

- I. ‘Structure’: “An SWF’s high score on the elements in this category provides confidence to the citizens of the home country and of countries where the fund may invest that the activities of the fund are transparent” (Truman 2008:8).
- II. ‘Governance’: “The governance category covers the respective roles of the government and fund managers in conducting the operations of an SWF...” (Truman 2008:9).
- III. ‘Accountability and Transparency’.
- IV. ‘Behavior’: “It combines aspects of risk management with features that may be of concern to market participants because of the potentially large scale of SWF investment activities” (Truman 2008:12).

emphasise that “[i]n more democratic countries, political contestability implies that the SWF agenda and investment goals should be more aligned with the domestic electorate, implying greater demand for domestic transparency.” Figure 3 illustrates that SWFs of OECD countries have an average higher score on the Truman chart than SWFs of non-OECD countries. Hence OECD SWFs tend to be more transparent, and thus more accountable, than their non-OECD counterparts. Although this thesis cannot determine a causal relationship between the form of governance and aspects related to transparency, there is at least a strong correlation between these variables.

The first three sections of this chapter have shown that the heuristic categorisation of OECD and non-OECD states comprises all three dimensions: geography, economy, and government. Setser (2008) associates the emergence of SWFs with these three dimensions. Therefore, an analysis of SWFs should include these dimensions in order to get a more comprehensive picture. It has been demonstrated throughout Chapter 2 that the dichotomy of OECD versus non-OECD states mirrors these dimensions in a coherent way. Consequently, the following section of this chapter builds on these findings by questioning: are there similar dynamics among all SWFs (influenced by macro-economic dynamics) regardless of to which state they belong to, and how can global dynamics explain commodity and non-commodity funds separately? Therefore, the OECD- non-OECD dichotomy is combined with another dichotomy of ‘commodity’ versus ‘non-commodity’ financed SWFs in an historical matrix.

Figure 2. *Status OECD and non-OECD countries*

OECD		Non-OECD	
<i>Country</i>	<i>Status</i>	<i>Country</i>	<i>Status</i>
Australia	F	Algeria	NF
Canada	F	Angola	NF
France	F	Azerbaijan	NF
Ireland	F	Botswana	F
Mexico	F	Brunei	NF
New Zealand	F	Chile	F
Norway	F	China	NF
South Korea	F	Colombia	PF
United States	F	East Timor	PF
		Gabon	PF
		Iran	NF
		Iraq	NF
		Kazakhstan	NF
		Kiribati	F
		Kuwait	PF
		Lybia	NF
		Malaysia	PF
		Mauretania	PF
		Nigeria	PF
		Oman	NF
		Qatar	NF
		Russia	NF
		Saudi Arabia	NF
		Singapore	PF
		United Arab Emirates	NF
		Venezuela	PF

Notes: F=Free, PF= Partly-Free, NF= Non-Free.

Source: Freedomhouse 2008.

Figure 3. SWFs scores between OECD and non-OECD countries

OECD			Non OECD		
Country	Fund	Truman overall score	Country	fund	Truman overall score
New Zealand	Superannuation Fund	95			
US	Alaska Permanent Fund	94			
Norway	Government Pension Fund Global	92			
France	Fonds de reserve pour les retrait	92			
US	Permanent Mineral Trust	91			
Ireland	National Pension Reserve Fund	86			
Australia	Future Fund	80			
Canada	Alberta Heritage Fund	74	East Timor	Petroleum Fund	80
South Korea	Korea Investment Corporation	51	Azerbaijan	State Oil Fund	77
Mexico	Oil Stabilisation Fund	47	Chile	Stabilisation Fund	70
			Hong Kong	Exchange Fund	67
			Kazakhstan	National Fund for the Republic Kazakhstan	64
			Botswana	Pula Fund	55
			Russia	Reserve and National Welfare Fund	51
			Kuwait	Kuwait Investment Authority	48
			Singapore	Temasek	45
			Singapore	Government Investment Corporation	41
			Malaysia	Khazanah	38
			China	China Investment Corporation	29
			Kiribati	Revenue Equalisation Reserve Fund	29
			Algeria	Revenue Regulation Fund	27
			Nigeria	Excess Crude Account	26
			Iran	Oil Stabilisation Fund	23
			Venezuela	Stabilisation Fund	23
			Oman	State General Reserve Fund	20
			Brunei	Brunei Investment Authority	18
			United Arab Emirates	Mubadala	15
			United Arab Emirates	Istithmar World	14
			Qatar	Qatar Investment Authority	9
			United Arab Emirates	Abu Dhabi Investment Authority	9

Source: Truman (2008:7).

2.4. Sources of Sovereign Wealth

The previous section emphasized that the categorisation of OECD and non-OECD countries implies three elements: geographical, economic, and government. Furthermore, it has been indicated that the establishment and funding of SWFs depend on the availability of resources. These resources are either generated by revenues from commodity exports, such as oil, gas, copper or diamonds, or foreign exchange reserves and fiscal surplus.

The commodity funded SWFs account for the largest stake in sovereign wealth world wide. In particular, oil exporting states of the Middle East (Western Asia), such as the United Arab Emirates or Kuwait are the dominant players. According to Truman (2008:4) 72 per cent of all SWF derive their money from commodity revenues, in most cases from oil export.

Consequently, this heavily reliance on oil revenues suggests a relationship between the formation of SWFs and international oil prices. Periods of high oil price have enabled some countries, especially those of the Middle East, to accumulate large portions of petrol dollars. Governments – such as Kuwait or United Arab Emirates – channel a fraction of this oil money into a SWF. Hence, global commodity prices affect the availability of resources which are transferable into a SWF. Although, these commodity financed SWFs (in particular oil) presumably continue to dominate the SWF landscape, experts such as Truman (2008a:169-183) and Setser (2008:201-218) point out that some of the ‘non-commodity SWFs’ – in particular the China Investment Corporation – have experienced dynamic growth. In fact, non-commodity financed SWFs have the potential to become, under certain circumstances, major players.

In contrast to commodity financed SWFs, the largest non-commodity financed SWFs are located in oil importing regions, in particular South and Eastern Asia. As the term ‘non-commodity’ already indicates, their way of funding differs from countries which fund their investment vehicles with money generated from natural resources, such as oil, gas or copper. For instance, China, Hong Kong and Singapore finance their SWFs with exchange reserves or fiscal surpluses generated by export activities or fiscal policies (Fernandez 2008:2). In the first case, the size of foreign exchange reserves, which can be transferred into a SWF, affects the availability of resources. These findings suggest that in both cases (commodity financed and non-commodity financed SWFs) the availability of wealth – either through natural resources, trade or fiscal policies – constitutes the foundation for establishing a SWF.

Having differentiated between commodity and non-commodity SWFs the following part applies these findings into a historical matrix in order to analyse some of the dynamics which influence SWFs. According to Garson (1971:12) “history must be divided into categories that simplify history for the purposes presumably useful to analysis.” In the case of commodity financed SWFs the historical matrix is divided into four periods. This chosen chronology mirrors on the one hand the dynamics of international oil price, whereas, on the other hand it reflects the emergence of SWFs in the context of these dynamics. The main question is whether these dynamics affect SWFs of OECD and non-OECD states in a similar way?

2.4.1. Commodity financed Sovereign Wealth Funds

Chapter 1. showed that some of the oldest and largest SWFs are concentrated in countries of the Middle East. But also outside the Middle East, most countries¹⁸ share one main characteristic, namely oil wealth which is partly transferred into a SWF. Therefore, the main criteria for the historical dividing lines in Figure 4 revolve around global oil prices. The matrix of Figure 4 is divided into four periods. Each of these periods illustrates a wave of SWF formation which corresponds with the dynamics in international oil prices (see Figure 5 and Appendix A). The argument of this section is that commodity based SWFs – in particular oil financed SWFs – are more likely to be established in periods of high oil price¹⁹. However, exact data concerning their current volume is not available. In fact, neither official data nor estimations concerning their original (foundation) volume are existent. Thus all the estimations about the volume of SWFs in this section refer to evaluations made in 2008.

The foundation phase (1953-1973), characterised in Chapter 1 as the period of the first steps of SWFs, can be described as an era of cheap oil. Nevertheless, Kuwait exported enough oil to accumulate sufficient surplus money to establish the Kuwait Investment Office, a SWF located in London. This SWF, with an estimated volume of US \$250 billion, belongs in 2008 to the top five global SWFs (see Figure 4).

This period was followed by the first expansion phase (1973-1981). Similarly to the 1950s (see Chapter 1) the economic situation in 1970s was heavily influenced by politics, where OPEC members unilaterally increased the oil price. According to Eichengreen (2004:37) “...the period starting in 1973 was characterized by sharp commodity price hikes. In addition to the oil price increases of 1973 and 1979, there was a commodity price boom of 1973-1974.” In this era both – OECD and non-OECD countries which disposed of oil reserves – took advantage of this situation – where politics drove oil price high – in that sense that they established SWFs on the basis of their surplus oil revenue. The findings in Figure 4 suggest that this era has seen a balanced growth in the number of SWFs between OECD and non-OECD countries.

¹⁸ More than 90 per cent of commodity SWF are financed through oil/gas.

¹⁹ According to Aizenman and Glick (2008:8) “[c]ountries that [...] specialize in fuel exports are more likely to have established sovereign wealth funds.”

Unlike the period between 1973-1981, the subsequent era (1982-1999) – described as a stagnation phase – saw a decrease in oil prices except for 1990, and only modest growth in the volume of assets controlled by SWFs. In mere numbers of SWFs established in this period, it seems only to be a stagnation phase for OECD countries. Most of the SWFs were established in non-OECD countries. Figure 4 shows that seven out of eight SWF in that period were located in non-OECD countries. However, Norway with its 1990 established Government Pension Fund constitutes a large exception. The Norwegian government founded its SWF in the context of increasing oil prices. Unlike the other years in this formation phase 1990 saw an upsurge in oil prices (see Appendix A). Other sizable commodity based SWFs established during those years were financed through copper or diamond revenues (see Figure 4).

Nevertheless, the period 2000-2007 experienced a stable rise in oil price and a parallel dramatic rise in SWFs (compare Appendix A with Figure 5). In contrast to previous periods, where the growth of SWF volume related to OECD and non-OECD countries was more balanced, described as the second expansion phase this period saw a shift in that balance in favour to non-OECD countries. After 2000 SWF assets related to non-OECD outstripped those of OECD countries. The same was true for the number of newly established SWFs. Out of the 14 commodity financed SWFs, 13 are located in non-OECD states. Hence, these findings suggest that the period between 2000-2007 witnessed a growing imbalance between OECD and non-OECD states in both volume and number of newly established SWFs.

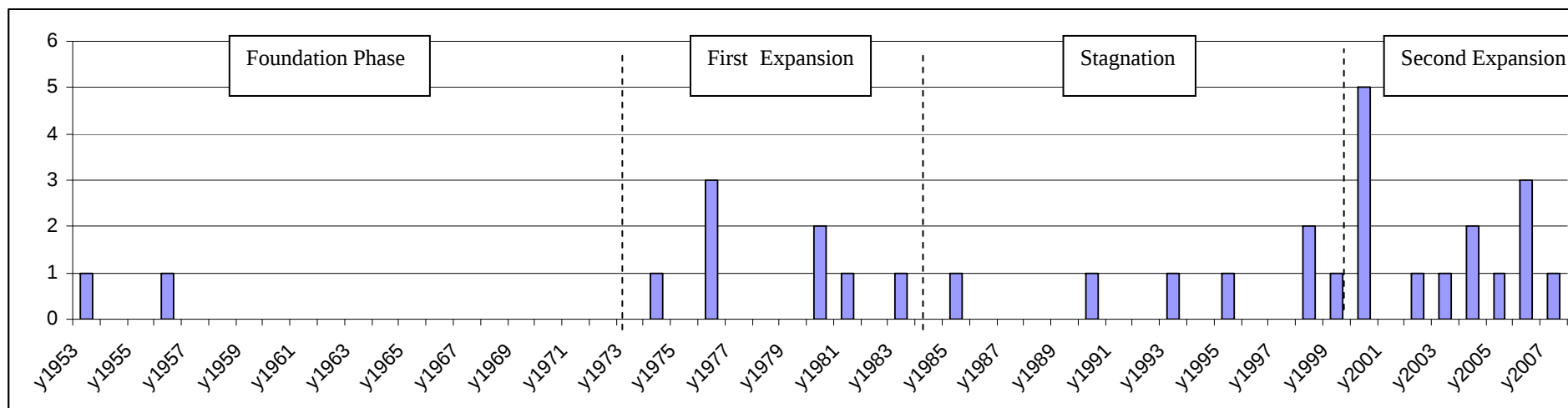
Figure 4. *Historical Trajectory of Commodity funded SWFs (1953-2007)*

	OECD countries					Non OECD countries				
	Year	Country	Name	Source	volume	Year	Country	Name	Source	Volume
1953-1973 Foundation Phase						1953	Kuwait	Kuwait Investment Office	Oil	213-250
						1956	Kiribati	Revenue Equalisation Fund	Phosphates	0.6
1973-1981 First Expansion Phase	1974	US	Permanent Wyoming Mineral Trust Fund	Minerals	4	1976	United Arab Emirates	Abu Dhabi Investment Authority	Oil	500-1000
	1976	Canada	Alberta Heritage Fund	Oil	17	1980	Oman	State General Reserve Fund	Oil/Gas	6
	1976	US	Alaska Permanent Reserve Fund	Oil	37	1980	Saudi Arabia	Kingdom Holding Company	Oil	25
						1981	Lybia	Lybian Investment Authority	Oil	50
1982-1999 Stagnation Phase of modest growth in assets (except 1990)	1990	Norway	Government Pension Fund	Oil	373	1983	Brunei	Brunei Investment Authority	Oil	25-35
						1985	Chile	Economic and Social Stabilization Fund	Copper	16
						1993	Botswana	Pula Fund	Diamonds	6
						1995	Colombia	Oil Stabilisation Fund	Oil	2
						1998	Venezuela	Investment Fund for Macroeconomic Stabilisation	Oil/Gas	0.8
						1998	Gabun	Fund for Future Generations	Oil	0.5
						1999	Azerbaijan	State Oil Fund	Oil	2

2000-2007 Second Expansion Phase	2000	Mexico	Oil Stabilisation Fund	Oil	2	2000	Qatar	Qatar Investment Authority	Oil	40-60
						2000	Algeria	Fonds de Régulation des Recettes	Oil	44
						2000	Iran	Oil Stabilisation Fund	Oil	10
						2000	Kazakhstan	National Oil Fund	Oil	23
						2002	United Arab Emirates	Mubadala	Oil	10
						2003	Iraq	Development Fund for Iraq	Oil	8
						2004	Russia	Stabilisation Fund	Oil/Gas	157
						2004	Nigeria	Nigeria Excess Crude Fund	Oil	13
						2005	East Timor	Timor- Leste Petroleum Fund	Oil	2
						2006	Chile	Chile Pension Reserve Fund	Copper	1.4
						2006	United Arab Emirates	Investment Corporation of Dubai	Oil	n.a.
						2006	Mauretania	National Fund for Hydrocarbon Reserves	Oil/Gas	0.3
						2007	Angola	Reserve Fund for Oil	Oil	n.a.

Sources: Compiled from various sources most notably Fernandez (2008).

Figure 5, *Numbers of SWFs established (1953-2007)*



Sources: Compiled from various sources most notably Fernandez (2008).

2.4.2. Non-Commodity financed Sovereign Wealth Funds

The previous sections have emphasized the role of SWFs financed through revenues generated from the extraction of natural resources, in particular oil. There is a strong relationship between oil prices and the formation of SWFs. This strong interdependence between oil prices and SWFs has led various commentators to dub these funds as natural resource funds²⁰. The majority of SWFs are financed with money from natural resources, especially oil or gas. On the one hand, abundant natural resource endowment explains the ability of large sums of capital which can be transferred into a SWF. But on the other hand, it overlooks countries such as Singapore or China, which also have SWFs but do not dispose of affluent oil or other natural resources, such as diamonds. A substantial part of sovereign wealth can be found in states²¹ which finance their SWFs from activities other than the extraction of natural resources. Consequently, some observers, most notably Rozanov (2005:1), emphasise that SWFs should not be called or reduced to natural resource funds.

Similarly to natural resource financed SWFs, non-commodity financed SWFs depend on the availability of surplus capital. In the case of SWFs financed by oil revenues, oil price dynamics determine the availability of resources which can be transferred to a SWF. But unlike SWFs financed through oil revenue, as is the case in non-commodity financed SWFs, it is more difficult to attribute the availability of surplus capital to one variable. Here the availability of capital resources, which can be transferred into a SWF, depends on fiscal policies, such as the transfer of taxation surplus, or capital generated from privatisation and exchange reserve surpluses.

The identification of a singular variable is more difficult because non-commodity financed SWFs have various sources of funding. Although accepting that indirectly most of the research²², in particular Aizenman and Glick (2008:2), on non-commodity financed SWFs focuses on China, and thereby concentrating on the relationship between the variable of ‘foreign exchange reserves’ and SWFs. This research reveals interesting aspects about some SWFs. For instance, the two largest SWFs – the Chinese Investment Corporation, and the Government Investment Corporation of Singapore – are financed by exchange reserve surpluses (see Figure 6). These countries, especially China but also Korea, have started to

²⁰ That is criticized by Rozanov (2005:1).

²¹ Most notably China and Singapore.

²² Truman, Edwin (2008a); Setser, Brad (2008a).

hoard exchange reserves, especially in the aftermath of the Asian Financial Crisis of 1997/1998 (Aizenman 2002:371; Jaenne 2007:3).²³

At the end of 1994, for instance, global reserves, excluding gold, amounted only US \$1254 billion, whereas international reserves in 2002 nearly doubled to more than US \$2223 billion (Aizenman 2002). Developing countries, particularly in East Asia were the main drivers of that phenomenon (Aizenman 2002:372; Jaenne 2007:38). In 2008, China, with US \$1400 billion, holds the largest foreign exchange reserves worldwide (Setser 2008:206). Until 2007 – in other words, before China established its SWF – the bulk of this money was conservatively invested in low yielding US treasury bonds. However, the holding of large sums of foreign exchange reserves is costly because of the “difference between the return on reserves and the return on more profitable alternative investment opportunities” (Jaenne 2007:25, 42, 47). According to James (2009: [1]) “[s]ince 2000, Chinese assets abroad have earned very poor returns -- and with the depreciation of the dollar, by some measures they have even performed negatively”. Consequently, in 2007 China, with the establishment of its SWF, took the first step into the direction of asset diversification in order to gain higher returns. It transferred 2007 US \$200 billions from its reserve stock to the China Investment Corporation (CIC 2008: [1]). The CIC diversified into a variety of channels with the objective of maximizing return. These channels include equity investments, direct investments, and real estate investments (CIC 2008a: [1]).

China’s SWF is large with further potential for growth, but by no means can it be described as the largest. Therefore, in a comprehensive SWF study, an exclusive focus on the variable of foreign exchange reserve holdings would under-appreciate other factors, which play an important role in contributing to the asset growth of SWFs. For example, many of the non-commodity funded SWFs, such as the US New Mexico Permanent Trust Fund, the Malaysian Khasana Nasional, the Australian- Queensland Investment Corporation, Future Fund and Victorian Funds Management Operation, the French Pension Reserve Fund, the New Zealand Superannuation Fund, the Irish National Pension Reserve Fund, the United Arab Emirates- Dubai Istithmar World, and Dubai International Capital, are not directly financed through

²³ There are interesting controversies about the underlying reasons for huge amounts of exchange reserve holdings. While there are those, such as Aizenman (2004; 2005; 2007), who describe hoarding of exchange reserves by emerging economies as a precautionary approach against capital flights in a world of volatile exchange rates, others, most notably Dooley, Folkerts-Landau and Garber (2003), who describe the massive hoarding of exchange reserves, which enable an undervalued exchange rate, as mercantile strategy to promote exports.

exchange reserve surpluses (State Investment Council 2008a:[1], State Investment Council 2008b:[1], State Investment Council 2008c:[1], Queensland Investment Corporation 2008:[1], Victorian Fund Management Corporation 2008:[1], Fonds de Reserve 2008:[1], NZSuperfund 2008:[1], National Pension Reserve Fund 2008:[1], Futurefund 2008:[1]).

The first non-commodity funded SWF, for example, was established during the 1950s, the same decade of the first oil financed SWFs. In contrast to the latter group, the first non-commodity financed SWF was established in an OECD country. The US New Mexico Permanent Trust Fund can be characterised as the first Western based SWF in the foundation phase 1958-1973 (see Figure 6). In 2008 this fund derives its capital from different sources. On the one hand the New Mexico Permanent Trust Fund profits indirectly from natural resources through taxing private business through leasing fees for mineral resources, and taxes collected on natural resources (State Investment Council 2008a:[1], State Investment Council 2008b:[1]). On the other hand, this fund derives additional capital from annual payments made by tobacco companies (State Investment Council 2008c:[1]).

The second phase from 1974-1981 (see Figure 6) saw the growth of two SWFs in a non-OECD country: Singapore. Singapore's first SWF Temasek is directly funded by the government (Fernandez 2008:35), whereas the second SWF – the Government Investment Corporation – manages Singapore's foreign exchange reserves (GIC 2008a:[1]).

The third phase from 1982-2000 experienced no discernable change. In this period Australia established two SWFs. Its first, the Queensland Investment Corporation, can be described as the largest institutional investment manager in Australia owned and funded by the government of Queensland (Queensland Investment Corporation 2008:[1]). Similarly to the Queensland Investment Corporation, Australia's second SWF, the Victorian Fund Management Corporation, receives funds from public agencies, particularly state-related insurers or public sector clients, such as universities (Victorian Fund Management Corporation 2008:[1]). Only one non-OECD SWF – the Malaysian Khasana Nasional – was created during the 1990s. The Malaysian government financed this SWF with revenues derived from privatisation of government companies (Fernandez 2008:54).

The period 2000-2007 saw rapid growth of SWFs in both OECD and non-OECD countries. The number of established SWFs in this phase overtrumped the total amount of previous phases. Three out of the five SWFs established by OECD states can be described – with a volume between US \$30-55 billion – as medium sized SWFs, whereas non-OECD China established one large SWF with a volume of US \$200 billion (see Figure 6). Three OECD members – Ireland, France, and New Zealand – were the first which established SWFs in this period. The Irish government funds its National Pension Reserve Fund by a “statutory setting aside and investing of 1% of GNP annually” (National Pension Reserve Fund 2008:[1]). Similarly to the Irish SWFs, the New Zealand Superannuation Fund is “financed by capital contributions from the Government” (NZSuperfund 2008:[1]). In contrast, the French Fonds de Reserve derives its resources from various channels: “[a] portion of the 2 percent social tax on income from estates and investments [...] [s]urplus sums from the French National Old Age Funds [...] [p]roceeds from the sale of certain state-owned assets through privatization” (Fonds de Reserve 2008:[1]).

These were followed by two non-OECD funds from the United Arab Emirates – Isthithmar World and Dubai International Capital – and another Australian fund, the Future Fund, which is financed by budget surplus and privatisation revenues, for instance Telstra in 2006 (Futurefund 2008 [1]). South Korea is the only OECD member with a SWF located outside the Western hemisphere. In other words, the Korean Investment Corporation is an OECD related SWF, but located in a non-traditional Western state. Like the Singaporean Government Investment Corporation, the Korean Investment Corporation manages a part of South Korea’s foreign exchange reserves (Korea Investment Corporation 2008: [1]). The last and politically most discussed SWF was created in 2007 by the Chinese government. Figure 1 illustrates that a wide public debate about SWFs started with the establishment of the Chinese fund and some high profile SWF investments.

Figure 6, *Historical Trajectory of Non-Commodity funded SWFs (1958-2007)*

	OECD Countries					Non OECD Countries				
	Year	Country	Name	Source	Volume	Year	Country	Name	Source	Volume
1958-1973 <i>Foundation Phase</i>	1958	US	New Mexico Permanent Trust Fund	Fiscal	16					
						1974	Singapore	Temasek	Fiscal	160
1974-1981 <i>Small number of SWFs</i>						1981	Singapore	Government of Singapore Investment Corporation	Reserves/Fiscal	200-330
1982-2000 <i>No discernable change</i>	1992	Australia	Queensland Investment Corporation	Fiscal	65	1993	Malaysia	Khazanah Nasional	Fiscal	23
	1994	Australia	Victorian Funds Management Corporation	Fiscal	36					
2000-2007 <i>Rapid growth of SWFs</i>	2001	France	Pension Reserve Fund	Fiscal	51	2003	United Arab Emirates	Dubai Istithmar World	Fiscal	6
	2001	New Zealand	New Zealand Superannuation Fund	Fiscal	10	2004	United Arab Emirates	Dubai International Capital	Fiscal	13
	2001	Ireland	National Pension Reserve Fund	Fiscal	31	2007	China	China Investment Corporation	Reserves /Fiscal	200
	2006	Australia	Future Fund	Fiscal	55					
	2006	South Korea	Korea Investment Corporation	Reserves /Fiscal	20					

Sources: Compiled from various sources most notably Fernandez (2008).

Chapter 2 has supported the application of the widely used categorisation of SWFs into commodity financed funds and non-commodity financed funds. This division is legitimised because different dynamics and variables influence the formation of SWFs. On the one hand, the faction labelled ‘commodity financed SWFs’ can be described as an homogeneous group, since more than 90 per cent of the assets are derived directly from oil or gas revenues. On the other hand, the group characterised as ‘non-commodity financed SWFs’ comprises a more heterogeneous cluster of funds. In contrast to commodity financed SWFs, non-commodity financed SWFs derive their funding from number of different sources, such as taxes derived from natural resources, and revenue derived from privatisation and foreign exchange reserves. By emphasizing this variety, a comprehensive analysis should not exclusively focus on one variable, in particular ‘foreign exchange reserves’. Although an investigation of the foreign exchange reserve dynamics reveals important insights in singular cases, such as in the Chinese or Singaporean one, it cannot embrace the whole picture.

Having discussed the economic basis of SWFs, it must be admitted that SWFs should be analysed in a political context, since all SWFs are related to governments. However, states owning SWFs are very heterogenous too, in matters of geography, in respect of the form of governance – whether democracy or autocracy – and in relation to their economic status. Hence, by relating SWFs to a political context these three dimensions are essentially embraced. Therefore the dichotomy of OECD versus non-OECD countries was introduced. This categorisation covers geographical, economic, and governmental elements which enable the structuring of this heterogeneity in a coherent way. While OECD countries with SWFs are often associated with the notion of western, highly industrialised countries coined by liberal capitalism, non-OECD states with SWFs are frequently described as non-western, emerging countries with authoritarian governments.

The integration of this dichotomy – of OECD versus non-OECD states – into a chronological matrix has revealed some interesting dynamics. Section 2.4.1. has analysed this dichotomy with reference to commodity financed SWFs. It has shown that although oil financed SWFs from non-OECD countries outgrew the number and volume of SWFs related to OECD members, both (OECD and non-OECD) experienced an increase in SWF assets. The findings of Section 2.4.1. suggest, that, in the case of commodity financed SWFs the dynamics of oil or commodity prices had until 2000 similar effects on SWFs whether located in OECD and

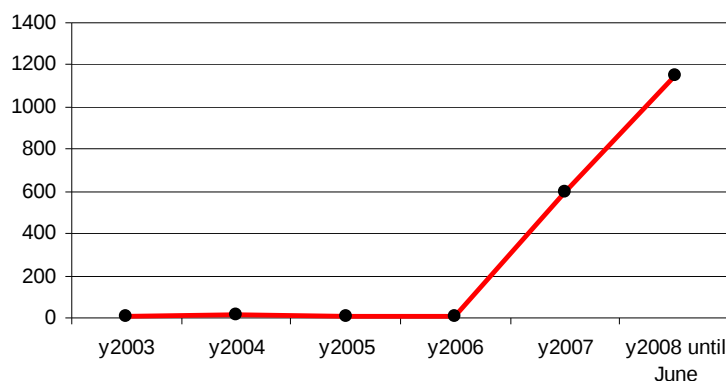
non-OECD countries. Section 2.4.2. has investigated this relationship in regard to non-commodity financed SWFs. Here, a comparison – whether certain dynamics have similar effects on OECD and non-OECD countries – is more difficult, since the sources of funding are more heterogeneous. Although the number of OECD SWFs outweigh the figure of non-OECD SWFs, concerning volume, the situation is converse. In terms of total assets controlled by SWFs, non-OECD clearly outplay OECD countries. In general, therefore, it seems that some dynamics – in particular oil prices – have similar effects on different countries.

While Chapter 1 revealed that the first SWFs emerged in a highly politicised world, Chapter 2 – by adding a political context – has integrated those findings into a contemporary framework. This framework has focused on the relationship between different types of SWFs related to various states. However, SWFs are not the only players in the international financial arena. Therefore, Chapter 3 analyses SWFs in relation to other financial players, in order to integrate SWFs into an international financial context

3. SWFs among Other Financial Actors

The rapid growth of SWF assets to an approximate volume of US \$3 trillion (Maslakovic 2007:5) in the last decade represents an issue which should become one of the hot financial topics in IPE, since there are clear intersections between economics and politics. Despite growing interest, most of the scholarly work about SWFs has been undertaken exclusively by economists. But most of the economic approaches, no matter how sophisticated they are, have problems when it comes to the integration of political variables. That often leads to an inadequate use of the term SWF since various actors that share some similarities with SWFs are often labelled as SWFs. This debate frequently results in disagreements in terms of what SWFs are, and what they are not. Since 2007 an inexact usage of the term SWFs contributed to some extent to an inflationary and inappropriate application of the term SWF, in particular in the media (see Graphic 11).

Graphic 11, *Number of Articles related to SWFs in the Financial Times*



Source: *The Financial Times* 2008.

Thus the main objective of studying SWFs is to examine in more detail the extent to which they differ, and in particular to examine the role of other financial actors and their relationship to SWFs. Therefore, Chapter 3 is divided into two sections. Sections 3.1., 3.2, and 3.2.1 deal in the first instance with the question of to what extent SWFs differ from other financial institutions or actors, such as reserve banks and pension funds. The purpose of these sections is to identify the intersecting elements among SWFs and some of those financial institutions (in Section 3.4.) in order to categorize them. Section 3.3. draws attention to the ways in which

the heterogeneous group of SWFs can be categorized in order to differentiate them, since various financial actors have diverse dynamics. In order for an adequate analysis of SWFs, the multiple dynamics linked with SWFs have to be appreciated.

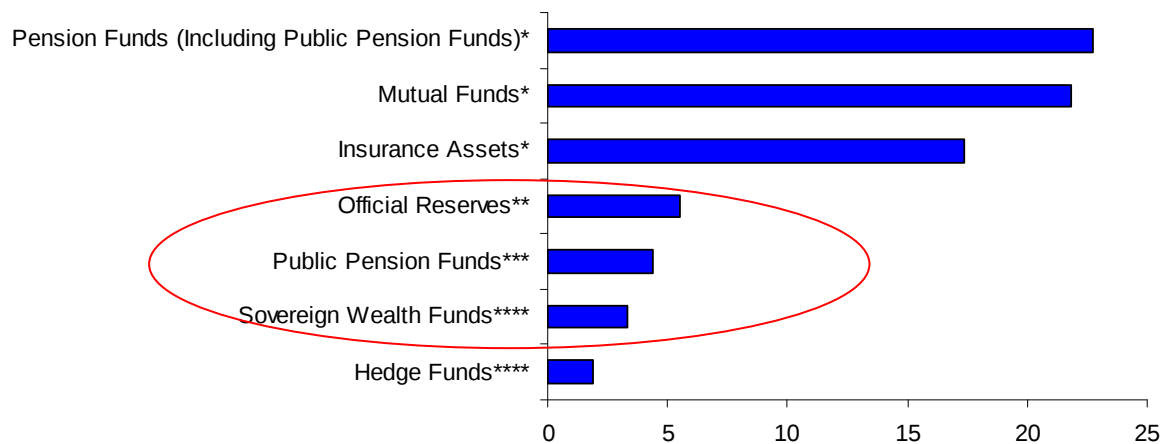
3.1. Differences between Sovereign Wealth Funds and Other Financial Actors

In the last three decades SWFs have grown to an impressive size of approximately US \$3 trillion, so that one of *The Economist's* (2008) cover stories had the title “Invasion of the Sovereign Wealth-Funds”. However, an inadequate use of the term SWFs accompanies the increasing public interest. A tendency to dump all state related pools of capital, such as reserve banks or public pension funds, into the category of SWF is one outcome. The incorporation of all these financial institutions, into the SWF debate, by including them in different SWFs ratings²⁴ can lead to confusion as to whether to describe one actor as SWF or not. There are some intersecting elements among SWFs and some of those financial institutions, but not enough to put them altogether into the category labelled ‘SWFs’.

Hence it seems important to shed light on this problematical issue. Graphic 12, *Global Asset Holdings* illustrates that SWFs act in the financial field among many other players. SWFs have an estimated volume of about US \$3 trillion (Maslakovic 2008:1); a large financial actor, but by no means the largest. Other institutional investors, such as private and public pension funds with combined assets exceeding US \$20 trillion (Maslakovic 2007:5), have much more financial leverage than SWFs. Even the official global Reserve holdings, managed by central banks, surpass the volume of SWFs (*The Economist* 2008a [1]). Consequently, this section illustrates some distinctive features shared by those financial players, thereby enabling differentiation between them.

²⁴ For example in Truman 2008:4; Maslakovic 2008:3; Blundell-Wignall et al. 2008:121; IMF 2007:48.

Graphic 12, *Global Asset Holding in Trillion US \$*



Sources : *Maslakovic (2007:5); **Economist (2008);*** (Blundell-Wignall 2008:117);
****Maslakovic (2008:1).

3.2. Similarities between Sovereign Wealth Funds and Other Financial Actors

Pension funds, reserve holdings of central banks, and the assets of SWFs are all related to the government in that sense that governments play a central role in the supply of financial resources allowing them to operate. That includes the governmental allocation of Foreign Exchange Reserve and Fiscal Revenue, such as tax exemption for both pension funds and SWFs (Fleischer 2008), as well as the channelling of commodity revenues, in particular oil, into these financial institutions. Hence for analytical reasons these three financial institutions – reserve banks, SWFs, and pension funds – are categorised under the label ‘government related pools of capital’ on the horizontal level in Figure 7.

Having differentiated among the actors on the horizontal level, Figure 7 illustrates that each of these actors can also be characterised along different vertical dimensions. Each of these vertical dimensions revolves around a key variable (objective, investment horizon, investment type, asset holdings, and source). Together, these variables constitute a complex of underlying logics which are influenced by developments in particular industries.

At the ‘source’ dimension, for instance, the effects of a commodity price increase, for example oil, differ between the SWFs of oil producing countries such as Kuwait, and the SWFs of export manufacturing countries, such as China. Whereas an additional inflow of oil money would increase the asset volume of the Kuwaiti SWF, at the same time, these dynamics would have other effects on the Chinese SWF, which is financed by a foreign exchange reserve overhang based on export activities. These export activities, in turn, are enabled to a certain extent by the availability of cheap oil. These findings suggest that different developments in particular industries shape various characteristics of SWFs in distinct ways. However, it turns out that the developments which influence these key variables are, in reality, often not clear cut.

Figure 7 shows that the horizontal actor-classification into five different units hardly matches the characteristics of each dimension in a coherent way. On the one hand, although being characterised as SWFs, stabilisation funds, investment holding companies as well as saving funds show great heterogeneity on the vertical levels. On the other hand, while central banks and stabilisation funds share a lot of similarities, in particular patterns of asset holding and investment types, they are expressed as separate actors on the horizontal level. These semblances and inconsistencies sometimes lead to confusion as to whether to describe some actors such as central banks or pension funds as SWFs. Hence, the purpose of the following sections is to describe each of the five actors separately in order to understand the categorisation.

Figure 7, *Categorisation of Government related Pools of Capital*

Government Related Pools of Capital	Central Banks	Sovereign Wealth Funds			Pension Funds
		Stabilisation Funds	Investment Holding Companies	Saving Funds	
Dimensions					
Objective	Macroeconomic Stabilisation Liquidity		Higher Return		
Investment Horizont	Short Term Investments		Long Term Investments		
Investment Type	Portfolio		Portfolio/Direct Investment	Portfolio	
Focus in asset allocation	Foreign		Foreign/Domestic	Foreign	Domestic/Foreign
Sources	Foreign Exchange Reserves	Commodity Revenue	Commodity Revenue Foreign Exchange Fiscal Revenue Issuence of Shares	Commodity Revenue Foreign Exchange Fiscal Revenue	Tax Employee contribution

Sources: Compiled from various sources, IMF (2008), Fernandez (2008), Pascuzzo (2008).

3.2.1. Relationship ‘Investment Type’ and ‘Investment Allocation’

Before analysing the actors separately it is useful to indicate a core relationship on the vertical level between ‘investment type’ and ‘investment allocation’. The following sections support the thesis of a causal relationship between the variables ‘investment type’ and ‘asset allocation’. Each of the nine selected cases (see Figures 8, 9, and 10) illustrates that, on the one hand, SWFs with little interest in direct investment (see Figures 9, and 10) hold their assets preferably in international assets, while SWFs which participate through direct investments and majority shareholding actively in the economy (see Figure 8), tend to hold a substantial part of their assets domestically.

In order to integrate these findings into an empirical IPE framework, the analysis builds on a well known theoretical tenet. Prominent representatives of industrial organisation literature, most notably Hymer (1960), as well as economists such as Krugman and Graham (1991:8), or Stolen (1969), differentiate between two patterns of long term capital movements: portfolio investment and direct investment:

Direct investment is ownership that carries with it actual control over what is owned; this aspect of control distinguishes direct investment from portfolio investment, which is simply the establishment of a claim on an asset for the purpose of realizing some return (Graham and Krugman 1991:8).

Similarly, Hymer (1960:1,6) emphasizes that most of the literature describes ‘portfolio investment’ as substantially influenced by seeking the highest rate of return, but specifying direct investment as connected to motives of control. In the same fashion Farrell (1997:19) refers to portfolio investment as “a flow of capital from a country of low financial returns to one of higher returns...”

However, such a clear cut dichotomy between profit interest and control interest may be problematical, since reality is more complex. Caves (1996:134) would argue that both portfolio and direct investment are two different ways of claiming rents in a foreign market, which automatically mean that direct investment is also guided by profit motives. Nevertheless, analytical reasons justify such a simplification into two categories, because “if

investor control is not important, investors may require only a financial and not strategic motivation for FDI” (Farrell 1997:26). Therefore, these findings suggest that ‘direct investments’ are driven to a certain extent by motivations of controlling assets, whereas ‘portfolio investments’ are motivated solely by return aspects.

The first three actors in the upcoming sub-sections – investment holding companies, saving funds, and stabilisation funds – are SWFs followed by central banks and pension funds. After a short definition, the five characterising dimensions are analysed in order to differentiate each actor.

3.3. Types of Sovereign Wealth Funds

3.3.1. Investment Holding Companies

Investment holding companies such as the Singaporean *Temasek* or the United Arab Emirates (UAE) *Mubadala* have received considerable attention through high profile investments in international investment banks such as Merrill Lynch and Barclays, or companies such as Ferrari (Burton 2008; Dulka 2008). Most of the literature²⁵ about holding companies focuses exclusively on private sector holdings (Daems 1978). A private sector holding company can be defined in the widest sense as a “financial institution that manages a portfolio of stocks in order to control the companies in which they hold a share of the equity capital” (Daems 1978:2).

If translated to state owned ‘investment holding companies’ that would mean governments participate through ‘investment holding companies’ directly in the industrial commercial and financial field in order to control these companies. Nonetheless, the application of this definition of government owned ‘investment holding companies’ seems justified since some of them share similar aspects with private holdings (see Figure 8). The UAE *Mubadala* holding company, for instance, comprises an official portfolio of 56 domestic or international operating companies in the energy, industry, real estate and various other sectors. From these 56 international and national companies *Mubadala* has 100 per cent ownership of 21 firms, and owns stakes of more than 50 per cent in 10 companies (Mubadala 2008:[1]). Taken together *Mubadala* holds a controlling stake in more than half of the companies. Likewise, the Singaporean *Temasek* has a controlling part in 17 entities out of its 32 major national and international companies (Temasek 2008:[1]). These findings suggest that *Mubadala* and *Temasek* are the controlling shareholders in more than half of the companies listed in their portfolio.

That goes hand in hand with the question of where those companies are located. Companies which are directly controlled by a state owned investment holding company are most likely to be based in the territory of the sovereign owner. Aspects related to the sovereignty might play a central role in that. For example, if a company that is owned by sovereign A, operates in the territory of sovereign B, there is an intersection between two sovereign powers which might

²⁵ Daems 1978 et.al.

lead to political tensions. The controversy involving the global terminal operator Dubai Ports – itself directly owned by an investment holding company ‘Dubai World’ – and its takeover of US ports in 2006 illustrates this tension (Friedman 2006). A broad debate comprising media and US politicians from Congress and the Senate, such as John Warner and Peter King, began as to whether this takeover poses a security risk to the US (Weisman 2006:1). In the light of attention and public pressure, at the end of 2006 ‘Dubai Ports World’ officials pronounced their withdrawal from the ports operations in the US (Jackson 2008:1).

Thus enterprises totally owned by a SWF may find it difficult to operate in the territory of another sovereign power, since this would indicate a overlapping of sovereignty issues. Figure 8, *Selected International Investment Holding Companies* underlines this hypothesis, since there is a relationship between controlling ownership and location. Actually, the companies fully owned by *Mubadala* are explicit UAE corporations; firms where *Mubadala* holds more than 50 per cent are in most of the cases joint ventures with international companies, but also headquartered in the UAE (Mubadala 2008:[1]). These findings show that the companies controlled by *Mubadala* are domestic UAE firms, although some of them are operating internationally. These patterns of domestic investment also correspond to the Malaysian government holding company *Khasanah Nasional* that holds 89 per cent of its assets in Malaysia (Khasanah 2008:[1]). In the same fashion, *Temasek* holds a substantial part of its total investments in domestic assets (see Figure 8).

Hence, unlike stabilisation and saving funds, government owned investment holding companies invest a substantial part of their resources in domestic assets. These patterns of resource allocation correlate with a high percentage of controlling ownership by investment holding companies. While, holding companies, such as *Mubadala* or *Temasek*, have a controlling stake in more than half of their investments, stabilisation and saving funds only make portfolio investments (see Figures 9 and 10).

Similar to that, on the ‘source’ level (see Figure 7) there is great difference between investment holding companies and the other two types of SWFs. The funding structure of investment holding companies is probably the most multifaceted among SWFs. It differs from country to country, where governments channel or transfer fiscal surpluses, commodity revenues or foreign exchange reserves into holding companies. In stark contrast to savings or stabilisation funds, investment holding companies also have complementary patterns of

funding. In addition to the initial or ongoing governmental allocations of capital, some investment holding companies issue bonds, as in the case of *Khasanah* (Fernandez 2008:54). This leads to the question of their objectives.

Hymer's (1960) differentiation between the two types of international capital movements – the return oriented 'portfolio investment', and the control motivated 'direct investment' – would lead to the conclusion that most of the investments of holding companies are motivated not necessarily by objectives of the highest return. Fernandez (2008:5) and also the IMF (2008:46) would agree, that in the case of government owned investment holding companies, the objectives of maximising return are strongly influenced by strategic issues of developing, transforming or diversifying industries.

Figure 8. *Selected International Investment Holding Companies*

	Temasek (Singapore)	Mubadala (UAE)	Khasanah Nasional (Malaysia)
Objective	"maximise long-term shareholder value"	"investments that deliver strong financial returns"	"drive shareholder creation"
Investment Horizont	Long term	Long term	Long term
Foreign Asset Holdings	67%	n.a.	11%
Domestic Asset Holdings	33%	n.a.	89 %
Investment Type	direct/portfolio Controlling shareholder in 17 of the major 32 (inter)national companies	direct/portfolio Controlling shareholder in 31 from 56 (inter)national companies	Portfolio
Source	Fiscal	Oil	Fiscal

Sources: Temasek (2008); Mubadala (2008); Khazanah (2008); Truman(2008:4).

3.3.2. Saving Funds

Saving funds are undoubtedly the largest players in the SWF arena. The four largest saving funds – the *Abu Dhabi Investment Authority*, the *Norwegian Government Pension Fund-Global*, the *Singaporean Government Investment Corporation*, and the *Kuwait Investment Authority* – comprise a volume of US \$1793 billion²⁶ which is more than 60 per cent of the global sovereign wealth assets (Truman 2008:2). These four saving funds, making the largest bulk out of 44 international SWFs, show the high concentration of sovereign wealth in a small number of actors.

According to Fernandez (2008:5), governments allocate wealth generated by commodity export income, foreign exchange reserve surpluses or fiscal transfers, into a saving fund over a long period for future needs. These needs can comprise future pension liabilities, safeguarding future rent income, or other requirements (Blundell 2008, IMF 2008). Although some of the saving funds' objectives may not be so clear, all of the saving funds share the objective of higher return which is based on a diversified investment portfolio (Norwegian Ministry of Finance 2008; Government Investment Corporation 2008; Kuwait Investment Authority 2008).

However, one aspect that complicates a clear-cut analysis of saving funds is the fact that some of saving funds are intermingled with other types of SWFs. The Kuwaiti SWF described here as a saving fund, for instance, has two sections: the *General Reserve Fund* a stabilisation fund, and the *Future Generation Fund* a saving fund (Kuwait Investment Authority 2008). However, despite these intersections, which make a clear estimation of the savings fund volume difficult, some of the characteristics of both saving funds and stabilisation funds differ from the other investment holding companies. Unlike investment holding companies (see Figure 8), saving funds and stabilisation funds concentrate their capital exclusively in portfolio investment (see Figure 9).

The *Norwegian Government Pension Fund* explicitly invests in financial assets that comprise equities, fixed income and real estate (Norwegian Ministry of Finance 2008). Furthermore, the Norwegian Ministry of Finance (2008) implemented an investment limit for its SWF

²⁶ Calculated with the highest estimates of Truman (2008:2).

which prohibits the acquisition of more than 10 per cent of a company. The same may be true for the *Kuwait Investment Authority* (Fernandez 2008:29), and for the *Singaporean Government Investment Corporation* (2008:11). This suggests that most of the investments of saving funds are characterised by patterns of minority shareholdings interested more in return- than control-aspects. But, what does that mean for the asset allocation process?

Chapter 3.2.1. (Relationship ‘Investment Type’ and ‘Investment Allocation’) already indicated a relationship between the investment type whether portfolio or direct investment, and the patterns of asset holding, whether this investment is domestic or international. Investment holding companies (see Figure 8) have a high direct investment ratio which means that they control companies via majority share ownership. In addition, investment holding companies invest an essential part of their money in domestic assets.

In contrast to investment holding companies, saving funds can be characterised as funds focused on return and not control. While investment holding companies also invest domestically, saving funds tend to invest most of their assets internationally (see Figure 9 and Truman 2008:4; Beck and Fidora 2008:10). The Norwegian and Singaporean saving funds allocated all of their investments into international assets. But also the Kuwaiti saving fund has the majority of its money allocated to international assets (Truman 2008:4). Hence, Hymer (1960) would refer to saving funds as portfolio investors, interested in high returns, rather than control. The fact that most of the saving funds assets are invested internationally leads to the conclusion that saving funds invest in the highest return promising assets on an international level. These findings are strongly supported by Fred Halliday (2002: 55) who writes that “Gulf Cooperation Council states and private investors have invested over \$2.000 billion in Western capital markets, and very little at home, because of the comparative advantages of security and return.” These findings suggest that there are factors, in particular higher return, which make investments on an international, rather than domestic scale more attractive for saving funds.

Figure 9. *Selected International Saving Funds*

	Government Pension Fund – Global (Norway)	Government Investment Corporation (Singapore)	Kuwait Investment Authority ²⁷
Objective	Return	Return	Return
Investment Horizont	Long term	Long term	Long term
Foreign Asset Holdings	100%*	100%*	80%*
Domestic Asset Holdings	n.a.	n.a.	20%*
Investment Type	Portfolio	93% Portfolio 7% n.a	Portfolio
Source	Oil	Fiscal/Reserves	Oil

Sources: Norwegian Ministry of Finance (August 2008); Investment Report GIC (2008); Fernandez (2008:30);

*Truman (2008:4).

²⁷ The KIA manages two investment funds. According to Fernandez (2008:29) the *General Reserve Fund* is similar to a stabilisation portfolio, whereas the second, the *Future Generation Fund* (which accounts for about 80% of the whole assets) is a saving fund.

3.3.3. Stabilisation Funds

Rising commodity prices have undoubtedly contributed to the growth of stabilisation funds and their assets. The three largest oil/gas based stabilisation funds – the Russian Stabilisation Fund, the National Fund of the Republic of Kazakhstan²⁸, and the Excess Crude Fund of Nigeria²⁹ – were established between 2000 and 2004 (Truman 2008:2), a period characterised by a continuous rise in oil prices (see Williams 2007). Stabilisation funds can be usually found in countries abundant with resources, in particular oil/gas, copper or diamonds (IMF 2008:46). In fact, all of the stabilisation funds, except the Taiwanese one, are located in economies richly resourced with primary commodities (Fernandez 2008:21).

Similar to saving funds, some stabilization funds have intersections with other types of SWFs. The stabilisation fund of the Russian Federation, which was originally “established on January 1, 2004 as a part of the federal budget to balance the federal budget at the time of when oil price falls below a cut-off price” (MinFin 2008: [1]), was split into two sections at the beginning of 2008: section one, ‘the Reserve Fund’, continues to play the role of a stabilization fund, whereas section two, ‘the National Wealth Fund’, can be characterised as a savings fund (Sovereign Wealth Fund Institute 2008:[1]). Although stabilisation funds differ from saving funds, both can be described in the broadest term as portfolio investors. For example, in contrast to investment holding companies, stabilisation funds and saving funds invest passively which means they make no (direct) investments in companies. The Russian stabilisation fund, for instance invests only in short term (not exceeding three years) sovereign debt securities (MinFin 2008: [1]), which can be liquefied quickly if required. Similar to saving funds, stabilisation funds concentrate their assets, in foreign rather than domestic investments as Figure 10, *Selected International Stabilisation Funds* shows. The investments in foreign assets may also be determined by macro-economic considerations.

Governments which derive a substantial part of their income from external revenue, based on the exploitation of non renewable resources, are confronted with two problems (Davis et al. 2001). On the one hand, the price volatility of primary commodities constrains their fiscal

²⁸ According to the Sovereign Wealth Fund Institute (2008a) ‘the National Fund for the Republic of Kazakhstan’ can be characterised as a Stabilisation Fund.

²⁹ According to the Sovereign Wealth Fund Institute (2008b) ‘Excess Crude Fund’ can be characterised as a Stabilisation Fund.

management, in particular effective budget planning, while on the other hand, the exhaustibility of these resources creates questions of whether the current wealth is sustainable (Davis et al. 2001). As a consequence, some of those countries channel part of their commodity revenues into a stabilisation fund in order to reduce or cushion the impact of volatile commodity revenues in the future (Fernandez 2008:5; Davis et al. 2001). Furthermore, a stabilisation fund may serve in those economies as a sterilisation vehicle that absorbs excessive money supply in times of high external income. For instance, when an oil/gas producing country, such as Russia, is confronted with excessive surges of petrol-dollar inflows in periods of high oil prices, it is reasonable to establish a stabilisation fund. Without such an absorption of excessive liquidity through a SWF, inflationary pressures would lead to appreciation of the domestic currency which would undermine the international competitiveness in regard to other currencies (Lee 1997:1). That is often referred to as the concept of the ‘Dutch Disease’, a term coined by *The Economist* (1977:82) describing the economic situation in Holland at the end of the 1970s, where large quantities of gas had been discovered in 1959. The exploitation of these deposits, in particular in the years of high oil prices, led to massive inflows of petro-dollars that caused an appreciation of the Dutch guilder, which undermined the competitiveness of Dutch manufacturers, since a strong guilder made Dutch manufacturing comparably expensive to other countries (*The Economist* 1977: 82-85). Thus the question of “how to spend [...] oil money” but prevent de-industrialisation at the same time became a crucial question (*The Economist* 1977:86). These findings suggest that SWFs, in particular saving funds and stabilization funds, also function as a tool to prevent the ‘Dutch Disease’.

Figure 10. *Selected International Stabilisation Funds*

	Russian Reserve Fund	Oil Stabilization Fund (Mexico)	Economic and Social Stabilization Fund (Chile)
Objective	“reducing inflationary pressure and insulating the economy from volatility of raw material export earnings” ***	“to offset the effects of any future drops in the price of crude oil” **	“ensure that public spending is no longer dependent on the fluctuations of international copper prices” **
Investment Horizont			
Foreign Asset Holdings	100%*	100%*	100%*
Investment Type	Foreign Debt Securities	US treasuries	Only Passive no active Investment**
Source	Oil/Gas	Oil	Copper

Sources: ***Russian Ministry of Finance (2008), **Fernandez (2008:65,80),

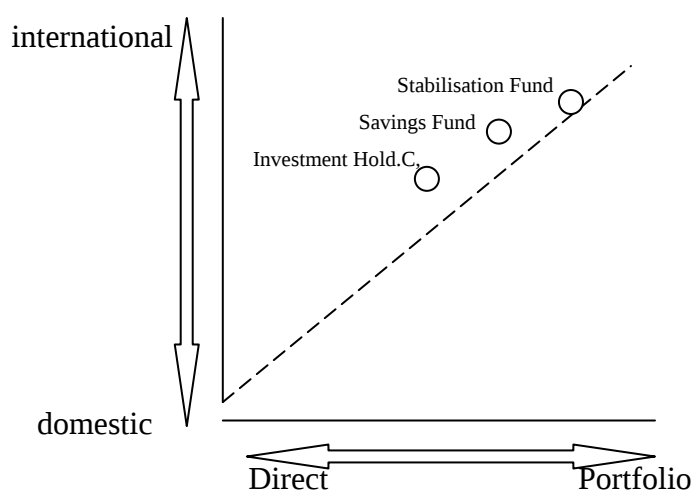
*Truman (2008:4).

Conclusion Investment Holding Companies, Saving Funds, Stabilisation Funds

The previous sections have illustrated the different logics among various types of SWFs. One of the underlying logics of SWFs analysed here comprises both: the ‘type’ of investment, whether minority or majority, and the ‘location’ of these investments, whether domestic or international. Some assumptions of classical capital flow theories help to understand these dynamics. These theories, in particular Hymer’s (1960), identify two main types of capital flows: portfolio and direct investments. While both types of investments may be influenced by return maximisation, direct investments also have motives of controlling assets. Furthermore, it was indicated that these two investment types correlate with specific patterns of allocation. The nine cases have shown that portfolio investment tends to be international, whereas direct investments tend to be domestic.

Therefore, supporters of the assumption of classical capital flow theory would conclude that investments on the international level promise higher returns than at home, since portfolio investment usually flows there where it can find the highest rate of return. These assumptions correlate with the findings, since those assets directly controlled by SWFs are located domestically, whereas portfolio investments made by SWFs are internationally. Graphic 13 illustrates the relationship between the investment type, whether portfolio or direct investment, and the allocation of these investments whether international or domestic.

Graphic 13, *Relationship between Asset Allocation and Investment Type*



While the results in Figures 9 and 10 show that high fractions of portfolio investments correlate with high international allocation of these investments, Figure 8 illustrates that the higher the portion of direct investments, the more likely these investments are based domestically. Nevertheless, further work needs to be done to establish whether the portfolio investments at the international level, in contrast to domestic investments, have yielded higher returns in every case.

But it has also been indicated that political aspects related to state sovereignty influence that division of capital. On the one hand states, in particular the US, welcome passive portfolio investment, such as a 4.9 per cent stake in Citigroup and a 9.9 per cent share in Morgan Stanley in 2007 (Joint Committee on Taxation 2008:27). On the other hand, discouraging direct investments related to SWFs is illustrated by the ports controversy in 2005 where ‘Dubai Ports World’, a company owned by a UAE SWF, purchased a controlling stake of some port facilities in the US (Teslik 2008), thereby provoking a political uproar. These double standards are most visibly enshrined in the US tax law in section 892 (Fleischer 2008:22). While income on passive portfolio investments of SWF is exempted from tax in the US, directly controlled entities of SWFs are taxed at 30 per cent (Fleischer 2008:19,22,23).

3.4. Financial Actors related to Sovereign Wealth Funds

3.4.1. Central Banks

A central or reserve bank can be defined as a “government bank which regulates a country’s banks and manages a nation’s monetary policy” (Chicago Exchange Glossary 2008). The main task of a modern central bank is to safeguard the stability of the national currency and maintain the liquidity of a country in the international market (Bundesbank 2008; European Central Bank 2008). According to Heller (1966:296) the term liquidity refers to “all short-term assets denominated in a foreign currency and all lines of credit that might be available to the residents of a particular country.”

While the primary duty of a modern reserve bank comprises tasks concerning sustaining macro economic stability, SWFs focus predominantly on profit maximisation (Jaenne 2007:42; Aizenman and Glick 2008:3). Most SWFs, except stabilisation funds, are long term investors interested in high returns, whereas central banks prefer to hold low yielding short-term assets, such as treasury bonds denominated in US Dollars, Euro or other currencies, which can be liquidated if required (Pascuzzo 2008:6; Jaenne 2007; Aizenman and Glick 2008:3). These findings suggest that these government related pools of capital – reserve banks, and SWFs – have crucially different objectives in their asset management.

However, since 2007 there has been a tendency among journalists, politicians and scholars to define some of these reserve banks or administrations of central banks as SWFs. Even, some scholars, most notably Rozanov (2005:1), note the blurred relationship between SWFs and central banks. According to Rozanov (2005:1) central bank managers start to behave like SWF managers. Actually, some of the activities carried out by some monetary authorities of both regions – the emerging Asian countries, in particular Hong Kong and China, and Middle Eastern states, such as Saudi Arabia – resemble those of SWFs. These activities are oriented towards return maximisation of the reserve portfolio (Rozanov 2005), rather than pure macro economic stabilisation operations.

The Saudi Arabia Monetary Agency (SAMA) which, for instance, carries out the tasks of a central bank, is often described by journalists such as Schultes (2008) as a SWF. That may be because the spectrum of the SAMA embraces not only the traditional tasks of a Western reserve bank. The SAMA has two functions: as a central bank it is responsible for the maintenance of the monetary stability by conservative investment in US treasury bonds; as an asset manager, the SAMA also focuses on higher returns on its reserve portfolio through asset diversification (SAMA 2008). According to the SAMA (2008: [1]): “Once liquidity and secondary liquidity have been created, the remaining assets are invested in bonds and equities.” These findings suggest that the Central Bank of Saudi Arabia has, besides the objectives of a modern reserve bank, also commercial profit maximising aims.

The same is the case with the Hong Kong Monetary Authority (HKMA), the central banking institution of Hong Kong. US congressperson Saxton (2008) defines the HKMA in a congress paper as an SWF. In fact, the operations of the HKMA, in particular the activities of its Exchange Fund, can hardly be confined to the tasks carried out by a reserve bank. The Exchange Fund, an incorporated agency, manages two portfolios; first, the ‘Backing Portfolio’ has the objective of backing the monetary base of Hong Kong by providing currency stability and liquidity, and second, the ‘Investment Portfolio’ has the objective to make investments in bonds, foreign and domestic equities in order to make the best return (HKMA 2008: 20-25). Those non-traditional portfolio investments yielded a 11.8 percent rate of return in 2007 (HKMA 2008:6-46). This indicates that return considerations have gained in importance. However, the primary concern of the HKMA is still in the nature of monetary stability. “While it is obviously important to make the best return we can, it is even more important to maintain the monetary stability for the benefit of the economic well-being of Hong Kong and its people” (HKMA 2008:25). Although the HKMA has some elements which are similar to SWF, it should not be automatically be equated with an SWF.

Another example for imprecise usage of the term SWFs is provided by Sheridan (2008) who categorises the State Administration of Foreign Exchange (SAFE) of China as an SWF. High profile equity investments of the SAFE in international companies, most notably in British Petrol and French Total, contributed to such allegations (Flaherty 2008). The SAFE, subordinated to the State Council and the People’s Bank of China, manages the largest foreign exchange reserves amounting US \$1809 billion (SAFE 2008: [1]). Until June 2007 the

greatest part of those reserves of approximately US \$922 billion were denominated in US securities, in particular low yielding US treasury bonds (Morrison 2008:1). However, these reserve holdings, especially those in US Dollars, have become problematical in the context of major shifts in both currencies. These shifts were characterised by a combination of both external pressure from the United States, and internal macroeconomic considerations to revalue the Yuan against a weakening US Dollar (see Appendix B.). This currency adjustment has had a deleterious impact on the Chinese currency reserves, because a revaluation of the Yuan reduces at the same time the value of the Chinese assets denominated in US dollars.

Within that context, in September 2007 China established the China Investment Corporation (CIC) with the official purpose of “mitigat[ing] risks in China's huge foreign exchange reserve” (China-Embassy 2007:[1]). Since its inception, the CIC has been managing a substantial part of about US \$200 billion of the Chinese foreign exchange reserves (Fernandez 2008:21). According to the CIC (2008a [1]) its investments are long term risk and profit oriented: “CICs overseas investment mainly includes equity, fixed income and alternative assets in developed countries and emerging economies. Alternative investments include private equity, hedge funds and real estate, etc” (CIC 2008a [1]). China launched its first SWF in the context of an appreciating currency, to make higher returns on a part of the Chinese foreign exchange reserves in order to balance some of the losses connected to the currency shifts.

Thus the objectives of all three reserve banks – SAMA, HKMA, SAFE – differ to some extent from the tasks of Western central banks, since elements of return maximisation are incorporated into the framework of maintaining monetary stability and liquidity. But history reveals that such a constellation of serving the public purpose of maintaining monetary stability, but also focusing on profit maximisation, is nothing new. In fact, there have been many variants of central banks during the last three centuries (Collins 1993:x).

According to the extensive research of Goodhart (1995: 205-7), the function and purpose of central banks have significantly changed over time. For instance, one of the earliest reserve banks, the Bank of England originally established as a Commercial Bank, had both profit motives, as well as public tasks such as maintaining the nation's convertibility of all notes and deposits into gold. However, in the second half of the 19th century it became increasingly clear that the Bank of England's public duty of maintaining the convertibility and supervision

of the national banking system contradicted its profit maximising motives (Goodhart 2005:209). Bagehot (1892:163) describes this situation in *Lombard Street*: “For more than fifty years – from 1793 down to 1844 – there was a keen controversy as to the public duties of the Bank.” Finally, the *Bank Charter Act 1844* terminated the conflict between profit interests and public duties by outsourcing the profit branch from the central banking operations (Bagehot 1892:163).

In the light of this historical background the SAMA, the HKMA, and the SAFE have intersecting elements similar to central banks of the early 19th century. Therefore, these central banks should be characterized as ‘Hybrid Monetary Authorities’, since their tasks and objectives differ from those of modern Western central banks. Graphic 14 illustrates the overlapping elements shared by the ‘Hybrid Monetary Authority’ and the central bank of the early 19th century.

Graphic 14. *Intersecting Elements of Monetary Authorities*

	Return	Liquidity	monetary stability
Modern Central Banks			
Hybrid Monetary Authorities			
Central Banks of 19th century			

Whereas the tasks of the modern central bank primarily cover aspects related to macroeconomic stability, such as liquidity and monetary stability, Hybrid Monetary Agencies also incorporate return objectives. The broad spectrum covered by Hybrid Monetary Authorities inevitably integrates a greater variety of interests and dynamics. As a consequence, the return maximising incentive might generate internal tensions with other objectives such as sustaining monetary stability. This conflict of diverse interests would

suggest an outsourcing of the return oriented branch in a similar fashion as the central banks of the 19th century. In fact, in 2007 China's SAFE outsourced its return oriented branch into an SWF, the 'Chinese Investment Corporation'. The second example for such a divestment is the SAMA which established an SWF in 2008, the 'Public Investment Fund' (*The Economist* 2008d).

Thus, an undifferentiated dumping together of state related capital pools, such as central banks, into the category of SWFs seems problematical in order to analyse the SWF phenomenon. That means mere intersections between the objectives of some 'central banks' and SWFs are not enough to warrant being described as an SWF. The position supported here is that the three mentioned financial institutions – SAFE, SAMA, HKMA – are not SWFs in the narrow sense, but rather Hybrid Monetary Authorities that incorporate both the tasks of a modern reserve bank, such as maintaining liquidity and stability, as well as return oriented elements similar to reserve banks in the early 19th century. However, the multiplicity of objectives generated by the broad spectrum covered by Hybrid Monetary Authorities has led to an outsourcing tendency of the return oriented branches into SWFs. The findings of this section resemble the problems of the next section, of how to differentiate between pension funds and SWFs.

3.4.2 Pension Funds

The time after the Second World War can be characterised as a period of a dramatic shift in demographics. Due to better medical supply and other social aspects related to economic development, more people are living longer. This has contributed to a doubling of the world population since the 1950s comprising in 2000 more than six billion people (US Census Bureau 2008: [1]). However, that growth has been accompanied by two tendencies: an overall rise in lifespan; and, a decrease in the fertility rate (Disney 1996:5,7). Both tendencies, initially experienced only in industrialised western countries and increasingly apparent in developing countries, contribute to an ageing society (UN DESA 2000:1; Disney 1996:1). Moreover, this demographic shift towards an ageing population has to be considered in the context of the weakening of traditional “intergenerational social support systems” (UN DESA 2000:1; Disney 1996:17). The main features of traditional support systems, such as large families, as well as the role of women as family care takers, are increasingly challenged by economic development associated with urbanisation (UN DESA 2000:1). This is supported by Leibenstein (1977:354; 1981) who investigated changing patterns of marriage and fertility in the context of economic development. He noticed that families in developing countries have considerably more children than in developed countries. Therefore, Leibenstein (1977), and others such as Bateman et al. (2001:7), Disney (1996:17), and the World Bank (1994:56), link shrinking family size to aspects of economic development.

However, the combination of both the impairment of traditional social support structures, most visibly represented in decreasing family sizes, and the changing role of women from family care takers to employees, and an overall ageing population, pose a variety of problems to policy makers. Hence, some policy has introduced ‘pay as you go’ pension schemes (Bateman et al. 2001:2), which are “plans that are financed directly from contributors...” (OECD 2005:51). That means the current pension entitlements are financed through the current working generation by transferring current tax receipts to the currently retired (Bateman et al. 2001:2; Disney 1996:18). The implementation of ‘pay as you go’ pension schemes already indicates a gradual replacing of the traditional intergenerational social support systems. However, in the light of rapid demographic change, where a smaller working age population has to support a growing retired population (World Bank 1994:92), the sustainability of ‘pay as you go’ schemes remains questionable (Bateman et al. 2001:3;

Disney 1996:18). Thus new means of support for an ageing population, able to complement or replace traditional or ‘pay as you go’ schemes, are essential for the long run.

Pension funds represent such a means of support. The OECD (2005:16) refers to pension funds as “pool[s] of assets forming an independent legal entity that are bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits.”

There are two types of pension funds: public pension funds with a volume of estimated US \$4.4 trillion in 2006/07 (Blundell 2008:117); and private pension funds comprising more than US \$15 trillion in assets (see Graphic 12). Nevertheless, sometimes a clear cut differentiation between private and public pension funds is difficult, since both have intersecting elements (OECD 2005: 30). For example, in the case of public funds, management tasks are sometimes outsourced to private companies, whereas in the case of private funds, the government sometimes guarantees a minimum return (OECD 2005:31). Suffice it to say, public pension funds can be described as statutory programmes related to governments, while private pension funds are administered by private institutions under private law (OECD 2005:12).

But both public and private pension funds are related to the state in the sense that their investments benefit from generous tax exemption.³⁰ The following two sections concentrate on the comparison between pension funds, and SWFs in general. The first part analyses some of the similarities between pension funds and SWFs, while the second part outlines some of the differences between both, with particular reference to public pension funds.

Some governments, such as the Irish or the New Zealand, initiated their SWFs on considerations of an ageing population. In order to continue sustainable consumption of resources over time for an increasing number of pensioners, they established an SWF (Superannuation Fund 2008; National Pension Fund Ireland 2008). In fact, most of the SWFs with the explicit purpose of providing pension liabilities for future generations have been formed since 2000³¹. Nevertheless, Chapter 1 showed that the SWF phenomenon is much older, dating back to the 1950s where governments, most notably Kuwait, formed the first

³⁰ In following countries Pension Fund earnings are tax exempt: Argentina, Austria, Canada, Chile, Colombia, Czech Republic, Finland, France, Germany, Hungary, Iceland, Ireland, South Korea, Mexico, The Netherlands, Norway, Peru, Portugal, Singapore, Spain, Switzerland, United Kingdom, United States, Uruguay (Bateman et al. 2001:140,141).

³¹ Pension Reserve Fund (France) 2000 (Fernandez 2008:43)
National Pension Fund (Ireland) est. 2001 (Fernandez 2008:52)
Superannuation Fund (New Zealand) 2001 (Fernandez 2008:70)
Norwegian Pension Fund Global est. 2005 (Fernandez 2008:24)
Pension Reserve Fund (Chile) 2006 (Fernandez 2008:89)

SWFs. In exactly the same period General Motors initiated in 1952 the first modern pension fund (Drucker 1976:vii). Nevertheless, the emergence of both pension funds and SWFs in the same historical context is more a coincidence than a feature of similarity.

The prominence of both actors has regularly been accompanied by tremendous growth expectations. According to Blackburn (2002: 11), one of the most exaggerated estimates concerning pension funds was made by Peter Drucker (1976) in his famous book *The Pension Fund Revolution*. Drucker (1976:1) estimated in the 1970s that pension funds were by 1995 going to control about two thirds of all US Business. Consequently, because of that dimension he assumed that such dramatic structural economic impacts would change capitalism (Drucker 1976: 33,34). Drucker proclaimed (1976:1,4) a ‘pension fund revolution’ which would transfer the fruits of the production process back to the source of the wealth, namely to the workers. According to Drucker (1976:4) this would change the structure of capitalism allowing countries such as the US to take the final step towards genuine socialism.

In fact, by the mid-1990s pension funds already owned approximately 25 per cent of the equities (Clark 1998: 150). However, it hardly can be said that as a result of this, the US was transformed into a socialist country.

In the same fashion, the SWF debate in 2007 was accompanied by high growth expectations. For instance, Stephen Jen (2007:1) the managing director and chief currency economist at Morgan Stanley estimated the SWF asset volume would increase to approximately US \$12 trillion by 2012. Another evaluation, from Gerard Lyons (2007:1) chief economist at Standard Chartered saw SWFs in the next decade growing to an amount of US \$13.4 trillion. These estimates from acknowledged economists and commentators have contributed to a debate similar to the pension fund debate in the 1970s: whether SWFs would change the hitherto capitalist system. Quality papers, most notably *The Economist* (2008b), as well as financial experts, such as Lyons (2007:2), proclaimed “The Rise of State Capitalism” in the context of a dramatic growth of SWFs. The proponents of the idea that SWFs would impact on the nature of Western liberal capitalism can be divided into two categories: one faction that stresses the qualitative dimension, and the other that accentuates the quantitative dimension of such a change. The proponents of the quantitative dimension, such as Truman (2008:3) Setser (2008:2), and Lyon (2007:2) emphasize the shift of economic power from the ‘West to the Rest’, or in other words a redistribution of wealth from industrialised countries – like the US –

to emerging markets, such as China, since most of the new wealth is created in non-Western countries. In contrast, another faction also comprising economists, most notably Summers (2008), stress the qualitative impact of SWFs on the nature of capitalism. Although Summers (2008) emphasises this point more explicitly, Truman (2008:3, 5) would also agree that there is, to some extent, a redistribution from private to public wealth. Hence, the focus of the qualitative faction is less on wealth shifts among states, but rather on a redistribution of wealth taking place within the state from the private to the state sector. Former chief economist of the World Bank, Summers (2008:[1]), highlights that “governments are now accumulating various kinds of stakes in what were once purely private companies”. However, it is highly speculative to predict a substantial change in the patterns of western liberal capitalism, since that would depend on many variables, such as the actual growth of SWFs and their behaviour. Actually, the prognosis of Drucker (1976) should serve as an example for being careful with such predictions about SWFs. If the discussion up to this point has emphasized historical parallels between pension funds and SWFs, the following paragraph should also devote some time to other semblances, in particular tax issues.

In both cases, the bulk of pension fund and SWF assets is concentrated in a small number of funds. In one of the first articles about SWFs Rozanov (2005:1) notes the similarity in size and scope between some SWFs and pension funds. For instance, the largest 300 pension funds together comprise a volume of US \$10.4 trillion (Watson Wyatt 2006:4). Out of this number each of the twenty largest pension funds has an average size of US \$171.4 billion (calculated with data from Watson Wyatt 2006:14). Again, from these top twenty, the Government Pension Fund of Japan constitutes the biggest pension fund, with a volume of US \$935.6 billion. Similar to that, the largest SWF, the Abu Dhabi Investment Corporation, holds assets worth approximately US \$800 billion (Watson Wyatt 2006:22). In the same fashion, the largest part of SWF assets is concentrated in a small number of funds: as Fernandez (2008:8) notes “the top ten funds account for about 80% of all SWF assets”. But which factors are responsible for that enormous size? The following paragraph suggests that capacious tax privileges play a central role.

Both pension funds and SWFs, particularly saving funds and stabilisation funds, can be described as investors and not owners, since they are more interested in return maximisation than control (Drucker 1976:82; see also Chapter 3.3.2.). It must be remembered, that only portfolio investment has tax privileges in some countries, in particular the US, the UK, and

Australia (Joint Committee on Taxation 2008:74,77). Much of the literature takes the position that tax privileges have been essential for the rapid growth of pension funds (Davis 1995:77; World Bank 1994:9). Scholars such as Blackburn (2002:108) go even further, claiming that pension funds are products of tax policies. As a matter of fact, in 1998 pension funds had fiscal exemptions worth Pounds 17.5 billion in the UK, and pension funds in the US were exempted from taxes worth about US \$109 billion in 2000 (Blackburn 2002:107). Through taxation a state can substantially influence the economic behaviour of actors since “taxation diverts economic activity from taxed to untaxed areas or from areas with higher taxes to areas of lower taxes” (Bateman et al. 2001:135). This suggests that comprehensive tax privileges play an important role in the operations of pension funds.

The same might be true for SWFs. However, the debate of to what extent tax issues influence the decisions of SWFs is more controversial. While there are those, such as Fleischer (2008:28), who characterize tax exemptions for SWFs as subsidising foreign governments and crowding out private business, others, most notably the US Joint Committee on Taxation (2008:65), take the position that the real benefit of tax exemption for SWFs is unclear since private foreign investors have most of the benefits enjoyed by SWFs. But both would agree that Anglo Saxon countries – such as the US, the UK, and Australia – treat portfolio investment made by SWFs favourably in terms of tax (Joint Committee on Taxation 2008:77; Fleischer 2008:18). That means income from portfolio investment, in other words assets where SWFs control only 10 per cent or less, is tax exempted (Joint Committee on Taxation 2008:77; Fleischer 2008:18). These findings suggest that SWFs which make portfolio investments have a comparative advantage over private firms, as their dividend yield is tax free (Fleischer 2008:28). According to Fleischer (2008:28) the “average dividend yield of S&P 500 stocks, as of mid-2008, was only 2.1%”, whereas the profits attained by SWFs were substantially higher³².

³²

SWF investments in the US of over US \$1 billion (as of March 2008)			
<i>Target</i>	<i>Buyer</i>	<i>Amount</i>	<i>Dividend Yielded</i>
Citigroup	ADIA (United Emirates)	7.5 billion	5.32%
Citigroup	GIC (Singapore)	6.88 billion	5.32%
Citigroup	KIA (Kuwait)	3 billion	5.32%
Merrill Lynch	Temasek (Singapore)	4.4 billion	3.03%
Merrill Lynch	KIA (Kuwait)	2 billion	3.03%
Morgan Stanley	CIC (China)	5 billion	2.27%
Blackstone	CIC (China)	3 billion	6.44%
Och-Ziff	Dubai International	1.26 billion	23.99%

Source: Fleischer 2008:29.

However, due to lack of transparency it is highly speculative to argue that tax exemptions explain the investments of SWFs. It may be one of many other factors influencing the decisions of SWFs investing in countries such as the US. But it can be said that Anglo Saxon countries prefer portfolio rather than direct investments since direct investments have no tax privileges. Having discussed some of the similarities among pension funds and SWFs the following section emphasizes those aspects which legitimise a differentiation between both pension funds and SWFs.

The previous section has shown that pension funds and several SWFs, in particular some saving funds, have certain overlapping characteristics. However, that can lead to confusion as to whether it is better to describe some funds, such as the Norwegian Government Pension Fund, as pension fund or SWF. Hence, this section establishes a coherent justification for why pension funds and SWFs should be treated as separate entities. Although pension funds and SWFs³³ are portfolio investors connected to governments in that sense that both have special tax privileges, there remain some crucial differences.

Firstly, the funding structures of SWFs differ sharply from pension funds. While pension funds are mainly funded by sources which are extracted from the domestic population through tax and compulsory or voluntary contributions (Blundell 2008:4), SWFs are financed in most cases by external revenues, comprising revenues from resource extraction – such as oil, gas, copper, and diamonds – or a current account surplus generated by export activities (Blundell 2008:2; Fernandez 2008; Truman 2008). Fiscal measures too, in particular tax (Blundell 2008:2) or asset transfers – for instance from currency stock reserves into a SWF as was the case in China (Monk 2008:4) – can also be used to establish or fund an SWF. Hence, the nature of funding substantially differs between SWFs and pension funds. Whereas SWFs are funded in most cases by income received from external resources, pension funds extract their sources from the domestic population.

Secondly there are dissimilarities related to the patterns of capital allocation, or in other words where pension funds and SWFs invest their assets: domestically or internationally. Although both have in common that they are portfolio investors³⁴ they allocate their portfolio investments in geographically different areas. Unlike pension funds which denominate most

³³ Except investment holding companies.

³⁴ Except investment holding companies.

of their assets in local currency with low exposure to foreign assets, SWFs hold the bulk of their investments in foreign countries and currencies (Kimmitt 2008:120). According to Davis (1995:206), pension funds invest at least 60-90 per cent of their capital in home markets. In contrast, SWFs, even investment holding companies (see Chapter 3.3.1), hold most of their assets in international markets.

However, having characterised both pension funds as well as SWFs, such as saving funds and stabilisation funds, as portfolio investors, this should result in similar investment behaviour. According to the assumption that portfolio investment seeks the highest return, both actors – pension funds and SWFs – should invest in similar markets where they both can yield the highest return. In contrast, the findings of this section suggest a substantial disparity in patterns of their asset allocation. But what causes such a difference in the allocation of investments? It seems that aspects related to political issues are crucial factors. In many cases pension funds, in particular public pension funds, “are required to invest in public securities, yielding low or even negative returns...” (World Bank 1994:14). For instance the Singaporean state owned Central Provident Fund invested 90 per cent of its money in public bonds with a low nominal rate of return of three per cent during the 1990s (Blackburn 2002: 263). Other countries, such as Denmark influence the behaviour of their pension funds by introducing minimum requirements which have to be invested in domestic or Euro-denominated debts (Bateman et al. 2001:67). Some countries even go further by prohibiting their pension funds to invest in foreign countries, as was the case in Chile until the 1990s (World Bank 1994: 222). Both actors are influenced by politics to different degrees.

Although, pension funds invest the bulk of their money in domestic assets, scholars such as Davis (1995:203) note that since the 1980s pension funds increasingly invest a part of their capital into foreign markets. Blackburn (2002:238) supports that observation by stating that UK’s pension funds already invest more than 30 per cent of their capital abroad. Foreign investments of pension funds incorporate both: a diversification of country risk but also capital flight accompanied by a loss of control by monetary authorities (Davis 1995). These findings suggest that both SWFs and pension funds differ substantially in aspects funding and the allocation of these funds.

This section has illustrated that SWFs and pension funds have some aspects in common. Both actors are characterised by a high asset concentration in a small number of funds. Like

pension funds, some of the SWFs, such as saving funds and stabilisation funds, are explicit portfolio investors. These passive investments made by both pension funds and SWFs have generous tax privileges from states in which they invest. However, although having emphasised some of the similarities, this section takes the position that pension funds differ substantially from SWFs in structural matters of how they are funded and of how they invest their funds. While SWFs are financed by external income, derived in most cases from export surpluses, pension funds are funded by income derived from the domestic population, through taxes, and compulsory or voluntary contributions. That relates to the second differing structural feature among SWFs and pension funds, namely the question of where they invest that income. While SWFs tend to reinvest their externally received income into international markets, pension funds are inclined to hold the largest part of their assets in domestic investments.

The rapid growth of SWFs and their assets in last decade has not been accompanied by an adequate political economic analysis of this phenomenon. There have only been a few economic attempts to systematically analyse SWFs. However, in the light of an inflationary and often undifferentiated use of the word SWFs, in particular since 2007, there is a pressing need to establish an empirical framework that deals with some of the neglected ambiguities. Those ambiguities appear most visible in a tendency of dumping together different actors into the category of SWF in various SWF ratings for instance. That often creates disorientation as to whether it is adequate to describe a certain actor as an SWF.

This chapter has shown that SWFs are such a multifaceted phenomenon that a universal definition can not easily encapsulate that complexity. On the one hand, a too broadly formulated definition of SWFs automatically embraces other financial actors which share some similarities; on the other hand, a too narrowly formulated definition entails the problem of ignoring substantial aspects that are important for the understanding of SWFs. Therefore, the taxonomy in this Chapter (see Figure 7) embraces both an inclusive dimension which embraces all state related pools of capital in order to get a comprehensive picture of all forms of sovereign wealth, and a descriptive dimension on the vertical level which depicts different core characteristics of these actors. Hence, the central characteristics of related actors are covered.

By doing this the grey zones which sometimes lead to confusion, whether to describe one actor as SWF or not, have been included. An understanding and differentiation of the dynamics of these ‘state related pools of capital’ establishes a firmer basis on which to understand the phenomenon of SWFs. For instance, it has been shown that Monetary Authorities – in particular the SAMA, HKMA or SAFE – should not be characterised as SWFs, but rather as Hybrid Monetary Authorities incorporating both the tasks of modern central banks, as well as the objectives of return maximisation. The identification of these intersections and overlapping is essential for a finer differentiation between different actors related to sovereign wealth. A better understanding of the phenomenon SWFs also has wider implications on the implementation of policies related to SWFs.

Furthermore, Chapter 3 has shown the existence of a core relationship prevalent in all three types of SWFs: saving funds, stabilisation funds, and investment holding companies. While direct investments of SWFs are concentrated domestically, portfolio investments made by SWFs prefer international markets. Investment holding companies, for example, hold a substantial part of their direct investments in domestic assets, while their portfolio investments are concentrated in international assets. This is also true for the other types of SWFs, such as saving funds and stabilisation funds, which invest their capital in form of portfolio investment in international rather than domestic markets. Hence the investment type – whether direct or portfolio investment – is related to the investment allocation. However, this correlation might be less a natural phenomenon, than an outcome of a complex political context.

Conclusion

Despite the turmoil in international finance in 2008, where global investors – among them also Sovereign Wealth Funds (SWFs) – suffered from heavy capital losses, a substantial part of money remains concentrated in SWFs. Hence, these state related financial power brokers, are here to stay and they likely to increase their influence in finance in the coming decade, in a shaping role in international finance. This thesis has examined the reasons why SWFs should be differentiated from other actors in international finance and why SWFs will remain important, and was structured into three Chapters.

Chapter 1 put SWFs in an historical political context. It was argued that SWFs are not a new phenomenon, but rather evolved from the 1950s. Politics, in other words, heavy state intervention, has enabled the economic foundation for many SWFs. By partly renationalising oil industries or unilaterally increasing oil taxes on private foreign oil companies, states made a claim on resources for national purposes. Chapter 1 demonstrated that the first economic steps of SWFs cannot be separated from the political context of that time.

Given the background in Chapter 1, Chapter 2 examined the current political economic environment of SWFs. It illustrated the heterogeneity of states, on the one hand, and the heterogeneity of SWFs, on the other hand. The title of Chapter 2, *Sovereign Wealth Funds among Other Sovereign Wealth Funds*, implies that each SWF is related to a particular state. Although the international order is becoming more complex, the fundamental structures of world politics continue to revolve around the actor state. The most significant variables to describe or characterise a state refer to geographical, economic, and governmental aspects. These facets appear regularly in the SWF debate. Therefore Chapter 2 integrated these state related aspects. The categorisation of various states into OECD and non-OECD countries captured these three dimensions, and thereby reduced complexity. In addition, the dichotomy of ‘commodity financed SWFs’ versus ‘non-commodity financed SWFs’ was introduced to reveal complexities related to SWFs.

Both of these categorisations were subsequently integrated into a chronological framework in order to systemise the formation phases of SWFs between OECD and non-OECD countries (Figures 4. and 6.).

Chapter 3 analysed the relationship between SWFs and other financial actors, and emphasised some of the similarities between SWFs and other financial actors, such as central banks or pension funds. This established an empirical foundation to differentiate between three main types of SWFs – Investment Holding Companies, Saving Funds, and Stabilisation Funds – along structural dimensions.

It was found that circumstances relevant to the economic foundations of many SWFs are heavily influenced by politics. For instance the economic basis of the first SWF – the Kuwait Investment Authority – was a result of state intervention in terms of unilaterally increasing oil tax, and partly renationalising natural resources. Also demonstrated was that in the case of commodity financed SWFs, there is not much difference in the formation process of SWFs between OECD and non-OECD countries. In particular during earlier phases of high commodity prices, in particular oil both OECD and non-OECD countries established SWFs in order to recycle a part of the commodity surplus revenues. However, the situation shifted dramatically in the years after 2000, where SWFs of non-OECD countries have become the dominant players. In the case of non-commodity financed SWFs, it is more difficult to determine similar patterns of behaviour, since the funding resources are much more heterogeneous. But it was found that governments with large foreign exchange reserves, in particular China and Singapore, tend to establish SWFs in order to receive higher returns. Not less important in terms of volume are SWFs which are financed through fiscal policies.

The relevance of a differentiation among SWFs – based on empirical data – is supported. The group of funds categorized as SWFs can be further separated into investment holding companies, saving funds, and stabilisation funds. Each of these subcategories has distinctive characteristics. Despite these distinctions there is an overall relationship among those funds between the variable ‘asset allocation’ and ‘investment type’. Direct investments made by SWFs tend to be domestic, whereas portfolio investment tends to be international. Secondly,

it is clear that the relationship between SWFs and other financial actors, most notably central banks and pension funds is often misinterpreted.

Only investigating the economic dimension of SWFs is similar to someone only looking at one side of a coin. Other aspects, particularly political and historical facets, have to be integrated in an analysis of SWFs to get a more comprehensive picture about this complex phenomenon. For this reason, categorisations of SWFs based on mere assumptions – without empirical foundation – covers more than it reveals.

Therefore, knowing the position of SWFs in financial markets is critical in evaluating the effects that they may have on various dynamics related to financial markets. Firstly, acknowledging the different types of SWFs within the financial markets is necessary to evaluate how changes in the field of sovereign wealth investment affect financial markets. Secondly, knowing the position of related financial actors is necessary to evaluate the impacts and dimensions of SWFs. Consequently, an implication for governments concerned with SWFs is a more differentiated policy approach towards these financial actors. Furthermore, this information can also be used by the private sector to develop a better understanding of SWFs.

Pure economic approaches struggle with the obvious intersection of states and funds in an international financial environment. To analyse the behaviour and impacts of this growing pool of state related financial capital more comprehensive approaches have to be applied. Therefore, an analysis through an International Political Economy (IPE) perspective has significant advantages. IPE investigates intersections between politics and economics on a broader and more comprehensive level than economics. Furthermore, IPE comprises elements of various disciplines, most notably International Relations, Political Science, Sociology, and Economics, which can contribute in a fruitful way to further research on this topic. The main objective of this empirical survey was to develop a framework that positions the state related financial actor SWF into an IPE context. These research findings can be used as a stepping stone for further analysis. Further work needs to be done to establish whether the role of central banks is changing towards more focus on aspects related to return, as suggested by Rozanov (2005). It would also be interesting to assess the effects of SWFs on other financial actors, in particular private equity or hedge funds, especially after the financial crisis in 2008.

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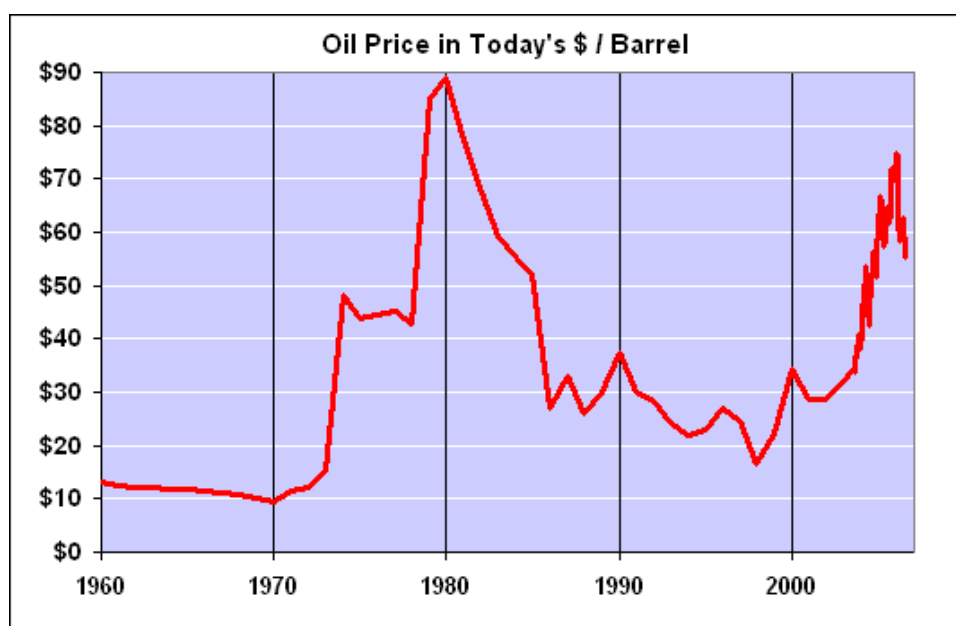
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Appendix A. *Capital Injections made by SWFs in 2007*

Date	Bank	SWF	Amount in billion US \$
Nov. 26, 2007	Citigroup	Abu Dhabi Investment Authority (ADIA)	7.5
Dec. 10, 2007	UBS	Singapore (GIC)	9.7
Dec. 19, 2007	Morgan Stanley	China Investment Corporation (CIC)	5
Dec. 24, 2007	Merrill Lynch	Singapore (Temasek)	4.4
Jan. 15, 2008	Citigroup	Singapore (GIC), Kuwait Investment Authority (KIA)	6.8 (GIC) 3 (KIA)
Jan. 15, 2008	Merrill Lynch	Korea Investment Corporation (KIC), KIA	2 (KIC) 2 (KIA)
Feb. 18, 2008	Credit Suisse	Qatar Investment Authority (QIA)	0.5
Apr. 16, 2008	Merrill Lynch	Singapore (Temasek)	0.6
Total in percent of total bank capital raised since Nov. 2007			41,5 US \$ billion 71%

Source: Srinivasan 2008: 24.

Appendix B, Global Oil Price



Source: zFacts 2008.

Appendix C, The Chinese Yuan against the Dollar



Source: *The Economist* 2008e.

Abstract

This thesis is a comprehensive empirical survey which investigates the phenomenon of Sovereign Wealth Funds (SWFs) in an International Political Economy context. SWFs can be defined as state related pools of capital which derive most of their capital from external resources, and reinvest a large part of this capital internationally. These powerful financial brokers impact international finance in a number of ways. Due to their sheer size, SWFs influence global financial stability. Even if the financial crisis 2008 has substantially reduced their volume, SWFs will continue to have immense financial influence.

SWFs constitute a heterogenous group of actors, but there are distinct intersections between them and other financial players, such as central banks and pension funds. Despite these overlappings, SWFs can be clearly operationally differentiated into subcategories, and furthermore, can be clearly differentiated from other financial actors.

Hence, knowing the position of SWFs in financial markets is critical in evaluating the effects that they may have on various dynamics related to financial markets. Pure economic approaches struggle with the obvious intersection of states and funds in an international financial environment. Therefore, an analysis through an International Political Economy perspective has significant advantages.

Zusammenfassung

Diese Arbeit ist ein umfassender empirischer Überblick, der Sovereign Wealth Funds (SWFs) in einem politisch- ökonomischen Kontext untersucht. Als SWFs bezeichnet man staatliche Investmentfonds oder Agenturen, die nationale Überschüsse organisatorisch getrennt von traditionellen Währungsreservenverwaltung verwalten. Diese Devisenreserven die sich ausschließlich aus Exporteinkünften speisen, werden mehrheitlich in internationale Märkte investiert. SWFs gehören mittlerweile neben Pensionsfonds zu den größten Akteuren am globalen Finanzmarkt. Durch ihr beachtliches Kapitalvolumen von mehreren Billionen US Dollar beeinflussen SWFs die Stabilität im internationalen Finanzgeschehen. Trotz der Finanzkrise 2008, die das Volumen einiger SWFs deutlich reduziert hat, werden SWFs weiterhin am Finanzmarkt eine leitende Rolle spielen.

Unter SWFs versteht man einen Sammelbegriff für eine heterogene Gruppe von Akteuren. Es gibt nicht nur Ähnlichkeiten zwischen SWFs untereinander, sondern auch Überschneidungen mit verwandten Akteuren wie beispielsweise Zentralbanken oder Pensionsfonds. Trotz dieser Gemeinsamkeiten sollte man SWFs gegenüber anderen Akteuren besser ausdifferenzieren.

Daher ist eine wissenschaftlich fundierte Einordnung entscheidend um etwaige Auswirkungen, die SWFs auf internationale Finanzmärkte haben, abschätzen zu können. Aus diesem Grunde ist es angebracht das Phänomen SWF aus einer international politik-ökonomischen Perspektive zu betrachten, da rein ökonomische Annäherungen politische Gesichtspunkte nicht ausreichend mit einbeziehen.

Curriculum Vitae

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2005-2009 Political Science (Diplomstudium) at the University of Vienna

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