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AUSTERITY, ABUNDANCE, AND THE INVESTOR STATES: THE POLITICAL ECONOMY OF SOVEREIGN WEALTH FUNDS

by

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ABSTRACT

AUSTERITY, ABUNDANCE, AND THE INVESTOR STATES: THE POLITICAL ECONOMY OF SOVEREIGN WEALTH FUNDS

Manda Shemirani
Old Dominion University, 2010
Director: Dr. David C. Earnest

Sovereign Wealth Funds (SWFs) are not new, but their foreign investment created concerns among many states in 2005 and 2006. Many policy makers argued that the ownership of foreign governments in specific areas may expose their countries to various risks. The concerns in the United States were from a national security perspective, while Europe was more worried about the lack of reciprocity and established standards. The political economy literature lacks a suitable framework for the study of investor states. The mainstream economic view contends that SWFs are a result of balance of payments surpluses and are used for economic smoothing purposes. This dissertation identifies three alternative theoretical perspectives—drawn from major political economic theories—to explain the potential goals investor states may pursue through their SWFs. It also addresses the gap in the literature by proposing a systematic methodology for the study of these funds, and subsequently applying it to four major SWFs: the Government Pension Fund-Global (Norway), the Abu Dhabi Investment Authority (United Arab Emirates), Temasek (Singapore), and the National Wealth Fund (Russia). This research revealed that the dominant conception that investor states are in pursuit of political power over another state is unjustified. The assertion that SWFs are used for balance of payments corrections is equally unfounded. None of the funds was shown to have attempted to exert political power over another state. The national system of political

economy of investor states defines the purpose of SWFs. Some states act as economic agents or entrepreneurs in order to increase the value of their assets. For others, accumulating sufficient resources required for domestic compensation is the immediate goal. Therefore, it would be wrong to treat all funds equally, as most of the analysts and policy makers do. In fact, investments by SWFs create interdependencies between the investor and the recipient states. A critical and yet hardly-discussed issue is that vulnerabilities can go both ways in these interdependent relationships. This means investor states, too, are exposed to various risks. In summary, we need a "paradigm shift" in our approach to the study of SWFs.

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I wish to thank Abu Dhabi Investment Authority for allowing me to use their organizational chart, and Temasek for their permission to use a chart from Temasek Review 2009.1 would also like to thank Nick for his superb editing skills, Svetlio for his assistance when needed; and my family, friends, and colleagues for their support and encouragement.

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INTRODUCTION

In late 2005 and early 2006, Sovereign Wealth Funds (SWFs)—some of which had been in existence since the 1950s—fell under the media spotlight for the first time. Policy makers in the states that were recipients of SWFs' investments became concerned about the underlying motivation of these funds, mainly because politicians and academics understood neither the fundamental reasons for the creation of SWFs nor the functioning of SWFs. To assess the validity of recipient states' concerns with respect to SWFs' investments, we first need to study how investor states employ these funds.

While there is no universally accepted definition of a sovereign wealth fund, various financial institutions, government agencies, and international organizations have provided definitions that generally share three main characteristics: ownership by sovereign governments, management of portfolios other than official national reserves, and involvement in overseas investments. The definition of SWFs in this research combines all three of these characteristics but also incorporates an additional criterion—the absence of a monetary or fiscal regulatory function. That means that, for instance, Saudi Arabia Monetary Authority (SAMA) is excluded from the SWF pool since it performs a function similar to that of a central bank.

In the United States and some European countries, the political scrutiny of SWFs' overseas investments intensified due to the lack of information about these funds. More importantly, the politicians' mindset, which had been influenced by major historical

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events, was not open to the idea of government-owned funds making overseas investments. The dominant realist view that the state's main goal is the pursuit of power, and the resulting presumption that any investment by sovereign states is a means to exert political influence over the recipient state, resulted in the rejection of foreign ownership or the withdrawal of foreign investment proposals in the United States.

In fact, there was very little interest in SWFs and their investments until a Chinese government-owned company placed a bid to buy an American oil company in 2005, and later a government-owned company from the United Arab Emirates acquired a British company whose assets included six port facilities in the United States. In August 2005, the China National Offshore Oil Corporation (CNOOC) abandoned its initial $18.5 billion cash bid—a more attractive proposal than Chevron's—for Unocal when it was faced with political opposition in the United States Congress while the proposal was still under the review by the Committee on Foreign Investment in the United States (CFIUS). Dubai Ports World (DP World), which had acquired Peninsular and Oriental Steam Navigation Company (P&O), was also made to sell the port facilities to a United States-controlled firm under the pressure of widespread, intense congressional opposition despite prior approval of the ownership change by the CFIUS.[1]

What these entities shared in their relationship with the United States was general skepticism and disapproval by the American policy makers. China, with its massive balance of payments surplus, artificially weak exchange rate, and various political issues, receives extra attention and scrutiny, as do the states in the Middle East for their oil and gas policies, positions with regard to regional conflicts, and their potential ties to the

[1] **Gary Clyde Hufbauer, Yee Wong, and Ketki Sheth, *US-China Trade Disputes: Rising Tide, Rising Stakes*, Policy Analyses in International Economics 78 (Peterson Institute for International Economics, 2006).**

events of 9/11. Consequently, the investment by these states has been excessively politicized. The political controversy over foreign investment by Chinese and Emirati entities in 2005 and 2006 soon evolved into a major presumption among policy makers in the United States. National security rhetoric was used for the purpose of opposing investments by states of which the politicians did not approve. The presumption focused attention on SWFs that had been managing states' assets for decades without causing any concerns.

The problem is that protectionism—which may result from the politicization of investment projects by states that may receive SWF investments—can trigger counter measures by investor states. Once their entry into the market of a potential recipient state is blocked, the investor states may decide to retaliate by blocking the entry of companies or capital flows from the protectionist states. In the end, the retributory actions by both investor and recipient states could put the foundation of the "free market" at risk by reversing the long-fought-for global trend towards economic openness.

Decision-making processes, based solely on a political rationale, are not efficient. In other words, politically-based decisions discount the importance of potential economic benefits. In the case of states that are the recipient of SWF investments, the potential gain from the inflow of foreign investment is often times overlooked. This is not to say that investment by sovereign states should be viewed in exactly the same way as investment by private entities; however, it should be considered with more objectivity. To be sure, dealing with SWFs and their investments is more complicated than dealing with private investors for two reasons. First, ownership by the governments makes it difficult to readily apply conventional economic theories or financial models to SWFs' investments.

Second, the economic nature of the investment itself makes the application of political or international relations theories to these funds more difficult.

The point—often missed in the heated debates among politicians—is that a purely political approach alone is misguided. Potential negative impacts on (or costs to) the recipient states should be reviewed in close conjunction with the potential economic benefits of SWF investments. So, in this kind of interdependent relationship, recipient states do not necessarily lose. SWFs can provide long term liquidity when liquidity is tight and markets are contracting. SWFs could also contribute to greater market efficiency and lower volatility by diversifying the global investor base.[2]

Investor states have various perspectives with respect to their sovereign funds. The opportunity cost of holding official reserves or excess capital in risk-free or fixed-income assets is continuously increasing, not only because of global inflation and downward pressures on the dollar—the unit of account for the investor states—but also because of uncertainties such as the risk of natural disasters, conflicts, wars, and market crashes. There are, of course, other reasons for the investor states to make overseas investment. To reiterate, viewing the capital inflow from investor states—which has been mostly in the form of portfolio investment rather than direct investment—through a highly political lens can limit both our understanding of the true nature and purpose of the SWFs, as well as potential gains (economic and otherwise) from sovereign investments.

Another important issue is that the SWFs are not identical, i.e., their characteristics vary widely. As this study will show, SWFs' motives and purposes are driven by the characteristics of the national system of political economy of the investor

[2] **"Sovereign Wealth Funds-a Work Agenda," (International Monetary Fund, 2008), 12-13.**

states. This multiplicity of forms and motives will be discussed in further details, but for now suffice it to say that the existence of such diversity among SWFs makes the application of a single policy ineffective. In other words, policy prescriptions based on general—and perhaps inaccurate—assumptions about investor states can lead to over- and under-estimation of various risks.

In order to address these complications, an original and innovative theoretical approach, one that brings a new perspective to the political economy literature, is needed. The current research provides a methodology for a micro-level analysis of SWFs, and proposes ways to distinguish the various motives of the investor states. In this dissertation, I propose an answer to the question of whether recipient states should be concerned about the investments by SWFs. I have observed that the investment decisions and strategies of the four cases of SWFs examined here, as well as others with similar characteristics, are based on certain fundamental yet uncomplicated principles other than the pursuit of power. The current research refutes the two mainstream conceptions of SWFs: (1) the policy makers' belief that these funds are a means of economic statecraft or foreign policy tool, aimed at exerting power over another state, and (2) the view of some economists that the role of these funds is limited to the correction of balance of payments deficit or monetary imbalances.

In fact, all of investor states studied here—Norway, United Arab Emirates, Singapore and the Russian Federation—had a balance of payments surplus during most of the life of their funds. The absence of a large or consistent balance of payments deficit makes it difficult to assess the merits of the argument that SWFs were created for balance of payments corrections. In addition to that, there was no evidence indicating that the investor states had ever used their funds in order to exercise power over any of the states in which they had made investments. Even in the case of the fund of Norway, whose investment decisions are guided by a set of non-commercial guidelines based on universal ethical principles, the targets were corporations, rather than the recipient states. Norway has certainly communicated its intentions to foreign states (e.g., Burma), but has done so without attempting to directly influence the government in the recipient state. This is what I have called "benign economic statecraft."

States like United Arab Emirates and Singapore are far too small, and at the same time, pre-occupied with their internal concerns, one being increasing the value of their assets. SWFs in these countries have acted mainly as an entrepreneurial arm of the state. On the other hand, various centers of power in the Russian Federation struggle to get access to the fund's assets. The whole thrust of this research is that there are alternative political economic theories that suggest motives for the investor states that are not adequately considered by the two mainstream theories, and consequently, a more meaningful explanation for the creation, evolution, and functioning of SWFs.

This research makes a number of important arguments. First, SWFs are a reflection of—to borrow Gilpin's term—the national system of political economy and a product of the political leaders' specific mindset, which has been shaped and influenced by both historical events and national resources endowment. The multiplicity of political economic systems as well as political mindsets of the leaders suggests a variety of SWF motives and purposes. Therefore, the one-size-fits-all approach to policy making with

[3] Gilpin argues that the role of domestic economies and the differences among them determine the international economic affairs. Therefore, the differences among national systems of political economies have significant implications for the global economy. For more information see Robert Gilpin, *Global Political Economy of International Relations* (Princeton: Princeton University Press, 1987).

respect to these funds is not appropriate. In practice, as the study shows, the only time SWFs tend to show a similar behavior is at times of financial crisis, or economic contraction. The recent global financial crisis and economic downturn in countries around the world provided an excellent opportunity for testing this hypothesis. Its timing and extent of impact with respect to the various states was consistent.

Second, the management and operation of SWFs are not a static percept but a dynamic process; learning and adjustment are natural and inevitable. States also undergo changes over time as a result of changes in modes of production, demography, political system, technological advancements, and global forces. All these mean investor states and their sovereign funds have to be studied longitudinally. Again, the Norwegian fund is a good example. The fund initially served mainly as a vehicle for the preservation of non-renewable wealth for future generations and a precautionary reserve to protect the country against global market fluctuations. As the fund matured, however, the primarily precautionary objectives were gradually re-aligned so that they were more consistent with the overall direction of Norwegian foreign policy.

Third, the lack transparency is certainly an important issue, and a legitimate source of concern for the recipient states, but the level of transparency should not become the sole or primary basis on which policy makers assess the funds. The assumption that the level of transparency can serve as an indicator of the real agenda of a SWF is superficial, naive, and most importantly, logically flawed.[4] A fully transparent SWF may include non-commercial principles in its investment decision making processes, as is the case with the Norwegian fund. A lack of transparency simply means that we do not know

[4] For more information see Manda Shemirani, "Sovereign Wealth Funds: The False Promise of Transparency," *Infinity Journal* 1, no. 5 (2009).

enough about these funds. This research attempts to fill this gap by providing a systematic typology of SWFs and an in-depth analysis of selected funds.

Fourth, and more importantly, we are now on the verge of a new era of increased state intervention in the economy. Specifically, after the recent crisis, the number of large companies now owned or controlled by governments has increased. "Today big government is back with a vengeance: not just as a brute fact, but as a vigorous ideology. ... The world is seeing the rise of a new economic hybrid—what might be termed 'state capitalism.' ... The most interesting arguments over the next few years will weigh government failure against market failure."[5] Interestingly, history is repeating itself. In the late 1960s, the expansion of multi-national companies (MNCs) raised concerns among both politicians and academics that the rise of the new actors would undermine nation-states. Today, policy makers' minds are occupied with the same fundamental concerns—the loss of sovereign power. The study of SWFs requires a "paradigm shift" in our approach to the study of international political economy.

This dissertation provides information, analysis, and a research methodology that is of benefit to academia and policy makers alike. For the academic world, this research proposes a systematic methodology for a longitudinal study of SWFs. It also provides a comparative and multi-dimensional analysis of different funds based on various characteristics such as size, source of funding, transparency, and purpose. By drawing upon major international political economic theories, this dissertation also provides a much broader view of the functioning of SWFs. It emphasizes the need for more specific policies on both the international and domestic scales.

[5] **"Leviathan Stirs Again; the Growth of the State,"** ***The Economist,*** **January 23, 2010.**

There are also several messages for policy makers at the national and international level. On the national level, they need to be more open to and appreciative of emerging state capitalism. Policy makers can, in fact, influence the flow of foreign portfolio investments, by for instance, providing incentives that serve to direct the capital to areas that they prefer. Recipient states should also be conscious of the fact that vulnerabilities go both ways. Although less widely reported, investor states are concerned with the various political or financial risks to which their overseas investments are exposed. Recipient states can also learn from the investor states and create their own sovereign funds in order to entertain growing public expenditures, instead of simply passing the financial burden on to the tax payers.

On the international level, forums such as the International Working Group of SWFs (IWG) and later the International Forum of SWFs—both sponsored by the IMF—can foster greater transparency and cooperation among the investor states on the international level. The creation of the Generally Accepted Principles and Practices (GAPP), also known as the Santiago Principles, is only the first step in promoting good governance and greater transparency. Further efforts that directly engage both the investor and recipient states on an international level can provide further opportunity for knowledge transfer and conflict resolution.

The popular question of whether SWFs pose a threat to the sovereignty or national security of recipient states is best addressed by focusing on the more fundamental questions of why SWFs were created, what goals they pursue, and more importantly, how the investor states balance various goals. An important consideration is that both investor states and their sovereign funds are prone to change over time. This is because both the international environment and the state's domestic structure (in all its political, economic, social, and cultural aspects) change over time. As a result, states' priorities shift in response and with that, so does the purpose of their sovereign funds. SWFs are live creatures that evolve over time and may pursue multiple goals. Therefore, a single theoretical perspective is not sufficient for the study of SWFs.

As mentioned earlier, despite the multiplicity of goals, there are certain conditions under which SWFs are expected to exhibit a similar behavior. We expect states to use the assets of their SWFs in times of economic hardship or when faced with global financial crises in order to cope with short-term financial problems. This means that during these times SWFs would have to temporarily abandon their normal agenda and provide financial resources for exchange rate stabilization or various government rescue or stimulus packages. The study of selected SWFs during the recent global financial crisis showed that all of them provided, in various forms, resources for dealing with the crisis.

On the other hand, during times of normal economic activity (that is, when the states are not financially constrained), we would expect investor states to pursue their original goals for the SWFs. This research draws upon the major international political economic theories and proposes three alternatives to the mainstream economic argument of balance of payments smoothing. These alternative perspectives can explain the behavior and goals of SWFs during normal times and enhance our understanding of the operation and evolution of sovereign funds. The research then tests the applicability of each alternative theoretical perspective to the selected SWFs.

Each political economic perspective looks at the state from a different angle. The first draws upon the most prominent theory in international relations, realism. The "economic statecraft" argument focuses on the classical concept of power in international relations theory and the notion that states pursue policies that maximize their power through various means (including investments by SWFs). Having stakes in other states' economies or in certain industries can be a source of power for the investor states. SWFs, through their overseas investments, manage and accumulate national wealth and create interdependencies between the investor and recipient states. What can be hypothesized is that investor states use their SWFs in order to exert political power and influence over the recipient state.

The second theoretical perspective focuses solely on the state, in its role as an independent economic agent and entrepreneur. As states' assets have grown over time, so has the opportunity cost of holding these assets in the form of idle reserves. As mentioned earlier, global inflation and the downward pressure on the US dollar have contributed to the increasing costs of holding idle reserves. As rational economic agents, states may seek alternative ways to better utilize available resources and maximize their wealth. In fact, this is not the first time that states have gotten directly involved in the economy.

State-owned enterprises (SOEs), many of which still exist today, are a prominent example of states' involvement in the economy. Similarly, investor states have attempted—much like private sector entrepreneurs—to take advantage of available opportunities and invest their funds in areas with the highest expected return consistent with their level of risk tolerance. The hypothesis is that investor states employ their SWFs for the sole purpose of efficient management of national wealth.

The third theoretical perspective uses the dynamics of the relationship between the state and the domestic structure on the one hand and the external forces of the global political economy on the other to explain the state's management of sovereign funds. According to this view, investor states use SWFs in order to compensate the society for domestic deficiencies (economic, political or both). In fact, there are many arguments that speak to the necessity of domestic compensation, including embedded liberalism and a new compromise; the problem of smallness and domestic adjustments to external forces; and the resource curse or the Dutch Disease argument. These three arguments, which overlap somewhat, can explain how SWFs use national financial assets to compensate domestic actors and how they provide resources for the redistribution of wealth among those who incur costs. Accordingly, we can hypothesize that SWFs are intended for domestic compensation purposes.

In this research, I have looked at world's four largest sovereign funds, including the most and the least transparent funds. The SWFs of Norway, United Arab Emirates, Singapore, and Russia provide an intriguing laboratory for the study of state capitalism. In conducting the current research, I have relied upon information and analyses provided by various institutions, market intelligence, press releases, and local and international media. I have used the official data to the fullest possible extent; however, the lack of transparency still remains a problem. On a few occasions, the lack of reliable and consistent information has limited the scope of the research. This limitation has applied even to international official data obtained from major financial institutions, including the IMF. On many occasions, when using secondary sources, data collection efforts had to be doubled in order to ensure the accuracy of information. For instance, information regarding business deals were acquired from multiple sources (including the local and international media) and the details of the various reports were compared. In the event of inconsistencies further sources were sought.

The funds studied here also differed in their reaction to outside inquiries. Contacts at the Norwegian fund referred all enquiries to the information available online through the official websites of the central bank or the ministry of finance. When asked about a specific clause, which contained a list of states to which the sale of weapons or military material was negatively screened, the central bank simply indicated that the information is exempt from disclosure.[6] The media relations department of the Abu Dhabi Investment Authority, in response to my inquiries, provided some general information, but only after I provided them with more details about my research and asserted that the information was required for academic research. Interestingly, a local reporter in the United Arab Emirates, who had extensively covered issues pertaining to the Abu Dhabi fund but was unable to provide any information other than what was already in print, insisted that the search for further information is fruitless, as no one other than the top management of the fund is knowledgeable about the fund's investment plans. The fund of Singapore, on the other hand, was cooperative and open to outside enquiries. It provided information about a bond issue which was, at the time, unavailable to United States residents. The Russian fund did not respond to any enquiries.

As the title of this dissertation suggests, I will discuss the activities of the selected SWFs over a period of time, including times of economic prosperity and times of hardship. Subsequently, I will compare their behavior during the two periods and test the hypotheses. Before moving on to the case studies, a thorough discussion of theory and methodology and how and why these four cases were chosen, is provided. Having

[6] **Ruth K. Lund, email message to author, August 31, 2009.**

presented a framework for the study of SWFs, the subsequent chapters seek to address the research questions discussed earlier.

Chapter II presents theoretical perspectives that aim to explain the creation and functioning of the SWFs. I will start with the economic perspective, and then propose the alternative political economic theories for the study of the funds. Specifically, I will discuss the three major perspectives of economic statecraft, state entrepreneurship, and domestic compensation. While the economic statecraft argument posits that states pursue power, the entrepreneurship argument focuses on the state's ability to optimize the risk-return profile of its national wealth through active management of its assets. The domestic compensation perspective asserts that states are in need of financial resources in order to provide compensation to domestic actors. There are a number of arguments that speak to the topic of domestic compensation. For instance, preservation of the postwar liberal economic order has required states to safeguard domestic society from the deleterious effects of liberalism. This is what Ruggie refers to as the "embedded liberalism compromise," a mediation between market and society, with the state safeguarding society and, at the same time, instituting self-regulating markets.[7]

Another reason for domestic compensation is the problem of smallness. As Katzenstein argues,[8] in a global economy, small and dependent states are vulnerable. Therefore, they need resources to protect themselves against unfavorable changes in the global markets. Resource-abundant states have also been exposed to the price volatility of their abundant resource (typically petroleum). Moreover, reliance on the resource sector

[7] **John Gerard Ruggie, "International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order,"** ***International Organization*** **36(1982).**
[8] **Peter J. Katzenstein,** ***Small States in World Markets: Industrial Policy in Europe,*** **Cornell Studies in Political Economy (Ithaca, N.Y.: Cornell University Press, 1985), 36.**

has slowed their rate of industrialization. Resource-abundance state often times suffer from what economists refer to as "Dutch Disease," a process of de-industrialization, slow economic growth and loss of international competitiveness. In non-democratic states or countries that lack an efficient taxation system, governments have little domestic resources to draw upon and therefore seek to increase their resources through active management of public assets.

In Chapter III, I define SWFs as "funds owned by the sovereign states governments or major sub-national governments, with no monetary or financial regulatory function, that make overseas investment." Subsequently, I present several comparisons of the world's twenty-largest SWFs, based on various criteria including, scale, source of funding, transparency, and perceived objectives. Of these criteria, two have been the most critical to the existing debate, and therefore to this research: transparency and objectives. These criteria were used to select the final case studies. In each group of funds, the most significant (largest) fund is selected. I have chosen four case studies that achieve a reasonable balance between geographical diversity, age, and size: the Government Pension Fund-Global of Norway, the Abu Dhabi Investment Authority of the United Arab Emirates, Temasek of Singapore, and the National Wealth Fund of the Russian Federation. I have also introduced a set of qualifying questions or markers for the purpose of hypothesis testing.

The case studies section starts with the study of the fund of Norway. This highly transparent fund has set the level of expectations high with respect to the volume of data required for the analysis. Chapter IV examines the Government Pension Fund-Global—one of the world's largest SWFs, with total assets under management of approximately

$454.5 billion as of the end of September 2009. The creation of the fund as well as its role fund during periods of large budget deficits, and specifically during the latest global financial crisis, has been consistent with both the economic and domestic compensation perspectives. In the absence of financial constraints, the fund has pursued a defined risk-return margin through a portfolio focused on equities. The fund's commercial performance, however, has been constrained by a set of non-economic guidelines that are expressions of the national political consensus in Norway. The fund is, in fact, a tool for pursuing multiple goals including profitability and socially-responsible investment, with a focus on the state's foreign policy agenda, as encapsulated in the Ethical Guidelines. Norway has pursued foreign policy goals through its fund, but only through negative screening of or divestment from various states or companies. In other words, the pursuit of foreign policy through the Norwegian fund has been limited to unilateral and relatively small-scale sanctions.

Chapter V looks at the Abu Dhabi Investment Authority, another of the world's largest fund, with an estimated value of between $400 billion and $875 billion[9] prior to the recent global financial crisis. This fund remains one of the most secretive funds. Notwithstanding the Emirate's claims of rapid modernization, many domestic political and administrative processes—including the management of the fund—still reflect an adherence to traditional values. Evidence suggests that the fund's operation is more consistent with state entrepreneurship and domestic compensation perspectives than economic statecraft or balance of payments correction theses. The emphasis on equities in the portfolio shows that achieving high returns is a more significant goal. Both the emirate of Abu Dhabi and the United Arab Emirates have little domestic tax base and

[9] Andrew England, "ADIA Makes Play for a Native Minority," *Financial Times*, November 16, 2008.

remain heavily dependent on the petroleum sector. Abu Dhabi, as the richest emirate, has also provided financial support to the federal budget and other emirates. Most recently, Abu Dhabi provided billions of dollars for the purpose of bailing out various troubled projects in Dubai, the most prominent one being the world's tallest building (Burj Khalifa, formerly known as Burj Dubai). Although there is no information as to whether the Abu Dhabi fund provided the bailout funds, it is nevertheless important to recognize the need for financial resources for domestic compensation—a purpose for which the fund has most likely been used.

In Chapter VI, I examine Temasek of Singapore. Temasek is an interesting case because in a number of ways it differs from most of the typical SWFs. Unlike the majority of SWFs, which are funded by proceeds from the resource sector, Temasek was initially endowed with a portfolio of state-owned companies. Therefore, the fund's portfolio consists for the most part of equities. Another unique feature of this fund is the issue of corporate bonds for the financing of its operations. State involvement in the economy is undeniable; however, the entrepreneurial spirit has become embedded in the management of various state-owned companies. Temasek has acted mainly as the entrepreneurial arm of the government and has facilitated the process of privatization by actively managing the state's equities in various business areas. The fund's structure and management follow corporate models and are relatively transparent. Temasek has established a sophisticated network of subsidiaries and is active both locally and internationally. There is no evidence indicating that the fund has ever been used either as a precautionary instrument for coping with external financial shocks, or as a foreign policy tool. This is largely because withdrawals from national reserves, including those held by Temasek, have been difficult to accomplish, due to legal and constitutional provisions.

The last case study is examined in Chapter VII. The National Wealth Fund of Russia provides a unique opportunity for the study of a fund in its nascent stage. The events following the collapse of the communist system had a significant impact on the thinking of policy makers in Russia; and the idea of establishing a precautionary (stabilization) fund was formed against that background. Of the three political economy perspectives under consideration, the domestic compensation thesis is the most relevant to the Russian fund today. The fund has also been the focus of various centers of power within the Russian government. The constant domestic struggle over access to the fund's assets has resulted in the fund's inability to develop a solid agenda. There was no evidence showing that the state has acted as an entrepreneur in managing the fund's assets. A major reason for this is the lack of entrepreneurial talent and spirit—something that is often times confused with rent-seeking behavior. Moreover, the fund's assets were mainly held in cash or Western government bonds; other assets were lent to domestic banks or businesses in the wake of the recent financial crisis as a part of the government stimulus package. The Russian fund certainly has a long way to go in the development of a solid agenda, investment framework, and independent and strong management—if indeed it ever reaches those goals. Conditions are bound to change; nevertheless, the fund presents a unique opportunity to observe the dynamics and challenges of institution-building within a state in transition.

I present a summary of all the findings and provide a brief comparative analysis of all four SWFs in Chapter VIII. This final chapter also provides a comparison between the investment approach and asset size of SWFs and two large pension funds. As I mentioned earlier, the dynamic nature of investor states and their SWFs, as well as the multiplicity of goals, has made application of a single theoretical perspective inadequate. This research proposes a systematic methodology for the study of these funds over their life span and emphasized the need for a paradigm shift in our approach towards the study of state capitalism.

CHAPTER II

THEORETICAL PERSPECTIVES

One of the main questions that the current research attempts to answer is what the purposes of sovereign funds are, in other words, what goals investor states are pursuing. There are a number of theoretical perspectives that can explain the behavior of investor states. The orthodox economic view contends that sovereign funds are the product of foreign reserve surpluses, due to high commodity prices or, in case of oil-exporting countries, a windfall of petrodollars. The economic view explains the purpose of such funds in terms of balance of payments corrections, neutralizing external economic shocks, or inter-temporal wealth smoothing.

But economics is only one side of the story. States may have decided to establish sovereign funds for reasons other than economic smoothing or shock absorbing. Moreover, the economic view does not adequately explain the cases where funds may have expanded or maintained the status quo at times of economic contraction, or actively managed during the time of plenty. It also does not shed light on the dynamics of decision making and policy setting within the funds.

The main argument here is that the economic view is insufficient in explaining operation and specifically evolution of these funds. In other words, the choices states make regarding the operation and management of sovereign funds can be based on reasons other than monetary stability. Sovereign wealth funds are technically a part of the state's political apparatus and can be used for reasons related to the domestic political and socioeconomic structure of the country. At the same time, these funds are significant financial actors. Alternative theoretical perspectives can provide explanation for the operation, evolution and development of different goals by SWFs. These alternative views combine economics with political science, and while they may not be mutually exclusive, they can enhance our understanding of the operation and evolution of sovereign funds.

In this section, I will first briefly discuss the economic view of the operation of the SWFs. Subsequently, I will provide alternative explanations derived from the mainstream theories in international political economy and international relations. These alternative arguments not only can offer a more comprehensive explanation of the operation of these funds, but also speak to the issue of the evolution and transformation of sovereign funds' objectives over time.

Each of these alternative theoretical perspectives looks at the state from a different angle. The first alternative explanation draws upon the most prominent theory in international relations, i.e., realism. The second focuses solely on the state in its role as an independent economic agent and an entrepreneur. The third uses the dynamics of the relationship between the state and the domestic structure on the one hand and the external forces of the global political economy on the other hand to explain the state's management of sovereign funds.

ECONOMIC VIEW

Both the economic view and conventional wisdom contend that the creation of SWFs is a result of rapid accumulation of foreign reserves. In fact the global reserves have been increasing steadily since the 1990s. Between 2001 and 2007, global reserves almost tripled from $2.1 trillion to $6.2 trillion, with the developing countries accounting for more than 80 percent of those reserves.[1] Current account surplus was the main drive behind the accumulation of reserves. This is especially the case of commodity or oil exporting countries, e.g., China, Singapore, Venezuela and the Middle Eastern states. For a few other countries, the capital account played a more important role in building up the reserves. For instance, India, Mexico, and Colombia sought large external financing.

Some analysts have attributed the creation of sovereign funds to the accumulation of international reserves "in excess of what may be needed for intervention or balance-of-payment purposes." Some others have viewed this phenomenon in terms of widening of global current account imbalances due to shifts in global savings and investment patterns, and, more specifically, the rapid growth of the foreign exchange reserves of non-Western countries:

> As foreign exchange reserves have grown, many monetary authorities have concluded that these reserves are well in excess of their immediate needs and offer sufficient protection against sudden capital outflows. Thus, they have opted to "ring-fence" a portion of their foreign exchange reserves for other purposes, allocating a significant share to sovereign wealth funds.[4]

In the case of the SWFs of developing countries, some scholars believe that:

[1] Stephany Griffith-Jones and Jose Antonio Ocampo, *Sovereign Wealth Funds: A Developing Country Perspective,* Workshop on Sovereign Wealth Funds (London: Andean Development Corporation 2008).
[2] Ibid.
[3] Roland Beck and Michael Fidora, "The Impact of Sovereign Wealth Funds on Global Financial Markets," (European Central Bank, 2008), 6.
[4] Shams Butt et al., "Sovereign Wealth Funds: A Growing Global Force in Corporate Finance," *Journal of Applied Corporate Finance* 20, no. 1 (2008): 74.

> The growth of these funds are part of larger process of accumulation of foreign exchange assets by developing countries, which also includes the large accumulation of foreign exchange reserves during the boom that these countries have experienced over most of the current decades, reflecting both booming exports (due in part to high commodity, particularly mineral prices) and pro-cyclical capital flows.[5]

Interestingly, the majority of states that have established sovereign funds are resource-abundant, with the main resources being oil and gas. Therefore, many have concluded there must be a direct connection between the creation of SWFs and the price of oil.[6] The idea is intuitive and straight forward: an increase in oil prices means an increase in the value of the country's main export (oil), and a subsequent windfall of foreign currency (US dollars). At the McKinsey Global Institute, creation of sovereign funds is explained within this context of high oil prices and the windfall of petro-dollars: "[m]ost oil-exporting countries have set up state-owned investment funds, often called sovereign wealth funds, to invest oil surpluses in global financial assets."[7]

Recent booms in international commodity prices have also enabled other commodity-exporting countries like Chile (copper), Kiribati (phosphate), and Botswana (diamonds and minerals) to accumulate foreign exchange as a result of the build-up in their balance of payments. There are also a number of non-commodity exporting countries across Southeast Asia and Oceania, including Singapore, Indonesia, China, South Korea, Malaysia, Hong Kong, Australia and New Zealand that have managed to

[5] Griffith-Jones and Ocampo, *Sovereign Wealth Funds: A Developing Country Perspective*, 2.
[6] The only exception is Venezuela that created Macroeconomic Stabilization Fund in 1998, following the IMF advice. For most of the 1980s, world oil prices have been declining from year to year,
[7] Diana Farrell and Susan Lund, "The New Role of Oil Wealth in the World Economy," *McKinsey Quarterly* January(2008).

accumulate foreign reserves over time. These countries share a number of characteristics, including an abundant labor force coupled with lower wages than that of the western countries, as well as established merchant marine facilities. These countries have also been major hubs for international trade, specifically, assembly and production of high-tech goods that are exported back to the industrial world. Many of these Southeast Asian countries have managed to accumulate foreign reserves over time.

There is no doubt that the availability of resources (in this case foreign reserves or balance of payments surplus) determines a state's ability to create a sovereign fund in the first place. For many resource-exporting countries, the state's international financial status has been directly dependent on the global price of their main export.

Proponents of the economic view also contend that the main purpose of the SWFs is to provide financial stabilization or smoothing effect on the domestic economy. Truman from the Peterson Institute for International Economics refers to this objective as *fiscal treatment,* saying: "Fiscal Treatment is central to a SWF's role in the macro-economic stability of the country."[8] From the economic standpoint, sovereign funds are saving or stabilization funds, i.e., a vehicle for the store of national wealth and protection against unfavorable changes in international reserves.

In other words, sovereign funds can absorb the impact of external economic shocks or neutralize pressures on exchange rates due to the inflow of foreign exchange. These shocks are usually related to pro-cyclical changes in both the price and volume of exports:

[8] Edwin M. Truman, "A Scoreboard for Sovereign Wealth Funds," in *Conference on China's Exchange Rate Policy* (Washington D.C.: Peterson Institute for International Economics, 2007), 3.

> SWFs —especially stabilization funds— can help shield an economy against volatility in markets of critical value for an economy, such as oil or other commodities. In this case, the fund serves as a liquidity pool which is replenished at times of favorable commodity price conditions or reserve inflows, and which can be drawn upon in cases of low asset prices or shortage of reserves.[9]

SWFs can absorb excess liquidity or foreign exchange at times of high export revenues. These reserves can be redistributed back to the economy when there is a shortage of foreign exchange. These funds can also be used to neutralize the impact of unexpected changes in national consumption longitudinally, although little explanation is offered with respect to the redistribution mechanism. SWFs can "smooth the country's inter-temporal consumption, in ways similar to individuals who save both for their retirement and to leave an inheritance to their children."[10]

Other terms used to describe the purpose of SWFs include store of wealth in the case of resource-exporting countries, fiscal stabilization, and self-insurance against pro-cyclical capital inflow (Griffith-Jones and Ocampo 2008), foreign exchange sterilization and stand alone investment in excess of the "optimal" reserve levels (Kimmitt 2008). Almost all of these goals are just reiteration of same ideas, i.e., income (or consumption) smoothing and protection against fiscal or foreign exchange volatility.

As discussed earlier, the economic view provides a clear-cut economic explanation for the creation of sovereign funds in terms of the accumulation of foreign reserves or surpluses in the balance of payments. By viewing the creation of SWFs solely

[9] Steffen Kern, "Sovereign Wealth Funds - State Investments on the Rise," (Deutsche Bank, 2007), 4.
[10] Griffith-Jones and Ocampo, *Sovereign Wealth Funds: A Developing Country Perspective*, 9.

in terms of absorbing economic shocks or smoothing inter-generational income and consumption, economists, however, close the door to other possible motives (political or social) that had led the states to establish such funds. Moreover, why SWFs develop multiple goals and how they balance these goals against each other are other questions where the economic argument falls short.

Traditionally, excess reserves were invested in other states' treasury bills or other low-risk financial instruments. SWFs, however, have entered equity and even real-estate markets whose risk is higher than benchmark risk-free bonds such as the US treasury bills. The key point is that existence of excess reserves or balance of payments surpluses does not adequately explain this level of risk-taking on the part of states. The theoretical literature on international political economy and international relations can provide valuable alternative explanations for SWFs' motives, as well as the multiplicity of goals and the dynamics of investment decision making within these funds.

As mentioned earlier, the economic view has limited application in explaining the functioning of SWFs and examining the evolution and transformation of the funds' objectives overtime. A particular characteristic of sovereign funds, which has been a source of concern for many, is their ownership by sovereign states. This calls for a much broader approach than that provided by economics alone to explain the behavior of SWFs. In this section, I will provide three alternative explanations that enhance our understanding of the creation, evolution, and various objectives of these funds.

The first view starts with the classical concept of power in international relations theory. It also draws upon the notion of power put forward by contemporary political scientists. States pursue policies that maximize their power, in all areas, including economics and commerce. In other words, the logic of economic statecraft prescribes accumulation and expansion of national wealth, in this case, financial assets. Additionally, not only the volume of wealth stored by states matters, but so does their form and location. Having stakes in other states' economies or in certain industries can also be a source of power. Sovereign funds, with their overseas investments, can serve as a vehicle for the accumulation of national wealth (financial assets) and its expansion beyond the geographical borders of one's state.

The second alternative theoretical perspective views states as capitalist economic agents or, more precisely, as entrepreneurs. Although states' assets may have grown over time, so has the opportunity cost of holding idle reserves, especially in the light of global inflation and the downward pressure on US dollar. A rational economic agent and entrepreneur will seek alternatives to better utilize available resources and maximize economic profit. Similarly, as capitalist entrepreneurs, investor states have attempted to take advantage of the existing conditions and invest their money in areas that they expect to yield higher returns.

Finally, the third theoretical view ties the state's management of national assets to the domestic structure of the country, arguing that sovereign funds are a means of compensating the society for structural deficiencies (economic, political or both). There are a number of arguments that speak to the necessity of domestic compensation, i.e., embedded liberalism and a new compromise, small states and domestic adjustments to external forces, and the resource curse argument. These three arguments, with some overlap, can explain how SWFs manage national financial assets for domestic compensation and how they provide resources for redistribution of wealth among those who incur costs.

ECONOMIC STATECRAFT

Much of the recent debate on SWFs has derived from one of the most prominent perspectives in international relations theory, i.e., realism, with its focus on the concept of power. Political elites, especially in the United States, have been overwhelmingly concerned with the realist view and the potential for manipulation of economic and financial power by states that have employed SWFs to acquire stakes in various economic sectors overseas.

At the core of realism lies the notion of power, its sources and forms. A strain of realists including Thucydides and the mercantilists draw a close linkage between power and security concerns on the one hand and economic affairs on the other hand. Thucydides considered wealth to be an important source of military power, as he wrote: "war is a matter not so much of arms as of money, which makes arms of use."[11] Mercantilists believed that a state's power depended on the amount of gold and silver it could accumulate in the public treasury. This wealth would enable the state to build up its military.

Although physical resources and capabilities—including the stock of arms, wealth, population and land—have traditionally been the main underpinning of national strength, the contemporary idea of power goes far beyond such capabilities. In the 1970s and 1980s, scholars began to return to a "realist conception of the relationship of economics

[11] **Thucydides, *The History of the Peloponnesian War* (New York: Dutton, 1910), 41.**

and politics that had disappeared from postwar American writings."[12] The postwar instability of economic systems due to global changes—including the emergence of new transnational actors like the Organization of Petroleum Exporting Countries (OPEC), increased competition between the United States, Japan and Europe, the relative decline of the American hegemony, and the debt crises of Southeast Asian countries— forced realists to "confront the fact that economic issues were of central importance and could no longer be relegated to the category of "low politics"."[13]

Strange identified the structure of production as one of the facets of power and defined it as "the sum of all arrangements determining what is produced, by whom and for whom, by what method and on what terms."[14] She argued that the production structure is what creates wealth in a political economy, which is also a source of power. She also asserted that there is a connection between the locus of power in the society and the production structure, and that when the structure of production changes, significant changes may follow in the distribution of social and political power. But perhaps the high point of Strange's argument is where she maintains:

> In the international political economy, power is held by those who can offer or deny security, and by those who manage creation of wealth... The power to create credit implies the power to allow or to deny other people the possibility of spending today and paying back tomorrow, the power to let them exercise purchasing power and thus influence markets for production, and also the power to manage and mismanage the currency in

[12] **Gilpin, *Global Political Economy of International Relations,* xii.**
[13] **Theodore H. Cohn, *Global Political Economy: Theory and Practice,* 2nd ed. (New York: Longman, 2003), 76.**
[14] **Susan Strange, *States and Markets* (New York: Basil Blackwell, 1988), 62.**

which credit is denominated, thus affecting rates of exchange with credit denominated in other currencies.[15]

The study of economic statecraft has a long but still relevant tradition. Economic statecraft was in fact a critical component of United States foreign policy and grand strategy with respect to the containment of the Soviet Union during the Cold War. The scholarly literature on economic engagement as an instrument of statecraft has no better starting point than Hirschman's 1945 work, *National Power and the Structure of Foreign Trade.* Hirschman developed a systematic framework for analysis of the relationship between trade and political power, and highlighted the importance of unequal trade relationships. Although Hirschman did not view the pursuit of power a necessary outcome of unbalanced economic relations, he argued that there is always a possibility that a government will use an unequal relationship as a source of power.[16]

For Baldwin, economic statecraft is the use of economic instruments by a government to influence the behavior of another state. He argued that economic statecraft can serve as a means of communicating intentions to friends and foes alike. Economic statecraft operates on multiple levels and is often an effective means of achieving foreign policy goals.[17] This definition of economic statecraft has been mainly used in connection with economic sanctions or incentives, but in the context of contemporary global political economy it may be extended to SWFs as well. In fact, SWFs can serve as both a foreign policy tool and a precautionary reserve in the face of potential sanctions.

[15] Ibid., 88.
[15] Albert O. Hirschman, *National Power and the Structure of Foreign Trade* (Berkeley and Los Angeles: University of California Press, 1945).
[17] David A. Baldwin, *Economic Statecraft* (Princeton, N.J.: Princeton University Press, 1985).

Additionally, in a world of highly interdependent financial markets, a state's power can extend well beyond its geographical border. For instance, Haskel argues that, in a world of highly interdependent political economies, an estimate of a state's power depends not only on the resources under its control but on the access that others have to its resources.[18] SWFs, by their very nature, create such interdependencies and access to other states' resources. From the recipient states' point of view, giving up significant stakes in industries or economic sectors to other states would mean relinquishing a part of their power to a foreign power.

SWFs also give rise to a variation in one of the prominent debates in international relations today, i.e., the security dilemma. States that create funds may do so for precautionary purposes, including protection against international market volatility and provisions in the event of sanctions. However, their choice of defensive tools (funds with overseas investment) can be perceived by other states (mainly the recipients) as a method of creating interdependencies that could be used in the exercise of power.[19]

As mentioned earlier, a number of states that are recipients of SWFs' investment, mainly the United States, have expressed concern about the intention of such funds. These recipient states argue that the SWFs might have a hidden agenda, and that by acquiring significant stakes in different industries and economic sectors, they expose the recipient state to national security risks. If this is true, then we would expect the sovereign funds to have high risk tolerance with respect to market forces, acquire stakes

[18] Barbara Haskel, "Access to Society: A Neglected Dimension of Power," ***International Organization*** **34, no. 1 (1980).**

[19] There is a vast literature on offensive or defensive realism. Theoretical discussion on these two strains of realism is outside the scope of the current research. Suffice to say that with change in time and sources of power, the fundamental issue of security dilemma (here more of an economic or financial nature) still remains the same.

in politically sensitive industries, and to continue to acquire stakes in such sectors even during market downturns.

STATE'S CAPITALIST ENTREPRENEURSHIP

Schumpeter's classic description of entrepreneurship as "a fundamental impulse that sets and keeps the capitalist engine in motion" provides an appropriate starting point for the study of states as entrepreneurs. A number of states have recently been found to act as international investors, driven by risk and profit calculations. Sovereign fund investment can be viewed as a modern form of state entrepreneurship, for the purpose of extracting profit from global opportunities.

Kirzner argues that the entire role of an entrepreneur lies in its alertness to unnoticed opportunities and in the ability to subsequently exploit those opportunities. In other words, entrepreneurship not only involves identification of opportunities but also extracting profit from those opportunities. Moreover, entrepreneurship involves planning, learning, and innovation.[21] In fact, state entrepreneurship entails the same concepts (identifying, learning, and innovation) and goals (profit maximization and risk minimization) as private sector entrepreneurship. There are a number of authors—both economists and political scientists—that have highlighted the role of states as entrepreneurs. Eisinger, for instance, referred to America as an entrepreneurial state that "performs roles much like those of Schumpeter's figure... The difference between Schumpeter's entrepreneur and the entrepreneurial state is that the latter seeks to identify

[20] **Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper and Row, 1962), 83.**

[21] **Israel M. Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973); —, *Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship* (Chicago: University of Chicago Press, 1979); ———, *Discovery and the Capitalist Process* (Chicago: University of Chicago Press, 1985).**

market opportunities not for its own exclusive gain but on behalf of private actors whose pursuit of those opportunities may serve public ends."[22]

Yu applied the very same concept of entrepreneurship to four Southeast Asian newly industrializing economies (NIEs), and showed that "governments can act as entrepreneurs and, through learning and innovation, can alter the given resource situation." He further distinguished between "directive entrepreneurial intervention" (as in the cases of South Korea, Taiwan, and Singapore) and "facilitative entrepreneurial intervention" (as in the case of Hong Kong), and argued that with the active entrepreneurial intervention of governments, these NIEs became what the World Bank has referred to as the East Asian "miracle."[24] Other political scientists like Wade support this view and believe that the governments of East Asian countries intervened in the economy extensively, in the capacity of an entrepreneur, and promoted the development of industries, some of which became highly competitive internationally.

The concept of state entrepreneurship is also embodied in the creation of state-owned enterprises (SOEs). Where markets failed, government stepped in as economic agents. Toninelli argues that the creation of SOEs and the "increased role of the state in

[22] Peter K. Eisinger, *The Rise of the Entrepreneurial State: State and Local Economic Development Policy in the United States,* La Follette Public Policy Series (Madison, Wis.: University of Wisconsin Press, 1988), 9.

[23] Tony F. Yu, "Entrepreneurial State: The Role of Government in the Economic Development of the Asian Newly Industrialising Economies," *Development Policy Review* 15(1997): 60.

[24] The terms "facilitative" and "directive" government intervention was used by Luedde-Neurath 1983 (see: Richard Luedde-Neurath, "State Intervention and Export-Oriented Development in South Korea," in *Developmental States in East Asia,* ed. Gordon White (New York: St. Martin's Press, 1988), 103. The first refers to function of government as the provider of public goods and the latter refers to achieving set of goals through conscious interference in markets and selective application of incentives and/or controls. Yu 1997 adopted the term and combined it with the idea of state entrepreneurship.

[25] Robert Wade, "The Role of Government in Overcoming Market Failure: Taiwan, Republic of Korea and Japan," in *Achieving Industrialization in East Asia,* ed. Helen Hughes (Cambridge: Cambridge University Press, 1988); ______, "State Intervention In "Outward-Looking" Development: Neoclassical Theory and Taiwanese Practice," in *Developmental States in East Asia,* ed. Gordon White (New York: St. Martin's Press, 1988); ______, *Governing the Market* (Princeton, N.J.: Princeton University Press, 1990).

the economy as the manager-entrepreneur of scarce resources is a phenomenon with deep roots in the modern age." He identified, among other things, social goals, including full employment, as well as market failure as reasons for the creation of public enterprises.

In a sense, SWFs are a metamorphosis of state-run businesses. The opportunities in the contemporary global political economy are different from those in the past. Domestic economies, modes of trade, and global governance have evolved. States have learned from their past entrepreneurial experience. The liberalization of financial markets and technological advancements have made the real-time flow of information and capital among states possible. All these changes call for a new entrepreneurial paradigm. As Cerny rightly puts it, "[d]omestic sources of inputs and domestic markets for products are too small to be economically efficient..."[27]

Entrepreneur states have learned not only about new opportunities but about new instruments as well. They have become more creative in managing their resources to make profit. As rational economic agents, they conduct a cost-benefit analysis with respect to the holding of assets, which include both natural resources and financial instruments. They have also become more sophisticated in their methods of dealing with structural uncertainty. They tend to incorporate inter-temporal variables more systematically into their political decisions. One recent example of such calculations by a state is the case of Saudi Arabia. The country is more aware than ever of the fact that oil is an exhaustible, non-renewable energy source, meaning that the country's foreign assets

[26] Pier Angelo Toninelli, "The Rise and Fall of Public Enterprise: The Framework," in *The Rise and Fall of State-Owned Enterprise in the Western World,* ed. Pier Angelo Toninelli (Cambridge University Press, 2000), 10.

[27] Philip G. Cerny, "The Competition State Today: From *Raison d'Etat* to *Raison du Monde," Policy Studies* 31, no. 1 (2010).

will not grow indefinitely. The Saudis established a small fund called Public Investment Fund, in 2008, with an estimated asset value of $5.6 billion, while the state still controls massive official foreign assets that are expected to grow to about $500 billion by the end of 2008.[28]

According to Saudi American Bank (SAMBA), "[essentially the Kingdom faces a choice between extracting or preserving oil reserves. Amongst the many complex and interlinked factors influencing this choice is the rate of return available on reinvesting the proceeds of extracted oil."[90] In other words, the Saudis are conducting an inter-temporal cost-benefit analysis, as a part of assets and risk management. They can extract oil today and invest the proceeds in a well-diversified portfolio with a long-term stream of profits, or they can preserve the oil and extract it gradually over time. The latter scenario would be an option if the expected net present value of the invested portfolio is less than the expected net present value of the stream of oil revenues.

While making such decisions is more complicated by the reality of intervening factors, e.g., domestic politics, policy dynamics within the OPEC, and the dynamics of the global political economy, nevertheless, this kind of analysis is crucial to state entrepreneurship. Learning, in addition to analysis and planning, is another entrepreneurial quality. The SAMBA report also indicated that the country had looked into other states' experiences. It had learned from the Norwegian case that extracting oil and transforming it into a well-diversified international portfolio of equities can help increase the return on the assets and minimize risks.

[28] Nadim Kawach, "Saudi Oil Policy 'Linked to Western SWF Moves'," *Emirates Business 24\7,* September 30, 2008.
[29] "The Global Oil Market: A Long-Term Perspective," (Samba Financial Group, 2008), 8.

Cases like those discussed above show that it is possible for states to act as an independent entrepreneur to increase earnings and manage financial risks. States define and assess their assets, identify opportunities (both domestic and global) and take advantage of those opportunities. In this respect, they learn not only from other states' experience but also from the private sector regarding the best ways to utilize resources and modern (high-tech) tools available to them. States have also realized the increasing intangibility of value. Some have established the institutions of virtual states and learned how to use advanced technology, and focus on "creative and management services, [and] designing new products."

Entrepreneurship not only involves identification of opportunities but also extracting profit from those opportunities. Moreover, entrepreneurship involves planning, learning, and innovation, and many states, including those with SWFs have been shown to possess those qualities and to act accordingly, i.e., maximize their earnings while managing financial risks.

DOMESTIC COMPENSATION

The domestic compensation argument can also provide an explanation as to why some states have chosen to establish SWFs. States have different motives for providing compensation and the methods, scale and the beneficiaries of compensation are not the same for all states. The embedded liberal order in western states has inflicted social costs upon society; small states are vulnerable to changes in the global political economy; and

[30] **Richard N. Rosecrance, *The Rise of the Virtual State: Wealth and Power in the Coming Century* (New York: Basic Books, 1999), 23.**

resource-abundant states face the problem of domestic political legitimacy and depletion of non-renewable resources.

Each of these states on their path to modernization has experienced one or several types of domestic problems. According to Huntington, these problems are due to an asynchrony of changes in social structure and mobilization of new groups into politics on the one hand and the rate of development of domestic political institutions on the other. This asynchronisms can create economic, social and political inequalities, deficiencies, instability or disorder.[31] Sovereign funds are one way of tackling the internal instability and inequalities.

Historically, states have developed various methods of domestic compensation. For instance, in the post-World War II era, when classical liberalism rose to become once again the dominant political ideology, states stepped in to minimize the deleterious impact of economic liberalism on their societies by providing safety nets and redistribution mechanisms. Some of the small European states accommodated both the logic of market and the power of the state through democratic corporatism and creating a balance between external forces, domestic political institutions and interest groups. Other states—for instance, those endowed with abundant natural resources—were not, however, as successful in managing the domestic political and economic structure as the others.

The vast majority of states with SWFs, as well as those with reserve or stabilization funds have experienced one or more domestic structural problems at some point in time. For instance, countries of Southeast Asia, such as Singapore, Malaysia, Hong Kong and South Korea, though once portrayed as economic miracles, went through economic hardship and political turmoil as a result of economic liberalism, imposed upon

[31] **Samuel P. Huntington, *Political Order in Changing Societies* (New Haven: Yale University Press, 1969).**

them in part, and perhaps, by international institutions. Many small states that have had or that are currently having trouble adjusting to external economic forces while pursuing open economic policies—such as Norway, Australia, New Zealand, Algeria, Ireland, or Bolivia—have already either established funds or are considering creating them. Many resource-abundant states with poor management of domestic political and economic structures have also established SWFs. The largest of such funds are in the Middle East. Others have been established by Chile, Russia, Iran, and Venezuela.

While the main goal of this research is to distinguish between the various goals of SWFs with respect to overseas investment—hence the need to look at various arguments from the domestic compensation perspective—we should note that there are important conceptual differences between the various types of domestic compensation. The domestic compensation argument can reflect three reasons for wealth redistribution from the standpoint of domestic politics. First, political leaders may need to provide compensation to their constituencies (or voters) in order to ensure the continuity of their governments; second, the governments may need resources in order to manage macroeconomic deficiencies including redressing the fiscal deficit; and third, the governments may find it necessary to diversify the industrial base of the domestic economy. These different arguments are grouped under the domestic compensation perspective; however, the type of compensation in the first instance is more likely to be corrupt, while managing macroeconomic deficiencies or diversifying the industrial base arguably involves the more legitimate goal of providing public goods. A concern related

[32] There is a great debate on the issue of Southeast Asian crises. Scholars diverge in their opinion as to whether the crises was the result of conditionality imposed upon the states by the IMF or the World Bank; or was due to their domestic political and economic structure; or simply a result of market forces.

to the politics of domestic compensation is that the less transparent funds may be engaged in corrupt compensation practices.

There are a number of theoretical discussions in international political economy (IPE) that speak to domestic compensation as a means of dealing with domestic inequality and political instability. I will discuss three major arguments here.

Embedded Liberalism and a New Compromise

The conviction that a liberal international economic order is the best choice for the functioning of economies has a history that goes back as far as the seventeenth century. Market rationality and its authority were dominant up until the twentieth century. After the First World War states focused their attention on the domestic structure and realized that they needed to align their economic policy with domestic social policy. Nevertheless, liberal ideas remained dominant during the interwar period, mainly because the hegemon (United States) was opposed to the transformation of the state's role with respect to the mediation between markets and society.

Liberalism was restored in the postwar period in a grand domestic bargain: "societies were asked to embrace the change and dislocation attending international liberalization, but the state promised to cushion those effects by means of its newly acquired domestic economic and social policy roles."[34] Liberalism and domestic stability were combined with a set of social objectives, while international financial markets offered states an additional mechanism to soften volatilities and change. Ruggie refers to

[33] Ruggie, "International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order."
[34] John Gerard Ruggie, "Globalization and the Embedded Liberalism Compromise: The End of an Era?," *MPIfG Working Paper* 9771(1997).

this mediation between market and society as the "embedded liberalism compromise," an economic order that was a function of social variables, with the role of state redefined as being the safeguarding of society from downward pressure on wages, low productivity, and growing foreign competition, and at the same time, instituting self-regulating markets. In other words, the success of post-war economic liberalization was made possible by a "compact between state and society to mediate its deleterious domestic effects."[36]

Barriers to trade and capital flow were torn down, as a result of both dominant liberal ideas and shifts in domestic politics. According to Milner and Kubota, political leaders may also have lowered trade barriers or pursued international economic liberalization policies as a strategy for building domestic political support. Groups that gained from these policies tended to be powerful supporters of the leaders: "democratic political competition meant that leaders were likely to liberalize trade to appeal to these new groups to ensure their political survival."[37]

Notwithstanding the powerful forces favoring it, the postwar compromise did not last long. Technological advancements, global economic integration, and the proliferation of multinational firms, with their commitment to free trade and strong laissez-faire policies, diminished the state's capacity to employ traditional policy instruments for the protection of society against widening inequality and the deleterious effects of competition. Moreover, the expansion of social safety nets was slowed down as a result

[35] Ruggie, "International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order."
[36] , "Globalization and the Embedded Liberalism Compromise: The End of an Era?."
[37] Helen V. Milner and Keiko Kubota, "Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries," ***International Organization*** **59, no. Winter 2005 (2005). 113.**

of increasing budget deficits. The costs became too high for even the most advanced social democratic and welfare states.

Geddes maintains that economic liberalization can be very costly, especially for "fragile, uninstitutionalized new democracies ... [where] its costs make it unpopular and hence politically suicidal to elected officials."[38] Ruggie refers to economic insecurity as one of the direct effects of widespread liberalization, while indirectly liberalism has undermined the ability of states to live up to the postwar domestic compact.[39] What is needed, according to Ruggie, is a:

> New embedded liberalism compromise, a new formula for combining the twin desires of international and domestic stability, one that is appropriate for an international context in which the organization of production and exchange has become globalized, and a domestic context in which past modalities of state intervention lack efficacy or legitimacy.[40]

I would argue that the accumulation of assets, and the efficient management and redistribution of those assets over time is one way of achieving Ruggie's goal. In this struggle, both sovereign states and local governments have recognized the importance of an instrument to compensate those domestic groups that bear costs in order to maintain domestic political support. For instance, Alberta's Heritage Fund of Canada, the Alaska Permanent Fund, and the Alabama Trust Fund were established to manage state assets and distribute them back to society. At the national level, the SWFs of Chile (Pension Reserve and Social and Economic Stabilization Fund), China (Social Security Fund), and

[38] **Barbara Geddes, "Challenging the Conventional Wisdom," in *Economic Reform and Democracy,* ed. Larry Diamond and Marc Plattner (Baltimore, Md.: Johns Hopkins University Press, 1995).**
[39] **Ruggie, "Globalization and the Embedded Liberalism Compromise: The End of an Era?."**
[40] **Ibid.**

Norway (Government Pension Fund-Global) are examples of other funds that could serve as the vehicles for Ruggie's new compromise.

Small States: Internal Adjustments to External Forces

The second perspective within the domestic compensation argument draws upon the issue of smallness and discussions on the problems unique to small states. The term "small" is often used in an economic context to refer to the "inability of a country to affect its own terms of trade, i.e., the world prices of its import and export."[41] In an international relations context, small states are generally weak states with very little or no influence on the dynamics of global politics.

Smallness is an issue because "[b]y their very nature, small states are exposed to economic, political and environmental forces which may greatly amplify the fluctuations in their growth with disproportionate impact relative to larger countries."[42] Large industrial states have the option of exporting or avoiding costs of economic change in times of hardship. They can exercise power over parts, at least, of the international environment or their societies. Still, as Katzenstein puts it, "[i]n the global economy the odds are stacked against small and dependent states."[43] Sovereign funds can provide some means of protection against the problem of "smallness."

In small states, domestic resources are oftentimes constrained by a small land area, poor natural resources, a limited supply of labor, or a combination of all these factors. UNCTAD has also classified small states based on their domestic economic structure.

[41] **Harvey W. Armstrong and Robert Read, "The Phantom of Liberty?: Economic Growth and the Vulnerability of Small States,"** ***Journal of International Development*** **14(2002): 436.**
[42] **Ibid.: 441.**
[43] **Katzenstein,** ***Small States in World Markets: Industrial Policy in Europe,*** **36.**

According to this typology, small states has one or more of these characteristics: depend heavily on income from workers' remittances from abroad, rely heavily on the export of natural resources or the services sector (notably tourism and financial services), or have diversified economies with a large manufacturing sector, often including textile.[44]

A broader body of research on small states is that of Armstrong *et al.*, who have compiled a list of 105 small entities (see Appendix B), 64 of which are sovereign states.[45] Five of the eight small states in the Middle East and North Africa in this list—i.e., Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates—have established SWFs. Other small states identified by Armstrong *et al.* as having established such funds are Trinidad and Tobago, Botswana, and Singapore.

In another attempt to quantify the concept of smallness and vulnerability, Briguglio has compiled a vulnerability index based on the four main sources of vulnerability: the size of the country, its distance to other states, susceptibility to natural disasters, and environmental vulnerability.[46] His list of 38 states (see Appendix C) contains six countries that have established SWFs [47]

States, in general, have developed various ways of adjusting to external forces. "Liberal countries such as the United States rely on macroeconomic policies and market solutions.... statist countries such as Japan preempt the costs of change through policies that pursue the structural transformation of their economies." [48] Differences in domestic

[44] UNCTAD, "The Vulnerability of Small Island Developing States in the Context of Globalization: Common Issues & Remedies," (Geneva: UNCTAD, 1997).
[45] Harvey W. Armstrong et al., "A Comparison of the Economic Performance of Different Micro-States and between Micro-States and Large Countries," *World Development* 26, no. 4 (1998).
[46] L. Briguglio, "Small Island Developing States and Their Economic Vulnerabilities," *World Development* 23, no. 9(1995).
[47] These vulnerable states with SWFs include Singapore, Trinidad and Tobago, Bahrain, Botswana, Kuwait and Oman.
[48] Katzenstein, *Small States in World Markets: Industrial Policy in Europe*, 23.

political and economic structures, society and culture, as well as the dynamics between these components, may explain the differences in the ways that states deal with the challenges imposed on them by the global political economy.

For instance, the Japanese after the Second World War realized that protectionism was not an option for them. Instead, they needed to initiate a process of domestic industrial adjustments. Therefore, they focused on the long-term exploitation of markets both at home and abroad. Specifically, the Japanese government played a critical role in anticipating structural changes in markets and supported businesses accordingly, with the goal of enabling them to become highly competitive in particular industries.

Large states' way of dealing with external forces could not be copied by small states, who therefore had to develop their own methods. Small European states, for instance, realized that openness was critical to their economic and political well-being. These states were very dependent on world markets, so, as was the case with Japan, protectionism was not a plausible choice. But unlike Japan, states like Norway, Sweden, Denmark, Belgium and Austria lacked the ability to transform specific sectors of their economy in such a way that they would become highly competitive. These states therefore followed a democratic corporatist industrial adjustment strategy that combined the ideology of social partnership, centralized interest groups, and political bargaining between the state, interest groups, and political parties.

Perhaps one of the best and most relevant examples of policy tools used to balance long-term political stability and legitimacy with economic flexibility is the Norwegian Petroleum Fund (Oljefondet), which was established in 1990 and later changed to the Government Pension Fund-Global of Norway in 2006. Although called a "pension fund," the funding source of this SWF is largely the oil-sector surplus and taxes on oil companies. The goal of this fund is to generate a long-term stream of revenue, subject to low-to-medium risk, in order to fund national pensions after 2015. It also has a set of ethical guidelines according to which investment decisions are made. These guidelines prohibit investment in areas that could have a potential for "violations of fundamental humanitarian principles, serious violations of human rights, gross corruption or severe environmental damage"[49] and thus creating tensions among domestic interest groups and social coalitions.

In small states, leaders and political elites had to allow the impact of external market forces on domestic economies, including rapid changes in technology and global competition, while adjusting domestic economic and social policies to accommodate the imposed changes. Small states managed to maintain or increase the domestic economic efficiency required for the maintenance of their political legitimacy by relying on their domestic political institutions and social coalitions. Katzenstein maintains:

> Successful strategy of adjustment practiced by the small European states bridges the divergent requirement of international competitiveness and political preference. These states adjust to economic change through a carefully calibrated balance of economic flexibility and political stability.[50]

In summary, small states are unable to influence the various political and economic forces of the international global economy. Additionally, they have neither the power to change the terms of trade at which they are trading with the world, nor the

[49] "The Ethical Guidelines," Ministry of Finance, Government of Norway, http://www.regjeringen.no/en.
[50] , ***Small States in World Markets: Industrial Policy in Europe,*** **29.**

privilege of seigniorage. This means that small states are unable to avoid the unfavorable conditions imposed upon them by external forces. These negative impacts on the domestic structure of the society, interest groups, and modes of production can adversely affect the political legitimacy of the ruling party. States have taken various paths in order to shield themselves from the global forces that can undermine their domestic political legitimacy. Where possible, states have transformed the structure of their economy or society. In the absence of such flexibility, defensive measures such as reserve funds and redistributive mechanisms are available options. This view may provide an explanation as to why a number of small states have established SWFs.

Resource Curse

A third view that falls under the domestic compensation argument is the resource curse argument. The majority of scholars, especially in developmental economics, contend that the resource curse argument can be used to explain why countries that export minimally processed natural resources—including petroleum and minerals— usually do not perform as well as resource-poor countries. Another issue with these countries is that such resources are, in almost all cases, non-renewable.

One way of compensating for the loss of the natural resources that are a part of national wealth is through the efficient management of the proceeds from their export. SWFs can certainly provide the vehicle for the preservation of the value of non-renewable resources. Interestingly, the list of states with sovereign wealth funds shows a good number of resource-abundant states, including the United Arab Emirates, Kuwait, Qatar, Oman, Russia, Iran, and Kazakhstan.

Mineral-exporting countries account for one-fifth of all developing countries. In his research, Nankani looked at the developing world's largest mineral-exporting countries for the period 1960 to 1976 and found that the per capita growth of mineral-exporting countries' GDP was half that of a control group of non-mineral-exporting countries.[51] Auty and Mikesell provided data that showed that hard-mineral exporters as a group have had the lowest rate of growth among the developing countries over the 1970-1993 period, which was characterized by sharp fluctuations in both oil and metal prices. Their findings confirmed other statistical studies that showed that resource-abundant states generally had lower rates of growth than resource-poor countries over the past three decades.

A more comprehensive study by Sachs and Warner that covered the period 1970 to 1990 showed that countries with a high ratio of natural resource export to GDP tended to grow slowly. The relationship still even held true after controlling for variables important to economic growth. The study also showed that the growth rate of the six oil economies of Bahrain, Iraq, Kuwait, Qatar, Saudi Arabia and United Arab Emirates was negative over the period of the study.[53]

The riddle of resource abundance and poorly-performing economies remains unresolved. Nevertheless, scholars have provided several economic and political explanations for the existence of resource curse. For instance, dependency theorists like Prebisch have argued that the terms of trade for natural resource exporters deteriorate

[51] **Gobind T. Nankani, "Development Problems of Nonfuel Mineral Exporting Countries,"** ***Finance and Development*** **January (1980).**
[52] **Richard M. Auty and Raymond Freeh Mikesell,** ***Sustainable Development in Mineral Economies*** **(Oxford University Press, 1998), 6.**
[53] **Jeffrey D. Sachs and Andrew M. Warner, "Natural Resource Abundance and Economic Growth," (Center for International Development and Harvard Institute for International Development, 1997), 39.**

overtime, contributing to the widening of the economic gap between the industrialized world and the resource-exporting countries.[54] Nurske has pointed to the fluctuations in international commodity prices and noted that these fluctuations can easily impact the domestic economies of states that rely heavily on commodity exports.[55]

According to Ross, the terms of trade for most primary commodities has deteriorated since the early 1980s. He attributed this decline drop to "the rising volume of commodity exports, a symptom of the debt crises and structural adjustment programs of the 1980s; the collapse of international commodity agreements; and, after 1989, the fall of the centrally planned economies of Eastern Europe and the former Soviet Union."[56]

Some political economy scholars attribute the poor performance of resource-abundant states to the rent-seeking behavior of the governments of natural resource-exporting states.[57] These scholars observe that the resource-abundant states rely mostly on the revenues from the export of natural resources rather than on domestic sources, i.e., taxes. An inefficient or underdeveloped taxation system means that states do not have to rely on their constituencies, and therefore face little social pressure to change their policies, since their low taxes discourage opposition groups from mobilizing around economic issues.[58]

[54] **Raul Prebisch, *The Economic Development of Latin America and Its Principal Problems* (Lake Succes, N.Y.: United Nations, 1959).**
[55] **Ragnar Nurske, "Trade Fluctuations and Buffer Policies of Low-Income Countries," *Kyklos* 11, no. 2 (1958).**
[56] **Michael L. Ross, "The Political Economy of the Resource Curse," *World Politics* 51, no. 2 (1999): 302.**
[57] **For more information see: Hussein Mahdavy, "The Patterns and Problems of Economic Development in Rentier States: The Case of Iran," in *Studies in Economic History of the Middle East,* ed. M. A. Cook (London: Oxford University Press, 1970); Kiren Aziz Chaudhry, "The Price of Wealth: Business and State in Labor Remittance and Oil Economies," *International Organization* 43, no. Winter 1989 (1989); , "Economic Liberalization and the Lineage of the Rentier State," *Comparative Politics* 27, no. October 1994 (1994).**
[58] **Hootan Shambayati, "The Rentier State, Interest Groups, and the Paradox of Autonomy: State and Business in Turkey and Iran," *Comparative Politics 29,* no. April (1994).**

A country's natural resource sector can be managed efficiently to contribute to economic growth if the external disturbances that lead to volatility in governments' domestic expenditures and exchange rates are overcome. Some scholars have prescribed the creation of reserve or stabilization funds as a means to tackle the resource curse. Auty and Mikesell maintain: "Since mineral reserves are depleted in the process of production, an important element in sustainability is for the country to save and reinvest a sufficient portion of the minerals rent to compensate for the loss of net income from the depleted mineral resources."[59] They further argue:

> A combination of appropriate monetary and fiscal policies and the establishment of a mineral reserve stabilization fund (MRSF) can modify the effects of these external disturbances in a manner that will avoid impairment to long-run sustainability. Governments can avoid sharp reductions in expenditures by accumulating funds in periods of rising income, and using these funds to maintain expenditures when revenue declines.[60]

Many of the SWFs mentioned in this research come from resource-abundant states. Within this group of states, the majority rely heavily on the export of petroleum, while others rely on minerals. The resource curse argument provides an explanation as to why such states have created sovereign funds.

As mentioned earlier in this section, the domestic compensation argument is a conceptual umbrella for a number of views that are not mutually exclusive. Indeed, some of the states that have established SWFs fit into a combination of these views discussed

[59]Auty and Mikesell, *Sustainable Development in Mineral Economies* A.
[60] Ibid., 37.

earlier. For instance, United Arab Emirates is both small and resource-abundant; Norway is a small and economically liberal country; and Singapore is small, economically liberal and highly interdependent with global economy. These states, especially in the face of global economic uncertainty, need to provide some sort of compensation domestically in order to maintain their political legitimacy. SWFs can provide a vehicle for the preservation and management of the state resources required for carrying out such a mission.

In this chapter, I first discussed the pure economic explanation for the creation of sovereign funds. I argued that the economic view is not, by itself, sufficient to explain either the formation or the evolution of SWFs. I provided three alternative theoretical perspectives to explain why states may have created these funds. The alternative perspectives can also help identify the different stages in the evolution of SWFs and their goals. The first alternative theoretical view was based on the notion of economic statecraft as a source of power. States create SWFs to accumulate and increase their power. They invest overseas in order to create interdependencies that make the recipient states vulnerable in the sectors in which the investment was made.

The state entrepreneurship argument views states as economic creatures that are driven solely by cost-benefit analysis. They have created SWFs because they have learned from their own as well as other states' experience how to identify and exploit profitable opportunities. They have discovered what Cerny calls the "infrastructure of the infrastructure," i.e., the financialization of states' core processes.[61] Their domestic

[61] **Philip G. Cerny, "The Infrastructure of the Infrastructure? Toward 'Embedded Financial Orthodoxy' in the International Political Economy," in *Transcending the State-Global Divide: The Neoconstructuralist Agenda in International Relations,* ed. Barry Gills and Ronen Palan (Boulder, Colo.: Lynne Reiner, 1994).**

markets are too small to be economically efficient and profitable. Therefore, investment is flowed in to states with well-established and functioning markets.

The domestic compensation perspective argues that states, in order to maintain their domestic political legitimacy, need to compensate their constituencies, whether the general public in democratic states or the few elites that support the state in non-democratic countries. Various reasons exist for doing so: liberalism and economic openness can hurt certain domestic groups; small states are unable to control external economic influences over their society and domestic economy; or they are inefficient in managing their abundant and non-renewable resources. In the next chapter, I will define SWFs and compare and contrast some of the world's largest funds. Subsequently, I will then present a typology based on which I select four case studies.

CHAPTER III

TYPOLOGY, CASE SELECTION, AND METHODOLOGY

SWFs are not new, but they have risen to prominence in the past few years. SWFs are another manifestation of states' intervention in the economy, but, perhaps for the first time, in the capacity of direct investors. SWFs are indeed an intriguing laboratory of "state capitalism," especially at this time of decentralized market triumph. [1] These funds manage large financial assets across borders. The complication of dealing with SWFs is twofold. On the one hand, ownership by the governments has made it difficult to apply the conventional economic models and theories to SWFs. On the other hand, the economic nature of investment has made the application of international relations theory to these funds more difficult.

Economists generally view the creation of these funds as a result of the accumulation of excess reserves. Nevertheless, many funds were created for reasons other than the mere availability of excess reserves, one of them being the perceived need for certain financial precautions, such as protecting the domestic economy against global market volatility or financial crises. In other cases, portfolio diversification and return maximization may be the immediate goal. One would expect the precautionary funds to be conservative and their investment characterized by lower risk-tolerance and a relatively long-term horizon, while speculative funds would be expected to have higher

[1] The term "state capitalism" has been by a number of authors including Trebat 1983 and Lyons 2007. For more details visit Thomas J Trebat, *Brazil's State-Owned Enterprises: A Case Study of the State as Entrepreneur* (Cambridge University Press, 1983), xv; Gerard Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds," (Standard Chartered Bank, 2007), 1.

tolerance for market volatility and risk in the short run. The motives of other funds might be multiple, or their objectives may change over time.

The question as to whether SWFs pose a threat to the recipient countries in terms of sovereignty, national security, or financial stability is one that has attracted considerable attention, especially in the United States since 2007 and, to a lesser extent, in Europe. Although the question is frequently asked, it may be the wrong question if the goal is to best identify the underlying motives of these funds. Instead, we should focus on the more fundamental questions of why SWFs were created in the first place, what the various goals are, and how the state balances these goals in order to understand their agenda and decision making, and to predict their behavior. A better understanding of the functioning of SWFs also enables the international community to better address the issues pertaining to these funds and to tailor appropriate codes of conduct.

Transparency is a critical issue. In the absence of some minimum level of transparency, one cannot easily determine the immediate goal of the fund. Recipient states will continue to be concerned about the funds' motives, simply because they do not have as much information as they expected. At the same time and from the SWF owner-state's perspective, without some minimum level of transparency, there is no guarantee that national assets or public money is being invested efficiently with respect to the purpose of the fund, be it precautionary or speculative. Additionally, continuous transparency, including audits, is needed in order to assess the performance of the fund over time.

In periods of financial hardship, such as is being currently experienced around the world, SWFs could potentially provide rescue packages for key financial institutions, industries, or companies. Whether and why this has happened or not are interesting questions. However, a more thoughtful observer may ask why states have acted as capitalist investors in the first place. Questions as to how "state capitalism" affects the national and global economy, whether state intervention in the economy is in conflict with foreign policy, and what challenges both investor and recipient states face will surely continue to be asked. This research attempts to shed some light on a fairly recent view of states as investors by closely examining a number of SWFs.

RESEARCH CONTRIBUTIONS

The political economy literature contains numerous debates and discussions on the role of the state in the economy. These roles include entrepreneur and conflict manager (Chang and Rowthorn 1995)[2], economic institution builder (Van Arkadie 1995)[3], or the authority to pool risks and improve allocative efficiency (Barr 1992)[4]. However, while most of these discussions emphasize the role of the state in economic development, the international political economy literature still lacks a suitable framework for the study of states as "investors".

This research views the SWFs within a larger socioeconomic and political context, which is different from the developmental states argument or excess reserve accumulation. The ultimate questions one might ask are why states have established sovereign funds and what investor states seek to accomplish. SWFs have varying goals,

[2] **Ha-Joon Chang and Robert Rowthorn, "Role of the State in Economic Change: Entrepreneurship and Conflict Management," in *The Role of the State in Economic Change,* ed. Ha-Joon Chang and Robert Rowthorn (Oxford: Clarendon Press, 1995).**
[3] **Brian Van Arkadie, "The State and Economic Change in Africa," in *The Role of the State in Economic Change,* ed. Ha-Joon Chang and Robert Rowthorn (Oxford: Clarendon Press, 1995).**
[4] **Nicholas Barr, "Economic Theory and the Welfare State: A Survey and Interpretation," *Journal of Economic Literature* 30, no. 2 (1992).**

ranging from meeting future public pension obligations, to insulating the domestic economy from international market volatility, and achieving a more efficient management of national financial assets, for instance, through investment diversification. Fortunately, there is a whole host of literature in international political economy within which one can study the SWFs objectives.

Later in this research, I will apply the theoretical perspectives, reviewed in the previous chapter, to selected cases in order to determine which theoretical framework best explains the creation and functioning of the selected funds. Identifying this framework can help predict what SWFs really attempt to achieve and what the consequences of their investment behavior would be. In doing so, this research also addresses two understudied yet critical areas, i.e., lack of transparency and lack of systematic methodology for the study of SWFs.

Interestingly, and despite the recent prominence of SWFs, there has been very little in-depth investigation or academic research on some of these funds individually. Information on investment plans and transactions is published sporadically in market news from around the world. International institutions (mainly the IMF) and government and banking industry have also conducted research, but they have done so only on a general level, treating all SWFs the same. This research attempts to fill this gap by closely examining the selected funds, and to provide a foundation for future micro-level research on other funds.

Additionally, the current research will study the selected funds longitudinally—i.e., it will explore the formation and "evolution" of different goals over time. While a particular goal might be of great importance at some point, it might subsequently lose its prominence as a result of changes in institutional or external factors, such as changes in a state's priorities or shifts in the global economy. SWFs' goals can also be multiple, in which case the critical question to ask is how the owner states balance their various goals against each other. Cautious generalization and careful conclusions drawn from the results of this research can also provide a basis for policy prescription at both the national (the recipient as well as the owner of the sovereign fund) and international (international organizations) levels.

DEFINITION OF SWF

The year 2007 saw efforts by many policymakers and researchers to define the emerging phenomenon of SWFs. In June, the US Treasury stated, "there is no universally accepted definition of an SWF… The term 'SWF' means a government investment vehicle which is funded by foreign exchange assets, and which manages those assets separately from the official reserves at central banks." Later in November, Truman from the Peterson Institute for International Economics, a Washington-based think tank, and a and a former Director of the Division of International Finance at the Federal Reserve Board introduced SWFs to the United States House Committee on Banking, Housing, and Urban Affairs as "separate pools of international assets owned and managed by governments to achieve a variety of economic and financial objectives."[5]

OECD defines SWFs as "government-owned investment vehicles that are funded by foreign exchange assets." Morgan Stanley assigns five characteristics to SWFs: being sovereign, and having high foreign currency exposure, no explicit liabilities, high risk

[5] **The United States Senate Committee on Banking, Housing and Urban Affairs,** ***Testimony of Edwin M. Truman, Senior Fellow, Peterson Institute for International Economics,*** **November 14, 2007.**

tolerance, and a long-term investment horizon.[6] For this research, I define SWFs as *funds that are owned by the sovereign states governments or major sub-national governments, that have no monetary or financial regulatory function, and their investment criteria include provisions for overseas investment.*

This definition includes, for instance, Abu Dhabi Investment Authority (ADIA), a sub-national fund of United Arab Emirates with one of the world's largest assets and overseas investments, as well as Government Pension Fund-Global of Norway, but excludes Saudi Arabia Monetary Authority (SAMA), which sets the country's overall monetary policy and regulates commercial banks, and exchange dealers.

TYPOLOGY OF SWF

There are a number of meaningful criteria for categorizing the SWFs. These criteria include their size and scale, sources of financing, degree of transparency, and objectives (stated or implied). In this section, I will first discuss each of these criteria (including their different measures) separately. Then I will combine two of these criteria at a time and compare the funds. This typology provides a basis for the final choice of case studies.

Scale

One can assess the size of these funds in several ways. The simplest would be to evaluate the volume of each fund in absolute terms. However, the absolute values would not tell us anything about the significance of these funds on the global scale, or compared to the size of the owner state's economy. A meaningful way of capturing the scale of a

[6] **"Sovereign Wealth Funds-a Work Agenda," 37-38.**

fund is to look at its size relative to the size of the economy or the GDP. Table 1 provides a comparison of top six funds based on domestic scale (fund size as a percentage of the 2006 GDP). Alternatively, we can express the size of the fund relative to the total market capitalization of a major stock exchange such as New York Stock Exchange (NYSE) or London Stock Exchange (LSE). Table 2 provides the data on top six SWFs based on a global scale (fund size expressed as a percentage of the market capitalization of major stock exchanges).

Depending on the purpose of the research, either of the above measures can be used. If the focus of the research is the domestic economy and SWFs are being treated as a dependent variable, the first measure will provide an indication of the domestic scale and performance of the external sector of the economy, in terms of accumulation of excess reserves. The second measure will be useful when the focus is on the impact of SWFs on international finance where SWFs are treated as an independent variable.

Interestingly enough, while a fund may be among the largest on the domestic scale, its size on the global scale may be negligible, and vice versa. For instance, the fund of Brunei is the second largest on the domestic scale. However, on a global scale this fund amounts to only about 0.8 percent of the LSE or 0.2 percent of the NYSE market capitalization. This comparison highlights the small size of the domestic economy compared to the global financial markets.

TABLE 1 Top six SWFs on domestic scale (percent)

ADIA (UAE)	521
BIA (Brunei)	309
KIA (Kuwait)	269
GIC (Singapore)	169
QIA (Qatar)	158
GPF-Global (Norway)	103

Source: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds

TABLE 2 Top six SWFs on global scale (percent)

	London SE	NYSE
ADIA (UAE)	23.1	5.7
GPF-Global (Norway)	10.0	2.5
GIC (Singapore)	5.7	1.4
KIA (Kuwait)	5.6	1.4
CIC (China)	5.3	1.3
Stabilization Fund (Russia)	3.4	0.8

Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds."

Sources of Funding

SWFs accumulate foreign assets. The majority of the funds are financed directly through the proceeds from the commodity exports, with the main commodity typically being petroleum and gas. Chile is one of few non-petroleum exporting states, with its Pension Reserve and Social and Economic Stabilization Fund financed through the export of copper. For some others, financing comes through the foreign exchange reserves already held by various official organizations such as the central bank or the ministry of economy or finance. In the case of Malaysia and Taiwan, the funds are partially financed through debt and in case of Singapore, in the form share holdings in government-owned companies. Table 3 shows the immediate source of funding for funds with assets larger than $100 billion.

TABLE 3 Sources of funding for SWFs with assets larger than $100 billion

Commodity	Non-Commodity
ADIA (UAE)	GIC (Singapore)
GPF-Global (Norway)	CIC (China)
KIA (Kuwait)	Temasek (Singapore)
Stabilization Fund (Russia)	

Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds" and "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

Transparency

Assessing transparency can be very subjective. For example, Standard Chartered Bank and Oxford Analytica, in a joint report on SWFs, categorized the world's twenty largest funds according to their level of transparency, which was rated as either "very low," "low," "medium," or "high."[7] Nevertheless, their criteria for assigning these labels are not clear. Seemingly, funds that "provide detailed information on their size, returns achieved and their portfolio composition"—such as, of Norway, Singapore (Temasek), United States (Alaska), Malaysia, Canada (Alberta) and Azerbaijan—are categorized as highly transparent.[8] However, they provide no further details regarding the basis on which the other funds are categorized.

A more systematic measure of transparency is perhaps the Linaburg-Maduell Transparency Index, developed at the Sovereign Wealth Fund Institute by Carl Linaburg and Michael Maduell. The L-M Transparency Index rates the SWFs on a one-to-ten scale based on the essential principles of transparency established by Linaburg and Maduell. Table 4 presents these criteria.

[7] **Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds."**
[8] **Ibid., 7.**

TABLE 4 L-M Transparency Index criteria

+1	History including reason for creation, origins of wealth, and government ownership structure
+1	Up-to-date independently audited annual reports
+1	Ownership of company holdings, and geographic locations of holdings
+1	Total portfolio market value, returns, and management compensation
+1	Guidelines for ethical standards, investment policies, and enforcer of guidelines
+1	Clear strategies and objectives
+1	If applicable, subsidiaries and contact information
+1	If applicable, the fund identifies external managers
+1	Fund manages its own web site
+1	Main office location address and contact information such as telephone and fax

Source: "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

It should be noted that the concept of transparency is susceptible to change. Therefore the transparency ratings can change as funds release additional information, voluntarily or under the pressure from international organizations. Table 5 shows the seven most transparent SWFs according to the L-M Transparency Index, as of February 2009. It should be noted that these ratings may change from time to time. For instance, Temasek Holdings of Singapore initially received an eight in 2008 and early 2009, but was upgraded to ten (fully transparent) in late 2009.

TABLE 5 Seven most transparent SWFs, as of February 2009

	L-M Transparency Index
GPF-Global (Norway)	10
Permanent Reserve Fund (Alaska)	10
KIC (South Korea)	9
Temasek Holdings (Singapore	8
GIC (Singapore)	6
KIA (Kuwait)	6
Alberta Heritage Saving Trust Fund (Canada)	6

Source: "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

Objectives

SWFs were created to serve various purposes. Some of these funds, such as those of Russia and Iran, were created as stabilization funds with the primary objective of insulating and protecting the domestic economy against fluctuations in global commodity prices, or as a backup in the event of sanctions. Such countries are highly dependent on commodity exports and may have already been exposed to sharp changes in global commodity prices, and therefore have experienced dramatic changes in their balance of payments. Stabilization funds could help smooth out short- and medium-term balance of payments fluctuations.

A small number of SWFs are pension funds (or pension reserves) with the purpose of providing the public with pension income in the future. In other words, such funds act as long-term reserves for meeting future national pension obligations. Government Pension Fund-Global of Norway is a good example. Loss of income due to the depletion of non-renewable energy resources was the reason that a number of states established a fund for future generations. For instance, the Kuwait Investment Authority (KIA) and Permanent Reserve Fund of Alaska aim at achieving a long-term return to provide an alternative source of income to the income that currently flows from oil reserves for their future generations.[9] Socio-economic development and the restructuring and promotion of domestic industries are the reasons behind the inception of other funds, such as those of South Korea, Malaysia and Chile.

All the above objectives are, more or less, precautionary in nature, and the funds may pursue one or more of them at any given time. There are, on the other hand, a number of other states—including the United Arab Emirates, China, and Singapore—that may be concerned about the opportunity cost of holding idle assets and therefore seek to achieve high returns. One would expect such funds to have a portfolio which is focused more on riskier assets. To reiterate, the objectives of SWFs may be multiple, either overlapping or changing over time. This is, for instance, the case of the Botswana and Russia funds, which have evolved from stabilization funds (short-term need) to saving or pension funds (long-term need).[10] I will discuss the multiplicity of SWFs goals and their evolution in greater detail in the course of each case study.

As a preliminary step, and based on general indications of objectives available from various sources, I have categorized the funds according to general perception of whether such funds are precautionary or speculative in nature. Precautionary funds are

[9] **Ibid."**

[10] **"Sovereign Wealth Funds-A Work Agenda," (International Monetary Fund, 2008), 6.**

those with the immediate objects of protecting the domestic economy against international market fluctuations, supporting economic sectors or industries, or meeting future national obligations such as public pensions. Speculative funds, on the other hand, have a higher risk tolerance and their immediate objective would be to increase or maximize return on assets. Table 6 provides a summary of the perceived objectives for funds with assets larger than $100 billion.

TABLE 6 Perceived objectives of SWFs with assets larger than $100 billion

Precautionary	Speculative
GPF-Global (Norway)	ADIA (UAE)
GIC (Singapore)	CIC (China)
KIA (Kuwait)	Temasek (Singapore)
Stabilization Fund (Russia)	

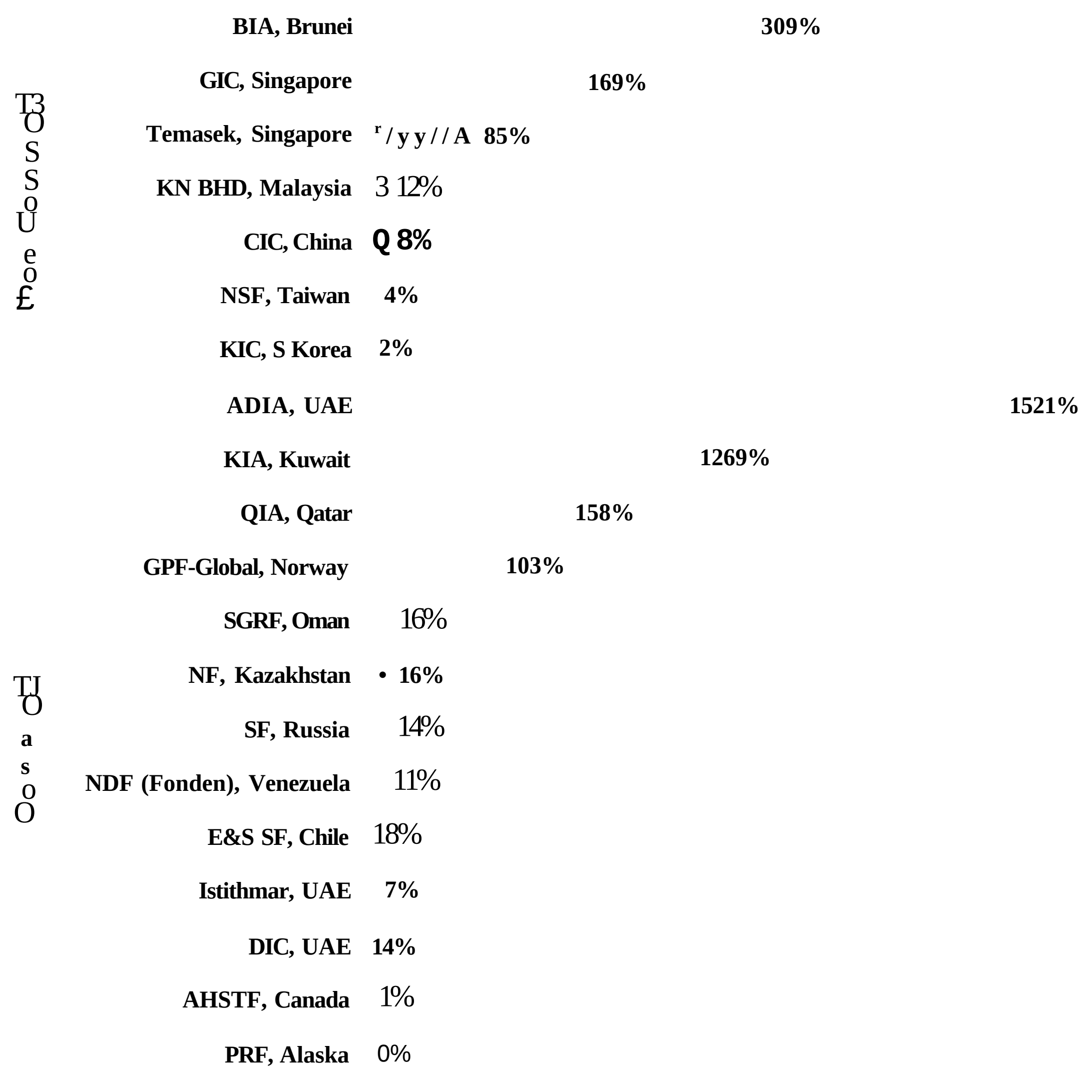
Sources: Standard Chartered Bank and Sovereign Wealth Fund Institute

Combined Criteria

In this section, I will combine two of the criteria discussed above at a time and compare the funds in each category. The sample population consists of the world's twenty largest funds that share the characteristics of *being owned by the governments of the sovereign states, or major sub-national governments, having provisions for overseas investments, and having no regulatory function.*

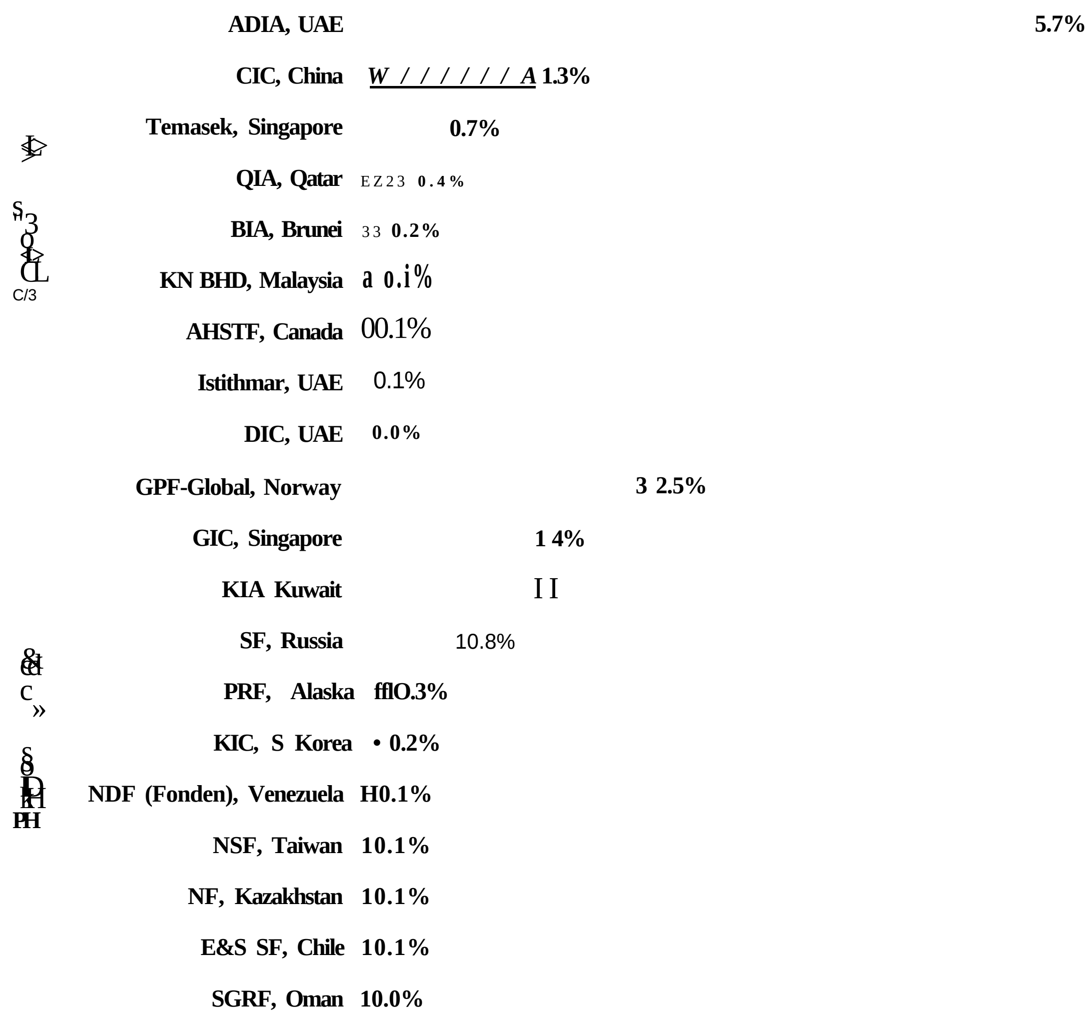
Figure 1 compares funds based on the sources of funding, i.e., commodity (mainly petroleum) vs. non-commodity (including transfers from foreign exchange reserves and debt)—and the funds' domestic scale, measured in terms of the size of total assets as a percentage of GDP in 2006. Figure 2 compares funds based on the combined categories of objectives, i.e. precautionary vs. speculative, and the size of the fund relative to NYSE market capitalization. Figure 3 combines the transparency index with the funds' objectives. The last figure (Figure 4) presents groups of funds categorized according to both their source of funding and their objectives.

FIGURE 1 Source of funding and relative domestic scale (size/GDP2006)



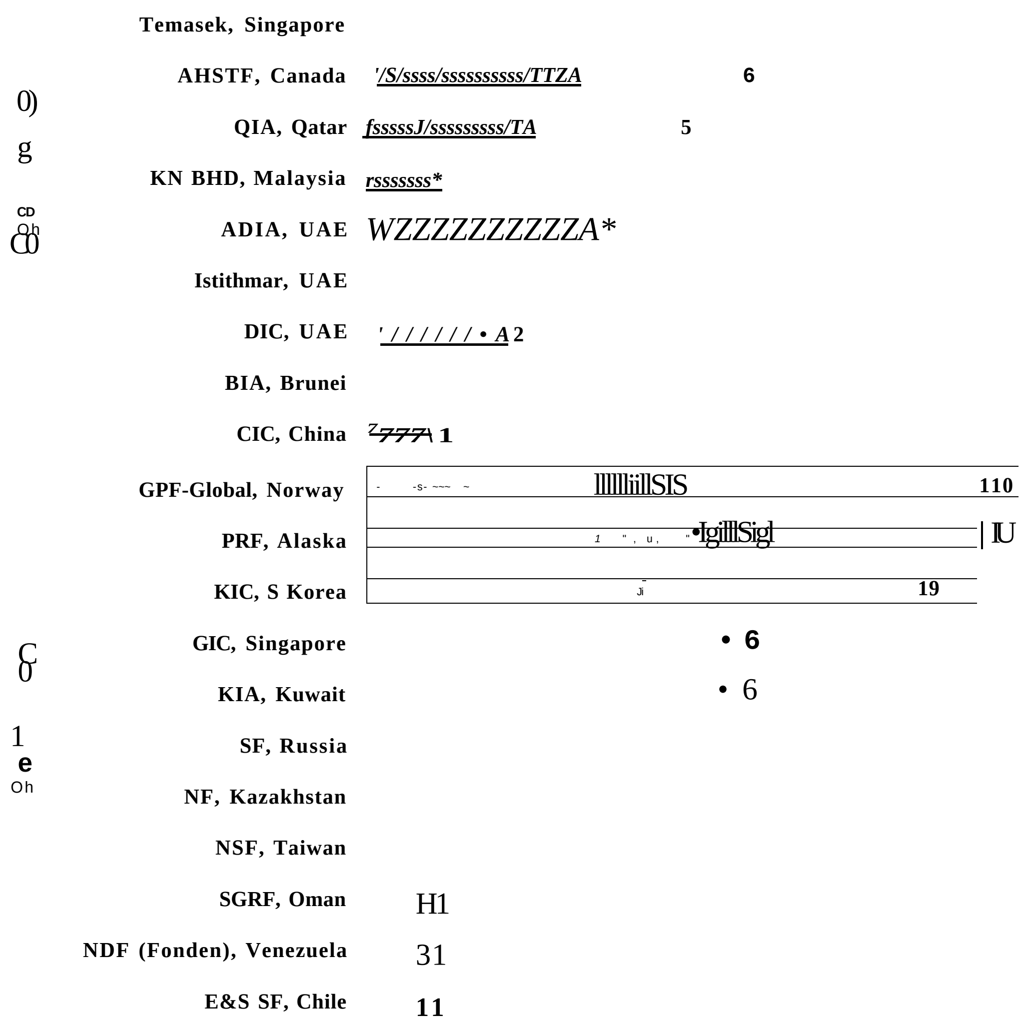
Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds" and "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

FIGURE 2 Objectives and relative global scale (percentage of NYSE capitalization)



Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds" and "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

FIGURE 3 Objectives and transparency (L-M Transparency Index in August 2009)



Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds" and "Sovereign Wealth Fund Institute." http://swfmstitute.org/.

FIGURE 4 Source of funding and initial perception of objectives

	Precautionary	Speculative
gí O T3 O i O u c o £	GIC, Singapore KIC, South Korea NSF, Taiwan	CIC, China Temasek, Singapore BIA, Brunei KN BHD, Malaysia
•1 T3 O 1 o U	GPF-Global, Norway KIA, Kuwait SF, Russia PRF, Alaska NDF (Fonden), Venezuela NF, Kazakhstan ESSF, Chile SGRF, Oman	ADIA, UAE QIA, Qatar AHSTF, Canada Istithmar, UAE DIC, UAE

Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds" and "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

SELECTION OF CASE STUDIES

Earlier in this section, I identified a number of different criteria based on which one can categorize SWFs. These criteria included total asset value; size of the fund relative to the domestic economy, or global financial markets; sources of funding; degree of transparency; and general perception of objectives. Two of these criteria, i.e., degree of transparency and objectives, have been the source of much debate among financiers, politicians, and academics recently. In order to choose the final candidates for case studies, I have combined these two critical criteria in figure 5 for the same top twenty funds discussed and compared earlier.

There are few points that I should mention regarding this categorization and diagram. First, I have modified the L-M Transparency Index, discussed earlier, and have transformed it into a dichotomous variable. The L-M index rates the SWFs on a one-to-ten scale according to the essential principles of transparency presented by Linaburg and Maduell.[11] Although this index provides a good starting point for measuring transparency, some of the criteria—e.g., availability of address and phone number of the fund and the maintenance of the fund's webpage—are too simplistic. Of the ten transparency criteria indicated by Linaburg and Maduell, only six—including the reasons for the establishment of the fund , the issuing of annual reports, and the market value of the portfolio—are sufficiently meaningful to merit inclusion in an index. For the purpose of this research, and to correct for simplistic criteria, I have categorized funds with an L-M Transparency Index of 6 and above as "transparent" and those with a rating of 5 and below as "opaque."

Second, I have taken a strict approach with respect to the assessment of the objectives. Funds whose objective (whether explicitly stated or not) is either saving for

[11] **See Table 4 for more details.**

the future—including meeting future public pension obligations, preserving the value of non-renewable energy resources for future generations, or long-term developmental goals— or for balance of payments stabilization are considered "precautionary." Funds with no clear agenda or those with an immediate focus on the current value of the fund and the maximization of its returns—including those with investment diversification, return maximization goals, or focus on equity markets—are considered "speculative."

The selection of final case studies consists of four SWFs, with each fund representing a quadrant in figure 5. Each quadrant in figure 5 contains a number of funds, any one of which might be a candidate for the final selection. In order to ensure a sound combination of case studies, I have selected the case in accordance with the following criteria. First, the size of the fund matters, particularly when compared with other funds or assessed in connection with the market capitalization of a major stock exchange like the NYSE or LSE. The assumption is that, the larger the fund, the greater its potential impact on global financial markets, and, in turn, its importance in global studies. Second, a good selection of cases should be geographically diverse. Therefore, though there is a high concentration of SWFs in the Middle East and East Asia, I have chosen funds that are geographically diverse. Third, I chose to exclude unique or special cases such as China and Chile in order to facilitate the generalization of findings.

FIGURE 5 Combined criteria: transparency and objectives

	Precautionary	Speculative
Opaque	SF, Russia NDF, Venezuela NSF, Taiwan NF, Kazakhstan ESSF, Chile SGRF, Oman	ADIA, UAE CIC, China QIA, Qatar BIA, Brunei KN BHD, Malaysia Istithmar, UAE DIC, UAE
[illegible]	GPF-Global, Norway GIC, Singapore KIA, Kuwait PR, Alaska KIC, South Korea	Temasek, Singapore AHSTF, Canada

Sources: Lyons, "State Capitalism: The Rise of Sovereign Wealth Funds" and "Sovereign Wealth Fund Institute." http://swfinstitute.org/.

Taking all of the above considerations into account, I have chosen four case studies from figure 5 that achieve a reasonable balance between geographical diversity, age, and size: the SWFs of Norway, United Arab Emirates (ADIA), Singapore (Temasek), and Russia. The Government Pension Fund-Global (GPF-Global) of Norway is one of the most transparent funds, with a precautionary agenda, as well as a clear investment strategy. This fund is held by a well-established democracy with an inherently open economy in Europe. It can serve as a benchmark for assessing other funds in a number of areas, including performance, governance, and transparency. The GPF-Global has the largest assets in its class of transparent-precautionary funds. It can also serve as a good example for other funds and for current and future efforts in formulating codes of conduct and global governance.

In the class of transparent-speculative funds, I have chosen Temasek of Singapore, which also is representative of East Asian economies. Although categorized as transparent, its L-M Transparency Index was below that of Norwegian fund. However, in terms of assets, Temasek is much larger than Alberta Heritage Fund, the other fund in this class. The Abu Dhabi Investment Authority (ADIA) of United Arab Emirates is also one of the most interesting cases. This fund manages the world's largest pool of assets, both in absolute and relative terms. At the same time, it is one of the low-transparency funds. This fund has already acquired stakes in financial institutions and other industries both in the region and in Europe.

Russia has the largest fund in the class of non-transparent and precautionary funds. The Russian fund also represents another characteristic—and, perhaps, a complication—to the case selection, in that while the other selected sovereign funds are a few decades old, the Russian fund, which was established in 2004, represents a class of emerging SWFs. Only recently, in February 2008, the Stabilization Fund was split into two funds, one managing official reserves, while the other became the official sovereign wealth fund, referred to as "National Wealth Fund." Although the Russian fund does not have much overseas investments at the moment, partial ownership of, or even expressions of interest in the infrastructure sectors of other countries (such as Germany) have raised concerns.

METHODOLOGY

There are three points that I wish to highlight. First, as I have indicated, some of the theoretical perspectives discussed in the previous chapter are not mutually exclusive. For instance, the pure economic explanation for the creation of sovereign funds (wealth smoothing) shares some feature with the domestic compensation argument (resource curse or Dutch Disease argument). Therefore, it is not possible, nor is it the purpose of this research, to either refute a theory or suggest a single theory to explain the creation and evolution of SWFs.

Second, as mentioned earlier, the purpose of a fund may change over time. For instance, the agenda of a fund which was set in the 1950s or 1970s may be less relevant today, for two main reasons. One is that, over time, countries undergo structural changes in their modes of production, society, and in some cases, their political system. Globalization has also made domestic transformation inevitable. The other reason is that the shape and nature of a country's interdependency with the outside world changes as a result of political and economic changes on both the global and domestic levels.

Therefore, the proper approach would be to look at the SWFs longitudinally, and not merely at a single point in time.

Third, all of the theoretical perspectives discussed in the previous chapter can be applied to a fund, depending on the period being considered. In other words, we should expect governments to tap into their SWFs, at times of economic contraction or financial crisis, in order to finance their balance of payments, and budget deficit in order to boost the national consumption and avoid recession. Many states such as Norway and Russia, introduced economic stimulus plans when faced with the global economic downturn. They increased government expenditures, which was partially financed through their SWFs. At times of economic prosperity, on the other hand, we should expect the governments to adopt a higher risk-taking threshold. They may become aggressive capitalist entrepreneurs with the goal of achieving the highest return or they may invest (or divest) in areas and industries as they see fit, based on their political agenda or foreign policy goals, if any. Good examples are the Norwegian fund that, on various occasions, has divested from industries that were involved in human rights violations, and the Abu Dhabi fund that had to forego an investment opportunity that, despite being economically sound and profitable, was religiously unacceptable.[12]

What this behavior tells us is that SWFs are theoretically progressive. More importantly, while various funds may show similar behavior at times of economic contraction, it is the times of prosperity that can really tell us what the differences are between the various funds. Therefore, in order to ascertain the main differences between

[12] In 1999, ADIA passed on an opportunity to participate in the $310m buyout of Champagne makers Mumm and Pierr-Jouet. The business was sold for $505m to Allied Domecq in 2001. For further information see Emily Thornton and Stanley Reed, "A Power Player Emerges in the Gulf," *BusinessWeek*, no. 4089 (2008).

the funds, more attention should be paid to periods of normal or booming economic activity.

The study of funds during times of international political crises compared to periods of stability may also shed some lights on conditions under which states are more likely to use their funds as a means of foreign policy. The idea is that investor states may pursue opportunities for economic statecraft during the times of political crisis, while during times of international political stability commercial motives are more likely to prevail. Although this approach may provide us with an opportunity to examine the behavior of SWFs during the times of political crisis (versus political stability) and explore potential factors that increase the likelihood of states pursuing economic statecraft through their funds, it does not allow us to test the behavior of investor states against other theoretical perspectives.

The main thrust of the research is to distinguish between the pure economic motives (specifically, balance of payments corrections) and alternative IPE perspectives. Dividing the periods of study between times of economic austerity versus abundance—instead of political crisis versus stability—is more relevant for this study for two main reasons. First, the choice of times of economic austerity versus economic abundance is the scenario under which investor states would most likely use their funds for pure economic purposes. Additionally, since the investor states maintained an overall balance of payment surplus during the life of their SWFs, the study cannot determine specifically whether states will use SWFs to redress balance of payments deficits. However, if economic motives drive SWFs, one would expect to observe this behavior during times of economic crisis rather than during political crises. By focusing on times of austerity and abundance, the study's research design favors the conventional economic explanation. For this reason, a finding of non-economic motives during times of economic crisis would be compelling evidence in support of IPE perspectives.

In the following chapters (case studies), I will first discuss the circumstances under which the SWFs were established. I will then discuss their current situation in terms of their operations and management. By doing so, I will establish the period of study for each fund. The period of study will be different in each case as Norway, Abu Dhabi, Singapore, and Russia established their funds at different times. Then I will review periods of economic downturn. Specifically, I will look at the country's foreign account, or oil prices, and other recession-related data specific to that country. In all cases, the recent sub-prime mortgage crisis provided the most suitable, and somewhat comparable situation, for the study of funds under economic hardship. I will discuss the behavior of the fund during the economic downturn and test the hypothesis that SWFs are sources for fiscal corrections during economic slowdowns. This assertion is in line with the economic view which is expected to apply mainly to periods of economic contraction. If, however, a fund does not act as expected, i.e., does not provide financial resources during times of economic contraction, we would know immediately that the fund has other—possibly non-commercial—purposes that economic on its agenda.

Subsequently, I will focus on periods of normal activity or economic expansion. The hypothesis is that during such times, states (or funds) are not financially constrained and therefore are free to utilize the funds' resources in a way that reflects the true goals of the funds. It is during these periods that we can distinguish the true purpose of the funds and observe how states balance various goals. In particular, we should be able to see whether a fund's investment decision making is motivated primarily by non-economic factors (economic statecraft) or by profit-loss calculations (state entrepreneurship or domestic compensation). In the case of non-political motives, characteristics such as the risk profile of the fund's portfolio, the existence of a well-established income redistribution mechanism, the size of the state, and resource-dependency can help us determine which of the two goals (state entrepreneurship or domestic compensation) are being pursued.

In order to determine which of the three theoretical perspectives prevails in explaining different stages during the life of a SWF, I introduce a number of key markers (see Appendix D) that fall within each theoretical framework discussed in the previous chapters. The realist explains the creation of SWFs in terms of state's power calculation. If SWFs were created for conduct of economic statecraft, then one should be able to observe certain key markers or behavior. For instance, there should be a close link between the management of the fund and the incumbent administration.[13] Political elites in the owner states of SWFs may also refer to the fund as foreign policy tool or means of power. Such statements are also indication of purpose of the funds.

The investment structure (portfolio) of the fund itself can also provide more insights into the reasons for its creation and operation. If the fund's portfolio consists of investment in sensitive or controversial industries such as defense, or in consistently-unprofitable areas, then one should look for reasons other than commercial for the operation of the SWF.

[13] The key here is the relationship between the fund's manager and the government. Where the fund itself is located (in terms of state's administrative structure) may not be as important since the fund can be formally within a specific administration or ministry but operate under minimal supervision or have independent decision making.

States that have historically intervened in the economy—especially at times when domestic markets lacked efficient economic actors—or have established state-owned enterprises (SOEs), are more likely to have established sovereign funds. SWFs, as a manifestation of state entrepreneurship, are expected to manage national wealth efficiently, and so we would expect them to act somewhat similar to private financial institutions, i.e., manage the portfolio actively and sophisticatedly, optimize risk and profit, and respond to global market movement.[14] The management of SWFs with an entrepreneurial approach is expected to be delegated to professional fund managers or independent investment experts. A portfolio that contains more risky assets (equities) than low-risk fixed-income instruments (bonds or treasury bills) also indicates a higher risk tolerance (and therefore possibility for higher returns) compared to conservative or precautionary funds. For entrepreneurial states, this is an ongoing and dynamic process that involves continuous learning, adaptation, and sometimes speculations.

As mentioned earlier, the three theoretical perspectives may share traits. Therefore, some of these markers can be applied to multiple perspectives. For instance, states whose SWF is aimed at domestic compensation, may still have independent or external managers. However, if a country is small, open, or resource-abundant—and in general, vulnerable to external shocks—it is more likely that it has established a SWF for domestic compensation purpose. Additionally, if the SWF account is integrated into the national budget and is drawn upon on various occasion, for instance for pension payments or financing government expenditures, it well may be the case that the SWFs' assets are used for domestic purposes.

[14] States with entrepreneurial skills and spirit allow their SWFs to engage in sophisticated, and sometimes complex, transactions such as mergers and acquisitions, and indirect investments.

Two additional markers can also help identify SWFs that were created for domestic compensation purposes. The first marker—mainly applicable to developed and open democracies—is the existence of an efficient domestic redistribution mechanism that can funnel the proceedings from SWFs investment abroad to the society. The other marker that is more applicable to non-democratic states is the lack of an efficient system of taxation. Inefficient or non-existing taxation system means that the government has to rely on external sources of income for budgetary purposes. Additionally, SWFs aimed at domestic compensation plans, most probably, have a more conservative portfolio with longer-term investment horizon compared to entrepreneurial funds.

CHAPTER IV

GOVERNMENT PENSION FUND-GLOBAL, NORWAY

The Government Pension Fund-Global (GPF-Global) of Norway is one of the world's largest SWFs, with total assets under management of 2,549 billion krone[1] (approximately $454.5 billion) as of the end of September 2009. The GPF-Global is one of the most transparent funds. The history of the fund dates back to more than two decades ago, and as it will be shown, over its lifetime, the fund's operations have been consistent with various theoretical perspectives at different points in time. At the beginning, the fund's mission was to provide necessary resources for meeting the government's future pension obligations. The GPF-Global has provided financial support to the government at times of economic contraction, or large budget deficits.

In normal times, however, the investment decisions of the GPF-Global were made according to a set of non-economic guidelines, which are expressions of the Norwegian national political consensus. As will be discussed, the purely economic view is not a relevant framework for explaining active ownership motivated by the ideal of socially-responsible investment, or sanctioning investment in areas that are in contradiction to the fund's Ethical Guidelines. In fact, the Norwegian foreign policy agenda, encapsulated in the Guidelines, determines where investments (or divestments) would be made.

In this chapter, I will first start with a discussion of the economic and political circumstances that have led to the creation of the GPF-Global. I will show that the creation of the fund was preceded by an external economic shock (first oil crisis), a

[1] "Government Pension Fund-Global, First Quarter 2009," (Oslo: Norges Bank Investment Management 2009).

massive current account deficit, and the recognition that the existing funding structure for future public pension obligations was inadequate. Second, I will discuss the current status of the fund and present an overview of the fund's current portfolio and performance.

Third, I will identify periods of economic hardship or financial crises and discuss the role (if any) played by the Norwegian SWF in smoothing the external shocks to the economy or easing the pressures on national budget or balance of payments. The hypothesis is that GPF-Global function at times of economic contraction more according to the economic idea (sterilizing external financial shocks or smoothing domestic wealth or consumption). Fourth, I will focus on the period of normal activity and discuss the evolution of the fund's functions and goals. The hypothesis is that, in the absence of financial constraints, the fund's investment decisions and management will reflect the actual, and perhaps non-expressed, agenda of the fund. For instance, as it will be shown, GPF-Global started to incorporate non-commercial, and somewhat political, factors into its decision making as early as 2004 with the involvement in an oil company in Africa and the related disputes.

Finally, as discussed in the previous chapter, a SWF may have several goals on its agenda. This case study identifies various objectives of the GPF-Global. The conclusion of this chapter contains a discussion of the various potential objectives of the GPF-Global and how the Norwegian government balances these goals against each other.

CREATION OF GPF-GLOBAL

The history of the GPF-Global as well as its source of funding is closely related to the petroleum sector. Therefore, a brief history of the Norwegian petroleum industry is relevant. In 1963, Norway proclaimed its sovereignty over the continental shelf and begun the exploration and exploitation of submarine natural resources. The Statoil (the state oil company) was established in 1972. Only a year later, and before the country could extract profit from the petroleum sector, Norway was hit by the first oil crisis. Gasoline was rationed, car-free days were introduced, and Norway's King Olav took the tram. The Statfjord field was discovered in the North Sea in 1974, but production from this field started only in 1979 and the Statoil became the sole operator of the field in 1981.[2]

The second oil crisis created a recession in most developed countries, but not in Norway—an oil exporter—that had focused on the petroleum sector. Heavy reliance on oil, however, had its own downside. Norway gradually lost its international market competitiveness and experienced de-industrialization, a phenomenon commonly known as Dutch Disease. In the early 1980s, while liberalization and privatization were occurring in many other countries, the conservative government of Norway continued to heavily regulate the economy, going so far as to have the Storting (the Parliament) setting the interest rates at a much lower rate than the market level.[3] When oil prices fell dramatically in December 1985, the artificially-produced economic prosperity of the mid-

[2] "The Norwegian Oil History," Norwegian Petroleum Directorate (Oljedirektoratet), http://www.npd.no/English/Om+OD/Nyttig/01je-ABC/Norsk+oljehistorie/70_tallet.htm.
[3] Ola Grytten, "The Economic History of Norway," in *EH.Net Encyclopedia,* ed. Robert Whaples (2008).

1980s could no longer be sustained, and Norway experienced a huge deficit.[4] Norway managed to correct the current account deficit after almost three years. Since 1989, Norway has continuously sustained a current account surplus. The current account surplus has been more than 12 percent of the GDP, reaching 16.4 percent in 2006, the highest point in the past decade.[5] Today, Norway is the world's fourth-largest exporter of oil (after Saudi Arabia, Russia, and Iran) and third-largest exporter of gas (after Russia and Canada).[6]

It took Norway almost two decades to realize that the oil reserves are not available infinitely. For long, it was believed that the oil and gas reserves in the Norwegian shelf were be depleted as early as 2015. It was only in June 2009 that Royal Dutch Shell, Europe's largest petroleum company, announced that it had made a natural gas discovery 360 kilometers (224 miles) offshore Bronnoysund in the northern Norwegian Sea.[8]

On June 22, 1990, the Storting passed the Government Petroleum Fund Act in order to support the long-term management of proceeds from the oil revenues. The Oljefondet (the Petroleum Fund) was established the same year; however, the first net transfer to the fund took place only in 1996. Between 1998 and 2002, equities and non-government bonds were also added to the fund's portfolio. On December 21, 2005, the Storting passed the Government Pension Fund Act to "support central government saving to finance the National Insurance Scheme's expenditure on pensions and long-term

[4] Average crude oil price fell about 48 percent from $27 in 1985 to $14 per barrel in 1986. The current account balance that had a $3 billion surplus in 1985 experienced a deficit of $4.5 billion in 1986.
[5] "External Trade with Commodities," Statistics Norway, http://www.ssb.no.
[6] "The World Fact Book," CIA, https://www.cia.gov/library/publications/the-world-factbook/docs/rankorderguide.html.
[7] "OLF the Norwegian Oil Industry Association," http://www.olf.no/about-olf/category292.html.
[8] Marianne Stigset, "Shell Gas Find in Norway May Be Biggest in 12 Years," *Bloomberg,* June 19, 2009.

consideration in the application of petroleum revenues."[9] As a result, the Government Petroleum Fund Act of 1990 was repealed. On January 1, 2006, the Government Pension Fund was established, indicating its mission as supporting a "broader pension reform, highlighting also the fund's role in facilitating government savings necessary to meet the rapid rise in public pension expenditures in the coming years."[10] The GPF-Global was in fact one of two funds that were created under the umbrella of the Government Pension Fund for the management of the latter's foreign assets.

The other fund was the Government Pension Fund-Norway (GPN-Norway), which managed the domestic assets of the Government Pension Fund. Under the 2005 Act, the responsibility of managing both GPF-Global and GPF-Norway rests with the Ministry of Finance. The operational management of the GPF-Global has, however, been delegated to Norges Bank (the Norwegian Central Bank), while Folketrygdfondet[11] has been managing the daily operations of the GPF-Norway.[12] The GPF-Global accounted for 95 percent of the overall value of the Government Pension Fund at the end of the first half of 2008, while the GPF-Norway accounting for the remaining 5 percent. Figure 6 presents a timeline of the administrative evolution of the fund.

[9] "Provisions on the Management of the Government Pension Fund," (Ministry of Finance, Government of Norway), 7.

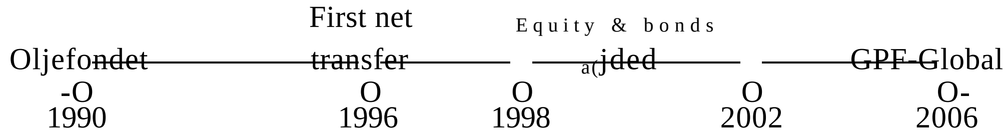
[10] "Background Note: Norway's Position in Relation to the International Debate on Sovereign Wealth Funds," (Asset Management Department, The Norwegian Ministry of Finance, 2007), 7.

[11] Folketrygdfondet is a company by special statute, with the Norwegian state as the sole owner. It manages the Government Pension Fund-Norway, with assets under it management of 113 billion krone at the end of 2007. For more information see http://www.ftf.no/about_ftf.html.

[12] The Government Pension Fund-Norway is invested in equities and fixed-income vehicles of Norway (85 percent of the benchmark portfolio), as well as in Denmark, Finland and Sweden (15 percent of the benchmark portfolio).

[13] "Chapter 5: The Management of the Government Pension Fund," in *National Budget 2009* (Ministry of Finance, Government of Norway), 4.

FIGURE 6 Timeline of the evolution of the Norwegian SWF



Both GPF-Global and GPF-Norway's major objective is to generate a higher return than the benchmark over time, within the defined risk margin, with the goal of "safeguarding the basis of future welfare, including national pension."[14] Norges Bank and Folketrygdfondet exploit their defined risk margin by investing in securities that fall outside of the scope of the benchmark portfolio and investing other portions of the fund in certain securities set by the benchmark portfolio, in order to achieve returns in excess of the returns on benchmark portfolio.[15]

Although the GPF-Global is the official sovereign wealth fund of Norway, the period of study here will not be confined to the short period of 2006 and after. On the other hand, 1990 would not be the most appropriate starting point, as until 1996 the Oljefondet existed only on paper. Between 1996 and 1998, when it received some of the petroleum sector income, Oljefondet was more of a saving fund. It was only after 1998 that equities and non-government bonds were gradually added to the portfolio of the fund. Therefore, 1998 is a more relevant starting point. Where the fund stands today is the focus of the next section.

[14] Norges Bank website (www.norges-bank.no).
[15] "Chapter 5: The Management of the Government Pension Fund," 3.

GPF-GLOBAL, TODAY

The petroleum sector and activities related to this industry are the main source of funding of the GPF-Global. Other sources of cash flow are the fund's own return on investment and the net result of financial transactions associated with the petroleum sector. The detail of the cash flow of the GPF-Global is presented in Appendix E.

The Norwegian Ministry of Finance acts as the owner of the fund and reports on all matters related to the fund's performance to the Norwegian Storting. The operational management of the fund is delegated by the Ministry of Finance to the Norges Bank, specifically, to its Investment Management arm or NBIM.[16] A management agreement defines the relationship between the Ministry of Finance (as the delegating authority) and the Norges Bank (as the operational manager).[17]

The GPF-Global is managed partially by the Norges Bank and partially by external managers. However, the key management strategy is dictated by the Ministry of Finance. The Ministry of Finance sets the long-term investment strategy by defining the structure of the "benchmark portfolio," in accordance with the general consensus in the Storting, with regard to objective of high-return subject to moderate-risk. "The long investment horizon of the fund means that the portions invested in various asset classes and geographical regions can be determined on the basis of the assessment of expected long-term returns and risks."[18]

[16] NBIM is one of 4 wings of the Norges Bank with three main areas of responsibilities including managing the foreign currency portfolio of the GPF-Global (on behalf of the Ministry of Finance), managing the foreign currency portfolio of the Government Petroleum Insurance fund (on behalf of the Ministry of Petroleum and Energy), and managing Norges Bank's long-term portfolio of foreign exchange reserves. Source: Norges Bank website (http://www.norges-bank.no/templates/article____49384.aspx).
[17] "Government Pension Fund-Global," Norges Bank, http://www.norges-bank.no/.
[18] "Chapter 5: The Management of the Government Pension Fund," 2.

Norges Bank has to follow the benchmark portfolio closely, although it has been given some leeway. The Ministry of Finance has established the limits within which the expected return on the actual investment can deviate from the expected return on the benchmark portfolio.[19] The structure of the benchmark portfolio determines 90 to 95 percent of the actual portfolio return.

In January 1998, when the Oljefondet started to invest in the equity market, Norges Bank hired the first external manager. The first active equity mandates were set in December the same year. For fixed-income mandates, external managers were hired in April 2000 and after. The external managers were selected by looking at characteristics such as their information advantage, portfolio composition, and portfolio implementation methods. Norges Bank has continued to hire external managers as of December 31, 2007. The list of external managers is presented in Appendix F. The amount of assets managed by the external managers as a proportion of total fund assets was 11 percent as of June 2008 (the lowest level since equities were introduced in 1998), and rose to 13.5 percent by the end of September 2008.

The GPF-Global may be considered to be a role model with respect to transparency and information disclosure. The management of the fund is characterized by a high degree of transparency, information disclosure, and professionalism. At the international level, the GPF-Global actively participated in the International Working Group, sponsored by the IMF in May 2008, and contributed to the preparation of a set of

[19] The Ministry of Finance uses the 'expected tracking error' (ETE) as a risk measure to manage the market risk of the fund. The ETE is defined as the expected value of the standard deviation of the difference between the annual return on actual investment and annual return on the benchmark portfolio. The Ministry has limited the ETE to 1.5 percentage point, meaning that in two out of three years, the fund's return should not deviate from the return on the benchmark portfolio by more than 1.5 percentage points.
[20] "Government Pension Fund-Global."

voluntary guidelines referred to as the Generally Accepted Principles and Practices (GAPP), also known as the Santiago Principles.[21]

At the national level, Norges Bank (as GPF-Global manger) is required to report the results of its performance to the Ministry of Finance on a quarterly basis. In each Quarterly Report, Norges Bank provides an overall market review, a discussion of portfolio adjustments and changes in its market value, and associated risk and return figures. The report also provides updates on other issues, including those pertaining to corporate governance and the exercise of ownership rights, socially-responsible investments, and sustainable development (such as environmental protection and fight against child labor). The quarterly and annual reports are available to the public through the Norges Bank website.

The Ministry of Finance also uses Mercer Investment Consulting, a consulting firm, to verify the performance of Norges Bank in a more detailed and technical manner. The GPF-Global is also subject to audits by the Office of the Auditor General (OAG) or Riksrevisjonen. This office has agreed with Norges Bank to follow the audit approach employed by the Norges Bank Auditing Department. In 2007, the Ministry of Finance announced that it would hold a public hearing on amendments to the accounting and auditing clauses of the Central Bank Act to enhance controls and supervisions. The Ministry has also maintained that the increased complexity of the management of the

[21] Santiago Principles or Generally Accepted Principles and Practices (GAPP) for Sovereign Wealth Funds are the product of the International Working Group (IWG) of SWFs, which was established on May 1 2008 The IWG was tasked to prepare a set of voluntary principles that would promote a better understanding of the issues related to SWFs, including their institutional framework, governance and transparency. The IWG presented the Santiago Principles, a set of 24 voluntary principles, to the IMF on October 11, 2008.

[22] The Office of the Auditor General (OAG) or *Riksrevisjonen* is the Norwegian state's auditor, under and reporting to the Storting. The OAG conducts financial audits, performance audits, and corporate control (for more information on OGA see: http://www.riksrevisjonen.no/en/). OAG has served as an external auditor for organizations such as the Permanent Council of the Organization for Security and Co-operation in Europe (OSCE) in 2006.

GPF-Global, together with the increase in its assets, calls for measures beyond those designated by the internal audit department or support from the auditing firm Deloitte, which has been within the framework of the Central Bank Act.

Section Two of the Regulations on Management of the GPF-Global defines the administrative and management framework of the fund. The fund is placed on a separate account, denominated in Norwegian krone, with the Norges Bank. The capital is then invested in Norges Bank's name in financial instruments and cash deposits denominated in foreign currency. Norges Bank "shall seek to achieve the highest possible return on the investments in foreign currency within the investment limits set out in these regulations and guidelines issued under these regulations."[24]

The fund's capital is invested in non-Norwegian financial instruments, since investment in securities by Norwegian enterprises (i.e., those with head offices in Norway) is not permitted. These instruments fall into two major categories: equities and fixed-income instruments. According to the early regulations on the management of the GPF-Global, the proportion of equity instruments could vary between 30 to 50 percent, while that of fixed-income instruments could vary between 50 to 70 percent. Financial instruments in the portfolio may included derivatives, commodity-based contracts, and fund units. Table 7 shows the allowed distribution of equity and fixed-income instruments by region.

[23] Specifically, the Ministry of Finance aims to hold a public hearing with regard to these proposed Central Bank Act amendments: 1) Replace the Central Bank audit arrangement by an arrangement whereby the Supervisory Council appoints an external auditor for Norges Bank; 2) Establish legal authority for regulations regarding the accounting principles Norges Bank should observe; 3) Define the scope of the audit and the content of the auditors' report. For more information see "Chapter 5: The Management of the Government Pension Fund," 10.

[24] "Chapter 2: Regulations on Management of the Government Pension Fund-Global," in *Provisions on the Management of the Government Pension Fund* (Ministry of Finance, Government of Norway), Section 2.

[25] Folketrygdfondet (as the operational manager of GPF-Norway) manages domestic investments.

[26] "Chapter 2: Regulations on Management of the Government Pension Fund-Global," Section 4.

TABLE 7 Allowed regional distribution of financial instruments (percent)

	Equity instruments	Fixed-income instruments
Europe	40-60	50-70
Americas and Africa	25-45	25-45
Asia and Oceania	5-25	0-15

Source: Section 4, Regulations on Management of the GPF-Global, Ministry of Finance

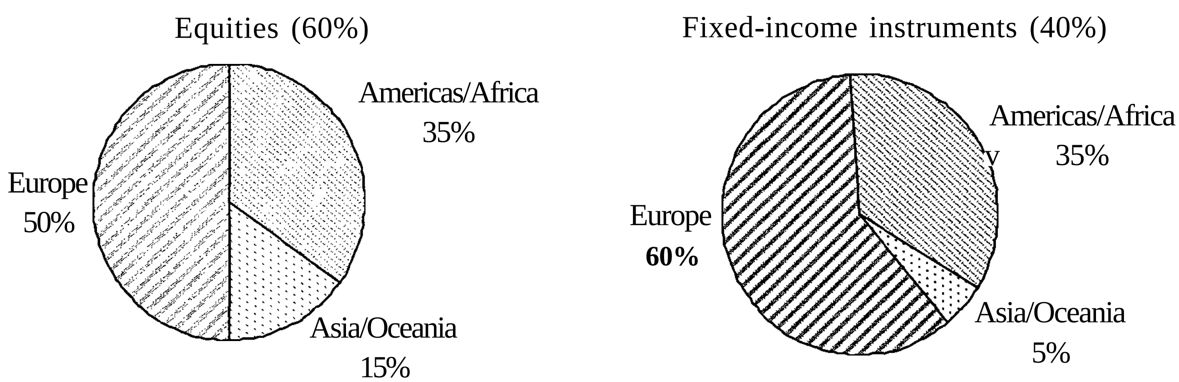
The most important strategic investment decision is made by the Ministry of Finance itself, which is setting the benchmark portfolio. The benchmark portfolio, in fact, controls the distribution of investment among various classes of assets and currencies, as well as geographical locations. Figure 7 shows the geographical distribution of the equities and fixed-income instruments in the benchmark portfolio.

In the recent benchmark portfolio, equities account for 60 percent and are composed of stocks, money market instruments, and derivatives, included in the Financial Times Stock Exchange (FTSE) All-World equity indices (large- and medium-size companies).[27] Fifty percent of the equities are invested in European countries, including Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Sweden, Spain, Switzerland, and the United Kingdom. Thirty-Five

[27] The FTSE All-World Index Series is the Large/Mid Cap aggregate of 2,700 stocks from the FTSE Global Equity Index Series. It covers 90-95percent of the investable market capitalization. The series is divided into Developed and Emerging segments, giving investors the opportunity to develop their own investible universe. The modular nature of the series provides maximum breadth of options for structuring portfolios with indices calculated at regional, national and sector level. For more information see "FTSE," http://www.ftse.com/index.jsp.

percent of equity portfolio of FTSE All-World equities is invested in Brazil, Canada, Mexico, South Africa, and the United States. The remaining 15 percent equities are invested in countries in the Asia-Pacific region, including Australia, Hong Kong, Japan, New Zealand, Singapore, South Korea, and Taiwan.

FIGURE 7 Geographical distribution of benchmark portfolio



Source: Norges Bank website

Fixed-income instruments or bonds account for 40 percent of the benchmark portfolio. Sixty percent of the fixed-income instruments consist of Lehman Global Aggregate (LGA)[28] and Lehman Global Real (LGR) in Europe, plus domestic government bonds included in Lehman Swiss Franc Aggregate. This portion of the fixed-income instruments is invested in 21 different countries and denominated in Euro, Pound

Sterling, Swiss franc, Swedish krona and Danish krone. Thirty-five percent of the fixed-income instruments are invested in similar bonds in the United States and Canada, and the remaining five percent in domestic government bonds in Australia, Japan, New Zealand, and Singapore. Table 8 shows the geographical distribution of the actual portfolio as of end the first quarter 2009. Table 9 provides the list of the ten largest equity and bond holdings of GPF-Global as of March 31, 2009.

TABLE 8 Geographical distribution of "actual portfolio" as of March 31, 2009

	Equity instruments	Fixed-income instruments
Europe	49.9%	60.0%
Americas	35.2%	35.1%
Asia and Oceania	15.3%	4.9%

Source: Government Pension Fund-Global, First Quarter 2009

[28] The Global Aggregate Index provides a broad-based measure of the global investment-grade fixed-rate debt markets. The Global Aggregate Index contains three major components: the US Aggregate Index ($300 million), the Pan-European Aggregate Index (€300 million), and the Asian-Pacific Aggregate Index (¥ 35 billion). Source: Lehman Brothers, Global Aggregate Index Fact Sheet.
[29] Norges Bank website and Section 1.2, Guidelines for the Management of the GPF-Global, Ministry of Finance.

TABLE 9 Largest GPF-Global holdings as of March 31, 2009 (million krone)

EQUITIES	
Royal Dutch Shell pic (Netherlands)	14,550
Nestle SA (Switzerland)	14,043
BP pic (UK)	13,221
TOTAL SA (France)	11,874
Exxon Mobile Corp. (US)	11,057
Roche Holding AG (Switzerland)	10,470
Vodafone Group pic (UK)	10,375
Telefonica SA (Spain)	9,550
Novartis AG (Switzerland)	8,961
Glaxo SmithKline pic (UK)	8,226
FIXED-INCOME INSTRUMENTS	
United States	85,083
Federal Republic of Germany	81,251
UK Government	78,770
Fannie Mae	75,961
Italian Republic	72,046
French Republic	48,161
Japanese Government	45,723
European Investment Bank	43,417
Kreditanstalt fur Wiederaufbau (Germany)	31,279
Bank of Scotland pic (UK)	23,505

Source: Government Pension Fund-Global, First Quarter 2009

Table 10 also shows the evolution of the quarterly market value of the fund and its components together with the changes in the percentage allocation of the underlying asset classes. The return on the fund's overall portfolio in the third quarter of 2008 fell to -7.68 percent, the lowest point in the fund's history. This was 1.84 percent below the benchmark portfolio return. The poor performance of both equities and fixed-income instrument contributed to this overall negative performance.

The fixed-income assets were primarily affected by the United States sub-prime mortgage crisis and the poor performance of the European and inflation-linked bonds. The equity section of the portfolio was also severely damaged by the losses in the United States banking sector.[31] Table 11 also provides quarterly data on the fund's return by asset class, as well as a comparison with the benchmark portfolio. It should be noted that excess return—i.e., the difference between the actual portfolio return and the benchmark portfolio return—is calculated in krone. As can be seen, the proportion of equities in the portfolio increased from 40 percent in 2007 to 60 percent in 2009, and the corresponding proportion of fixed-income instruments dropped from 60 percent to 40 percent.

[30] "Government Pension Fund-Global, Third Quarter 2008," (Oslo: Norges Bank Investment Management 2008).
[31] Ibid.

TABLE 10 Evolution of the "actual portfolio" as of June 30, 2009

	Ql 2007	Q2 2007	Q3 2007	Q4 2007	Ql 2008	Q2 2008	Q3 2008	Q4 2008	Ql 2009	Q2 2009
Market value (billions of krone)										
Equities	753	819	878	958	935	1,031	1,123	1,129	1,091	1,438
Fixed-income assets	1,124	1,120	1,054	1,061	1,011	961	997	1,146	985	948
Total fund	1,876	1,939	1,932	2,019	1,946	1,992	2,120	2,275	2,076	2,385
Allocation of assets (percent)										
Equities/fond	40.14	42.24	45.45	47.45	48.05	51.76	52.97	49.6	52.6	60.3
Fixed-income/fund	59.91	57.76	54.55	52.55	51.95	48.24	47.03	50.4	47.4	39.7

Sources: Government Pension Fund-Global Second Quarter 2008, Third Quarter 2008, and Second Quarter 2009 Reports

TABLE 11 Quarterly portfolio and excess return as of June 30, 2009 (percent)

	Qi 2007	Q2 2007	Q3 2007	Q4 2007	Qi 2008	Q2 2008	Q3 2008	Q4 2008	Qi 2009	Q2 2009
Return in Foreign Currency										
Equity portfolio	2.59	7.40	-0.30	-2.77	-12.67	-1.60	-13.12	-20.58	-8.84	19.49
Fixed-income portfolio	0.74	-1.19	2.10	1.30	0.87	-1.72	-1.19	1.55	-0.88	5.07
Total fund	1.48	2.23	1.15	-0.64	-5.62	-1.87	-7.68	-10.30	-4.81	12.67
Benchmark portfolio	1.39	1.93	1.33	-0.20	-4.79	-2.10	-5.97	-8.62	-4.48	10.60
Return in Norwegian krone										
Equity portfolio	1.04	4.86	-5.57	-1.59	-14.71	-1.90	-5.84	-8.41	-14.46	19.69
Fixed-income portfolio	-0.78	-3.53	-3.29	2.53	-1.49	-2.02	7.08	17.12	-6.99	5.25
Total fund	-0.05	-0.19	-4.20	0.56	-7.83	-2.17	0.06	3.45	-10.67	12.86
Benchmark portfolio	-0.15	-0.49	-4.03	1.01	-7.02	-2.41	1.90	5.38	-10.36	10.78
Excess Return	0.09	0.30	-0.17	-0.45	-0.81	0.24	-1.84	-1.93	-0.14	1.08

Sources: Government Pension Fund-Global Second Quarter 2008, Third Quarter 2008, and Second Quarter 2009 Reports

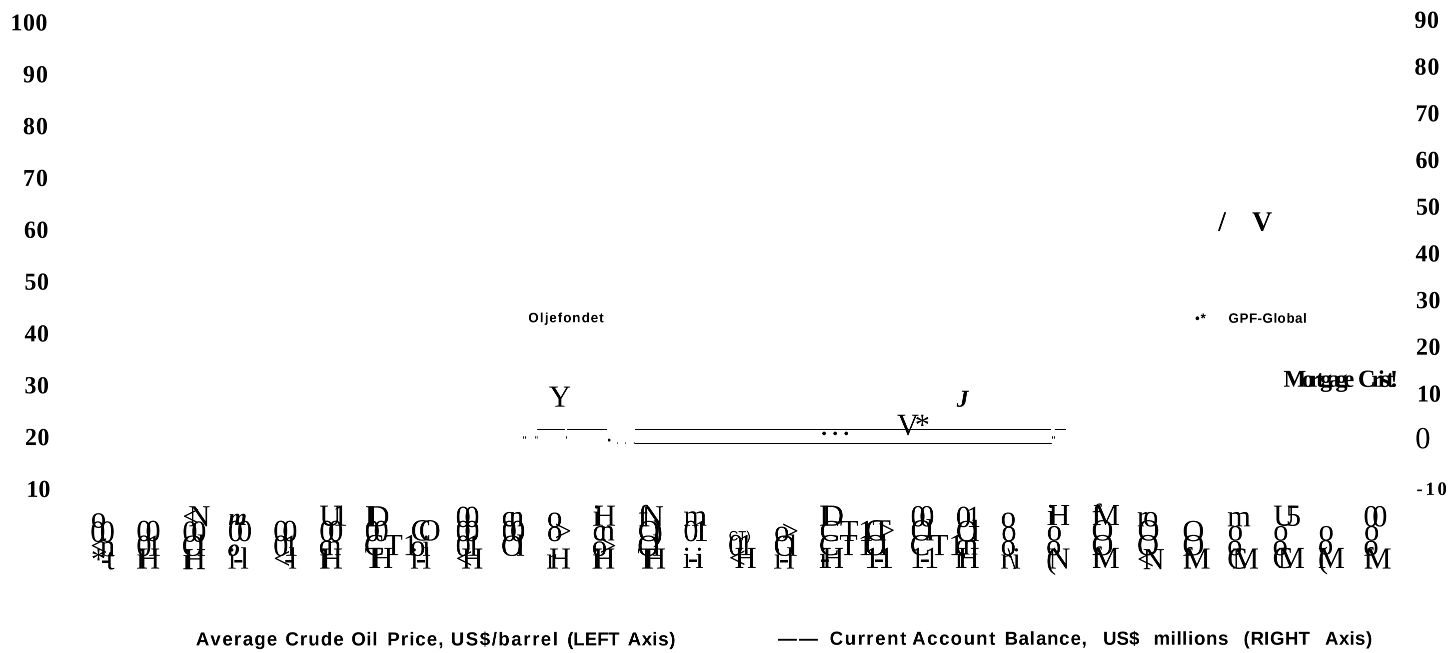
TIMES OF HARDSHIP AND GPF-GLOBAL

Since the creation of Oljefondet in 1990, there have been only two events that may have had a negative impact on the balance of payments of Norway. In 1998, average crude oil prices dropped by about 32 percent. The current account balance of Norway did not, however, experience a deficit, and only dropped sharply from $10 billion in 1997 to only $6 million in 1998.[32] Norway managed to sustain its overall balance of payments status through the capital account that offset the downward pressure on the current account. The Oljefondet, at the time, did not seem to have played much of a role in easing the economic pressure. It is not clear why this did not happen; the government may have decided that it was not necessary to use the petroleum money, or the fund may not have had resources sufficient to support the national economy, especially since the first net transfer to the fund took place only in 1996.

Unfortunately there is very little information about the balance and cash flow of the Oljefondet between 1990 and 2006. Therefore, any conclusions would be only speculations. Drawing conclusions about the behavior of the GPF-Global, which was established in 2006, during periods of low oil prices is in fact impossible since the price of oil has exhibited an upward trend since 2006 (see figure 8). Infrequent drops in oil prices are not, however, the only external factor threatening the Norwegian current account. There is another kind of crisis that both the Norwegian and global economy are exposed to—a financial crisis. Since 1990, the only financial crisis that has had a significant impact on the Norwegian economy is the recent sub-prime mortgage crisis.

[32] **International Monetary Fund., "IFS CD-ROM." (Washington, D.C.: IMF, 2009).**

FIGURE 8 Norway's current account status and average crude oil prices



Source: "International Financial Statistics." IMF, 2009.

The crisis began in summer of 2007 with a fall in the value of securities backed by US sub-prime mortgages. During 2008, many large financial institutions went bankrupt or were sold to other financial institutions. Major financial institutions such as Bear Sterns, Lehman Brothers, and Merrill Lynch were already in trouble. By the end of the year, the problem had developed beyond that of a purely financial crisis, as a crisis of confidence in the financial system and a global economic downturn took hold. Governments of many industrial countries, including the United States, Germany, and Japan, were forced to immediately inject money into their economies or introduce economic stimulus programs to boost employment and maintain the domestic consumption level.

The global recession did not leave Norway unaffected. On the national (macroeconomic) level, the Norwegian mainland GDP[33] had shrunken already by 0.8 percent by the end of the fourth quarter 2008, and the first quarter 2009 figures showed a further one percent decline. The total GDP also shrank by 0.4 percent in the first quarter 2009.[34] In late 2008, Jens Stoltenberg, the Norwegian prime minister, said that his government would soon announce more spending measures designed to boost the domestic economy.[35] The government announced a 20 billion krone ($2.89 billion) stimulus package that consisted of 16.75 billion krone in increased government spending with a focus on infrastructure and 3.25 billion kroner in tax relief for the business sector.[36] In January 2009 the government proposed amendments to the 2009 budget. In

[33] Mainland GDP refers to the GPD that excludes oil, gas, and shipping industries. Norway authorities believe mainland GDP to be a better indicator of the economic well-being because while the petroleum sector constitutes 25 percent of the economic growth, it only employs about one percent of the Norwegian labor force

[34] "Norway Enters Recession: Offical Data," ***Agence France Presse,*** **May 19, 2009.**

[35] "Norway SWF Takes Domestic View," ***Thomson Merger News,*** **December 31, 2008.**

[36] Elizabeth Cowley, "Oil-Rich Norway Sets Stimulus Plan " ***Wall Street Journal Europe,*** **January 27, 2009.**

February, it was confirmed that, in the face of the global financial crisis, the Norwegian government needed more financial resources in order to boost employment and protect generous welfare-state policies. Stoltenberg, in a speech to the Confederation of Norwegian Enterprise (NHO) said:

> To counter the effects of the financial crisis, I am letting you know that in 2009 we will use much more of the oil income than is justified by the expected returns from the pension fund… There will be extensive measures aimed at employment and welfare focused in a number of different sectors. Norway will through these measures rank among the European countries doing the most to counter the crisis.[37]

In May 2009, the government revised the national budget for 2009 and introduced the most expansionary fiscal policy in 30 years. The initial fiscal stimulus package of 0.7 percent was increased to three percent of the non-oil GDP, and the government announced that it planned to spend 130 billion krone ($20 billion) from oil revenues to tackle the global financial downturn.[38] This reflected a drastic increase in the use of oil income, which was 9.5 billion krone in 2009. Subsequently, the projections for domestic economic variables were revised. Table 12 summarizes key economic variables in 2006 prices. The proposal indicated the use of 39 billion krone in excess of the estimated return on the GPF-Global.

The GPF-Global itself was hit by the financial crisis. The fund's return for the third quarter of 2008 fell to -7.68 percent in the international currency basket. This rate, the lowest in the fund's history, was mainly a result of the downturn in equity markets.

[37] "Norway to Dip into Oil Fund Due to Financial Crisis," ***Agence France Presse*,** **January 7, 2009.**
[38] "Norway Enters Recession: Offical Data."

The negative impact of the movements in the equity markets on the value of the fund was, however, offset by the weaker krone. Therefore, the market value of the fund increased from 1,992 billion krone at the end of the second quarter to 2,120 billion krone at the end of the third quarter of 2008.[39]

TABLE 12 Selected economic variables, 2008 actual and 2009 projections

	2008 (billion krone)	2008 (percent)	2009 (percent)
Private Consumption	992.3	1.5	0.0
Gross Fixed Investment	527.2	3.3	-6.3
Gross Domestic Product	2,537.9	2.0	-1.9
Mainland GDP	1,842.5	2.4	-1.0
Current Account (as a percentage of GDP)		18.4	9.8

Sources: Statistics Norway and Ministry of Finance

GPF-Global had even prepared for the bankruptcy filing by Lehman Brothers, in which the fund owned a 0.27 percent equity share and 4.38 percent worth of fixed-income securities (about $840 million of stocks and bonds). Norges Bank spokeswoman,

[39] **"Government Pension Fund-Global, Third Quarter 2008."**

Siv Meisingseth, told the media: "[t]his is a very serious situation which we are monitoring closely... But it is also a situation we have been prepared for."[40]

The United States mortgage market had a direct and negative impact on the GPF-Global's performance. The fund held stakes in both Fannie Mae and Freddie Mac. According to Yngve Slyngstad, the fund's Chief, the total exposure amounted to 88 billion krone (about $13.36 billion). Although the amount was relatively small (less than 0.4 percent of the fund portfolio), it was significant since the fund had considered this investment "the second most secure investment in the United States."[41] Later, in November 2008, and in the face of losses due to weak equity markets, Finance Minister Halvorsen said: "[t]his will be a hard year for the fund... this will be a year of losses, especially in the equity markets.. .Because we are very long term investors, we are not panicking, even if this is going to be a year of losses."[42]

As mentioned earlier, the GPF-Global is fully integrated into the national budget. The fiscal policy guidelines that Norway put in place in 2001 stipulated increasing use of the oil revenues. The government was permitted to develop a non-oil budget deficit of four percent (equal to the expected real return on the GPF-Global) over time. However, the guidelines had provisions for an active fiscal policy, when necessary, to counter economic volatility.[43]

One such event was the 2008 financial crisis, when the government had to revise the 2009 budget and propose further expansionary measures. Table 13 shows the

[40] Wojciech Moskwa and Camilla Knudsen, "Norway's Wealth Fund Says Was Prepared for Lehman," *Reuters,* September 15, 2008.
[41] Nina Berglund, "Oil Fund Takes 'Minor' Hit from U.S. Mortgage Crisis," *Aftenposten,* August 26, 2008.
[42] "Norway's Oil Fund Faces Losses in 2008," *Reuters,* November 10, 2008.
[43] "Press Release 48/2009: Revised National Budget 2009: Continued Expansionary Policies," (Ministry of Finance, Norway, 2009).

Norwegian government budget for 2007 and 2008 as well as the projected 2009 figures, along with the amount of the transfers required from the GPF-Global. The table shows that the non-oil budget deficit grew by almost a factor of 10 from 2008 to 2009, and the 2009 transfer from the GPF-Global was about 14 times that required in 2008.

TABLE 13 Fiscal budget balance and GPF-Global (billion krone)

	2007	2008	2009
Non-oil budget	-1.3	-11.8	-117.6
Transfer from GPF-Global	2.8	8.4	117.6
Fiscal Budget Balance	1.5	-3.4	0.0

Source: Ministry of Finance

In summary, it is somewhat difficult to draw definitive conclusions about the role and behavior of the Norwegian fund in times of economic hardship. The relatively brief existence of the GPF-Global does not offer data sufficient to test the changes in investment behavior or fund contributions to the national budget in times of global financial crises. Even if we extend the period of study by changing the starting point to the date on which the Oljefondet (the original petroleum fund) was established, we may still not be able to reach, definitive conclusions, because actual transfers to the fund started only in 1996, and since then there have been very few financial crises.

With all that being said, an examination of certain historical events preceding the creation of the fund can provide us with a better understanding of the context within which the fund was established. The original fund was created out of necessity and foresight, for inter-generational wealth smoothing purposes, and for the preservation of non-renewable resources. Over the course of almost 10 years, the fund evolved, developing a new structure with a more sophisticated agenda. Hit by the recent mortgage crisis and facing the risk of recession, the government of Norway revived the wealth smoothing thesis and tapped into the GPF-Global in order to maintain a balance budget.

Conventional wisdom is that if the country is ever in need (e.g., financial distress, liquidity shortage, etc.), the GPF-Global can be a source of relief for the government and the economy; recent events confirm this. What we do not know much about, however, is how the fund might be used during a time of normal economic activity or prosperity, when the economy is not financially constrained, nor threatened by external economic shocks. The following section discusses the GPF-Global structure and investment performance, at normal economic times, when the country is free from financial crises or economic contraction.

GPF-GLOBAL IN TIMES OF ABUNDANCE

GPF-Global has undergone several operational changes. As mentioned earlier, the major operational goal of the fund is to maximize returns on portfolio, subject to moderate risk, and in doing so, GPF-Global has to follow the general structure of the benchmark portfolio set by the Ministry of Finance. The structure and weighting of the benchmark portfolio is, however, not constant; it is reviewed regularly and may be adjusted periodically as a result of changes in the market value of securities in the portfolio, or global market developments. Traditionally, 40 percent of the portfolio was made up of equities. Starting in 2007, the allocation of assets to equities has been increasing gradually to the target 60 percent.[44] With a higher equity share in the portfolio, the GPF-Global is more exposed to global market volatility and risks, but, at the same time, has a potentially higher return.

Another initiative by the Ministry of Finance was raising the topic of inclusion of real estate assets in the benchmark portfolio of the GPF-Global in 2007. The Ministry proposed to the Storting that up to five percent of the capital of the fund be invested in real estate over time, with a corresponding decrease in the proportion of bonds. The Ministry outsourced the task of preparing a report, on how to formulate real estate investment strategy, to Partners Group AG, a Swiss company.

Another significant change in the GPF-Global's investment strategy is related to the limits on the holding of voting shares in a single company. Initially, the fund could hold no more than five percent of a company's voting share. In June 2008, the Storting approved an increase in the limit to 10 percent[45] As of September 30, 2008, however, the fund's largest ownership interests with voting power in an individual company were approximately six percent.[46]

[44] "Government Pension Fund-Global, Second Quarter 2008," (Oslo: Norges Bank Investment Management, 2008).
[45] Initially, Ingve Slyndstad, the fund's Chief, had asked the government to allow up to 15 percent investment in individual companies. But the Storting agreed on 10 percent limit, which includes the 5 percent planned investment in real estate. For more information see John Acher and Wojciech Moskwa, "Norway Oil Fund Big Buyer of Stocks, Eyes New Deals," ***Reuters*****, May 29, 2008.).**
[46] "Government Pension Fund-Global, Third Quarter 2008."

Perhaps, the most significant development in the history of the fund is the introduction of the Ethical Guidelines by the Ministry of Finance. This is of paramount importance as the Guidelines set limitations of non-economic nature on the investment decision making of the fund. The Guidelines were officially issued in December 2005 pursuant to the regulations pertaining to the management of GPF-Global, dated November 19, 2004. The Ethical Guidelines are based on two main principles. First, GPF-Global should manage a reasonable portion of the petroleum wealth in such a way as to generate a sound return over a long period and preserve the petroleum wealth for the benefit of future generations.[47] Second, the GPF-Global should not invest in areas or instruments that bear the risk of the fund contributing to "unethical acts or omissions, such as violation of fundamental humanitarian principles, serious violation of human rights, gross corruption or severe environmental damages."[48]

In 2008, the government conducted an evaluation of the Ethical Guidelines. The object of this evaluation was to "maintain broad-based [domestic] political support for the guidelines, as well as to gather any feedback that may contribute to strengthening the profile of the fund as a socially responsible investor."[49] As a part of this evaluation, the Ministry of Finance organized an international conference in Oslo, in January 2008, under the rubric of "Investing for the Future." Participants, who included academic figures, financial institutions, NGOs, and corporations, discussed the challenges of incorporating social and environmental factors into investment calculations and decision making processes.

[47] **The Ministry of Finance does not elaborate on how much the reasonable portion is.**
[48] **"The Ethical Guidelines."**
[49] **"Chapter 5: The Management of the Government Pension Fund," 11.**

The Ministry of Finance also held a public hearing on June 18, 2008, during which issues such as the need for changes or adjustments to existing policy measures, exercise of ownership rights, and the exclusion of companies from the GPF-Global were discussed. The Ministry also raised the question of whether "a minor part of the fund should be earmarked for special investment purposes, for example, within environmental technology or in developing countries."[50] The idea of a separate environmental fund was, however, abandoned later.

In complying with the Ethical Guidelines, Norges Bank (as the manager of GPF-Global) has two basic measures at its disposal. First, the Norges Bank can exercise its "ownership rights" to safeguard the GPF-Global's long-term financial interests. In doing so, Norges Bank follows its own internal guidelines by taking into account the United Nations' Global Compact[51] and the OECD Guidelines for Corporate Governance[52] and Guidelines for Multinational Enterprises. Norges Bank may occasionally delegate the exercise of ownership rights to external managers. During 2008, Norges Bank held shares in about 7,000 companies around the world. It also participated in 6,857 general meetings and voted in 6,143 of them.[54]

[50] Ibid.

[51] The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption.

[52] The OECD principles for corporate governance are intended to assist both OECD and non-OECD governments to evaluate and improve the legal, institutional and regulatory framework for corporate governance in their countries, and to provide guidance and suggestions for stock exchanges, investors, corporations, and other parties.

[53] The OECD Guidelines for Multinationals are a set of voluntary recommendations to multinational enterprises in major business ethics areas, including employment and industrial relations, human rights, environment, information disclosure, combating bribery, consumer interests, science and technology, competition, and taxation. For more information see http://www.oecd.Org/department/0,3355,en_2649_34889_l_l_l_l_l,00.html.

[54] "Government Pension Fund-Global, Second Quarter 2008."

One example of the exercise of ownership rights is the filing of a law suit in a Maryland Court in 2008 by GPF-Global seeking to delay a 23-December meeting by Constellation shareholders to vote for the takeover of their company by MidAmerican Energy Company, a unit of Warren Buffett's Berkshire Hathaway Incorporated.[55] GPF-Global held 4.8 percent shares in Constellation at the time. The GPF-Global's head of corporate governance, Anne Kvam, stated: "[i]n our opinion, the MidAmerican agreement undervalues Constellation, and we expect the board to work for a solution that offers the highest value... We are one of the biggest shareholders and take these necessary steps in order to safeguard our financial interests..."[56] As a result of this involvement, MidAmerican Energy failed in its three-month long pursuit of Constellation on December 17, when Constellation agreed to sell half of its business to French energy giant Electricite de France.[57] Norges Bank, in its quarterly reports, publishes updates on its performance with regard to voting at general meetings, as well as its dialogues with large energy and multinational companies on various issues, including the environment and child labor.

The Norges Bank's second measure in complying with the Ethical Guidelines is the "negative screening and exclusion" of certain companies from the fund's investment universe. This task is accomplished through the Council on Ethics. The Council was established on December 19, 2004 for the purpose of providing evaluations of various investment opportunities, and determining whether they are consistent with the fund's

[55] MidAmerican offered $4.7 billion to take over the Constellation in September 2008. This move was backed by the Constellation's board. However, in December 2008, Electricite de France said it would offer $4.5 billion for half of the Constellation's nuclear assets and would give the company the option to sell up to $2 billion more of its nuclear assets.

[56] Wojciech Moskwa, "Norway SWF Seeks to Block Buffett on Constellation," *Reuters*, December 17, 2008.

[57] Colin Barr, "Constellation Loss a Win for Buffett," *CNNMoney.com*, December 17, 2008.

ethical principles. The Council consists of five highly-educated members with backgrounds in environmental science, law, economics, and human rights, and it collects information independently and at its own discretion.[58] In addition to an annual activities report, the Council makes recommendations to the Ministry of Finance, who in turn make decisions regarding the negative screening or exclusion of companies from the universe of possible investments. Upon a request from the Ministry, the Council also investigates whether an investment may violate Norway's obligations under international laws.

For example, the fund became indirectly involved in a power play involving foreign states and ethical issues in late 2004. At the time, approximately 337 million krone of the GPF-Global (which was still referred to as the Oljefondet) was invested in stocks and bonds of Kerr-McGee Corporation. The company, through its one of subsidiaries, Kerr-McGee du Maroc Ltd., had entered into an agreement with the state-owned Moroccan oil company (ONAREP) for oil exploration on the continental shelf, offshore Western Sahara. The area was a Moroccan-occupied territory, a situation that had made it the object of UN condemnations.

In December 2004 the exile government of the Saharawi Arab Democratic Republic (SADR) and the Western Sahara Support Committee requested the Norwegian Ministry of Finance to exclude Kerr-McGee Corporation from GPF-Global's investment portfolio, on the grounds that Kerr-McGee, through its exploration activities, could enable Morocco to exploit the petroleum resources of the area. The Council regarded this

[58] The members of the Council on Ethics are: Andreas F0llesdal, Ph.D. (Professor at the Norwegian Center for Human Rights at the University of Oslo), Gro Nystuen as Chair of the Council (Associate Professor and Dr. Juris at the Norwegian Center for Human Rights at the University of Oslo), Bjern 0stbo (Director Corporate Finance at First Securities and Managing Director of First's Bergen Office), Anne Lill Gade (Product Safety Manager at Jotun A/S), and Professor Ola Mestad (Dr. Juris and Professor at the Center for European Law, University of Oslo). For more information on Council members see: http://www.regjeringen.no/en/sub/Styrer-rad-utvalg/ethics_council/Councils-Activities/Council-Members.html?id=434895.

as a serious violation of fundamental ethical norms, since it could strengthen Morocco's sovereignty claims and thereby contribute to the undermining of the UN peace process.[59] The company was excluded from the portfolio in 2005, a decision that was revoked only after a review in 2006 and the suspension of the Kerr-McGee operation in the disputed areas.[60]

Negative screening of companies also includes those that either "produce weapons that through their normal use violate fundamental humanitarian principles; or sell weapons or military material to states mentioned in Clause 3.2 of the supplementary guidelines for the management of the fund."[61] Additionally, companies whose activities create an unacceptable risk for the fund by contributing to any or a combination of the following items are excluded from the fund's investment universe:

- serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labor, the worst forms of child labor and other forms of child exploitation
- serious violation of individuals' rights in situations of war or conflict
- severe environmental damages
- gross corruption
- other particularly serious violations of fundamental ethical norms

Once a company is excluded from the investment universe, it will remain so until a regular review of excluded companies by the Council on Ethics establishes that the

[59] "Press Release 38/2005: Company Excluded from the Government Petroleum Fund," (Ministry of Finance, Norway, 2005).
[60] "Press Release 62/2006: KerrMcGee Corporation Is Again Included in the Government Pension Fund-Global," (Ministry of Finance, Norway, 2006).
[61] "The Ethical Guidelines."
[62] Ibid.

grounds for exclusion no longer exist. The Council will use the new information and recommend that the Ministry of Finance revoke the decision. The decision is then communicated to the Norges Bank immediately. Norges Bank, on request from the Ministry of Finance, may convey to the companies the reason for the Ministry's decision. Appendix G contains the list of excluded companies.

Negative screening and compliance with the Ethical Guidelines in general is taken very seriously by government officials. In an interview, Finance Minister Halvorsen stated that while Norway would prefer not to exclude companies, it would not shirk its responsibility to exclude companies that commit violations of ethical precepts, such as human rights abuses, environmental pollution, and corruption.[63] The Ministry of Finance is also of the opinion that the negative screening should include both the producers and sellers of weapons and military materiel. For instance, the Ethical Guidelines ban investment in companies that sell weapons to Burma, in order to "prevent contributing to human rights violations as the result of the Burmese regime's systematic repression of its own population... Such a formulation of the new measure is also well aligned with, for example, US and UK prohibition on the export of weapons and military material to Burma."[64] In 2008, Clause 4.4 of the Ethical Guidelines was revised to include companies that:

- Produce weapons that through their normal use violate fundamental humanitarian principles; or
- Sell weapons or military material to states mentioned in Clause 3.2. of the supplementary guidelines for the management of the fund.

[63] "Interview Norway's Halvorsen: Oil Fund to Grow in Tandem with Ethical Footprint," *Forbes*, April 13, 2007.
[64] "Chapter 5: The Management of the Government Pension Fund," 16.

In 2009, the Ministry of Finance excluded five companies from the fund's portfolio on ethical grounds.[65] Earlier, in December 2008, Norway hosted a conference that agreed on a new international ban on cluster munitions. As a result, Textron (US), in which GPF-Global held shares valued at 249 million krone at the end of July 2008, was excluded due to production of cluster munitions. The Finance Minister Halvorsen, confirmed that "[t]he company produces cluster weapons, which are banned pursuant to the Convention on Cluster Munitions."[66] Additionally, the world's largest gold mining company, Barrick Gold (Canada), was also excluded from the fund's portfolio in January 2009. The fund held shares in the company valued at 1.25 billion krone at the end of July 2008. The decision was made on the grounds of environmental damage.[67] The Ministry of Finance has also asked the Council on Ethics to review the companies in which GPF-Global holds shares that operate in the Palestinian territories. At the end of 2007, the fund owned equities in 12 Israeli companies and the bonds of three Israeli issuers. In early January 2009, after the Israel's attack on the Gaza Strip, Finance Minister Halvorsen asked the Council on Ethics to investigate whether the actions by companies in which the fund holds securities and which operate in the Palestinian territories are in compliance with the Ethical Guidelines. The finance minster stressed:

> In the light of increased conflict level in the Palestinian areas, I will ask the Council on Ethics for an account of council's work on matters related to companies that have operations in these areas... Investment in companies that contribute to an occupation against international law or

[65] These companies included Barrick Gold, Textron, Dongfeng Motor, Elbit System and Norilsk Nickel. For the complete list of excluded companies see Appendix G.
[66] "Norway Oil Fund Expels Two Companies," *Reuters*, January 30, 2009.
[67] Ibid.

> oppression in occupied areas could be affected by both of these considerations [human rights abuses and violation of individuals' rights].[68]

Gro Nystuen, Head of the Council on Ethics, also reported that the Council had already begun re-reviewing the fund's investment in bonds issued by the state-owned Israel Electric Corporation (IEC), which supplies electricity to the Gaza Strip. He added, "[w]e are looking at all companies that might have activities in violation of the ethical guidelines, regardless of whether they are Israeli or operating in Israel."[69] The IEC went under the Council's review as early as April 2008, when it allegedly restricted power supply to the Gaza Strip. At the time, the Council on Ethics could not recommend excluding the IEC on the ground of a limited reduction in supply.[70]

Germany's Siemens AG, in which GPF-Global held shares valued at 6.3 billion krone (1.34 percent of the voting shares) as of December 2008, was also put under observation for four years on grounds of gross and systematic corruption. According to Finance Minister Halvorsen, in the event that new cases of gross corruption were uncovered, the company would be excluded from the fund's portfolio.[71] In another case, on March 13, 2009, the Ministry of Finance excluded Dongfeng Motor Group, a Chinese company, from the GPF-Global investment universe. The company had been under close observation since 2008 for its sale of trucks to Burma. The council report indicated that the trucks were produced or adapted to military purposes and were therefore considered

[68] Ibid.
[69] John Acher, "Norway Oil Fund's Israel Holdings under Scrutiny," *Reuters*, January 6, 2009.
[70] Ibid.
[71] Marianne Stigset, "Norway Bans Dongfeng from Oil Fund; Siemens on Watch," *Bloomberg*, March 13, 2009.

military equipment. Finance Minister Halvorsen stated: "We cannot finance companies that support the military dictatorship in Burma through the sale of military materials."[72]

Norwegian officials have continually publicly endorsed the adherence to the Ethical Guidelines. In June 2008, during a public hearing and seminar organized by the Ministry of Finance, issues including the exercise of ownership rights and exclusion of companies from the GPF-Global were discussed. There Finance Minister Halverson indicated that although banning an entire state is unlikely, she was open to discussing the matter during the ongoing review of the fund's Ethical Guidelines.

The realm of the Norwegian socially-responsible investment has also involved issues such as the global environment and child labor. Norges Bank has continuously engaged with companies regarding their lobbying on legislation related to climate change. In June 2008, the United States Senate considered a major bill on the regulation of greenhouse gases. Although the bill did not come up for preliminary debate, Norges Bank held meetings with senior executives or high-level officers at six companies and aggressively pursued its environmental concerns during the second quarter of 2008.[74] In June 2009, the Norges Bank officially added the climate change, water management, and children's rights to its ethical agenda.[75]

Norges Bank also arranged a meeting in India to engage multinational companies active in cotton and vegetable seed production in order to develop industry standards with regard to child labor. Norges Bank plans to formulate a definition for child labor and

[72] **Ibid.**
[73] **Aasa Christine Stoltz, "Norway Says Oil Fund Reluctant to Blacklist States,"** ***Reuters*****, June 18, 2008.**
[74] **"Government Pension Fund-Global, Second Quarter 2008."**
[75] **"Government Pension Fund-Global, Second Quarter 2009," (Oslo: Norges Bank Investment Management 2009).**

develop standards for monitoring and reporting child labor in the region.[76] On June 12, 2009—the Word Day against Child Labor—four companies[77] in which GPF-Global holds equities announced that they will collaborate to fight against the use of child labor in seed production.[78]

BENIGN ECONOMIC STATECRAFT

In this section I will review each of the markers introduced in Chapter III and examine the Norwegian experience in order to identify the various objectives of the fund. Subsequently, I will attempt to weigh the various goals to determine whether there was a dominant objective at any point in time. Over the past 60 years, Norway has been a strong and durable parliamentary democracy with a constitutional monarchy, governed by a prime minister and a cabinet selected by the Storting (the Parliament). Norway has a long tradition of political participation by the public, along with respect for civil liberties and political rights. With a GDP of $276.3 billion, population of 4.65 million, and a per capita income of $59.5 thousand in 2008, Norway is one of the richest countries in the world. As discussed earlier in this chapter, the Oljefondet (later GPF-Global) was established for the purpose of preserving the non-renewable energy resources, absorbing external financial shocks, and providing resources for the payment of the state's future obligations. As Daniel Gross[79] puts it:

[76] "Government Pension Fund-Global, Second Quarter 2008."
[77] These four companies included Monsanto (an international agriculture company), Syngenta (established after the merger between Novartis and AstraAeneca in November 2000 and became the first international company focusing exclusively on agribusiness), Bayer and DuPont.
[78] "Government Pension Fund-Global, Second Quarter 2009."
[79] Gross is the business columnist for Newsweek and Moneybox columnist for Slate.

> Norway has pursued a classically Scandinavian solution. It has viewed oil revenues as a temporary, collectively owned windfall that, instead of spurring consumption today, can be used to insulate the country from the storms of the global economy and provide a thick, goose-down cushion for the distant day when the oil wells run dry.[80]

As shown earlier in this chapter, when faced with the global financial crisis and the risk of recession, the government resorted to using the resources of the GPF-Global in order to expand its rescue package while avoiding large budgetary deficits. The economic thesis, above all, assumes that the SWF is a precautionary tool and a saving deposit for rainy days. If so, one would expect the fund to be invested in fixed income instruments, specifically, government bonds with a relatively minimal risk and a steady return. The economic thesis fails, however, to explain why the GPF-Global invests a major portion of its portfolio in equities. It also does not provide insight as to why, despite being profitable, specific companies or industries have been excluded from the portfolio. Most importantly, the purely economic view is not a relevant framework for explaining active ownership motivated by the ideal of socially-responsible investment.

In the context of economic statecraft and the pursuit of power, we need to look at the relationship between the fund's management and the government, type of investment, and any statements by political elites about the purpose of the fund. The Ministry of Finance is regarded as the owner of the GPF-Global. The owner defines the structure of the benchmark portfolio, in accordance with the consensus in the Storting, and in doing so determines the main purpose of the fund. The fund is then managed by the investment management arm of the Norges Bank as well as a number of external managers. Norges

[80] **Daniel Gross, "Avoiding the Oil Curse, What Norway Can Teach Iraq,"** ***Slate,*** **October 29, 2004.**

Bank is obliged to follow the benchmark portfolio, but has a defined deviation range. External managers have been managing only 11 to 14 percent of the portfolio, and their function has been limited to technical management of their mandates.

The GPF-Global's management is free to act only within the limits set by the government. The fund managers also do not seem to have any influence over how the Ministry of Finance builds the benchmark portfolio, nor do they have any say in decisions regarding the inclusion or exclusion of companies from the portfolio. The government (Ministry of Finance) has also been including issues such as ethical and socially-responsible investment, human rights and labor rights, and environmental protection in the agenda, and the fund management has been obliged to follow these guidelines. Sanctioning (divestment) of a number of companies in which the fund held equities is one example of this. The fund's management uses active ownership as a tool to influence the decision-making process within the commercial companies in which the fund holds shares. In a sense, the Ministry of Finance uses the GPF-Global's investment as leverage over companies whose activities contradict the values of the Ministry or the Council on Ethics (and in a broader sense, Norwegian foreign policy).

Despite all these, there is, however, little evidence showing that this leverage is being applied at the national level and directly over another state. Moreover, the values that the GPF-Global adheres to are mostly universally-accepted and internationally-endorsed values mandated by international organizations such as the United Nations or the OECD. Additionally, the fund has never acquired any stakes in sensitive or controversial areas such as defense, nor has it invested in commercially irrational areas.

As discussed earlier, the GPF-Global divested from many companies whose operations were in conflict with the Ethical Guidelines. The divestment had, however, no real impact on the company or the equity prices. The Norwegian government clearly communicates its preferences with respect to what it deems unethical or in contradiction to the Norwegian foreign policy to the companies or states. Yet, Norway does not manipulate the operation of those companies through divestment. In all cases, the Ministry of Finance gave Norges Bank about two months to sell the assets and the decision to sell was made public only after the sale was complete in order not to affect the sale price.

Additionally, the amount of shares held in each of these companies was very small so the divestment of shares, which was done gradually over a two-month period, would not have negative impact on the company's equity prices or the stock market. For instance, the GPF-Global equity holdings of Elbit Systems or Dongfeng were less than 0.3 percent at the end of 2008. The fund's holdings in Textron, Barrick Gold, and Rio Tinto were only about 0.3, 0.6, and 0.1 percent, respectively, at the end of 2007.

Norwegian officials, however, seem to have sent some mixed messages, although most of the time, they refer to the GPF-Global as a precautionary and fully transparent investor, with long-term profitability as their goal, and no hidden or political agenda. For instance, in early 2008, Finance Minister Halvorsen, was quoted as saying that the fund was "clearly a financial investor and not a strategic investor."[81] When asked about the losses GPF-Global incurred as a result of its holding in Lehman Brothers, Halvorsen maintained: "[w]hen you are an actor in the world markets, as we are through the pension fund, you have to expect both losses and gains... Even if we sometimes suffer short-term

[81] John Acher, "Norway Seeks to up Wealth Fund's Ownership Cap," *Reuters,* April 4, 2008.

losses, we also go through long periods of growth. Since we are long-term investors, our investments pay off, they do not lose value."[82] This statement indicates that the GPF-Global is not a speculative fund with a short-term investment horizon that may expose the recipient company as well as the host state to market volatility.

Interestingly, in March 2008, Martin Skancke, Director General of the Asset Management Department of the Norwegian Ministry of Finance, appeared before the House of Representatives to talk about GPF-Global and investment in the United States. He maintained:

> While individual shareholders may sell their holdings of individual assets or funds they do not find ethically acceptable, the citizens of Norway have to accept to be the ultimate owners of the companies that the fund invests in. To preserve the legitimacy of the fund, it is important that the ownership in the various companies is acceptable for most citizens. Hence, the fund avoids investments in companies whose practices constitute an unacceptable risk that the fund is or will be complicit in what is deemed as grossly unethical activities.

In his statement, however, Skancke maintained that the fund will be managed according to democratic principles and in a way that most Norwegian citizens would have chosen to invest their money, meaning the selection of instruments (equities or bonds) within the portfolio would reflect the democratic values of Norway, and not necessary the profitability of an instrument. In fact, the fund was shown to be somewhat politically oriented. It has, for example, taken sides with regard to issues related to the

[82] **"Norway's Oil Fund Loses 61 Million Euros on Lehman Brothers,"** ***AFP,*** **September 15, 2008.**
[83] **The Committee on Financial Services, United States House of Representatives,** ***Statement by Director General Martin Skancke, Asset Management Department, Norwegian Ministry of Finance,*** **March 5, 2008.**

Israeli occupation of Gaza Strip and the Moroccan sovereignty claims over the disputed area of the continental shelf.

The Finance Minister Halvorsen has, on the sidelines of a seminar organized by the Ministry of Finance in June 2008, clearly stated that "there could not be a large gap between Norway's foreign policy and the policy of the fund." She even added: "I would guess that the conclusion also in the next round will be that we cannot run a separate foreign policy for states through the pension fund... "[85] This clearly indicates that GPF-Global acts according to the Norwegian foreign policy agenda by including political considerations in its decision-making. Those considerations are, in fact, the reflections of the Norwegian national system of political economy.

Norway is an old democratic and pacifist state and highly dependent on the global economy. It is a model of welfare capitalism, featuring a combination of free markets and government intervention. Norway has a long history of state intervention in the domestic economy. Traditionally, the Norwegian government regulated the domestic economy heavily. Despite international waves of liberalization and privatization, the interest rate was still set by the Storting as recently as the 1980s. "The level of interest rates was an important part of the political game for power, and thus, they were set significantly below the market level."[86] Market intervention and control was not limited to the setting of interest rates and included many other areas. Even today, the Norwegian public sector is directly involved in the domestic economy, largely through state-owned enterprises (SOEs), in various organizational forms, in areas such as oil and gas, railroad passenger transportation, airline and civil aviation, electricity, and telecommunication.

[84] **Stoltz, "Norway Says Oil Fund Reluctant to Blacklist States."**
[85] **Ibid.**
[86] **Grytten, "The Economic History of Norway."**

In Norway, state entrepreneurship takes several forms, including portfolio investment or capital investment, and direct ownership (full or partial) of limited companies. According to an OECD report, "[a]bout three quarters of all Norwegian savings are controlled by the State, and state ownership in commercial entities is extensive both at the central and municipal level... As an illustration, the State's holdings amount to about 40 per cent of the total value of the companies listed on the Oslo Stock Exchange."[87] This reflects both the history of Norway's industrial development and the role played by the state. It may also be due in part to the fact that Norway is a model of the "welfare state", with direct involvement of the government in social and welfare services.

The state entrepreneurial thesis can also be applied to the GPF-Global. With extensive experience in managing the economy, the Norwegian government employs the fund in order to manage the national wealth. As discussed earlier, the share of the equities in the portfolio was also increased from 40 percent in 2007 to 60 percent in 2009, suggesting a higher degree of risk tolerance by the government. This shows that the fund is not being used as a saving or purely precautionary deposit; if that were the case, the entire portfolio would have been invested in low-risk-low-return bonds. Additionally, companies or instruments that the GPF-Global has invested in are all highly rated by reputable rating agencies. This reflects the level of professionalism and the commercially-oriented investment approach of the fund. Therefore, in certain respects, the fund behavior can be explained by the state entrepreneurship thesis.

[87] OECD, "Regulatory Reform in Norway, Marketization of Government Services - State-Owned Enterprises," (2003).

Lastly, Norway's fund has a number of characteristics that are consistent with the domestic compensatory purpose. Norway is a small and inherently open state. It has no influence over the terms of trade at which it is trading with the world and is therefore vulnerable to fluctuations in global commodity or financial markets. The contemporary industrial development history of Norway does not include any period of protectionism. Liberalism has been a main characteristic of both the Norwegian economy and society. Moreover, Norway is well aware of the limited life of its non-renewable energy resources. The petroleum reserves are expected to be depleted within a decade, and the state will face a large public pension obligation as soon as 2012. It has also experienced the negative impact of reliance on the petroleum sector in the form of lower productivity, increasing wages, and loss of international competitiveness during the 1980s and 1990s. On the domestic side, Norway puts a large emphasis on income redistribution and broader provisions for social services. The long-term profitability agenda of the fund also implies that there is a need for a sustainable stream of income or financial resources over time. The need for domestic compensation is of indefinite duration. It can also be immediate if there is sudden shock to the economy. In either case, the GPF-Global can provide resources for domestic compensation.

In summary, the GPF-Global is consistent with all theoretical perspectives discussed earlier (economic statecraft, entrepreneurship, and domestic compensation). However, looking at the past performance and management of the fund, it seems that both economic and domestic compensation goals dominate the management of the fund only at times of large budget or current account deficits. In the absence of large deficits, or when the assets grow at a rate higher than the rate of the deficit growth, the GPF-

Global fund is an investor that uses its entrepreneurial competence in line with the Norwegian foreign policy agenda. The fund's commercial performance is constrained by a set of non-economic guidelines that are expressions of the national political consensus. In the case of Norway, the GPF-Global is a tool for pursuing multiple goals including profitability and socially-responsible investment, with a focus on state's foreign policy agenda, encapsulated in Ethical Guidelines.

CHAPTER V

ABU DHABI INVESTMENT AUTHORITY, UNITED ARAB EMIRATES

This chapter presents the second case study of SWFs, the Abu Dhabi Investment Authority (ADIA) of the United Arab Emirates. Although the ADIA has been in existence since the mid-1970s, only in the past few years has the fund appeared in the headlines. There is no information about the exact volume of the fund. Many analysts and market observers believe that the fund is the world largest SWF, with an estimated value of between $400 billion and $875 billion[1] and sometimes even more. Some others, however, estimate the size of the assets under ADIA's management, in the wake of the global financial crisis, to be below $300 billion, making ADIA the second largest fund after the GPF-Global of Norway.

Despite lack of transparency, there is evidence suggesting that the fund's performance is more in line with state entrepreneurship and domestic compensation perspectives than economic statecraft thesis. State entrepreneurship provides a relevant context for the study of ADIA's modest management, while domestic compensation argument offers some additional insights to the formation and purpose of the fund. The United Arab Emirates balance of trade was never in deficit, and since 2002, has even experienced a constant increase in the surplus. Yet, ADIA has been a source of financing for the Emirates' federal budget on various occasions. At the same time, opacity of the fund does not necessarily reflect deliberate secrecy. It can be a cultural issue or it may be a result of the lack of developed organizational procedures or standards similar to those in well-established western financial entities.

[1] **England, "ADIA Makes Play for a Native Minority."**

Although ADIA is technically a sub-national fund, it qualifies as a sovereign fund, for several reasons. First, ADIA is the largest fund of Abu Dhabi, which is the driving force of the Emirates, both economically and politically. Abu Dhabi is endowed with most of the United Arab Emirates' natural resources and is the federation's fiscal heavyweight. Second, ADIA is the Emirate's largest fund, and the Emirates' president is chairman of the board of directors. And third, ADIA is involved in large investments in many different areas, in terms of both geographically and industry sectors. Since 2008, it has focused its attention solely on markets outside of its region.

In this chapter, I will discuss the politico-economic circumstances that existed prior to the establishment of the fund. Then I will review the current status of the fund and examine its management structure, internal decision-making process, and some of its recent investments. Subsequently, I will focus on periods of economic hardship—specifically, low oil prices and the global financial crisis—that may have had an impact on the Emirati economy and discuss whether the resources of the fund were used, in any way, by either Abu Dhabi or the federal government to address the problems. Periods of normal economic activity or high oil prices, on the other hand, will provide the opportunity to study the fund in periods when it is not financially constrained. An examination of the way in which ADIA's assets were used or where they were invested during these periods provides us with insight into the underlying motives of the fund.

It should be noted that, despite its long history, ADIA remains one of the least-transparent sovereign funds. The only official source of information is a website that provides very brief background information on the history, management, and investment strategy of the fund. At the time that this research was conducted, there was no official published account of the fund's investments, audit reports, or financial statements available to the public. Contacts with the fund's public relations department produced very little information. And the Emirati authorities have been very reserved, or even silent, regarding the details of the fund's assets or investments. Additionally, detailed data on international accounts of the United Arab Emirates was not available from major sources such as the International Financial Statistics or the World Bank. All these have made ADIA a challenging case for a micro-level analysis of SWFs. The extent of the current research has been, in some cases, dictated by the availability of data. In the concluding section, I will discuss the relevant theoretical perspectives that enhance our understanding of the functioning of the fund, and identify the primary goal of the fund.

CREATION OF ADIA

The history of ADIA dates back to the creation of the federation of seven former Trucial States in December 1971, known today as the United Arab Emirates. Oil exploration in the region started in 1930s and was pursued vigorously after World War II in various parts of the then Trucial States. Oil was discovered for the first time off-shore Abu Dhabi in August 1958, and in 1962 exportation began, from Das Island. One year later an on-shore field was discovered in Abu Dhabi, and vast revenues began to pour in to the emirate. However, Sheikh Shakhbut bin Sultan A1 Nahyan, Amir of Abu Dhabi at the time, refused to allow the oil money to be spent, because "[w]hat he feared most was the disintegration of the social fabric of Abu Dhabi in the face of such an extraordinary

[2] The United Arab Emirates is a federation of seven former Trucial States, i.e., Abu Dhabi, Dubai, Sharjah, Ras-Al-Khaimah, Ajman, Umm al-Qaiwain, and Fujairah. Trucial States refer to the states (Sheikhdoms), whose rulers had signed the Perpetual Maritime Truce with the British government in 1853, which called to end all hostilities at sea.

windfall. ... [H]e honestly believed that maintenance of the status quo was the only way to save Abu Dhabi."[3]

Sheikh Shakhbut's resistance to change and development was one of the main reasons that the Al Nahyan family—who believed that change is both vital and inevitable— encouraged Sheikh Shakhbut to step down. He was replaced by his younger brother, Sheikh Zayed bin Sultan Al Nahyan, who brought a great deal of experience and knowledge about administration to the office. In November 1971, just before the creation of the United Arab Emirates, the Abu Dhabi National Oil Company (ADNOC) was established. Since that time, the Emirate's oil affairs have been conducted mainly through this state enterprise. In December 1971, Sheikh Zayed, Amir of Abu Dhabi, became the first president of the United Arab Emirates.

After the creation of United Arab Emirates, the new constitution stipulated that the rulers of the individual emirates retain control over their respective oil resources.[4] The extent of Sheikh Zayed's ambition for the prosperity and development of the federation was such that he dissolved the Abu Dhabi cabinet in 1973, merged it with that of the United Arab Emirates, and offered Abu Dhabi's oil revenues to finance developmental projects in the federation.[5] Abu Dhabi was the richest of the seven emirates in petroleum resources. "By 2000, Abu Dhabi controlled 90 percent of the country's oil and more than 85 percent of its gas reserves."[6]

[3] Rosemarie Said Zahlan, *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman,* Rev. and updated ed. (Reading, Berkshire, U.K.: Ithaca Press, 1998), 110.
[4] Malcolm C. Peck, *The United Arab Emirates: A Venture in Unity,* Profiles. Nations of the Contemporary Middle East. (Boulder, Colo.: Westview Press, 1986).
[5] Zahlan, *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman.*
[6] Andrea B. Rugh, *The Political Culture of Leadership in the United Arab Emirates* (New York: Palgrave Macmillan, 2007), 8.

In the United Arab Emirates, foreign exchange and monetary policies are conducted by independent bodies, and therefore sovereign funds (including ADIA) remain outside of the monetary policy arrangement. In 1973, the Emirates established a currency board to issue the national currency and maintain its parity against foreign currencies. The Emirates' Central Bank was established in 1981 in order to "direct and control the monetary, credit and banking policy in accordance with the state's general policy and in such ways as to help support the national economy and to stabilize the currency."[7]

In 1976, ADIA was established by Sheikh Zayed. The sole source of ADIA's revenue has been the profits from the petroleum sector. The ADNOC transfers its net profit—which may vary year by year depending on both oil prices and the volume of exports—to the Abu Dhabi Department of Finance. Subsequently, the Abu Dhabi Department of Finance allocates one part of ADNOC's net profits to ADIA and the other part to the emirate's budget. During its early stages, ADIA was a relatively unsophisticated fund, mainly due to a lack of local talent.[8] According to the ADIA's newly-launched website, the fund focused on investing in bonds, equities, and real estate in the country and in the region. Unfortunately, detailed information on the early stages of the fund is not available, a situation consistent with the relative unavailability of other official data. In 1986, a decade after its inception, ADIA entered into the commodity business. Subsequently, in 1989, ADIA started investing in private equities. Inflation-indexed bonds were added to ADIA's portfolio in 1998.[9]

[7] K. Hassanain, "Monetary Control in the UAE," ***Middle Eastern Finance and Economics,*** **no. 1 (2007).**
[8] Karen Remo-Listana, "Wealth Funds in the UAE Lead Way with Transparency," ***Emirates Business 24\7,*** **March 3, 2009.**
[9] "Abu Dhabi Investment Authority," www.adia.ae.

The administrative structure of the Emirati fund also grew gradually. Between 1988 and 1993, the number of fund employees almost doubled.[10] Since the turn of the century, ADIA has restructured its organization. In 2005, focus shifted to the emerging markets, and the Emerging Markets department was created. This shift indicated that the risk appetite of fund managers was increasing, and that maximizing investment return was becoming a major objective. However, the most significant organizational change took place in late 2007, when ADIA decided to transfer the local and regional portion of its investment portfolio to Abu Dhabi Investment Council (ADIC). ADIA divested its domestic assets for an undisclosed amount to ADIC in 2008.[11] With that, the Abu Dhabi

Investment Company (ADICo.), which was established in 1977 and had acted as an executive arm of ADIA, was placed under the ADIC administration. In the same year, ADIA diversified its focus to include infrastructure projects by creating an infrastructure group. Figure 9 provides a timeline of the evolution of the fund.

[10] ADIA had about 500 employees in 1988. By 1993, this number jumped to over one thousand.
[11] Victoria Barbary and Edward Chin, "Testing Time, Sovereign Wealth Funds in the Middle East & North Africa and the Global Financial Crisis," (London: Monitor Company Group L.P., 2009).
[12] ADICo. also offers treasury services, loan syndication, equity and debt underwriting as well as asset management and brokerage. It made the news when it reportedly was it talks to buy the Chrysler Building in New York City for about $800 million. (Source: Remo-Listana, "Wealth Funds in the UAE Lead Way with Transparency.")

FIGURE 9 Timeline of the evolution of ADIA

ADIA	ADICo.	Commodity added	Equity added	Inflation-indexed bonds added	Emerging markets added	ADIC took over the local & regional investments
—O—	— o —	- O	- O	- O	-O-	O
1976	1977	1986	1989	1998	2005	2008

ADIA, TODAY

According to its website, ADIA is "a globally-diversified institutional investor with the mission of securing and maintaining the current and future prosperity of the Emirate of Abu Dhabi. ADIA prudently invests the Emirate's assets through an investment strategy focused on long-term value creation." Although there is no official data on the size the portfolio, ADIA is thought to be one of the world's largest SWFs. Saudi American Bank (SAMBA) has estimated the size of the portfolio under ADIA's management at the end of 2007 as being between $335 billion and $875 billion.[14] Media and business analysts' estimates of the size of the fund range from $500 billion to $900 billion.[15] However, in the aftermath of the global financial crisis, estimates of the size of the fund were revised drastically. In 2009, two researchers at the Council on Foreign Relations (CFR) attempted to estimate the size of the Emirati fund. Setser and Ziemba built a model using oil price data and relevant IMF data, and concluded that the size of

[13] **"Abu Dhabi Investment Authority."**

[14] **"The UAE Economy: Sustainable in the Face of a Serious Global Recession ", (Riadh: Samba Financial Group, 2009).**

[15] **Christopher S. Rugaber, "Abu Dhabi Lays out Investment Principles for Its Government-Run Wealth Fund," *The Associated Press,* March 18, 2008.**

assets managed by ADIA had been overestimated, sometimes by as much as 100 percent. They estimated the total size of ADIA and ADIC as of December 2008 at $328 billion.[16] The Institute of International Finance was also quoted as having estimated the size of ADIA's assets at about $282 billion at the end of 2008 (from $372 billion at the end of 2007),[17] which would make the fund second in size to the GPF-Global of Norway.

ADIA has also acquired the reputation of being the world's least transparent fund, with none of its financial reports or information concerning its investment decision-making process available to the public. Under pressure from the international community, ADIA established a website, but it provides very little information about its resources and operations. This is despite the fact that ADIA has been at the forefront of the development of the Santiago Principles and an advocate of greater transparency. The lack of official information about ADIA also means that most of the information about the fund's operation and performance is acquired indirectly and through secondary sources, such as the local media, regional commercial or central banks, and international organizations and think tanks.

Today, ADIA employs more than 1,000 people from 40 countries, with more than 60 percent of its employees coming from outside the United Arab Emirates. On a few occasions prominent western financial experts were hired to lead various departments in ADIA. These experts have usually been veterans of major financial companies such as Morgan Stanley or Goldman Sachs. Lack of local talent has always been an issue for the fund. In 2008, ADIA announced a new recruitment program to ensure that it has a ready pipeline of local talent. It selects students in their last year of high school and then

[16] Brad Setser and Rachel Ziemba, "GCC Sovereign Funds, Reversal of Fortune," (New York: Council on Foreign Relations, Center for Geoeconomic Studies, 2009).
[17] Nadim Kawach, "Bond Issues to Help Boost UAE," ***Emirates Business 24\7*****, May 3, 2009.**

sponsors them through their graduation from university. This scheme attracted 400 high school applicants in the first year, but only 18 were accepted. The applicants are mostly sent to universities in the United States. Reportedly, ADIA spends about $10 million on training annually.[18]

ADIA is run by a board of directors that has absolute control over all aspects of the fund's operations. The board of directors consists of 10 members, the majority of whom come from the powerful and influential family of Al Nahyan. The current Chairman of ADIA is Sheikh Khalifa bin Sultan Al Nahyan, who is both the ruler of Abu Dhabi and the president of the United Arab Emirates. He was named president by the Federal Council shortly after the death of his father, Sheikh Zayed bin Sultan Al Nahyan, the engineer of the Emirates' development plan, who died in November 2004. All other board members are appointed by the ruler's decree. The list of members of the board of directors as well as its management is presented in Appendix H.

The managing director of ADIA is Sheikh Ahmed bin Zayed Al Nahyan, the 12th son of Sheikh Zayed bin Sultan. He is a graduate of the University of Al-Ain in Abu Dhabi and joined ADIA as an equity analyst in 1992. He rejected the traditional investment philosophy of the fund that dated almost two decades earlier, and when the fund was first conceived, under the direction of a British colonial officer and a local advisor to the royal family, using British pension funds as a model. A year after Sheikh Ahmed joined ADIA, the fund's executives decided to peg the fund's holdings to global economic growth.[19]

[18] England, "ADIA Makes Play for a Native Minority."
[19] Thornton and Reed, "A Power Player Emerges in the Gulf."

Many analysts believe that the average annual return on ADIA's portfolio since 1976 has been about 10 percent. It is, however, virtually impossible to verify such information in the absence of official data from ADIA. Until recently, ADIA's senior officials were not even allowed to be interviewed by the media. This changed in 2008, when ADIA hired Burson-Marsteller, an American public relations company, and former Morgan Stanley communications specialists [91] as resident communications experts. [yy]

It has been always difficult to track ADIA's investments. However, since ADIA was placed in the spotlight a few years ago, information concerning its investments or divestments can be found through the media. The fund's portfolio is believed to be very diverse, consisting of fixed-income instruments (bonds), equities, commodities (including gold), and real estate. According to a Financial Times report, about 80 percent of the portfolio is managed externally, and 60 percent of that is managed passively through indexed tracker funds in order to keep the costs of managing the fund down. ADIA is said not to take controlling stakes in companies, usually acquiring less than 4.5 percent of a company.[24] There is no official data on the structure of the portfolio. Table 14 shows one local media source's summary of the structure of ADIA's portfolio.[25]

In 2008, Sheikh Ahmed bin Zayed A1 Nahyan, managing director of ADIA, gave an exclusive interview to Business Week, revealing some details of the fund's portfolio,

[20] Ibid.
[21] Eric Portanger was appointed as the new head of media relations of ADIA. He was responsible for corporate communications at Morgan Stanley in the United Kingdom Earlier in May 2008, Euart Glendinning was also appointed as the global head of corporate communications and public affairs.
[22] Remo-Listana, "Wealth Funds in the UAE Lead Way with Transparency."; Barbary and Chin, "Testing Time, Sovereign Wealth Funds in the Middle East & North Africa and the Global Financial Crisis."
[23] England, "ADIA Makes Play for a Native Minority."
[24] Remo-Listana, "Wealth Funds in the UAE Lead Way with Transparency."
[25] Ibid.

investment approach, and agenda. Table 15 shows the composition of the fund's portfolio, as reported in this interview. Unfortunately, ADIA's authorities have not disclosed the details of the companies in which the fund holds equities.

TABLE 14 Composition of ADIA's portfolio, based on a local media source (percent)

Equities	50-60
of which in emerging markets	14
Fixed-income instruments	20-25
Real estate	5-8
Private equity *	5-10
Alternatives **	5-10

Source: Remo-Listana, "Wealth Funds in the UAE Lead Way with Transparency."
* Investment in equity funds or direct purchase of equities.
** Includes hedge funds and funds with non-directional strategies

ADIA claims to have the highest governance standards, along with "well defined policies, processes and systems that ensure robust accountability."[27] According to its

[26] Thornton and Reed, "A Power Player Emerges in the Gulf."
[27] "Abu Dhabi Investment Authority."

website, the investment decision-making and execution process within ADIA's organization is well-defined, with financial controls and audits governing the entire process. Verifying these claims are, however, virtually impossible since none of the details of these procedures or policies is available to outsiders. There are different departments and committees within ADIA's organizational structure. The managing body of the fund also includes specialized committees in various areas, including investment (consisting of 11 members with a focus on asset allocation), strategy, management, IT, compensation, audit, and investment guidelines. Appendix I presents the organizational structure of ADIA.

Since 2008, ADIA has been promoting its image, especially with respect to the issue of transparency. As mentioned earlier, ADIA has been at the forefront of the Santiago Principles. Hamed A1 Hurr A1 Suwaidi, Undersecretary of the Abu Dhabi Department of Finance and one of ADIA's directors, has been one of the most active participants in the International Working Group of SWFs, chairing the forum leading to the Santiago Principles. He has been quoted as saying "[i]t's all about trust. ... It's about collectively doing everything in our power to ensure that trust lies in the heart of everything we do."[28]

[28] **Remo-Listana, "Wealth Funds in the UAE Lead Way with Transparency."**

TABLE 15 Business Week estimate of ADIA's portfolio (est. $875 billion)

By Asset Class (percent)	
Developed markets equities	45-55
Emerging markets equities	8-12
Small-cap equities	1-4
Government bonds	12-18
Non-government bonds	4-8
Alternative investments	5-10
Real Estate	5-10
Private equity	2-8
Infrastructure	0-4
Cash	0-5
By Geography (percent) *	
North America	40-55
Europe	23-35
Developed Asia	10-15
Emerging markets	10-15

Source: "Table: Abu Dhabi's Asset Allocation." Business Week, June 6, 2008.
* excludes real estate, private equity, alternatives, infrastructure, and cash.

In an interview with IMF Survey online, Al Suwaidi maintained: "Now that the principles are a public document, non-implementation or non-compliance will become clear in a short period of time, especially as some of the principles call for certain information to be disclosed. In addition, we are considering the establishment of a permanent representative body for SWFs."[29] Despite all these efforts, ADIA remains closed to outside enquiries. Even the L-M Transparency Index for ADIA did not change o 1 over the past few years and remained very low.

Prior to the development of the Santiago Principles, ADIA attempted to address the concerns about transparency by sending a letter to a number of states and international institutions. ADIA sent a three-page letter—dated March 12, 2008 and signed by Abu Dhabi's director for international affairs, Yousef A1 Otaiba— to the United States secretary of the treasury at the time, Henry Paulson, in order to clarify for the United States and Europe the intent of Abu-Dhabi's government managed investment funds. The letter was also sent to the finance ministers of the other G7 states, the IMF, the World Bank, OECD, and the European Commission.[32] In the letter, principles such as "independent, commercially driven investment decisions" and adherence to "all laws, regulations, and rules of the countries its funds invest in," were stressed.

TIMES OF HARDSHIP AND ADIA

The central place of the petroleum sector in the United Arab Emirates' economy is evident. However, looking at only the federal budget can sometimes be misleading since "the individual emirates tend to exercise great autonomy over spending plans, and

[29] "Wealth Funds' Long-Term View May Help Stablize Markets," ***IMF Survey,*** **October 16,2008.**

[30] After several attempts in contacting ADIA's media relations department, the first question I was asked was whether any of the information I had requested would be made public or not. Subsequent correspondences remained unanswered.

[31] The L-M Transparency Index for ADIA was 'three' as of January 2009. Source: "Sovereign Wealth Fund Institute," http://swfinstitute.org/.

[32] The letter was also published on the Wall Street Journal. See: Yousef A1 Otaiba, "Our Sovereign Wealth Plans," ***The Wall Street Journal,*** **March 10, 2008.**

emirates have their own budgets."[33] Therefore, the volatility in oil markets can not only have an effect on the overall budget, but it can also impact the individual emirates' budgets in a different way. In fact the rulers of each emirate retain control over their oil and gas resources, by provisions of the Constitution. Both the available resources and their composition change over time and differ from one emirate to another. For instance, Abu Dhabi has the largest oil and gas resources compared to other emirates. Both the Emirates and Abu Dhabi economies are dependent on this sector. On the other hand, Dubai, with less hydrocarbon resources, has diversified its industries and shifted its emphasis from the petroleum sector to trade, tourism, and services.

The federal government depends largely on grants from Abu Dhabi and Dubai for the funding of its budget. Table 16 shows the importance of the petroleum sector in both the United Arab Emirates' and Abu Dhabi's budgets. As the table shows, Abu Dhabi's reliance on the income from the petroleum sector has been greater than that of the federal government. The Emirates' current account balance is also quite dependent on the oil and gas sector. Figure 10 shows that the current account has, for the most part, been shadowing the price of oil. Although the United Arab Emirates never experienced a current account deficit, it did experience periods of low oil prices, in the 1990s and early 2000s. The federal budget, on the other hand, has generally experienced deficits in the period prior to 2003, simply because of loose fiscal policy and large government expenditures. However, the recent global financial crisis had an adverse effect on the economy of the United Arab Emirates.

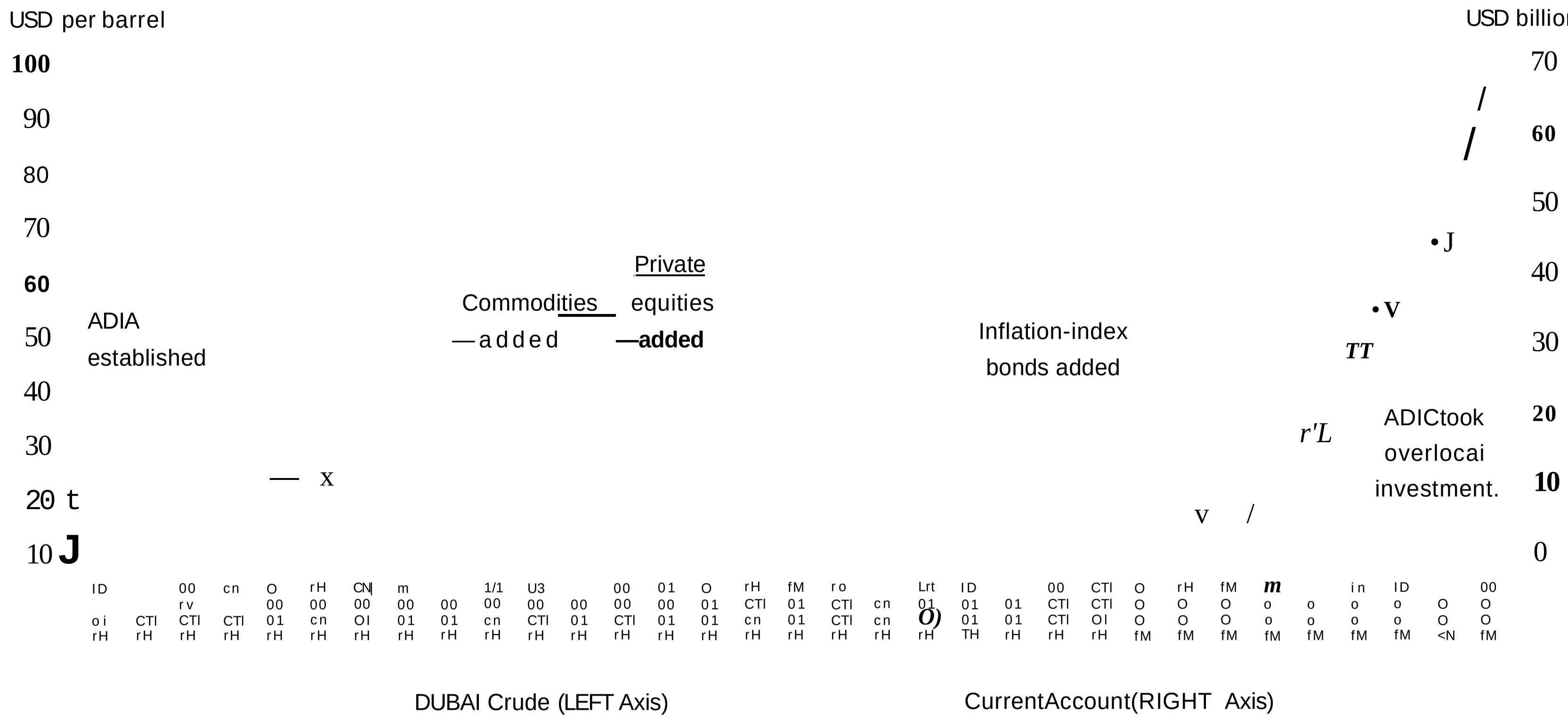
[33] **Peck, *The United Arab Emirates: A Venture in Unity,* 116.**

TABLE 16 Federal government finances and Abu Dhabi fiscal operations (Dh billion)

	Federal government total revenue	of which from oil & gas sector	Share of oil & gas sector of total revenue	Abu Dhabi fiscal revenue	of which from oil & gas sector	Share of oil & gas sector of total revenue
1991	61.8	38.7	63%	52.2	32.3	62%
1992	56.2	37.2	66%	42.0	29.4	70%
1993	48.8	32.0	66%	36.7	24.5	67%
1994	50.0	28.7	57%	38.1	22.7	60%
1995	57.4	32.0	56%	44.2	25.5	58%
1996	65.1	37.0	57%	49.8	30.7	62%
1997	70.5	41.1	58%	53.3	34.3	64%
1998	61.4	25.5	42%	44.6	21.4	48%
1999	54.7	30.1	55%	37.1	25.2	68%
2000	89.7	60.0	67%	69.5	52.6	76%
2001	78.4	51.6	66%	58.9	45.5	77%
2002	79.4	55.0	69%	46.0	36.4	79%
2003	100.0	75.5	76%	61.1	51.8	85%
2004	134.9	99.6	74%	85.6	68.0	79%
2005	203.7	152.8	75%	131.6	104.3	79%
2006	299.0	229.4	77%	194.4	157.1	81%
2007	333.4	234.5	70%	224.0	168.3	75%

Sources: IMF Country Reports 03/67 (years 1991-1998), IMF Country Report 04/174 (year 1999), IMF Country Report 06/256 (years 2000-2001), IMF Country Report 07/348 (year 2002), and IMF Country Report 09/120 (years 2003-2007).

FIGURE 10 United Arab Emirates current account status and oil prices



Source: "International Financial Statistics (IFS)." IMF, 2009.

to

Whether ADIA has played a smoothing role in the economy of Abu Dhabi or the Emirates in the face of low oil prices, is obscured by both general lack of information and the inconsistency of international statistics (both variables and observations). The main source of data on the United Arab Emirates' economy is the IMF Country Reports. However, in some cases the same observation takes different values in various country reports. To correct for this, the latest available report containing the specific observation was used. Additionally, it seems that, in some cases, the definition of a given variable and its accounting methodology have changed from one report to the next. This makes the comparison of the data over time quite difficult. Where inconsistencies could not be explained, the data was excluded from the research.

Table 17 shows the federal government's consolidated balance of the budget during two periods for which consistent data was available. Although the budget methodology has slightly changed over time—which might explain why data is inconsistent—even the inconsistent data show the same phenomenon, i.e., frequent (almost continuous) federal budget deficits. This trend continued until 2003. The budget had surpluses for five consecutive years since then.

There are two interesting points about the consolidated federal budget. First, it contains an item called "investment income" under the revenue section. There is no data on exactly what the components of this item are. Figures indicated in the IMF Country Reports are staff estimates (as is emphasized in the relevant footnote). Only in the 2009 IMF Country Report is there a reference to the "transfer of earnings of sovereign wealth funds" as a component of the "investment income" item. It is still not clear whether it includes the transfer of return on investment of all Emirates' wealth funds or only that of

ADIA. However, since ADIA is the largest Emirates fund, it is reasonable to presume that most of the "investment income" came from ADIA.

TABLE 17 Consolidated budget (Dh billion)

	Overall balance	Bank financing	Non-bank financing *
1993	-15.0	-2.7	17.7
1994	-20.5	2.2	18.3
1995	-21.0	-3.0	24.0
1996	-25.2	2.1	23.1
1997	-9.5	0.6	8.9
2003	8.4	-2.3	-6.1
2004	38.4	-1.8	-36.6
2005	99.3	-16.0	-83.2
2006	171.3	-4.6	-166.8
2007	166.4	-9.5	-156.9

Sources: IMF Country Reports 09/120 (years 2003-2007) and IMF Country Report 98/134 (years 1993-1997)

* This item has taken different names in various reports. For the period 1993-1997, it was referred to as "exceptional financing"

The budget deficit has also been financed through different accounts whose titles and definitions have changed over time. These account titles include resident or domestic banks, non-banks, official foreign reserves, privatization receipts, exceptional financing, etc. ADIA has been mentioned only once as the source of financing for the budget deficit, in the 1998 IMF Country Report covering the period 1993-1997.[34] In that report, only two accounts were shown under the financing; one was "domestic banks" and the other "exceptional financing," a title that was never used again. The relevant footnote indicated that the exceptional financing included "use of investment income and transfers from ADIA's foreign assets."

Therefore, we can assume that between 1993 and 1997 ADIA has been used to finance the federal government's expenditures. It is also possible that during the subsequent years of budget deficit, ADIA's resources (investment income or foreign assets) were used for the same purpose. Although without accurate information it would be difficult to prove any systematic role played by ADIA in correcting the budget deficit, however, the available information—and the fact that the United Arab Emirates' budget has a low tax base and highly dependent on the oil income—suggest that the role played by the fund is more compatible with the domestic compensation perspective.

Investment income has been a significant part of the Abu Dhabi budget, although there is no detailed information about the components of the investment income, but considering ADIA as the Emirates' largest fund, it is very likely that the major part of the investment income in Abu Dhabi's budget was driven by ADIA's returns. As shown in table 18, the investment income included in the total revenue of Abu Dhabi's budget rose

[34] **This is different from ADIA's return on investment that is likely a revenue item on the budget under the title "investment income."**

from about Dh 34 billion in 2006 to more than Dh 46 billion in 2007, and its share from the total revenues varied between about 12 percent and 26 percent between 1999 and 2007.

TABLE 18 Abu Dhabi fiscal operations and share of investment income (Dh billion)

	Total Revenue	of which investment income *	Share of investment income of total revenue	Overall balance
1999	37.1	9.7	26.10%	-10.1
2000	69.5	15.1	21.70%	5.8
2001	59	11.6	19.70%	-17.4
2002	46	8.1	17.60%	-20.3
2003	61.1	7.2	11.80%	-8.8
2004	85.6	13.9	16.20%	13.4
2005	131.6	24.6	18.70%	51.7
2006	194.4	33.7	17.30%	120.1
2007	224	46.3	20.70%	102.2

Sources: IMF Country Reports 04/174 (year 1999), IMF Country Report 06/256 (years 2000-2001), IMF Country Report 07/348 (year 2002), and IMF Country Report 09/120 (years 2003-2007).

* IMF staff estimate

The recent global financial crisis did not leave the United Arab Emirates' economy unaffected. The Emirates Central Bank had to inject funds into the domestic banking sector to address the liquidity shortage. In fact, the Central Bank guaranteed the external liabilities of all Emirati banks. The Central Bank foreign assets, which grew sharply between 2003 and 2007, mainly due to high oil prices, shrunk by more than one-third, to Dh 201.4 billion, in March 2009.[35] Despite the impact of the global financial crisis, some analysts in the region still believe that the external factors did not have a major impact on the management of assets of the United Arab Emirates, including those controlled by the wealth funds. For instance, according to an analyst at the National Bank of Kuwait, "[significant though these shifts have been, it is important to note that they do not equate to changes in the UAE's 'income.' Nor do they reflect any change in overall strategy regarding the country's huge total stock of foreign assets, the bulk of which are managed not by the CBUAE [Central Bank of United Arab Emirates] but by the Abu Dhabi Investment Authority (ADIA)."[36]

ADIA, which has a large portion of its portfolio in equities, was hit hard after the sharp fall of global equity prices. As mentioned earlier, Setser and Ziemba estimated that the value of the assets under the management of ADIA and ADIC fell by $180 billion in 2008.[37] Furthermore, as early as summer 2007, the fund was faced with a problem in its asset allocation. When the market plunged, the fund became underweighted in American stocks. One solution was a single-shot investment. In late November 2007, ADIA decided to buy up to 4.9 percent of Citigroup Inc. bonds at a total value of $7.5 billion,

[35] Daniel Kaye, "UAE Money Data Reveals Financial System under Stress," (National Bank of Kuwait, 2009).
[36] Ibid., 3.
[37] Setser and Ziemba, "GCC Sovereign Funds, Reversal of Fortune."

with no special right of ownership or control, and no role in the management or governance of Citigroup.[38] The units were convertible at a price of between $31.42 and $37.24 a share between March 15, 2010 and Sep 15, 2011. But the price of Citigroup shares did not recover—they fell even further. As early as September 18, 2008, shares of Citigroup closed at $16.65 per unit, resulting in a loss of $3.53 billion.[39] During the course of this transaction, ADIA was shown to be concerned more about the safety of its assets rather than any potential influence it could gain in the western markets.

Due to both the market crisis and speculative investment decisions, the value of the assets under the management of ADIA plunged even further. The Institute of International Finance was quoted as having estimated the value of ADIA's assets in 2009 at about $282 billion, which made the fund second in size to GPF-Global of Norway on a global scale.[40] In summary, a careful conclusion—in the absence of consistent and reliable information—is that there is no conclusive evidence that shows ADIA has been the main source for stabilizing the domestic economy or financing the federal budget deficit (beyond its return on portfolio, which is already a revenues item in the budget) at times of economic contraction. Therefore, it is not possible to show that the fund was used systematically at times of economic hardship, although the economic argument seemed relevant at times.

[38] "Citigroup to Sell 47.5 Billion in Equity Units to Abu Dhabi Investment Authority," ***The Associated Press,*** **November 27, 2007.**
[39] Craig Karmin and Carolyn Cui, "Smart-Money Bets on Street Turn Sour-Big Investors Find Some Big Losses; 'Stakes on the Cheap'," ***The Wall Street Journal,*** **September 19, 2008.**
[40] Nadim Kawach, "UAE's Overseas Invetsmnet Income to Rebound in 2009," ***Emirates Business 24\7,*** **April 20, 2009.**

ADIA IN TIMES OF ABUNDANCE

ADIA has come a long way in its efforts to more skillfully manage its assets. It has entered many different areas, in terms of both geographically and industry sectors. As mentioned earlier, it took a decade for the managers to start investing in commodities. Later, in 1989, private equities were added to the portfolio. In 1993, ADIA managers instituted strict guidelines to peg the fund's holdings to global economic growth. The decision quickly proved to be strategically critical. ADIA reduced its large positions in Japanese equities just before the Japanese stock market began a 15-year decline.[41] In 1999, inflation-indexed bonds were added, and six year later, emerging markets instruments were introduced to the portfolio.

Although ADIA does not disclose information about its investments, some of its transactions, especially the recent and large ones, have made their way into the media. Since 2007, ADIA has focused on acquiring financial firms, banks, or brokerage houses. In 2007, ADIA acquired about an eight percent stake in the regional investment bank EFG-Hermes. The investment bank was established in Egypt in 1984, and its activities included brokerage, asset management, and investment banking. EFG-Hermes has established a presence in the markets of Gulf Cooperation Council (GCC) members, specifically the United Arab Emirates in 2005 and Saudi Arabia in 2007. The position gave ADIA a seat on the EFG-Hermes Holdings Board of Directors [42]

[41] **Thornton and Reed, "A Power Player Emerges in the Gulf."**
[42] **"Abu Dhabi Investment Authority Accumulates an 8% Stake in EFG-Hermes Holding," *Al Bawaba,* May 21,2007.**

In the same year, ADIA, in a competition against six other institutional players, took about a 20 percent stake in the private equity firm Ares Management.[43] Ares became a hot commodity after its managing partner, Tony Ressler, revealed a plan to buy distressed debt. According to Ressler, ADIA was chosen as it "seemed to care" about long-term performance rather than short-term gains [44] Other investments by ADIA included a 10 percent holding in Qatar Telecom, 0.07 percent in Ecopetrol SA (Colombia), 40 percent in AP Alternative Assets LP (the Netherlands), 38.9 percent in Banque de Tunisie et des Emirats (Tunisia), 25 percent in Arab International Bank (Egypt), 20 percent in Union Cement Company (UAE), and holdings in Joint Arab Investment Corporation (Egypt) and International Capital Trading (UAE).[45]

Year 2008 was perhaps the busiest year for ADIA. The most significant event in this year was the Citigroup deal, discussed earlier. As it turned out, the investment did not turn out to be as profitable as initially expected. However, ADIA continued to invest in other banks, such as a 27.6 percent stake in Arab Banking Corporation (ABC).[46] It also turned over all its local and regional investment to ADIC and started to focus solely on foreign markets. ADIA was also active in the real estate sector of the emerging markets of Oceania. In early 2008, it was reported that ADIA bought 19.9 percent of AMP NZ Office Trust[47] and entered into a partnership agreement with AMP Capital Investors[48], in

[43] Ares Management is an independent Los Angeles-based investment management firm. Established in 1997, assets under its management are estimated at about $29 billion.
[44] Thornton and Reed, "A Power Player Emerges in the Gulf."
[45] "Company Profile: Abu Dhabi Investment Authority," Zawya http://zawya.com/cm/profile.cfm/cid 1000152/.
[46] "S&P Reaffirms Rating for Arab Banking Corporation," ***McClatchy-Tribune Regional News - The Middle East and North Africa Business Report,*** **June 25, 2008.**
[47] AMP NZ Office Trust is the New Zealand's largest investor in commercial office property. It has been listed on the New Zealand Stock Exchange since 1997 and has more than 7,000 investors.
[48] AMP Capital Investors, based in Australia, is a wholly-owned subsidiary of AMP. It manages about $90 billion worth of assets.

which each partner would hold 24.9 percent of the Haumi Company Ltd. (previously taken over by ADIA). Haumi Company Ltd. acquired 50 percent in AMP Capital Investors for $178.2 million.[49]

ADIA's investment was not confined to direct portfolio investment. The fund has acquired stakes in other companies indirectly and through its subsidiaries. In 1984, in a 50-50 joint venture with ADNOC, International Petroleum Investment Company (IPIC) was established. The aim of IPIC was to focus on overseas oil-related acquisitions. Many of the IPIC board members are executives from ADIA and ADNOC. ADIA and ADNOC jointly make decisions about acquisitions by IPIC. ADIA analyzes deals based on their financial merits, while ADNOC reviews its strategic importance with respect to Abu Dhabi's petroleum sector.[50] In September 2008, IPIC acquired $1.8 billion worth of convertible bonds of Aabar Investments.[51] This was the largest acquisition in the Middle East during that month. The total volume of mergers and acquisitions was $3.2 billion, the majority of which took place in Oman and United Arab Emirates.[52]

ADIA's investment interest has reached many diverse areas. In 2008, it announced that it was open to investment opportunities in Hong Kong. According to Ronald Arculli, executive counselor and chairman of the Hong Kong Exchanges and Clearing, "[t]hey agree that as a platform for investing on the mainland, Hong Kong is very suitable." He

[49] **"Abu Dhabi Buys Stake in Anzo,"** ***The New Zealand Herald,*** **January 18, 2008.**
[50] **"Abu Dhabi - the International Petroleum Investment Co," (APS Review Downstream Trends, 2001).**
[51] **Aabar Petroleum Investments Company was established in 2005 focusing on oil and gas. In 2008, the company changed its name to Aabar Investments, sold its oil and gas subsidiary and became a diversified investment firm. In 2009, IPIC became a major shareholder of Aabar after the mandatory conversion of bonds purchased in 2008.**
[52] **Nadia Saleem, "Slew of Mergers and Takeovers in Mena Region,"** ***gulfnews.com,*** **November 8, 2008.**

hoped that ADIA would establish an office in the city and said that the Hong Kong government would do anything to be accommodating.[53]

ADIA also showed an interest in acquiring two shipyards in Poland. It sent a query to the Polish Treasury and requested that a decision be made on the issue in early 2008. Poland has been under pressure to privatize the shipyards in Szczecin and Gdynia, especially after the European Commission decided in July 2008 that shipyards had to return the subsidies they had received since 2004. The Gdansk shipyard was already privatized and controlled by Ukrainian-held ISD Polska. One of ADIA's directors, Abdul Aziz Abdullah al Ghurair, stated at the time: "We are interested in investing in Polish shipyards. ... Poland should as soon as possible give us an offer convincing us of the benefits that we could gain from such a transaction."[54] Despite its importance inside Poland, none of the deals for the two shipyards[55] went through, and ADIA did not submit any offer[56] for undisclosed reasons.

Deutsche Bahn (DB) was also in discussion with ADIA (and other large investors in the region) regarding the public offering of one of DB's units. Hartmut Mehdorn, Chief Executive of DB, had held talks with large investors in the region on the possibility of listing about 25 percent of the DB Mobility Logistics AG unit in 2008. The offering was, however, postponed due to the turmoil in the financial markets.[57]

[53] Dennis Eng, "Abu Dhabi's $650 USb Investment Arm Wooed," ***South China Morning Post,*** **February 1, 2008.**

[54] "Press: Abu Dhabi Invetment Authority Wants Offer for Polish Shipyards as Soon as Possible," ***Poland Business Newswire,*** **October 30, 2008.**

[55] The Polish prime minister had previously said if the shipyards were not ceded by the end of August 2008, the Minister for Treasury would lose his position. Poland also received a second offer from the Qatar's largest investment bank, Qlnvest (also one of the subsidiaries of the Qatari SWF). However, the Qlnvest dropped the offer on September 1, 2009. For more information see "Poland Seeks New Shipyard Investor as QIA Stays Out," September 1, 2009.

[56] "Shipyards' Status Blocks Entry of Potential Investors," ***Wasraw Business Journal,*** **October 30, 2008.**

[57] Kerstin Gehmlich, "D.Bahn IPO Unlikely This Year, Not Impossible: CEO," ***Reuters,*** **October 30, 2008.**

The latest interest of ADIA has been the UK electricity distribution network of Electricite de France, which was offered for sale for about £4 million. In this deal, ADIA was competing against other interested buyers including Cheung Kong Infrastructure Holdings Ltd., Borealis Capital Corporation, Ontario Teachers' Pension Plan and CPP Investment Board, as well as the Scottish & Southern Energy pic, National Grid pic, Global Infrastructure Partners, and Morgan Stanley that intended to form a consortium to compete with the others.[58]

As can be seen, ADIA has entered many areas of business. Occasionally, it has been forced to drop its interest in an investment opportunity. For instance, in 1999 ADIA turned down the $310 million buyout of Champagne makers Mumm and Pierr-Jouet. Ultimately, the business was sold for $505 million to Allied Domecq in 2001.[59] Many believed the decision was based primarily on cultural and religious considerations, as the business involved alcohol. It also dropped the Polish shipyards deal discussed earlier for reasons not disclosed to the public. ADIA had also formally registered its interest in London's Gatwick airport.[60] However it dropped out of the deal in January 2009, when it failed to submit its initial bid by the deadline. It is not clear why such opportunities were not pursued. But these potential deals provide evidence that ADIA has pursued portfolio diversification, which emphasizes the entrepreneurial aspect of its management.

[58] Danny Fortson, "EDF Attracts Big Hitters in Auction of £4bn UK Electricity Network," ***The Sunday Times*****, August 16, 2009.**
[59] Thornton and Reed, "A Power Player Emerges in the Gulf."
[60] David Robertson, "Sovereign Wealth Giant ADIA Drops out of Gatwick Race " ***TimesOnline*****, January 20, 2009.**

STATE ENTREPRENEURSHIP FOR DOMESTIC COMPENSATION

The United Arab Emirates is a young modern state, established only in the latter half of the twentieth century by small sheikhdoms. Although the formation of a government, appointment of its head, and administration (e.g., ministries and the national budget) take a modern political form, many of the major domestic political processes adhere to the traditional values of the earlier sheikhdoms. Each emirate retains certain independence over its territory, resources, and budget. The status of a certain family or tribe still plays a great role in the running of both the local and federal governments. The influence and significance of the Al Nahyan family in the leadership of the country is evident. The formation of the United Arab Emirates itself as a modern state was initiated under the strong leadership of the ruler of Abu Dhabi, Sheikh Zayed bin Sultan Al Nahyan, in the 1970s. This is what Davidson refers to as a "neopatrimonial model," with the executive branch entirely dominated by the members of the prominent families:

> Indeed, the presidency of the UAE is entirely synonymous with the traditional rulership of Abu Dhabi, the largest and wealthiest of the constituent emirates. ... Moreover, with Abu Dhabi being by far the largest contributor to both the federal budget and the UAE's GDP, this historical association of the presidency with the ruler of Abu Dhabi has now been informally accepted by the other emirates.[61]

Interestingly, both the Emirates' and ADIA's officials have asserted that the fund is primarily motivated by economic considerations. Even some local analysts strongly

[61] **Christopher M. Davidson, *The United Arab Emirates: A Study in Survival*, The Middle East in the International System (Boulder, Colo.: Lynne Rienner Publishers, 2005), 189.**

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believe that ADIA is essentially an oil stabilization fund. ADIA, however, remains one of the most opaque funds. Details of the fund's investments, assets under management, and decision-making processes remain a secret, despite ADIA's having been at the forefront of the development of the Santiago Principles for transparency and governance. Hamad A1 Suwaidi, director of ADIA, and Abu Dhabi Finance Department Secretary, who also co-chaired the IWG, told Simon Wilson of the IMF Survey: "One of the main principles of SWFs is to invest on an economic and financial risk-and-return basis. By law these funds will not be able to get involved in noncommercial activity. ... By their very nature, sovereign wealth funds have a big stake in stable global financial markets." In the absence of reliable information, it is difficult to verify whether ADIA's performance actually conforms to such claims.

In effect, ADIA is managed by the ruler of Abu Dhabi (who is also the president of the Emirates), and the person who appoints all other board members, most of whom come from the A1 Nahyan family. In some cases, the day-to-day operations of the fund are managed by a few western fund managers. For instance, until November 2008, the asset management in the Equity and Fixed-income Departments at ADIA was headed by Thomas Connelly, who was previously a senior analyst in the Equity Research Department at Bear Sterns in New York City.[64] Another example is the appointment of

[62] For instance, Nadim Kawash, a reporter for Emirates Business 24|7, who has been extensively covering the issues surrounding ADIA, strongly believes that the fund is an oil stabilization fund that will protect both Abu Dhabi and the Emirates against a fall in oil prices. During our correspondence, he strongly discouraged me from looking into ADIA's investment behavior. His somewhat childish argument was that any such efforts are fruitless as the fund does not disclose any data, and that even those employed by ADIA do not have information on the operations of the fund. He further claimed that this issue is kept secret and discussed only during the annual meeting with Sheikh Zayed.

[63] "Wealth Funds' Long-Term View May Help Stablize Markets."

[64] Connelly left ADIA in November 2008 to join BNY Melon Asset Management as the Bank's first head of asset management for the Middle East region. Source: "BNY Mellon Asset Managment Expands Middle East Regional Team," *Zawya,* November 4, 2008.

Bill Schwab, a veteran of J.P. Morgan, Deutsche Bank, and Goldman Sachs, as the Global Head of Real Estate of ADIA in January 2009, making him responsible for the management of ADIA's global investment strategy in the real estate sector.[65] But again, decisions regarding the major aspects of the fund's operations are ultimately made by the ruler.

As has been previously mentioned, ADIA does not seem to have played any role in correcting the balance of payments of the Emirates. The United Arab Emirates has had a constant balance of trade surplus. Even when oil prices were at their lowest, the current account balance never showed a deficit. The situation is a bit different when we look at the government budget. Both the consolidated (federal) and Abu Dhabi budgets have occasionally experienced deficits due large government expenditures, although high oil prices in recent years have produced budget surpluses. There is a possibility that the investment income from ADIA has been used as a revenue source for the consolidated budget. However, there is no conclusive evidence showing that the fund was used as an emergency fund for supporting the budget.

Peck explains how the Emirates has tackled the low oil prices of the 1980s, seemingly without reliance on (or assistance from) ADIA. In fact, the government decided to reduce the expenditures, instead of sustaining the expected level of revenues through borrowing. According to Peck, the decline in oil revenue has resulted in "deficits

[65] Schwab was with J.P. Morgan as a Managing Director in the European Real Estate Finance division, responsible for real estate transactions. He was also at the Deutsche Bank for five years as a Director in the Real Estate Capital Structure and Underwriting department. He was also a Chief Lending Officer in the Real Estate division at Goldman Sachs. Schwab also held numerous senior posts in real estate and construction industries. For more information see "Press Release: Abu Dhabi Investment Authority Appoints Bill Schwab as Global Head of Real Estate," (Abu Dhabi Investment Authority, 2009).

in both the federal and Abu Dhabi budgets in 1983—$1.49 billion and $760 million respectively."[66] He further maintained:

> The 1984 federal deficit was expected to be reduced by about one-fifth and Abu Dhabi's by nearly one-half through the practice of holding spending levels steady. The country's balance of payments has remained in a surplus situation, though by a smaller margin. ... Partly, the government has responded to economic downturn by cutting significantly the outlay for salaries of government personnel. ... The major means of trimming expenditures to fit reduced revenue is a government slowdown or deferral of various projects. Several major construction schemes... have been shelved, at least for now.[67]

As mentioned earlier, according to the IMF country reports, a source of revenue on both the consolidated and Abu Dhabi budgets is the item "investment income." It is likely that this item includes returns on the assets managed by ADIA, meaning that the return on ADIA's investment has been a regular source of government revenue, and not necessarily the source of a precautionary fund used only on an ad hoc basis to cope with, for example, oil price volatility or unexpected external shocks.[68] In summary, there is no evidence showing that ADIA's resources have been used to correct balance of payments deficit or support the budget only at times of financial crisis or economic contraction. In

[66] **Peck, *The United Arab Emirates: A Venture in Unity*, 116.**
[67] **Ibid., 116-17.**
[68] **There are two problems with the IMF country reports. First, there is no statement indicating that the item in question actually represents specifically, or includes, the return on ADIA's investment. Second, assuming the item in question actually refers to ADIA's return, the data provided in the IMF country reports are only staff estimates and not official figures.**

other words, the economic argument is insufficient in explaining the functioning of the fund.

Despite the fall in the value of the fund due to the global economic downturn, ADIA continued to acquire stakes in different companies and restructured its organization to focus solely on foreign markets. Additionally, the emphasis on equities in the portfolio shows that achieving high returns is a more immediate goal. As Setser and Ziemba have stated, ADIA is "viewing itself as a pure portfolio manager that seeks (not always successfully) the highest risk-adjusted return—not a fund that supports domestic or regional economic development."[69]

ADIA's management is greatly influenced by domestic politics, as the fund is under the direct control of the Abu Dhabi's ruler, who is also the United Arab Emirates' president. The senior management of the fund is also appointed by the ruler. The few outside technical managers of ADIA are, consequently, not independent in their decision-making; they have to align their investment strategy with the guidelines provided by the board of directors and seek the board's approval before making any changes. The history of ADIA's operation, however, shows that the fund has consistently invested in industries that it deemed commercially and financially appropriate, and has avoided sectors that could have been controversial, domestically or internationally (e.g., alcoholic drinks and the defense industry). Therefore, although the structure and management of ADIA is greatly intertwined with political structures and the ruling family, there is no evidence that the fund was ever used to pursue power through economic means.

In the United Arab Emirates, there is a great emphasis on the role of the government (local and federal) in running the economy. This is mainly the legacy of the

[69] **Setser and Ziemba, "GCC Sovereign Funds, Reversal of Fortune," 20.**

traditional and patriarchic structure of the society and the significance of the position of each ruler in running his emirate. This, in the context of the modern state, takes the form of state involvement in almost all areas. In fact, the major sectors of the economy are run by or regulated through the state-owned enterprises. For instance, the oil and gas industries, as well as investments related to this sector, are run by local state enterprises such as ADNOC or IPIC. Other public enterprises include Abu Dhabi Water and Electricity Authority (ADWEA), Emirates Telecommunications Corporation (ETC), Dubai Ports World (global port operator), and Emaar Properties (the developer responsible for the world's tallest building—Burj Khalifa, formerly known as Burj Dubai). These state enterprises and their subsidiaries are run by members of the ruling family or government officials, who, in most cases, hold several positions in other state-owned companies. Public entrepreneurial intervention through SOEs is an embedded characteristic of the United Arab Emirates, or in Gilpin's words, a unique feature of its "national system of political economy."[70]

As discussed earlier in this chapter, these state enterprises are capable of engaging in complex acquisitions through their network of sister SOEs or their subsidiaries. The wide diversity of the portfolio and a greater emphasis on equities also mean both a higher risk tolerance and openness to new areas and projects, which are key entrepreneurial characteristics. When most of the countries in the West became concerned about the agenda and investment approach of SWFs—especially those with little transparency—ADIA sent a letter to United States officials stressing that the government "will never use its investments as a foreign policy tool;" instead, the Emirate's sovereign funds "are

[70] **Robert Gilpin and Jean M. Gilpin, *Global Political Economy: Understanding the International Economic Order* (Princeton, N.J.: Princeton University Press, 2001).**

similar to pension funds, combining a strong focus on long-term capital returns" to finance public services such as health care, infrastructure projects.[71] Although this statement does not match the structure of the portfolio (high equity share), nevertheless, it shows the concerns on the part of ADIA's official with respect to the West perception of the fund's agenda.

Interestingly, ADIA became concerned about the security of its own overseas investments and demanded transparency from the recipient states. In a joint editorial piece with the then United States secretary of the treasury Henry Paulson and the Singapore finance minister Tharman Shanmugaratnam, ADIA's director and undersecretary of finance of Abu Dhabi, Hamad A1 Hurr A1 Suwaidi wrote: "The need to enhance transparency and maintain an open dialogue is in essence a two-way street. Recipient countries share responsibility for maintaining an open investment regime that is transparent, proportional and accountable... ADIA has disclosed its broad asset allocation and is engaged in an ongoing process to enhance disclosure in all these areas,

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including compliance verification."

So far, state entrepreneurship provides the most relevant and applicable context within which one can study ADIA. At the same time, the domestic compensation argument can provide some additional insights into the formation and purpose of the fund. The United Arab Emirates is a small state. It is highly dependent on its oil and gas resources and, therefore, the price at which it is exporting the commodity. For the small Gulf economies, "isolation and autarky were never viable options for achieving

[71] **Rugaber, "Abu Dhabi Lays out Investment Principles for Its Government-Run Wealth Fund."**

[72] **Henry M. Paulson Hamad A1 Hurr Al-Suwaidi, Tharman Shanmugaratnam, "Open Editorial - the Role That Sovereign Wealth Funds Can Play in Promoting Free-Flowing, Open and Stable Capital Markets," (Abu Dhabi Investment Authority, 2008).**

prosperity. These countries derive much of their income from exporting hydrocarbon resources to the world markets and invest considerable sums of these proceeds in international portfolio and direct investment."[73]

Additionally, the Emirates' economy is particularly vulnerable to changes in global economic activity since it consists largely of services (e.g., shipping, banking, and tourism) that depend on the level of global economic activities. The United Arab Emirates is also a highly dependent on it natural resource sector. Moreover, as a non-democratic state, it may be necessary to provide the few influential families with resources and wealth so as to ensure the continuity of the political system. The domestic compensation argument is to some extent applicable to ADIA, although it does not provide a satisfactory explanation for the behavior of the fund.

There is no evidence to show that ADIA has been used as a foreign policy tool by either the federal government or the emirate of Abu Dhabi. The industries the fund has acquired stakes in are not politically or security-wise sensitive. Most of the investment takes the form of portfolio investment. Moreover, the fund's officials are aware of the created interdependencies and have been concerned about the security of the fund's assets in the recipient states. The state intervention in the economy is also rooted in the traditional society of the emirates. Almost all of the main areas of the economy today are run or regulated by the government. The wide range of financial instruments as well as the greater emphasis on equities in the portfolio of ADIA shows that the fund's agenda is focused on generating profit and diversification of assets as a risk management tool. At

[73] ***Gulf Oil and Gas: Ensuring Economic Security,*** **1 st ed. (Abu Dhabi: Emirates Center for Strategic Studies and Research, 2007), 57.**

the same time, the fund's resources (or returns) are likely used to provide sources of income for the federal budget, and therefore used as a social bargain.

Lack of transparency, nevertheless, remains one of the main challenges to the micro-level study of ADIA. Despite the official's emphasis on the existence of sophisticated investment procedures and audits within the fund's organization, as well as numerous statements by the fund's officials affirming the commercial nature of ADIA's investments, it is very difficult to verify these claims when no information is actually disclosed. Emirates' authorities may perceive secrecy as an entrepreneurial tactic for the success of the fund. As Barbary and Chin put it, "money and mystery are a potent mix, and this enabled ADIA to attract some of the best asset managers in the business... This has been critical to its success."[74] Lack of transparency and disclosure may also be a cultural issue or simply indicate underdeveloped standards and procedures.

[74] Barbary and Chin, "Testing Time, Sovereign Wealth Funds in the Middle East & North Africa and the Global Financial Crisis," 38.

CHAPTER VI

TEMASEK HOLDINGS, SINGAPORE

The third SWF case study looks at Temasek[1] Holdings. Temasek, which was established more than 35 years ago, has a number of characteristics that make it unique in a number of ways. Unlike the majority of SWFs, which are funded by excess foreign reserves or proceeds from the export of the abundant resource (typically oil) and make only foreign portfolio investment, Temasek was endowed with a portfolio of companies that was placed under its management by the Singapore Ministry of Finance. And, while other government agencies manage the extensive surpluses generated by the budget sector or the balance of payments, Temasek manages the government's stakes in various companies at home and abroad. Another interesting feature of Temasek is the unique nature of the relationship between its management and the President of Singapore. The president is, in fact, the financial guardian of Singapore assets whose concurrence is needed for appointment or removal of the Board of Directors of Temasek. Furthermore, Temasek is the only SWF that has issued bonds to finance its business.

Today, Temasek is the biggest shareholder in half of Singapore's ten largest (by market value) publicly traded companies.[2] Many of its foreign investments have been made through a sophisticated network of fully-owned subsidiaries or joint ventures. As will be discussed, Temasek has acted mainly as the entrepreneurial arm of the government. It has facilitated the process of privatization and actively managed the state's

[1] **Temasek means sea town. It was also the original name of Singapore.**
[2] **Simon Bennett, "Temasek's Mapletree Plans to List S$4 Billion REIT,"** ***Bloomberg*****, September 12, 2009.**

equities in various business areas, ranging from banking and finance to manufacturing and technology, with very little, if any, cash position or risk-free assets.

Although, Temasek is categorized as a transparent fund and has published annual reviews disclosing its group financials since 2006, it nonetheless is not very open to foreign enquiries. There is little information that may be obtained about the management and performance of Temasek during the period between its inception and the turn of the century. Additionally, the relationship between the fund and the national budget is not entirely clear, as the relationship between its board of directors, the management of its portfolio companies, and the government remains unclear. Temasek has nonetheless been sensitive to public opinion, and has used every opportunity to respond to misperceptions held by outsiders, including the public as well as policy makers.

As will be discussed, there is no evidence indicating that the fund, which is relatively illiquid and reflects an above-average tolerance for risk, was established or has ever been used as a precautionary means for coping with external financial shocks or domestic liquidity shortages. There is certainly a need for domestic compensation mechanisms or precautionary saving deposits in a small and highly interdependent (and therefore vulnerable) state like Singapore; however, Temasek was not intended to serve such purposes.

CREATION OF TEMASEK

The creation of Temasek is closely linked to the history and structure of the Singapore economy and the role of the state in economic development. The core of the Singapore economic system was formed in response to numerous political and economic challenges. Singapore, in its modern form, is (like the United Arab Emirates) a young state. Before independence, Singapore was a part of the British Empire. In 1942 it fell to Japan but was recaptured in 1945 by the British. Singapore became a part of the Federation of Malaysia[3] in September 1963. Regional political tensions, and specifically the growing tension with the Malay leaders, forced Singapore to declare independence on August 9, 1965. Since then, the People Actions Party (PAP) has been in control of the government and has remained the dominant political party in Singapore.

Not too long after independence, the British abandoned their naval base in 1968 due to the high costs of maintaining the facility. This meant a massive job loss for the local people, whose lives depended on the British facility. In a process generally described by Toynbee's "challenge and response"[4] framework, the economy of Singapore was shaped mainly in reaction to a series of misfortunes in the early years of independence. Between 1966 and 1973, "Singapore was in its 'heroic' phase of growth, moving along at the impressive rate of 12.3 percent a year."[5] Although economic growth rate fell afterwards, it still remained well above the growth rate of the industrial states. Immediately after independence, the government realized that the strategy of import substitution was not viable since the domestic market was too small. Therefore, tariffs and quotas were reduced, and an export promotion strategy was adopted in the late 1960s.

[3] Federation of Malaysia was composed of the former Federation of Malaya, Singapore, Sabah, and Sarawak.

[4] Toynbee's argument was that minor challenges do not induce any responses. A significant and sizable challenge, however, can produce industrial development. For further information see Alexander Gerschenkron and Seymour Martin Lipset collection., *Economic Backwardness in Historical Perspective, a Book of Essays* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1962), 11; Jurgen Schmandt and C. H. Ward, *Sustainable Development: The Challenge of Transition* (Cambridge, U.K.: Cambridge University Press, 2000).

[5] Linda Lim, Pang Eng Fong, and Ronald Findlay, "Five Small Open Economies," in *A World Bank Comparative Study. The Political Economy of Poverty, Equity, and Growth.*, ed. Ronald Findlay and Stanislaw Wellisz (New York: Published for the World Bank [by] Oxford University Press, 1993), 97.

The government also recognized the need for both physical infrastructure and the institutions required for economic growth and therefore took the lead, especially in economic areas, where the private sector was absent. It even set up enterprises in competition with the private sector. According to Lim et al.:

> Besides being the exclusive provider of infrastructure and social services, as are many other governments, the Singapore government engaged in direct production. The main reason for doing so in the 1960s was to build large, high-risk enterprises, such as the National Iron and Steel Mills and Jurong Shipyard. The government also set up state-owned companies to take over some functions from public agencies that had grown too rapidly with a view of safeguarding institutional efficiency and flexibility. ...By the early 1980s the government owned close to 450 companies in a wide range of manufacturing and service industries...[6]

The government, and specifically the Deputy Prime Minister, Dr. Goh Keng Swee, believed that there was no choice but to ensure that government investments were commercially sound and sustainable. Dr. Goh Keng Swee, who is also referred to as the architect of Singapore's modernization and economic development, believed that the task of managing various economic entities should be in the hands of managers other than the government bureaucrats. He asserts his view clearly by saying: "One of the tragic illusions that many countries of the Third World entertain is the notion that politicians

[6] **Ibid., 108.**

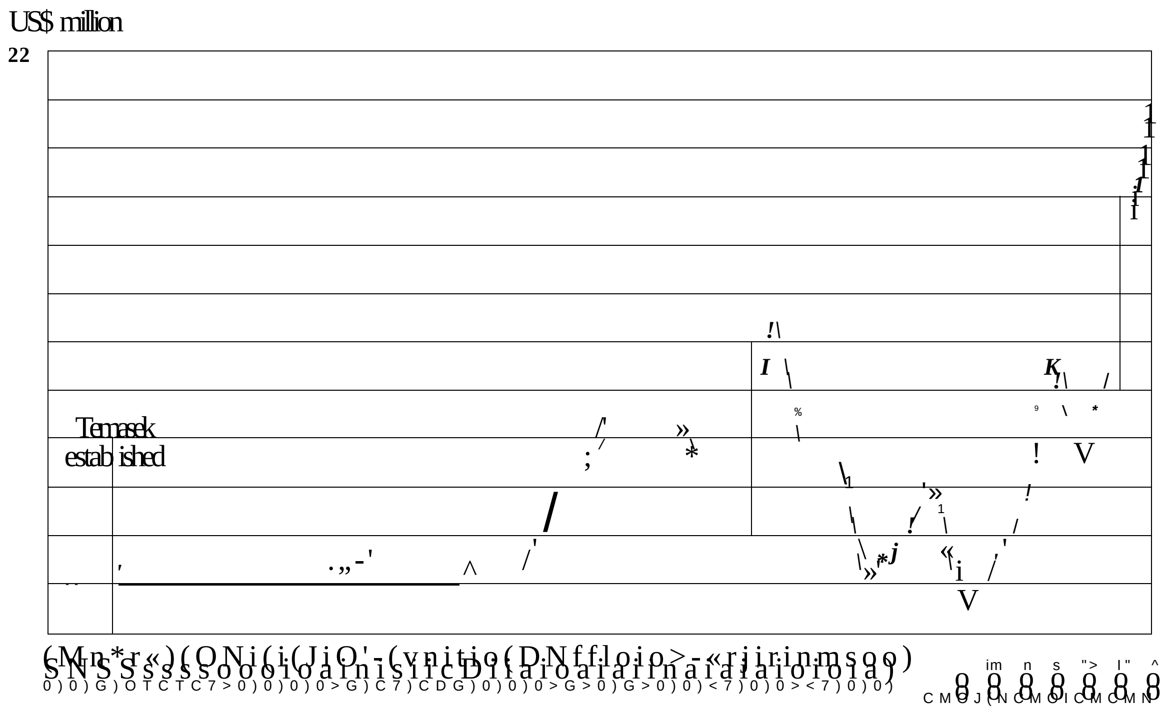
and civil servants can successfully perform entrepreneurial functions. It is curious that, in the face of overwhelming evidence to the contrary, the belief persists."[7]

Temasek Holdings was established on June 25, 1974 by the government of Singapore to take over the ownership and management of 35 government-linked companies (GLCs) whose shares were held by the Singapore Ministry of Finance. "The objective was to find a way to better manage the portfolio of companies and investments accumulated by the Ministry of Finance in the first decade of nation building since 1965." The establishment of Temasek is unique in the sense that, unlike most of the SWFs, it was not funded by foreign reserves or balance of trade surpluses. Instead, Temasek received its initial endowment of S$345 million ($134 million) in the form of company stock from the Ministry of Finance.

In fact, in the 1970s and early 1980s, Singapore's current account balance was constantly in deficit. Figure 11 shows Singapore's balance of payments status for the years 1972-2007. The deficit was mostly corrected through the financial account. Yet, between 1972 and 1975, with the exception of 1973, the balance of payments was in deficit. In the early 1990s and concurrent with the global waves of liberalization, the government of Singapore transferred additional state-owned companies to Temasek. The fund took over companies such as SingTel (telecommunications), Port of Singapore Authority (PSA) International (the world's second largest port operators), and SingPower (power generation).

[7] **Quoted in The Committee on Financial Services, United States House of Representatives,** ***Testimony by Simon Israel, Temasek Holdings: A Dependable Investor in the United States,*** **March 5, 2008.**
[8] **"Frequently Asked Questions About Temasek Holdings," Temasek Holdings, http://www.temasekholdings.com.sg/pdf/TemasekHoldingsFAQs.pdf.**

FIGURE 11 Singapore balance of payments ($ billion)



Source: "International Financial Statistics." IMF, 2009.

Temasek has been governed under the Singapore Companies Act, which requires that directors have the fiduciary duty of acting in the best interest of the shareholders. In accordance with Chapter 50 of the Act, Temasek Holdings is considered an exempt company and is therefore not required to publish audited statutory consolidated financial statements.[9] In 1991, the Singapore Constitution was revised and Temasek was designated as a Fifth Schedule Company. The revision also granted the President of

[9] According to the Chapter 50 of the Singapore Companies Act, an exempt company has no more than 20 shareholders, none of which are corporate, and is not required to file its audited financial statements with the public registry.

Singapore more roles than his previous ceremonial role. The President (now appointed by popular vote instead of the Parliament, for a period of six years) became the "fiscal guardian" of Temasek and other Fifth Schedule companies,[10] which meant that the President's approval was required for spending past reserves, including those accumulated by Temasek and other Fifth Schedule companies. The President could also veto the budget if he believed that it put the past reserves at risk.[11] This also meant that the government could not withdraw from the assets under the management of Temasek or other Fifth Schedule companies for its own purpose. Many believed that it was very important for the President to have "an independent and direct electoral mandate in order to be in a position to legitimately overrule the will of Parliament (government)."[19]

It took Temasek almost 28 years to issue its Charter. The Charter, issued on July 3, 2002, stated that Temasek "holds and manages the Singapore Government's investment in companies, for the long term benefit of Singapore,"[13] with a focus on value (profit) creation and the maximization of customer fulfillment and shareholder (Ministry of Finance) returns. The Charter refers to the various types of businesses that are managed by Temasek. These include companies that are critical to Singapore's security or economic welfare, natural monopolies (e.g., water, power, gas, and airport operations), and businesses that have a potential for becoming internationalized.[14] In 2009, the

[10] Other Fifth Schedule entities include Singapore's Government Investment Corporation (GIC), which manages the reserves of the government, Central Provident Fund (CPF), a pension fund or a mandatory saving scheme financed by payroll contributions, and the Monetary Authority of Singapore (MAS), which acts as the central bank.

[11] This is also referred to as "two-key" principle, meaning both the Parliament (government) and the President have to agree in order to use the past reserves.

[12] J6n R. Blondal, "Budgeting in Singapore," (Organisation for Economic Co-operation and Development, 2006), 20.

[13] Tommy T. B. Koh and Li Lin Chang, *The United States-Singapore Free Trade Agreement: Highlights and Insights* (Singapore: World Scientific Pub; Institute of Policy Studies, 2004), 258.

[14] Ibid., 260-61.

Charter was revised and re-written, and corporate citizenship was added to Temasek's responsibilities, while key concepts such as the maximization of shareholder value, active investment, and consistent value creation remained unchanged.

TEMASEK, TODAY

The first annual report, called the Temasek Review, was published in 2006, and stated that the mission of the fund was to create and maximize long-term shareholder value as an active investor and shareholder of successful enterprises."[15] Today, Temasek Holdings employs about 380 people from 24 countries in more than ten different offices around the globe.[16] As of March 31, 2009, the portfolio under its management amounted to $S130 billion ($86 billion) and has delivered an annual compounded total shareholder return of 16 percent since its inception in 1974.[17] The sources of financing for Temasek are dividends from the portfolio companies, proceeds from divestment, and the occasional transfer of new companies by the Ministry of Finance. Temasek has a corporate credit rating of AAA and Aaa by Standard and Poor's and Moody's respectively.

Temasek is led by a nine-member Board of Directors, a management team, and several Board committees. It also benefits from the insight and advice of both international and advisory panels that consist of business leaders from around the world. The Board of Directors is currently constituted of nine members, who also serve as board members or are on the management team of other companies affiliated with Temasek. Appendix J presents a list of the Board of Directors with a brief description of their

[15] "Temasek Review 2006," (Temasek Holdings, 2006), 11.
[16] In addition to the head office in Singapore, Temasek has five offices in China, two in India and Vietnam each, and new offices in Brazil and Mexico.
[17] "Temasek Review 2009," (Temasek Holdings, 2009).

business affiliations. The Board has been chaired by S Dhanabalan since September 1996. He is a former cabinet member (1978-1994) and has been the chairman of a number of companies, including DBS Group and Singapore Airlines, in which Temasek has 28 percent and 54 percent stakes respectively.

The Chief Executive Officer (CEO) and the Executive Director of Temasek is Ho Ching, the wife of the current Singapore prime minister, Lee Hsien Loong. She has been the Executive Director since May 2002 and the CEO since January 2004. Ho Ching held positions in the defense industries and was the president and CEO of the Singapore Technologies Group before joining Temasek. In early 2009, Temasek was set to name

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Charles "Chip" Goodyear as the first foreign national CEO of the fund. This was viewed as a step toward greater transparency and professionalism. However, on July 20, 2009, Temasek unexpectedly announced that the plan for the leadership transfer would not proceed, due to "differences regarding certain strategic issues that could not be resolved."[19]

Goodyear reportedly was expected to change the fund's strategy and shift the focus from financial investments to natural resources.[20] There were reports that Goodyear was trying to instill a greater degree of discipline and that he "had fired people for showing up late to internal meetings and had prohibited them from typing messages on their BlackBerry's during meetings."[21] Temasek officials offered very little explanation for this decision, but indicated that the search for a well-qualified CEO would continue.

[18] Charles Goodyear is the U.S. born former head of BHP Billiton (Australian mining company). He joined the Temasek's Board of Directors on February 1, 2009, and was to replace Ho Ching in October 2009.
[19] "Temasek and Transparency-Ii," *The Wall Street Journal,* July 21, 2009.
[20] John Burton, "Temasek and US's Goodyear Part Ways," *Financial Times,* July 22, 2009.
[21] Fiona Chan, "Goodyear Rumors 'Far from the Truth'," *AsiaOne,* August 1, 2009.

According to the Temasek Review, the Board of Directors and the management team are responsible for business decisions related to investment or divestment. The fund asserts that neither the President of Singapore nor the Ministry of Finance gets involved in the operations of Temasek, while the former safeguards the assets under management of Temasek from the latter's potential withdrawal for budgetary purposes. The Board of Directors provides the overall policy direction to the ten-member management team. The management of Temasek claims that it complies with the local rules and regulations pertaining to its investment or operation and has no involvement in the day-to-day operations of the portfolio companies. It gets involved only in the capacity of a shareholder exercising its rights and voting at shareholders' meetings.

One of the interesting features of Temasek is the unique nature of the relationship between the fund's Board of Directors and management on the one hand and the President of Singapore on the other hand. As mentioned earlier, after the revision of the Constitution in 1991, the President's role changed from a ceremonial one to one of a financial guardian of Singapore's assets (including past reserves). The appointment or removal of Board members by the Ministry of Finance (the sole shareholder of the fund) is subject to the President's concurrence.

Additionally, the President is responsible for fiscal discipline and protecting the accumulated national reserves. Any profits or assets built up during a previous government term are considered past reserves, and are considered untouchable once a new government is in power. Any deficit or negative reserves should be corrected using the reserves accumulated within the current government term. In other words, the government can run a deficit only if it has already built up surpluses during its five-year term. In order to draw on the past reserves, approval of both the President and the Parliament must be obtained.[99] This also indicates that Temasek assets cannot be used for balance of payments corrections.

Due to its exempt status, information about Temasek Holdings, including its financial statements between 1974 and 2000, is not available. The information for financial years 2002 to 2004 is included in the first Temasek Review, issued in 2006. Temasek was, however, subject, as a company, to financial audits and has received international ratings. The consolidated financial statements of Temasek Holdings have, since at least financial year 2001, been examined by two major accounting and auditing firms, PricewaterhouseCoopers and KPMG, whose auditors' reports contained unqualified opinions.

There is a wide spectrum of industries that Temasek Holdings invests in. These include banking and financial services, transportation, infrastructure, real estate, telecommunications, and energy. Temasek manages its portfolio of different companies by exercising its shareholder rights to influence the general direction of the companies, allegedly without getting involved in the day-to-day business operations and decisions. Over the past few years, the composition of the portfolio in terms of its exposure to geographical areas and markets has changed. As table 19 shows, with the exception of financial year 2008-09 (and that a reflection of the global financial crisis), the market value of the portfolio has grown steadily. The geographical focus of the portfolio has also shifted from domestic and OECD markets to regional and emerging markets. Appendix K

[22] The President can also veto the government budget if he is of the opinion that such budget entails the risk of using past reserves.

[23] For financial years 2001-02 to 2006-07, PriceWaterHouseCoopers conducted the audit. KPMG audited the consolidated financial statements for the financial years 2007-08 and 2008-09.

shows the major holdings of Temasek as of March 31, 2009. Since 2004, emphasis on the domestic market has been lessened, and the focus shifted to North Asia, Latin America and other regions. The portfolio structure is divided almost equally between emerging markets, with their higher risks, and developed countries, with their slower growth rates and lower risks. The Chairman of the Board of Directors, S. Dhanabalan, has clearly indicated the fund's approach with respect to risk, saying: "[A]s Asia continues to make progress, it will continue to de-risk. We are comfortable to maintain an overweight in Asia... ,"[24]

Table 20 shows the changes in the portfolio by sector since financial year 2004. As can be seen, a large portion of the portfolio is constituted of companies active in the financial sector, telecommunication, and media. However, over time, the emphasis has shifted from telecommunication (as well as the infrastructure sector) to financial services and new areas such as life science and consumers. After the financial crises triggered by the recent financial crisis, Temasek reduced its exposure to the financial services sector. During financial year 2008-09, Temasek took advantage of lower asset prices and strengthened its portfolio position in real estate, transportation, and logistics.

Another distinctive feature of Temasek is the issuance of bonds in order to finance its operations. Initially, the information on the bond holdings of the fund was not available to certain people. The bonds webpage initially showed a disclaimer page that restricted access to and use of the bond information to residents of the United States. In October 2009 Temasek removed the restriction, and information about bond issues

[24] **"Temasek Review 2009," 12.**

became available to the public.[25] In September 2005, Temasek issued $1.75 billion worth of 10-year bonds with a coupon rate of 4.5 percent. In late October 2009, Temasek took advantage of low interest rates and raised another $1.5 billion through its wholly-owned subsidiary Temasek Financial Ltd. in order to "provide the net proceeds from the offering to Temasek and its subsidiary companies to fund their ordinary course of business."[26] The second series of the 10-year bonds carried a 4.3 percent coupon and was jointly put on the market by Deutsche Bank AG, Goldman Sachs Group Inc., and Morgan Stanley.

[25] This temporary restriction were most likely due to the fact that Temasek was planning to issues a second series of bond in late October 2009.
[26] Ditas Lopez, "Temasek Looks to Tap U.S. Bond Markets," ***The Wall Street Journal,*** **October 20, 2009, C2.**

TABLE 19 Temasek portfolio by market value and geographical distribution (financial year ending 31 March)

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Market Value (S$ billion)	90	103	129	164	185	130
Geography (percent)						
Singapore	52	49	44	38	33	31
North Asia (China, Taiwan, Korea)	6	8	19	24	22	27
ASEAN	9	9	12	12	12	9
South Asia (India, Pakistan)	1	2	3	4	7	7
OECD	32	30	20	20	23	22
Latin America and Others *	0	2	2	2	3	4

Sources: Temasek Reviews 2006, Temasek Review 2008, and Temasek Review 2009

* Mexico is classified under OECD in 2004 and later included in Latin America and Others

TABLE 20 Temasek portfolio by sector (percent-financial year ending 31 March)

	2004	2005	2006	2007	2008	2009
Financial Services	21	21	35	38	40	33
Telecommunication and Media	36	33	26	23	24	26
Transportation and Logistics	14	17	13	12	10	13
Infrastructure, Engineering & Technology	10	10	9	8	8	7
Real Estate	6	8	7	9	7	9
Energy and Resources	7	8	6	6	5	5
Others	6	3	4	4	6	7

Sources: Temasek Review 2006, Temasek Review 2008, and Temasek Review 2009

TIMES OF HARDSHIP AND TEMASEK

As a small, open economy, Singapore has been vulnerable to adverse international economic developments. In fact, the country has already endured a number of international crises. The first oil crisis induced a recession in 1974 and 1975, and resulted in shrinkage of the export sector and mass layoffs of workers in this sector. During the 1985-86 recession, which was due in part to high wages in the exports sector and the reduced demand for electronic products, the Singapore dollar also came under speculative pressures. Since then, the government has reduced emphasis on high tech. During the East Asian financial crisis of 1997, which began with the floating of the Thai baht, Singapore first used the exchange policy, allowing a gradual 20 percent depreciation in the Singapore dollar, to fight the recession. Later, as the crisis dragged into 1998, Singapore focused on wage controls and cost-cutting initiatives to maintain the health of its economy.

Lack of information regarding the operations of Temasek during the aforementioned crises makes it almost impossible to draw any conclusions about the role that Temasek played, if any in helping the ailing economy. Much of Singapore's success in managing the crises is due to the effective monetary and exchange rate policy, as well as wage and cost controls, rather than fiscal policy. In this process, Temasek has relied on domestic institutions such as the Central Provident Fund (CPF) or the Government Investment Corporation (GIC). Temasek did not seem to play a major role during the past crises either, a perception that is supported by the fact that its investment income was excluded from the government budget. The recent mortgage crisis provides an

[27] The CPF is financed by payroll contributions, which are invested in government securities. This arrangement allows the members to withdraw funds for items such as housing, retirement, and medical expenses. The GIC is the government's fund manager for official reserves.

opportunity, however limited, to examine the role that Temasek may have played in the government's efforts to cope with the crisis. But before doing that, an overview of the relationship between Temasek and the government budget is necessary.

As mentioned earlier, Temasek is a holding company that manages a portfolio of state-owned companies for the government. In other words, it manages shares owned by the government. During the early years of Temasek, most of the portfolio was constituted of domestic companies. Later, as the burden of helping GLC become internationally competitive was reduced, Temasek expanded its operations (portfolio under management) to include overseas companies, mainly through portfolio investment, also through mergers and acquisitions (M&A) or joint ventures.

The government is entitled to dividends from owned companies. Temasek's dividends are based on its net profit and the realized capital gains and losses from its investments. Up until the year 2000, Singapore's focus was on fiscal discipline and sustainability, which they achieved by excluding the use of investment income. The government used the "operating revenue", which did not include investment income. The only sources of revenue were taxes and fees. "In 2000, Singapore's budget concepts were revised and parts of net investment income derived from investments of past surpluses were now treated for budgetary purposes. This was an implicit recognition of the tight fiscal realities."[28]

In January 2001 and in response to fiscal contractions, the Constitutional Amendment Bill was passed. The Bill allowed the government to use up to 50 percent of the Net Investment Income (Nil). As a result, income (dividends) from companies managed by Temasek, as well as investment income from GIC and Monetary Authority

[28] **Blondal, "Budgeting in Singapore," 8.**

of Singapore (MAS), were included as a revenue item in the budget as Net Investment Income Contribution (NIIC).[29]

Singapore's economy contracted after the recent sub-prime mortgage crisis. Similar to some other governments that introduced rescue packages and adopted expansionary policies, and in light of the increasing future government expenditures, Singapore passed another amendment to the Constitution in January 2008, which introduced the concept of "long-term expected returns" and permitted the government to use up to 50 percent of these returns. The critical issue is that Temasek was excluded from the new arrangement—i.e., access to the long-term expected returns (effective January 1, 2009) was limited to the MAS, which manages the official reserves of Singapore, as well as GIC.

Interestingly, in adapting this concept, the Ministry of Finance drew upon the Norwegian experience and Norway's inclusion of the expected real return on the Government Pension Fund-Global of Norway in the budget in the aftermath of the recent crisis (see Chapter III).[n] The Minister for Finance, Tharman Shanmugaratnam provided a number of reasons for this decision:

> The nature of Temasek's investment strategy... involves taking concentrated stakes in companies, including direct investments. Like other such investors, this strategy entails higher risks, with the expectation of higher returns... this approach makes it more difficult for us to project a

[29] Nil refers to the dividends, interest and other income received from investing reserves, as well as interest received from loans, after deducting management and administration expenses. NIIC is a part of Nil that is taken into the budget to augment the Government's revenues. For more information see "Budget Highlights, Financial Year 2009: Keeping Jobs, Building for the Future," (Singapore Ministry of Finance, 2009).

[30] "Second Reading Speech for Constitution of Republic of Singapore (Amendment) Bill 2008," (Singapore Ministry of Finance 2008).

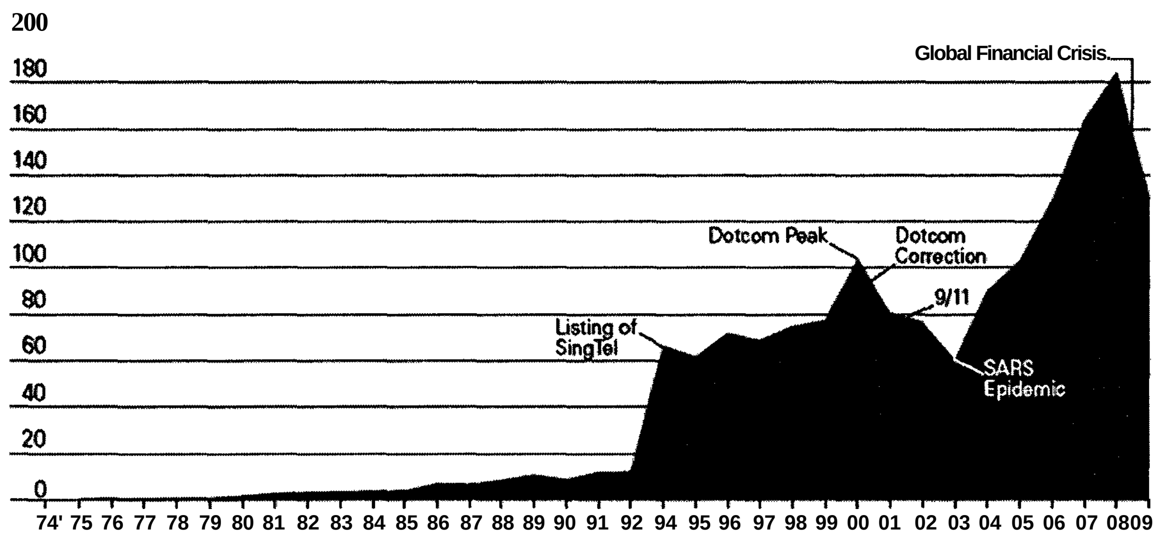
> long-term expected rate of return on Temasek's portfolio to a reasonable degree of certainty... Temasek's investment strategy is still evolving, having begun a major effort to diversify its investments geographically and sectorally in 2002. Temasek today operates very differently from the way it was operating six years ago, and its strategy will continue to evolve in response to the investment climate. ... It will therefore be prudent to leave Temasek out of the new framework.[31]

The statement clearly shows that Temasek's focus is on maximizing returns, which automatically entails higher risk, and because of this risk, the government is not ready to include the fund into its budget that requires conservative planning. Temasek, like many other funds and businesses, sustained losses during the crisis. As figure 12 shows, the market value of Temasek's portfolio dropped significantly, from S$185 billion in the financial year ending March 2008 to S$130 billion at the end of March 2009. Similarly, the profit margin, expressed as a percentage of revenue, dropped from 24.2 percent to only nine percent during the same period. Despite the tough market, Temasek continued to actively manage its portfolio. During 2008 and early 2009, Temasek divested about S$16 billion of its assets and invested S$9 billion in new assets, including S$3 billion of rights offerings[33] of its portfolio companies.[34] In fact, Temasek managed to complete the 14-year long process of the privatization of the Singapore's power generation sector, which produced 90 percent of the country's power. It sold Tuas Power

[31] Ibid., 27-28.
[32] "Temasek Review 2009."
[33] In a rights offering or issue, a company sells new shares at a discounted price to its existing investors to raise capital.
[34] "Temasek Review 2009."

to SinoSing Power (a wholly owned subsidiary of China Huaneng Group)[35] for S$4.24 billion ($3 billion).[36] This was followed by the sale of Senoko Power to Lion Power Holdings (a consortium led by Japanese Marubeni Corporation) for S$3.65 billion ($2.40 billion) and the sale of PowerSeraya to YLT Power International of Malaysia for about S$3.11 billion (all three companies for a total of S$11 billion).[37]

FIGURE 12 Year-end market value of Temasek portfolio (S$ billion)



Source: Temasek Review 2009

* Until 1993, financial years ended 31 December. In 1994 and onwards, the financial year ended 31 March.

[35] **Ibid.**

[36] **"Singapore: Temasek to Sell Electricity Generator,"** ***Mysinchew.com,*** **October 8, 2008.**

[37] **"Singapore Temasek to Sell Power Firm PowerSeraya,"** ***Xinhua,*** **October 7, 2008.**

Since the start of the recent financial crisis, Temasek has divested a significant amount of its stakes in the financial sector, most likely as a result of not so much bright horizon of the financial system and financial products. Temasek sold its entire stakes in Bank Internasional Indonesia (BII), (held since 2003), Merrill Lynch (held since 2007) , Barclays (held since 2007), China Minsheng Banking Corporation (held since 2004) , and E.SUN Financial Holding Company (held since 2006). As a result, the allocation of financial services companies in Temasek's portfolio dropped from 40 percent to 33 percent between March 2006 and 2009 (see table 20).

Temasek also shifted its focus from Western markets to Asian and emerging markets (including those in South America), and increased its investment in the real estate, transportation, and logistics sectors. In September 2008, Temasek invested about S$700 million in Li & Fung, a global supply chain management company providing service for major brands and retailers.[40] In October, Temasek, through its real estate arm, Mapletree Investment, entered into a contract to develop a $400 million, 75-hectare business park in Binh Duong Province in Vietnam. Mapletree is also involved in the development of several logistics parks in Vietnam.[41] In June 2009, Temasek acquired

[38] Temasek initially acquired 9.4 percent stakes in Merrill Lynch in December 2007 and later raised it to 13.7 percent to become the largest shareholder in September 2008. On January 1, 2009, Merrill was acquired by Bank of America. By end of March 2009, Temasek sold all its shares in Bank of America at a significant loss. Merrill had to pay Temasek $2.5billion to offset losses Temasek incurred after acquiring share in December 2007. For further information see "Merill Posts 3rd-Quarter Loss of $5.2 Billion," *The New York Times,* October 16, 2008.

[39] The Minsheng divestment was mainly due to regulatory reasons, based on which Temasek could not hold share in more than two Chinese banks. Temasek has stakes in China Construction Bank Corporation and Bank of China Limited.

[40] "Temasek Review 2009."

[41] "Mapletree," http://www.mapletreeindustrial.com/.

stakes in 01am International, a local company involved in supply chain management in the agricultural products field.[42]

In early 2009, Temasek increased its stake in Neptune Orient Lines (NOL) through a rights issue. NOL is one of the oldest companies (since 1975) in Temasek's portfolio. As of end of March 2009, Temasek held about a 67 percent stake in NOL. Earlier, in September 2008, NOL pursued a plan to take over the German container shipping company Hapag-Lloyd, which could have made NOL the third largest container carrier worldwide.[43] The proposal caused an uproar among shipping workers in Germany, and NOL dropped the deal. Other major investments by Temasek include a S$150 million stake in Hong Kong-based Lung Ming Investment Holdings, which operates an iron ore mining operation in Mongolia, a 15.4 percent stake in a Brazilian onshore oil field service company, San Antonio International, and a 19.5 percent stake in ENK, a Korean supplier of compressed natural gas (CNG) cylinders [44] This shows Temasek pursues a well diversified portfolio (both in terms of industry and geography), and at the same time avoids situations where its investment may create controversy.

TEMASEK IN TIMES OF ABUNDANCE

As mentioned earlier, the extent of the current research is limited by the availability of reliable data. Consequently, in this section, I will focus on the period immediately before the recent mortgage crisis. Of the 35 GLCs that were transferred to Temasek in 1975, at least five companies are still in existence. These include DBS Group Holding (corporate and investment banking), in which Temasek has a 28 percent stake,

[42] **"Temasek Review 2009."**
[43] **"Singapore's NOL Says Drops out of Race to Buy Hapag-Lloyd,"** ***AFP,*** **October 10 2008.**
[44] **"Temasek Review 2009."**

NOL with a 67 percent stake, Singapore Airlines (SIA) with a 55 percent stake, Keppel Corporation (offshore marine infrastructure) with a 21 percent stake, and Wildlife Reserve Singapore (the parent company of Singapore zoo, Night Safari, and Jurong Bird Park) with an 88 percent stake.

Between 1975 and 2000, at least 12 other GLCs—including MediaCorp (national broadcaster), SingTel (Singapore Telecommunications), and the three power companies discussed earlier—were transferred to Temasek. During 2001 and 2002, Temasek began to expand its portfolio to the real estate sector. It acquired a 40 percent stake in CapitaLand[45] in 2000. In 2001, Temasek established its fully-owned property unit, Mapletree Investments. Since 2002, Temasek has gradually shifted its focus from the domestic market and OECD countries to Asia. As a result, the value of investment in Asia (outside of Singapore), expressed as a percentage of the total value of Temasek's portfolio, increased from 16 percent in 2004 to 24 percent in 2006 (see table 19).

Since 2004, Temasek has actively expanded its investment through joint ventures between its portfolio companies and other entities around the globe, and has re-aligned its portfolio with market realities. The main investment arm of Temasek in financial services is Fullerton Financial Holdings (originally called Asia Financial Holdings-AFH). Through Fullerton, Temasek acquired stakes in (and later divested from) Bank Danamon Indonesia, Bank Internasional Indonesia (BII), Minsheng Bank (China), China Construction Bank, Bank of China (BOC), ICICI Bank (India), First India Credit Corporation, Hana Bank (South Korea), Alliance Bank (Malaysia), NIB Bank (Pakistan), E.Sun Financial Holding (Taiwan), and Siam Commercial Bank (Thailand).

[45] CapitaLand is the largest publicly listed property group in Southeast Asia. It was established in November 2000 as a result of merger between two local property developers (DBS Land and Pidemco Land).

Other major investments during 2004 and 2005 included Hopson Development Holdings (a developer of residential properties in China), Mahindra & Mahindra (India's largest manufacturer of utility vehicles as well as the Scorpio SUV) through Temasek's wholly-owned subsidiary Aranda Investments[46], and Apollo Healthstreet (an Indian medical outsourcing company) through Maxwell Mauritius, a wholly-owned subsidiary of Temasek [47] Investments in Southeast and East Asia included a co-investment with Cargill in oil palm plantation in Indonesia and Papua New Guinea; investments in PT Chandra Asri (Indonesia's largest producer of ethylene), and i-Logistics Corporation (a Japanese logistics firm specializing in international multi-modal distribution services); in other parts of the world, a partnership with Troika Dialog Asset Management to target markets in Russia and the former Soviet Union, a co-investment with two American private equity firms (Silver Lake Partners and KKR) to form Avago Technologies, which is involved in the semiconductor industry, and a co-investment with Istithmar, the SWF of Dubai, in Thailand's healthcare sector.

One of the major, and controversial, investments was the acquisition of a stake in the Thai wireless communication company Shin Corporation Public in January 2006. Temasek, through two Thai-registered companies, Cedar Holdings and Aspen Holdings, acquired 49 percent of the company from the family of the then Thai prime minister, Thaksin Shinawarta, for $1.9 billion [49] By late May, Cedar and Aspen held a 96 percent stake in Shin Corp, achieved through a mandatory offer to shareholders. Aspen is owned

[46] "Temasek Holdings' Subsidiary Acquires 5.5 Million M&M Shares," (Temasek Holdings, 2005).
[47] "Apollo Hospitals Group Company, Apollo Health Street Creates an Industry Landmark," (Temasek Holdings, 2005).
[48] "Temasek Review 2006."
[49] Vivian Wai-yin Kwok, "Temasek's Profits Receive Kick in the Shin," *Forbes.com,* August 2, 2007.

directly by a Temasek subsidiary, while Cedar is 49 percent owned by Temasek.[50] In Thailand, the transaction stirred up anti-Thaksin feelings, in particular, the belief that the prime minister "avoided taxes and put an important national asset in the hands of foreigners, namely Singapore's government-run Temasek Holdings."[51] Temasek later reduced its stake in Shin Corp and, as of the end of March 2009, Temasek held only a 42 percent stake.

Since late 2006, the pace of portfolio adjustment (investment or divestment) has slowed down. In late March, Temasek, through Dover Investments—its wholly-owned subsidiary —increased its stake in Standard Chartered Bank to about 19 percent. Later in December, Temasek also acquired about a 15 percent stake in Fraser & Neave Limited through its wholly-owned subsidiary Seletar Investments, which marked its most substantial investment in the food and beverage industry.[54] In early 2007, Temasek also boosted its investment in the technology sector and increased its stake in STATS ChipPac (through its wholly-owned subsidiary Singapore Technologies Semiconductors) from 35 percent to about 83 percent.[55]

But perhaps the least discussed aspects of Temasek's operations are its developmental initiatives and humanitarian efforts. On numerous occasions, Temasek and its portfolio companies have assisted with crisis management and natural disaster relief efforts in neighboring countries. In May 2003, Temasek and six of its portfolio companies came to China's aid in 'its battle against the Severe Acute Respiratory

[50] "Thai Shin Says Temasek Stake Sale Depends on Market," *Reuters,* August 24, 2009.
[51] "Pressure Tells: Temasek Calls for Polls," *Asia Times,* February 25, 2006.
[52] "The Tan Sri Khoo Teck Puat Estate Agrees to Sell Shares in Standard Chartered to Temasek," (Temasek Holdings, 2006).
[53] "Temasek Review 2008," (Temasek Holdings, 2008).
[54] "Temasek Holdings (Private) Limited Announces Investments in Fraser & Neave Limited," (Temasek Holdings, 2006).
[55] "Temasek Review 2008."

Syndrome (SARS) epidemic by providing 20 ventilators for use in hospitals and two thermal imaging scanners for use by the Civil Aviation Authority of China (CAAC). Ho Ching, the Executive Director at the time, also paid a courtesy call on the Chinese vice prime minister and health minister.[56] Between July and August, Temasek and its portfolio companies provided the same equipment to Taiwan, Indonesia, and Vietnam.

In January 2005, after South Asia was hit by the tsunami, Ho Ching, now the CEO of Temasek, sent a sympathy message to victims and survivors of the disaster, expressing Temasek's commitment to support relief and reconstruction efforts. She maintained: "We have set aside $10 million for relief, recovery and reconstruction support. We have already disbursed or committed $1 million for immediate relief in the first week of the disaster... Apart from funds, we have also leveraged on our network of partnerships with companies, NGOs, governments and private groups to focus on resolving issues such as logistics, water, communications and medical care, to help aid to reach those in need. We will continue to work with partners to support the recovery and reconstruction efforts."[58]

Temasek's engagement in development and social activities started 1997, with the Singapore Technologies Endowment Program (STEP). STEP organizes youth programs throughout Asia and has more than 1,200 participants from 13 countries, including ASEAN member states, China, India, Kazakhstan, and the United Kingdom. Recently, Temasek established two philanthropic organizations, Temasek Trust and Temasek Foundation. The former manages the donated funds received from Temasek and other parties, while the latter identifies developmental opportunities in Asia. Funds donated to

[56] **"Temasek Group of Companies Support China's Battle against SARS," (Temasek Holdings, 2003).**
[57] **"Goodwill Contribution by Temasek Group of Companies to Vietnam," (Temasek Holdings, 2003).**
[58] **"Temasek's Relief Efforts in Asia's Tsunami Disaster," (Temasek Holdings, 2005).**

the Trust are managed actively by Temasek fund managers. Through this structure, about S$16 million has been allocated to 14 programs in Asian countries, including China, India, the Philippines, Vietnam, and Singapore.[59]

In addition to community building and developmental projects, Temasek has also targeted human capital development. In 2001, the Singapore Millennium Foundation (SMF) was established with a focus on research and higher education. More than 200 postgraduate scholarships have been given out in areas such as engineering, physical and material sciences, life sciences, and water and renewable resources. In 2007, SMF awarded S$12.5 million for research in liver cancer, mental health, and bio-diesel fuels. In August 2002, Temasek founded the Temasek Life Sciences Laboratory (TLL), which coordinates the research efforts of a team of scientists from more than 25 countries, focusing on molecular biology, genetics, plant and animal sciences, solutions for food supply and safety, healthcare (e.g., the low-cost easy-to-use diagnostic kits for the H5N1 bird flu virus), and renewable bio-resources.[60]

RESPONSIBLE ENTREPRENEURSHIP

Temasek is an interesting case, in several respects. First, unlike many other SWFs, which are funded by foreign exchange, the Ministry of Finance transferred a portfolio of companies to Temasek. Second, Temasek has acted as a vehicle for privatization for the government. Temasek was tasked to improve the efficiency of GLCs and to make them internationally competitive for the purpose of selling them. This allowed the state to

[59] "Temasek Holdings," www.temasekholdings.com.sg.
[60] Ibid.

reduce its involvement in the economy, while remaining committed to long term economic development and an open economy.

The third feature unique to Temasek is the issuance of bonds. As discussed earlier, in 2005 and 2009, Temasek issued two series of 10-year bonds with a total value of $3.25 billion. There is no information regarding how and where these funds are being used, but the fact that Temasek had to raise money on the commercial international market most likely indicates the need for liquidity for daily operations of Temasek and its portfolio companies, and perhaps for new portfolio investment.

Transparency is a feature for which many have praised Temasek. The SWF Institute assigned an M-L Transparency index rating of ten to the fund. Since 2005, Temasek has published annual financial reports. Additionally, Singapore has been a member of the IWG of SWFs, which later became the International Forum of SWFs. Despite all of this, many aspects of Temasek's operations remain unclear. For instance, we do not know much about the operations of the fund during the period between its inception in 1974 and the turn of the century. It is also not quite clear how the investment (or divestment) decisions are made, or how much Temasek may have been contributing to the national budget. Nevertheless, no evidence was found showing that Temasek assets or returns ever used for balance of payments corrections.

Another non-transparent aspect of the fond is the nature of the relationship between Temasek's business leaders (board of directors, management, and various advisory boards), the management of the subsidiary and portfolio companies, and the government. A number of board members of Temasek currently serve (or have served) as board members or executives of other companies. Some of them have been government officials (see Appendix J). In addition to many years of experience, these board members bring with them an extensive network of government officials and business leaders, which most likely has influenced or facilitated business decisions.

Despite the close connection between Temasek and the Singapore government, there has been no evidence of Temasek making overseas investments in non-commercial or politically sensitive areas. In the case of the controversial investment in Shin Corporation in Thailand, Temasek preferred the offloading of its investment to political controversy. At the same time, government officials in Singapore remain sensitive to public opinion with respect to the role of the government in the economy and Temasek's internal affairs. In fact, both the Singapore Ministry of Finance and Temasek have, on various occasions, reacted to major newspapers' op-eds or editorials on topics such as government involvement in the economy, transparency, and the sudden change of course with respect to the appointment of the new non-Singaporean CEO. For instance, in May 2000, two days after a column published in one of the major local newspapers *(The Strait Times)* criticizing the continued government ownership of major companies, Temasek issued a press release defending its position and stressing that its portfolio companies performed on a commercial basis and that the process of privatization would not be a quick one.[61]

During August and September 2009, both the Ministry of Finance and Temasek responded to *The Wall Street Journal,* defending the fund's position with respect to issues discussed previously in the *Journal's* opinion section. On the issue of transparency and disclosure, the Ministry of Finance asserted that Temasek "discloses all relevant information that Singaporeans need to judge Temasek's performance as a long-term

[61] **"Temasek Cannot Divest Stakes in GLCs Overnight," (Temasek Holdings, 2000).**

investor ... Temasek itself discloses well beyond what it is required under the law." Regarding the sudden departure of Goodyear, the Ministry argued that "what Temasek stated about the mutual agreement not to proceed with the planned CEO succession is no different from typical disclosure by large companies ... while it is ideal to have a Singaporean [CEO], this is not always possible, as the field of candidates with experience in running international operations is narrow."[63] Temasek also reacted to another op-ed that had called Temasek "another government appendage,"[64] by stressing that Temasek was "an investment company set up as asset owner to seek returns by taking investment risks."[65]

The Singapore government involvement in Temasek and in the economy in general goes well beyond the boundaries of economic statecraft. In fact, as early as the 1970s, the government of Singapore realized that smallness and domestic market limitations are impediments to economic development and that efficient management of the SOEs required an entrepreneurial entity, outside of the formal political structure. Dr Goh Keng Swee, the architect of Singapore's modernization believed:

> The role that is to be accorded to private entrepreneurs in the development plans of underdeveloped countries not only depends on political attitudes, but to some extent is influenced by the adequacy of the supply of entrepreneurs ... The role of entrepreneurs, broadly, is to perform the function of risk-taking by investing capital in new ventures. They introduce innovations in processes or in products. It is on the successful

[62] **Chin Sau Ho, "Singapore, Temasek and Disclosure," *The Wall Street Journal,* August 25, 2009.**
[63] **Ibid.**
[64] **"Temasek's Revised Charter," *The Wall Street Journal,* August 31, 2009.**
[65] **Myrna Thomas, "Correcting Temasek Misperceptions," *The Wall Street Journal,* September 8, 2009.**

> performance of entrepreneurs that continuous economic expansion in modern industrial society largely depends.[66]

Since 1965, when Singapore became an independent state, the government has been continuously involved in running the economy, establishing new industries and SOEs to run various economic sectors, such as maritime and shipping, power generation, and telecommunication. The government also designed and led the import substitution, and later the export promotion, economic development strategies.

In fact, the level of government involvement in the economy has been so great that, according to some, it has become counterproductive. Lim et al maintained, "[the] state capitalism built by civil servants turned entrepreneurs has added a new dimension to the competition between the public and private sector, in that it has alienated local business groups and to some extent the professional classes."[67]

State involvement in the economy in the case of Singapore is undeniable. Nevertheless, the entrepreneurial spirit became embedded in the management of various industries or state-owned companies, with Temasek being one example. While the GIC and MAS each respectively manage the official reserves of the country, and administer the monetary policy of the economy, Temasek manages the government's stakes in various companies. As indicated in the latest Temasek Review, the fund has "a flexible investment horizon and look[s] to create optionalities for future value," and it also has "the flexibility of taking concentrated positions or investing with a long or short

[66] Keng Swee Goh, *The Economics of Modernization and Other Essays* (Singapore: Asia Pacific Press, 1972), 80.
[67] Lim, Fong, and Findlay, "Five Small Open Economies," 109.
[68] "Temasek Review 2009," 37.

horizon."[69] Almost the entire portfolio of Temasek consists of stakes in various companies, resulting in a large holding of equities and either a less liquid position or investment in low risk, fixed-income assets.

As mentioned earlier, when short on cash, Temasek issued bonds, like any other commercial entity, to raise money for its operations. Additionally, Ho Ching indicated that there was a possibility of bringing in co-investors in the long run to ensure the sustainability of the fund's operations. She maintained that Temasek "would seek 'sophisticated co-investors' and would not sell the 'family jewels' for short-term gains."[70] Although many questions (e.g., whether "sophisticated investors" refers only to domestic investors or includes international investors, and, if so, whether Temasek would still be considered a SWF or not) remain to be answered, this approach indicates the entrepreneurial spirit guiding Temasek today.

Singapore is a small country, without any natural resources. It has access to a small domestic market and a limited regional market. Since gaining independence, Singapore has experienced several financial crises. However, the government—or, more precisely—the "PAP did not abandon the colonial administration's commitment to free trade, competition, and free enterprises, it felt that the state should... take the lead in establishing new economic activities, especially in industries where the private sector had neither the experience nor the capital to operate successfully."[71]

Today, Temasek manages a portfolio of companies on behalf of the Singapore government. The government is allowed to withdraw up to half of the returns accumulated within the current government term for budgetary purposes. Beyond this

[69] **Ibid., 34.**
[70] **Gwen Robinson, "When Is an SWF Not an SWF?," in *FTAlphaville* (2009).**
[71] **Lim, Fong, and Findlay, "Five Small Open Economies," 107-08.**

contribution, there is no evidence or indication that Temasek is (or will be) providing resources to assist the government in coping with international financial imbalances or meeting public pension fund obligations. As mentioned earlier, the GIC manages official reserves and the CPF is the national pension scheme that manages funds contributed by both employees and employers. Temasek, above all, is the embodiment of the Singapore government's entrepreneurial spirit.

CHAPTER VII

NATIONAL WEALTH FUND, THE RUSSIAN FEDERATION

The fourth case study looks at the National Wealth Fund (NWF) of the Russian Federation. This is an interesting case and indeed a unique opportunity to study a fund in its nascent stage very closely. The NWF, which is often referred to as the welfare fund in the media, was established in 2008 as a result of the split in the four-year old Stabilization Fund. The NWF is, in a sense, a continuation of the Stabilization Fund. Therefore we cannot study the history of one without studying the others'. The post-1991 events had a significant impact on the thinking of economic policy makers in Russia. The Stabilization Fund was established to sterilize the windfall of oil revenues and providing resources for correcting fiscal deficit. After 2008, the task of protecting against the volatility of oil prices was transferred to the Reserve Fund, while the NWF was created to provide resources for government pension obligations, or other fiscal needs.

Of the three political economy perspectives under consideration, the domestic compensation thesis is most relevant to the case of the NWF today. The NWF's assets are held in cash or western government bonds, and some was lent to domestic banks or businesses after the recent financial crisis. The fund with its current asset volume, allocation, and management could not be used as a means of economic statecraft. Neither is it capable of serving as an expression of state entrepreneurship, as the spirit and talent for being one is still missing in Russia. In fact, there is a domestic power struggle over the NWF (and prior to that the Stabilization Fund), with various groups trying to gain access to the funds' assets.

The Stabilization Fund was created during a period of balance of payments surplus, and as its name suggested, was in fact aimed at managing international imbalances. Through this fund, large amounts of Russia's foreign debt (both sovereign and banking sector) was paid off, some ahead of schedule. Russia's approach to managing crisis is, in fact, different from other states. The NWF, which was created during the period when Russia was hit by the global financial crisis, provided funds for bail outs. However, economic hardship, to a great extent, undermined the mandated objective of the fund. Before the NWF could formalize its investment criteria and asset management, it had to provide some of its assets as domestic loans to banks and businesses.

Perhaps the most interesting issue with respect to the NWF is its position within the Russian political apparatus. While the fund is officially managed by the Ministry of Finance, it has been the focus of various centers of power within the Russian government. The constant struggle has also resulted in the fund's inability to develop a solid agenda. In terms of the research design, the short lifespan of the fund does not allow us to follow the same structure of study as previous funds, i.e., comparing the fund's behavior at the times of economic contraction with times of economic prosperity. Therefore, conclusions about the purpose of NWF must be drawn in conjunction with the state's priorities that can change over time.

Russia remains one of the least transparent states in many areas, including those related to its funds. The website of the Ministry of Finance has dedicated sections to both the Reserve Fund and the NWF; however, this information is limited to general literature and chronological aggregate balances of the funds.[1] There is no official information on

[1] **Even the website in Russian language (compared to the English version) does not provide any additional information.**

the actual composition of the NWF assets and whether (or how much of) its assets are held in the form of sovereign debt instruments (bonds).

The Russian fund continues to operate in a non-transparent way, and its management remains closed to external enquiries. As with many other states, the Russian official information did not match that provided by the IMF (available from 1994). Therefore, any conclusion about the purpose of the NWF can be only as good as the available data and information would allow.

CREATION OF NWF

The period between the collapse of the Soviet Union in August 1991 and the creation of the Stabilization Fund in 2004 had a critical influence on the thinking of the economic policy makers in Russia. During this period, the Russian Federation had experienced not only the political, economic, and social problems associated with the transition, but also a number of external economic shocks. The NWF of Russia was officially established on February 1, 2008, following the split of the Stabilization Fund into two separate funds, the Reserve Fund and the NWF. In order to better understand the purpose of the NWF, we need to study the Stabilization Fund and look at the economic and political environment prior to its establishment, and the relationship between the fund and the Russian federal budget.

In the period between the collapse of the Soviet Union and 1998, the economy was characterized by high inflation and large budget deficits. On October 11, 1994 (the "Black Tuesday"), the exchange rate fell by 27 percent in a single day. A year later and

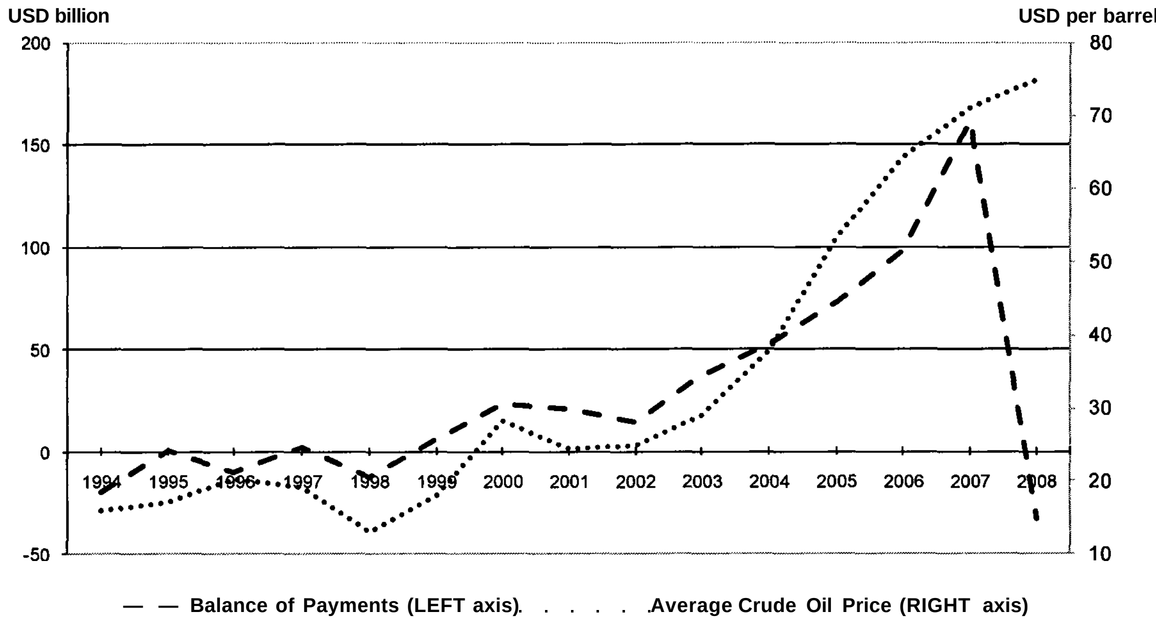
[2] **Anders Aslund, *Russia's Capitalist Revolution: Why Market Reform Succeeded and Democracy Failed* (Washington, D.C.: Peterson Institute for International Economics, 2007), 143.**

in the summer of 1995, the monetary authorities introduced the currency band that allowed for a moderate and periodic devaluation of ruble against foreign currencies. Since the mid 1990s, economic policy was characterized by an incongruous combination of tight monetary policy and excessively loose fiscal policy, which resulted in large scale government borrowing, mainly through domestic treasury bills with exceedingly high interest rates, sometimes "lingering 100 percent per annum."[3] Under the pressure of the IMF, the government bond market was opened to foreign investors, exposing Russia to external market volatilities.

In a sense, the financial crash of 1998 can be attributed to the high exposure to the global economy resulting from the massive foreign portfolio investment in Russia. "Foreign portfolio investment skyrocketed from a respectable $8.9 billion in 1996 to an incredible $45.6 billion in 1997 or 10 percent of GDP. ... At the peak of the stock market in 1997, foreigners might have owned as much as 30 percent of the market capitalization of some $100 billion."[4] The IMF data on Russia's balance of payments (available from 1994) also shows a large amount of volatility between 1994 and 1998, with the balance of payments mostly in deficit (figure 13). One important by-product of massive foreign borrowing by the government was that the government did not focus on domestic sources of revenue, e.g., taxes.

[3] **Ibid., 173.**
"Ibid., 174.

FIGURE 13 Russian Federation balance of payments and oil prices



Source: "International Financial Statistics (IFS)." IMF, 2009.

The Asian financial crisis, which had started in the summer of 1997, reached Russia in late October, and resulted in the fall of Russia's stock market by 19 percent from its peak.[5] Almost a year later, the exchange rate came under attack, creditors started to withdraw their monies on a large scale, and the country's foreign exchange reserves diminished significantly. Russia was forced to both devalue the currency and default on some of its domestic debt. "Inflation that had fallen to the single digits surged to 85 percent for 1998 as a whole. The Russian stock market hit bottom with a staggering fall

[5] **Ibid., 177.**

of 93 percent from its peak in October 1997. … About half of Russia's commercial banks went bankrupt."[6]

The turn of the century opened a new chapter in Russia's political economy. The country had fought two wars in Chechnya since the collapse of the Soviet Union, had undergone political and social turmoil, and was struggling with an out-of-control economy. The economic stabilization began as early as 1999. The government cut expenditures, and applied tax laws to large enterprises that had previously enjoyed favorable tax rates. All types of revenue were routed to the federal budget. As a result, federal revenue almost doubled between 1998 and 2002, from 11 percent to 20 percent of GDP.[7]

Since the turn of the century, Russia has made progress in joining the global economic system. During May and June 2002, both the United States and the EU recognized Russia as a market economy.[8] A year later, President Vladimir Putin announced that Russia's GDP would be doubled by 2010. In 2005 revenues from the oil and gas sector accounted for 50 percent of the federal budget.[9] The revenues from the oil and gas sector consisted of "hydrocarbon extraction tax (oil and natural gas from all types of hydrocarbon deposits, gas condensate from all types of hydrocarbon deposits); export duty on crude oil; export duty on natural gas; [and] export duty on petroleum products."[10] The Russian government realized that the maintenance of a balanced budget depended, to a large extent, on the sustainability of revenues (including those from the oil and gas

[6] Ibid., 179.
[7] Ibid., 193.
[8] Peter Slevin, "U.S. Says Russia Now 'Market Economy'; Designation Follows Announcement by EU," *The Washington Post,* June 7, 2002. Also see "Commission Recognises Russia as Market Economy," Euroactive.com, http://www.euractiv.com/en/trade/commission-recognises-russia-market-economy/article-115282.
[9] "Main Results and Trends of Budget Policy 2008-2010," (Ministry of Finance, Russian Federation).
[10] Ibid., 29.

sector) and consistent levels of expenditures.

Against this background and on January 1, 2004, the Stabilization Fund was established. The fund was the brain child of Andrei Ularionov, one of President Putin's maverick economic advisors. The Stabilization Fund was designed to sterilize the windfall of oil revenues by absorbing the excess liquidity (and, by doing so, controlling inflation), and providing resources for correcting the fiscal deficit when the price for Urals oil falls below the cut-off price." In practice the role of the fund was twofold. On the one hand, it accumulated foreign reserves to maintain the stability of exchange rate and prices, and later paid off Russia's sovereign debt. On the other hand, once it had accumulated a certain level of funds, it could finance the domestic budget.

The fund was managed by the Russian Ministry of Finance, which set the currency composition and asset allocation, with some asset management functions delegated to the Central Bank of Russia. The Stabilization Fund accumulated assets when the actual price of oil surpassed the cut-off price. Once the balance of the Stabilization Fund exceeded 500 billion rubles, it could release funds to finance the federal budget deficit, pay off foreign debt, or fund other obligations, including pension payments.[12]

The fund's assets were to be invested in foreign sovereign debt. The Ministry of Finance could fulfill this responsibility by doing one or both of two things. 1 ^ It could

[11] The cut-off price is defined in each annual budget according to the Budget Code of the Russian Federation. The cut-off price for 2005 and 2006 budgets were $20 and $27 per barrel respectively. Since 2004, the oil prices have surpassed the cut-off price, bringing windfall of oil revenues to the country.
[12] "Stabilization Fund of the Russian Federation," Ministry of Finance of the Russian Federation, http://www.minfin.ru/en/stabfund/.
[13] "Procedure for Management of the Assets of the Stabilization Fund of the Russian Federation," in *Regulation of the Government of the Russian Federation No. 229,* Government of the Russian Federation (21 April 2006). Quoted in "Stabilization Fund of the Russian Federation."

either invest the funds in foreign fixed-income instruments[14] directly, or it could deposit the money in the form of foreign currency in a Federal Treasury account held by the Central Bank of Russia.[15] The second scheme was most commonly chosen, with an asset allocation of 45 percent in dollars, 45 percent in Euros, and 10 percent in the British Pound.

It is not clear how and on what basis the returns were paid; nor is it clear whether the Central Bank of Russia managed the funds on its own (and paid out the returns after subtracting fees) or managed the funds on behalf of the Stabilization Fund. The Ministry of Finance reported the fund's activities to the government on a quarterly- and annual-basis,[16] and government passed the same to both Chambers of the Russian parliament (Duma and the Federation Council). The Ministry of Finance has also made the monthly aggregate balance of the fund (in dollar and rubles) available to the public since mid-2006 (see Appendix L).

Rising oil prices in the period since 2004 led to the accumulation of funds in the Stabilization Fund. A month after its inception, the fund received more than 106 billion rubles as the federal budget surplus. By end of May 2004, the fund had a balance of 199 billion rubles and was able to pay out 333 million rubles for budgetary purposes. By the

[14] There are certain criteria for the fixed-income instruments. The instruments should be denominated in dollar, British Pound or Euro. Additionally, the issuer has to have the highest credit rating from at least two of the credit rating agencies. The countries whose sovereign debt instrument could be purchased included Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, the United Kingdom, and the United States. For more details see "Stabilization Fund of the Russian Federation."

[15] The returns were paid based on the indices composed if eligible foreign debt instruments, defined by the Ministry of Finance. For further details see Ibid.

[16] "Procedure for Management of the Assets of the Stabilization Fund of the Russian Federation." Quoted in "Stabilization Fund of the Russian Federation."

end of the year, the balance had increased to 522 billion rubles.[17] In January 2005, the Stabilization Fund was able to repay the IMF and the members of the Paris Club[18] a portion of the country's foreign debt, some ahead of schedule.[19] It also paid out 30 billion rubles (about $1.04 billion) to the pension fund to finance the upcoming obligations. Russia made further payments towards its debt in 2006, ahead of the maturity. Russian finance minister Alexei Kudrin maintained that he was "in favor of making more effective use of Russia's available resources,"[21] and that by making early debt repayments the country would save billions of dollars on fees and interest. In June 2006, Russia paid the last $23.7 billion of its debt and completely discharged its obligations to the Paris Club.[22]

Russia imposed further fiscal discipline and a tight monetary policy. During 2006, currency controls were lifted, the ruble became fully convertible, and the inflation rate was reduced to 9 percent. Still, in 2006, there was a great deal of debates over the management of the fund. Kudrin argued that a major portion of the Stabilization Fund should "be invested in foreign government bonds and the rest in large foreign companies."[23] This required an amendment to the Budget Code to allow investment in foreign stocks. Most of the debates centered on the scope of investments and a possible

[17] "Stabilization Fund of the Russian Federation: Funds Flow on the Federal Treasury's Account in the Bank of Russian in Rubles in 2004," Ministry of Finance of the Russian Federation, http://www.minfin.ru/common/img/uploaded/library/no_date/2007/rub2004_eng.pdf.

[18] The Paris Club was established in 1956 as a lending scheme and provides debt treatment facilities. Currently, the club has 19 permanent and 13 associate members. Russia joined the Paris Club as a permanent member in 1997. The Finance Ministry of Germany is the Russia's main creditor in the club. See "Early Paris Club Debt Repayment to Save Russia $7.7 Bin - Kudrin," ***RIA Novosti,*** **June 21, 2006.**

[19] The payments included early debt repayment to the IMF (93.5 billion rubles or about $3.33 billion), first debt repayment installment to the members of the Paris Club (430.1 billion rubles or about $15 billion), and servicing the state foreign debt of 1998-1999 (123.8 billion rubles or about $4.3 billion). Source: "Stabilization Fund of the Russian Federation."

[20] "Russia's Pension Fund Takes out $1.04bln from Stabilization Fund," ***RIA Novosti,*** **December 27, 2005.**

[21] "Early Paris Club Debt Repayment to Save Russia $7.7 Bin - Kudrin."

[22] "Budget Reform."

[23] Kirill Gusev, "Russian Stablization Fund to Be Invested Abroad," ***RIA Novosti,*** **April 13,2006.**

hire of external fund managers. Some argued that this task should be delegated to the Central Bank. There are no details about the type of instruments the fund was invested in. In addition to the currency deposits with the Central Bank, it is believed that a portion of the fund was invested in conservative foreign securities, such as United States treasury bills until February 2008.[24] The fund, as a result, remained a precautionary reserve and efforts to open the portfolio to riskier assets remained futile. The fund's management was nowhere near a profit maximizing entrepreneur.

The Stabilization Fund was a subject of heated debates and a great deal of political contention in 2007. Various rent-seeking groups had an eye for the fund's resources. President Putin was pushing for more public expenditures to be funded by the Stabilization Fund. During his last year as president, he pressed for billions of rubles from the fund for three government agencies, the Development Bank, the Investment Fund, and the Russian Venture Company, which in return were supposed to fund developmental projects involving power stations, roads, and waterways. Putin also urged the government in order to invest some of the Stabilization Fund in the domestic stock market to prop up blue chip stocks such as those of Gazprom and Rosneft. Kudrin rejected the president's suggestions maintaining: "I see no threat to our blue chips, the government's investment only boosts speculative growth."

Many supported Kudrin's point of view. The chairman of the investment bank Troika Dialog, Ruben Vardanyan, agreed with the minister of finance saying that an influx of cash from the state would "overheat" the stock market. Pyotr Kazakevich, the

[24] **"Oil Fund Manager Warns on Spending,"** ***The Moscow Times,*** **December 19, 2007.**
[25] **Anatoly Medetsky, "Billions Pledged for Roads, Homes,"** ***The Moscow Times,*** **April 27, 2007.**
[26] **"Kudrin Sees No Threat to Blue Chips,"** ***The Moscow Times,*** **May 23, 2007.**
[27] **Ibid.**

official in charge of the Stabilization Fund, warned that "irrational" spending could fuel inflation and make the economy more dependent on the global oil market. Illarionov, now a senior fellow at the Washington-based Cato Institute and a critic of the Kremlin, admitted that the fund was diverging from its original purpose of absorbing excess liquidity and protecting the economy against oil price volatility. He maintained that a "stabilization fund by definition cannot be used and cannot be spent inside the country."

In a sense, there was a struggle over the Stabilization Fund in the Kremlin, with the *siloviki*[29], or the Kremlin clan, fighting for more access to the funds, and Kudrin persisting in his position of withholding the money. Some state-owned corporations such as Russian Technologies proposed that the Stabilization Fund provides loans to domestic companies. Even the Federation Council's Budget Committee said that the funds should be invested in state-owned companies' bonds or Russian companies' shares.[30] The Kremlin clan is also said to have arranged for the arrest of Kudrin's deputy, Sergei Storchak (responsible for the Stabilization Fund at the ministry level) in order to pressure the Ministry of Finance to back down from its position.[31]

Amid these power struggles, Putin announced plans for the split of the Stabilization Fund into two separate funds, the Reserve Fund and the National Welfare (or Wealth) Fund (NWF) in 2008.[32] While the Reserve Fund was intended to supply funds for budgetary purposes, the NWF was designed to increase, through the active

[28] "Oil Fund Manager Warns on Spending."
[29] Siloviki means "people of the force" and refers to those coming from the Russian military, law enforcement or security services. The siloviki members entered the cabinets of Yeltsin and Putin, and remain powerful elements in the Russian politics.
[30] "Oil Fund Manager Warns on Spending."
[31] Ibid.
[32] The National Wealth Fund was initially to be called the Fund for Future Generations. Later it was referred to as the National Welfare Fund. The official website of the Ministry of Finance refers to the fund as the National Wealth Fund, yet many reporters and analysts still refer to the fund as Welfare Fund.

management of funds, available resources (or maximizing wealth) in order to meet state pension obligations, which were expected to run a deficit as early as 2012. Between August 2006 and the end of January 2008, the balance of the Stabilization Fund almost doubled. According to official data, as of the end of January 2008, the aggregate balance of the Stabilization Fund was 3,851.8 billion rubles ($157.38 billion).[33] According to Kazakevich, the fund had earned an average annual return of 11 percent.[34] There is no official data on the structure of the fund in terms of foreign currency or debt instrument holdings. Appendix L presents the monthly balance of the Stabilization Fund during this period. On February 1, 2008, as global markets were still plunging, the split of the Stabilization Fund went through.

The new Reserve Fund was similar to the Stabilization Fund, but differed from it in that it accumulated not only oil revenues but revenues from the production and export

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of natural gas as well. Its size was set to 10 percent of the forecasted GDP each year. The monthly aggregate balance of the Reserve Fund is presented in Appendix M. The government also introduced concepts and measures for the better management of the fiscal budget. According to a budget study the key objectives of the proper budget management was maintaining a "stable rate of government spending and private consumption in the long range, and averting fluctuations of macroeconomic indicators, such as inflation, currency exchange rate, amount of federal debt and interests rates on financial markets."[36]

[33] **"Ministry of Finance of the Russian Federation," http://wwwl.minfin.ru/en/.**
[34] **"Oil Fund Manager Warns on Spending."**
[35] **"Reserve Fund," Ministry of Finance of the Russian Federation, http://wwwl.minfin.ru/en/reservefund/.**
[36] **"Budget Reform," 29.**

In a move similar to that of the Norwegian government, the Russian government introduced the new concept of "oil and gas deficit," which reflected the "difference between federal revenues without oil and gas revenues and the amount with oil and gas revenues factored in."[37] The 2008 fiscal deficit was financed by the oil and gas revenues (including those held by the Reserve Fund) up to an amount equal to 6.1 percent of the forecasted GDP. The ceiling for oil and gas revenue transfer to the budget was set at 5.5 percent and 4.5 percent of GDP in 2009 and 2010, respectively. After 2010, the oil and gas revenue transfer could not exceed 3.7 percent of the GDP.[38]

On February 1, 2008, the NWF was endowed with an aggregate portfolio valued at 783 billion rubles ($32 billion), held in a Treasury account at the Central Bank. In October 2008, some of these deposits were transferred to Vnesheconombank (the state-owned Bank of Development and Foreign Economic Activity).[39] The NWF's starting portfolio consisted of foreign currencies, including $10.4 billion, €12.7 billion, £1.4 billion, and 7.2 billion rubles, and its mission was defined as a means to "support pension system of the Russian Federation to guarantee long-term sound functioning of the system. Fund's [primary] assignments are to co-finance voluntary pension savings of Russian citizens and to balance budget of Pension Fund of the Russian Federation."[40]

[37] Ibid., 30.
[38] Ibid.
[39] "National Wealth Fund," Ministry of Finance of the Russian Federation, http://www1.minfin.ru/en/nationalwealthfund/.
[40] Ibid.

NWF TODAY AND IN TIMES OF HARDSHIP

The NWF is third in line when it comes to receiving oil and gas revenues. With the changes in the budget process with respect to oil and gas revenues, the NWF receives funds only if the Reserve Fund has reached 10 percent of the forecasted GDP.[41] As mentioned earlier, the Reserve Fund receives money only after a certain level of oil and gas revenues has been allocated to the federal budget.[42] The Ministry of Finance is the manager of the fund and the Central Bank acts as the operational manager. By law, the fund remains open to engaging an external fund manager, although the terms of engagement have yet to be drafted.

According to the official website of the NWF, the Ministry of Finance reports the value of the fund assets, the inflows and outflows, and the allocation of the fund each month to the government, which subsequently reports the same to both Chambers of the Russian parliament (Duma and the Council of Federation).[43] The Ministry of Finance claims that audits of the fund are conducted by Russian official agencies and that the Accounts Chamber examines the management, accumulation, and expenditures of the NWF on a quarterly basis. Despite these claims, details of the audits and their results are not available to the public, and therefore are difficult to verify.

The Russian government has defined the limits within which the Ministry of Finance can establish the NWF's portfolio. Table 21 summarizes these limits on the various classes of financial assets that the fund may include. It is, however, not clear how

[41] "Budget Code of the Russian Federation," in *Chapter 13.2, Article 96.10, Clause 3.* Quoted in "National Wealth Fund."

[42] The federal budgets of 2008, 2009, and 2010 receive oil and gas revenues up to 6.1 percent, 5.5 percent, and 4.5 percent of the forecasted the GDP, respectively. In 2008, the required level was achieved at the oil price of $70 per barrel. From 2011 and onwards, the government has limited the use of the oil and gas revenue in the federal budget to 3.7 percent of the forecasted GDP.

[43] "National Wealth Fund."

the government determines the criteria. Additionally, the government establishes the criteria determining the eligibility of debt securities. Only the debt instruments of certain states—Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Spain, Sweden, the United Kingdom, and the United States—can be included. Additionally, the debt instruments must comply with certain criteria with respect to the credit rating of the issuing agency. The foreign issuers must have a long-term credit rating of at least AA- (Fitch and S&P rating) or Aa3 (Moody's rating). The instruments should also have a fixed face value (denominated in approved currencies), fixed coupon rate, and fixed maturity date, with no call or put option.[44] There is no information about the portfolio of the foreign debt instruments held by the NWF. It has been said that $48 billion of the fund assets were invested in foreign bonds, including those issued by government-related agencies in the United States and the United Kingdom.[45] As can be seen in table 21, the portfolio can only consist of up to 50 percent equities. The criteria also allow the portfolio to be wholly in debt instruments or in cash with the central bank. The overall criteria tends to favor low-risk or risk-free holdings. This portfolio structure also indicates that wealth maximization in not the immediate goal of the fund.

[44] **Ibid.**

[45] **Courtney Weaver, "State Will Start Buying Shares This Week,"** ***The Moscow Times,*** **October 20, 2008.**

TABLE 21 NWF's investment criteria set by the Russian government (percent)

Debt securities of foreign states	0-100
Debt securities of foreign state agencies and central banks	0-30
Supranational agencies debt securities *	0-15
Deposits in banks, depository institutions and Vnesheconombank **	0-40
Deposits in the Bank of Russia	0-100
Debt securities of legal entities	0-30
Equities of legal entities and shares of investment funds ***	0-50

Source: "National Wealth Fund." Ministry of Finance of the Russian Federation, http://wwwl.minfin.ru/en/nationalwealthfund/.

* Supranational agencies include, Asian Development Bank (ADB), Council of Europe Development Bank (CEB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank (IADB), International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), Nordic Investment Bank (NIB).

** The bank or depository institutions should have a long-term credit rating similar to issuers of debt instruments. In the case of Vnesheconombank, maximum deposit amount is set at 655 billion rubles.

*** Equities must be listed on one exchange market with the foreign equities be included in MSCI World Index and FTSE All-World Index.

Additionally, the Ministry of Finance can establish its own criteria or requirements within the limits imposed by the government. According to the Ministry of Finance, up to 40 percent of the fund's assets may be denominated in rubles, whereas holdings of foreign currency may constitute up to 100 percent of the fund's assets. The foreign currency assets are to be 45 percent dollars, 45 percent Euros, and 10 percent pounds.[46] Regarding the holdings of debt instruments, the Ministry of Finance has also set maturity criteria: for instruments denominated in dollars and the Euros, between three months and three years; for those denominated in pounds, between three months and five years.[47] The list of foreign entities, whose bonds are eligible for inclusion in the NWF's portfolio is presented in Appendix N. The selection of these foreign entities is still subject to the approval of the Central Bank of Russia.[48] A key point is that the debt holding of any one issue cannot exceed five percent of the aggregate value of that issue.[49]

In October 2008, in response to the financial crisis, the Duma decided to place about $17 billion of NWF assets on deposit with the Vnesheconombank, which would then lend the money to other banks and businesses, including $ 1 billion to Rosselkhozbank and the agricultural bank.[50] Vnesheconombank acted as the government broker for the funneling of 410 billion rubles in lending to other banks,[51] and injecting of a further 175 billion rubles ($6.8 billion) into the domestic stock market. The bank's chief, Vladimir Dmitriyev, explained that the aim of the move was to diversify fund reserves, make additional investments in the Russian stock market, and refinancing the external debts of several companies in the mining and manufacturing sectors.

The S&P had previously criticized Kudrin's plans for using the NWF to support financial markets, but he said that, in this instance, "[o]ur participation in the market will

[46] **"National Wealth Fund."**
[47] **Ibid.**
[48] **"Order of the Ministry of Finance No. 22, Dated January 24, 2008," (Ministry of Finance of the Russian Federation). Quoted in "National Wealth Fund."**
[49] **"Order of the Ministry of Finance No. 23, Dated January 24, 2008," (Ministry of Finance of the Russian Federation). Quoted in "National Wealth Fund."**
[50] **Andrew E. Kramer, "Russia Approves Loan Plan to Ease Credit Crunch," *The New York Times,* October** 10, 2008.
[51] **"Federal Law No.l73-FZ, Dated October 13, 2008 'Additional Measures to Support Financial System of the Russian Federation,' Article 4," (Ministry of Finance of the Russina Federation, 2008). Quoted in "National Wealth Fund."**
[52] **"National Wealth Fund."**
[53] **"Vnesheconombank to Bail out Companies This Week ", *RosBusinessOnsulting (RBC),* October 21, 2008.**

have a completely different goal... [it] will have some healing effect. Maybe we will have to wait three to five years for the assets to grow, but that's okay."[54] According to Anna Zadornova, a Goldman Sachs analyst, the Ministry of Finance had to temporarily "scale back or even abandon its plans to invest (Russia's) oil and gas revenue outside the country."[55]

As of December 1, 2009, more than 65 percent of the NWF deposits at Vnesheconombank had been lent to other banks, with about 29 percent of the deposits used to support the Russian stock exchange and the remaining amount lent to small- to medium-size companies. Table 22 shows the lending limits, the actual deposits level, and the interest rates earned on NWF deposits as of December 1, 2009.[56]

The structure of deposits and their related terms and conditions, details of which are not available to the public, are set by the Ministry of Finance. The NWF deposit levels at Vnesheconombank and other deposit institutions including the Central Bank, earn interest. Interest on deposits with Vnesheconombank is, for the most part, paid quarterly. The Central Bank also pays interest on the funds. Although it is not clear what rate is being paid and how it is calculated, the rate it is said to be based on the indices approved by the government.

[54] Anatoly Medetsky, "Kudrin Says Pension Fund Next up for Stocks," *The Moscow Times,* October 13, 2008.
[55] Gleb Bryanski, "Russia Says No Change to SWF Strategy Despite Crisis," *Reuters,* October 3, 2008.
[56] "National Wealth Fund."

TABLE 22 Structure of the NWF's deposits at Vnesheconombank (billion ruble)

Eligible Allocation (as of December 1, 2009)	Maximum Allowed	Actual Amount	Maturity	Interest rate (percent)
Loans to Russian banks	410.00	284.34 103.45	31 Dec 19 21 Dec 20	7.0 8.5
Russian stock exchange	175.00	175.00	21 Oct 13	7.0
Loans to small to medium-size companies	30.00	20.00	25 Dec 17	8.5
Loans to the Agency for Housing Mortgage Lending	40.00	0.00		
Total	655.00	582.79		

Source: "National Wealth Fund." Ministry of Finance of the Russian Federation, http://wwwl.minfin.ru/en/nationalwealthfund/.

The aggregate value of NWF assets has exhibited an upward trend over time. Table 23 shows the monthly aggregate balance of the NWF since its inception. There is little information on the use of the NWF's funds. According to the Ministry of Finance, the fund's assets can only be used to "co-finance voluntary pension savings of Russian citizens and to balance budget of Pension Fund of the Russian Federation."[57] Each fiscal year, the federal budget defines the amount to be transferred to the Pension Fund.

[57] Ibid.

TABLE 23 Aggregate balance of the NWF

As of first of		dollar (billion)	ruble (billion)
December	2009	92.89	2,769.84
November	2009	93.38	2,712.56
October	2009	91.86	2,764.37
September	2009	90.69	2,863.08
August	2009	90.02	2,858.70
July	2009	89.93	2,813.94
June	2009	89.86	2,784.14
May	2009	86.30	2,869.44
April	2009	84.71	2,915.21
March	2009	83.86	2,995.51
February	2009	84.47	2,991.50
January	2009	87.97	2,584.49
December	2008	76.38	2,108,46
November	2008	62.82	1,667.48
October	2008	48.68	1,228.88
September	2008	31.92	784.51
August	2008	32.69	766.48
July	2008	32.85	770.56
June	2008	32.60	773.93
May	2008	32.72	773.82
April	2008	32.90	773.57
March	2008	32.22	777.03
February	2008	32.00	783.31

Source: "National Wealth Fund." Ministry of Finance of the Russian Federation, http://wwwl.minfin.ru/en/nationalwealthfund/.

The government allocates about 10 percent of its revenues to the payment of pensions. These payments are made through the Pension Fund and direct budget payments.[58] The actual amount paid from the budget to cover the Pension Fund deficit was 88.2 billion ruble in 2007. Table 24 shows the projected transfer from the federal budget to the Pension Fund for the period 2008-2010.[59] It is not clear, however, whether the entire amount is to be withdrawn from the NWF.

TABLE 24 Federal budget payment for the Pension Fund deficit (billion ruble)

2008	2009	2010
184.6	149.1	251.6

Source: "Main Results and Trends of Budget Policy 2008-2010," (Ministry of Finance, Russian Federation)

In 2009, efforts concerning the topic of an independent or separate fund manager gained pace. The Ministry of Finance, in coordination with other agencies, including the Ministry of Economic Development and the Central Bank, managed to finalize a draft

[58] Pensions to military personnel and their family members are paid directly through the federal budget. The federal budget then transfers funds to the Pension Fund for three items, i.e., base pension, additional provisions or benefits and compensations, and Pension Fund deficit. Source: "Budget Reform."
[59] Ibid., 10.

law (which it had initiated in October 2008[60]) on the establishment of the Russian Financial Agency (RFA). Pankin, the deputy finance minister, announced that he expected that the law would go into force in 2010. The primary role of the RFA was to efficiently manage the state's assets and debt obligations. The expected federal budget deficit may, however, shift the focus to fund-raising. Pankin described the top priority as "managing NWF funds and federal budget liquidity."[61] Although the RFA still would still be a state-owned agency, it can be seen as a first step towards a separate fund management structure. Of course, depending on internal politics, the fund may either move in the direction of more independent management or fall into the hands of silovikis, Putinists, or rent seekers.

TORN FOR DOMESTIC COMPENSATION

The NWF is an interesting and, in a sense, unique case of sovereign fund. The fund and its predecessor, the Stabilization Fund, have both been the center of power struggles between various bases of power within the Russian government. This was especially the case during Putin's second term as president. The Russian government has been, in fact, divided between the Ministry of Finance headed by Kudrin and the rest of the cabinet. Although the fund does not have an external, independent manager, Kudrin, has to a certain extent, acted as the guardian of Russian national wealth. He managed to resist the Putinist policy makers and cabinet members, whose push for progress was not necessarily based on a long-term vision of sustainable economic growth.

[60] The draft strategy indicated that up to 50 percent of the NWF could be invested in equities, and a further 30 percent in corporate bonds. The investment universe included both the emerging and the domestic markets. The draft law also had provisions for a separate (even foreign) fund manager. Source: Bryanski, "Russia Says No Change to SWF Strategy Despite Crisis."
[61] "Russian Financial Agency Should Commence Business Starting 2010," ***Cbonds,*** **August 14, 2009.**

At one point, Putin even denied that Russia had a sovereign fund. In June 2008, when the then United States Secretary of the Treasury, Henry Paulson, travelled to Moscow to discuss the trade and investment between the United States and Russia, Putin, then the prime minister, assured him that all the Russian investment in the United States was private. In reference to the topic of SWFs, Putin said: "Since we do not have a sovereign wealth fund yet, you are confusing us with someone else... but we are ready to do it, especially if you want us to." Putin's position implied that he believed a sovereign fund was to serve any purpose that the government deemed appropriate. This does not exclude economic statecraft in the future; however, at this time the money was needed primarily for domestic purposes, specifically, the sustainment of a high level of public expenditures.

In fact, Kudrin was besieged with demands to direct funds towards the public welfare and the military. In early 2006, only two years after the creation of the Stabilization Fund, the cabinet's deputy chief of staff, Mikhail Kopeikin, argued that leaving the fund to accumulate revenues would result in the waste of almost 600 million rubles over three years and that the fund should invest in riskier, high-yield assets. Kudrin denied Kopeikin's request, and at one point even shouted at Kopeikin, asserting that Kopeikin's claim was "completely uninformed," and that he had "cast a shadow over the president and the government."[64] Illarionov, once Putin's economic advisor and now a Kremlin critic, argued: "I don't think they should take this money out at all, regardless of

[62] **In fact, with no foreign portfolio investment these funds do not meet the SWF criteria. It was said that some of NWF assets were in foreign bonds, although that could not be verified. Nevertheless, there are provisions and guidelines for investment in foreign instruments. That means the NWF is able to make overseas investment.**

[63] **David Lawder and Gleb Bryanski, "Putin-No Sovereign Wealth Fund in Russia Yet," *Reuters*, June 30, 2008.**

[64] **Courtney Weaver, "Crisis Silencing Kudrin's Critics," *The Moscow Times*, November 7, 2008.**

the speed, regardless of the size. The resources of the stabilization fund cannot be used first domestically, and second, in the investment of shares."[65]

In January 2008, as oil prices rose above $100 per barrel, Kudrin asserted that "Russia, which channels most of its oil revenues into its Reserve Fund and [the] NWF would refrain from spending any additional income immediately... we'll have more money... we will spend it gradually and according to a plan."[66] Later in October 2008, Pankin, deputy finance minister, asserted that Russia did not plan to change the investment strategy regarding its funds in response to market turbulences. [67] At the same time, Illarionov asserted that the fund was becoming a "victim of the greed of several groups."[68]

In fact, Kudrin's firm and relatively independent position with regard to management of the NWF assets has paid off. According to Jonathan Schiffer, Moody's chief sovereign ratings analyst, "Kudrin has played a very lonely but admirable role... For all the volatility and the depreciation of the ruble, if you didn't have the stabilization fund, the volatility [of ruble] would be multiplied two or three times. Kudrin has been validated."[69] Over time and especially during the recent global financial crisis, the government's attitude has also mellowed. Some say that the views of Kopeikin, Sergei Mironov (the Federation Council Speaker), and Boris Gryzlov (State Duma Speaker) have turned in favor of Kudrin.

Nevertheless, when Kudrin revealed plans to tap into the NWF as part of the economic stimulus package, he faced a challenge on a different front. The State Duma

[65] Ibid.
[66] Anatoly Medetsky, "Oil Takes a Trip Past $100 Plateau," ***The Moscow Times*****, January 9, 2008.**
[67] Bryanski, "Russia Says No Change to SWF Strategy Despite Crisis."
[68] "Oil Fund Manager Warns on Spending."
[69] Weaver, "Crisis Silencing Kudrin's Critics."

had approved anti-crisis packages worth a total of $86 billion[70] and, as a result, the government had to use all its resources, including the Reserve Fund and the NWF.[71] Kudrin's announcement was followed by S&P downgrading its outlook rating for Russia. Fitch Ratings also estimated that Russia would lose a total of $160 billion by the end of 2009, though Fitch and Moody's did not change their ratings.[72] In response Kudrin stated: "When I defended the oil fund, I always said we can spend it during the crisis. Maybe I was expected to always say that we should not spend the oil fund, but this is wrong." In summary, the Russian funds (the Stabilization Fund and the NWF) have been more of a subject of domestic political debates than a means of economic statecraft or a foreign policy tool.

Some have also asserted that NWF funds (channeled through the Vnesheconombank) have been used at the discretion of Prime Minister Putin, who chaired the Vnesheconombank's oversight board. It is said that Putin helped oligarch friends such as Oleg Deripaska, Roman Abramovich, Igor Vyuzin, and Sergei Bogdanchikov pay their foreign debts. Deripaska received $4.5 billion to pay off RusAl and Norilsk Nickel loans from the Royal Bank of Scotland; Abramovich received $1.8 billion to pay off Evraz' immediate creditors; Vyuzin's Mechel was bailed out with $1.5 billion; and Bogdanchikov's Rosneft received $4.5 million.[74]

There are two important factors preventing the NWF's assets from being managed in an entrepreneurial way. First and most important, the fund has never had a coherent

[70] "Russian Capital Flight at $33 Bln in Aug-Sept.-Finance Minsiter," *RIA Novosti,* October 17, 2008.
[71] This is a similar situation to other SWF discussed in earlier chapters, i.e., at the times of economic hardship, fund's resources are, most of the times, tapped into by the government.
[72] Weaver, "Crisis Silencing Kudrin's Critics."
[73] Medetsky, "Kudrin Says Pension Fund Next up for Stocks."
[74] Boris Nemtsov, "No More Welfare for Russia's Oligarchs," *Radio Free Europe,* February 18, 2009.

management. As discussed earlier, the Ministry of Finance is officially the manager of the fund; however, its management has been overshadowed by the influence of other centers of power. Second, there is no clear consensus as to the purpose of the fund. Although at the time of its creation, the NWF was mandated to provide long-term support to the Russian pension system, its purpose has been redefined by various parties, most often as an ad hoc source of funding for various needs.

In Russia, the sense of entrepreneurship does not have a visible manifest and is often times confused with rent seeking behavior, a legacy of the years of communist rule and its command economy. Aslund has argued that "massive rent seeking characterized the collapse of the Soviet system and the early post-communist period."[75] Innovation, learning, and adaptation are absent from the fund's management. The majority of the NWF assets were put in deposit accounts; only a small portion was invested in foreign governments' bonds, a low risk investment.

Russia has had a troubled economy, as well as the occasional internal battles between the government and other influential players, such as the oligarchs. Russia is exposed to fluctuations in both foreign exchange and oil prices. In 1998, ruble started to depreciate against the dollar, declining from 6 rubles to 10 rubles, and continued until it became fully floating in 2006. During 2009, the interbank exchange rate fluctuated between 36.53 rubles and 28.13 rubles against the dollar.[76] Russia has also experienced oil market volatility, which was severe during the recent global financial crisis. In 2008 alone, the spot price of Urals crude (Russia's main export) fluctuated between $137.61 (4

[75] Aslund, ***Russia's Capitalist Revolution: Why Market Reform Succeeded and Democracy Failed,*** 3.
[76] **"Historical Exchnage Rates," (ONDA, 2009).**

July) and $34.81 (26 December) per barrel.[77] Despite opening its economy, Russia remains heavily dependent on its oil sector. According to Professor Vladimir Popov at the New Economic School in Moscow, while fewer than 1 million of Russia's 142 million people work in oil-related industries, they produce about half of the country's GDP.[78]

Of the three political economy perspectives under consideration, the domestic compensation thesis is most relevant to an analysis of the NWF today. Although Russia is not a small state, it has very little control over its terms of trade, and, as discussed earlier, global market fluctuations can have a significant impact on its economy. Russia is also a resource-abundant country but like many other resource-abundant (oil exporting) countries, its domestic economic structure has not developed or diversified. The personal tax system is underdeveloped and the corporate tax remains low and determined primarily by narrow political considerations.[79] Having said all this, it should also be noted that Russia is still a state in transition, both politically and economically. Corruption and domestic political turmoil and occasional foreign economic shocks have made the pace of the transition sluggish.

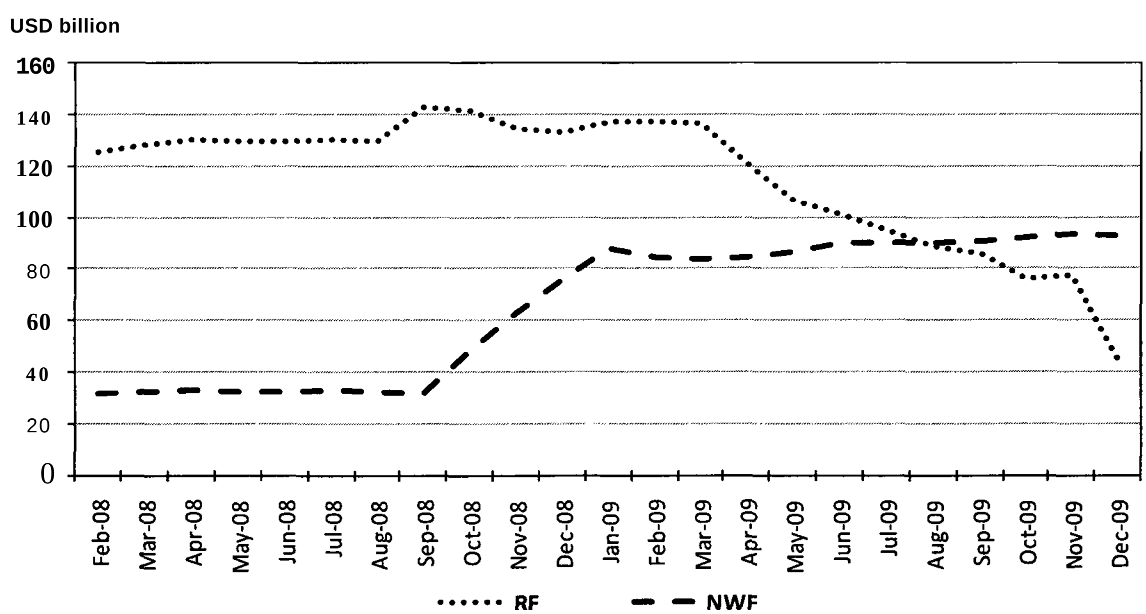
Changes are, nevertheless, taking place and Russia's approach to coping with global financial crisis is not necessarily similar to that of other states. Instead of borrowing, as the United States did, Russia financed its bailout funds through domestic sources, including the Reserve Fund, NWF, and the national gold and currency reserves held by the Central Bank.[80] Figure 14 shows the use of both Reserve Fund and NWF

[77] "Weekly Mediterranean (Russia, Urals) Spot Price FOB (Dollars Per Barrel)," (Energy Information Administration, 2009).
[78] Catrina Stewart, "From Battered to 'Island of Stability'," *The Moscow Times*, February 28, 2008.
[79] One of Putin's radical reforms was his new Tax Code in 2000, which cut all taxes to a flat rate of 13 percent, believing that lower tax rates would make the tax evasion less likely. Source: Ibid.
[80] Kramer, "Russia Approves Loan Plan to Ease Credit Crunch."

resources during the crisis. As can be seen, the Reserve Fund resources were being quickly used up, and, consequently, the NWF missed the opportunity to accumulate new funds. Additionally, a portion of the NWF assets was redistributed domestically, in the form of loans, through the Vnesheconombank.

Russia also initiated a pension reform in 2008 that relies more on the assets of the NWF. In addition to the present-day Pension Fund that pays the current pensioners, the government initiated a retirement plan system. In this system, employees pay a portion of their income into a personal retirement fund.[81]

FIGURE 14 Monthly balance of the Reserve Fund and the NWF ($ billion)



Source: "Ministry of Finance of the Russian Federation." http://wwwl.minfin.ru/en/.

[81] **Medetsky, "Kudrin Says Pension Fund Next up for Stocks."**

In summary, the NWF in its current form cannot be deemed an instrument of economic statecraft or a manifestation of state entrepreneurship. Its short lifespan makes it difficult, however, to determine whether the fund will be used within the economic framework of balance of payments smoothing, continue to provide resources in support of the budget or, in accordance with its mandate, provide resources for the management of future pension obligations. The lack of third party or externally audited information that might serve as a basis on which to assess the validity of the official data certainly limits the extent of the study.

The Russian fund continues to operate in a non-transparent way (a source of concern to the IMF as early as 2004, prior to the establishment of the Stabilization Fund), and its management remains closed to external enquiries. Martin Gilman, a former IMF representative to Russia, maintained: "The preconditions for the fund's successful operation were unlikely to fit together in the Russian context. There were too many governance and transparency issues for a fund like this to really be effective. In a blunt categorization, Russia was not Norway-Russia was more like Nigeria."[82]

As the NWF is only a few years old, things are bound to change, and both the structure and management of the fund will formalize and mature overtime, perhaps in a decade or so. As was the case with respect to other funds discussed earlier in this study, the state's priorities will most likely change over time, and, consequently, so would the priorities and purpose of the NWF. Until then, we may continue to observe the evolution of a fund and the transition of its owner state.

[82] **Weaver, "Crisis Silencing Kudrin's Critics."**

CHAPTER VIII

CONCLUSIONS AND FURTHER DISCUSSIONS

Why should we study SWFs after all? Many states in the West have had a variety concerns regarding the investments of these funds. Although the anxiety on the part of the recipient states has been overshadowed by the recent global financial crisis that started with the massive defaults on sub-prime mortgages in the United States, the concern still exists and will surface again once the full economic recovery is in motion. The primary concerns are generally around a few major topics: SWFs posing a threat to national security, the risk of protectionism in response to the proliferation of SWF investments, and the risk of financial instability due to reckless decisions by SWFs.

During 2005 and 2006, the United States' concern was more from a national security perspective while Europe was more concerned with the lack of reciprocity, established standards, and openness. Policy makers in the Unites States were preoccupied with the idea that the some foreign governments' ownership in specific areas might expose the country to manipulation through economic means. Two specific examples are the plan to take over the management of six sea port facilities by the state-owned Dubai Ports World (DP World) and the purchase of Unocal sought by the China National Offshore Oil Corporation (CNOOC).[1]

In the case of the CNOOC, the intense political opposition in Congress halted the formal process of the review of the offer. This caused the CNOOC to withdraw its offer

[1] **Interestingly, national security was not an issue in the 1980s when Japanese companies made major investments in movie studios or the Rockefeller Centre. Many newspapers such as Metro or Boston Globe are also owned by European investors. Or when in 2007 APM Terminals, a subsidiary of Danish APM Moller, built its $450 million-575 acre facility in Portsmouth, Virginia. The company was the first container terminal developed by a foreign and private company in the United States.**

in August 2005.[2] After the uproar over the CNOOC case subsided, DP World, which had acquired P&O, a British company whose assets included six port facilities in the United States, faced the same kind of political opposition on the Capitol Hill. At the end, DP World agreed to sell the facilities to a US-controlled firm.[3]

Germany chancellor Angela Merkel, while referring to SWFs as "new and completely unknown elements," expressed her concerns over their investments in the country and proposed drafting an investment law that would allow the government to block takeovers by SWFs or other large state-sponsored investment agencies.[4] President Nicolas Sarkozy's concern about SWFs' investments in Europe was more due to the lack of reciprocity. He demanded that the owner states of SWFs (for instance China) increase their countries openness to the flow of capital from Europe.[5] In the United Kingdom, the chancellor of the exchequer, Alistair Darling, maintained that as long as SWFs do not threaten national security or pursue political goals, they should be free to invest as they please.[6] The Swiss National Bank authorities' concern focused on the financial protectionist policies that any unfavorable actions by the SWFs might trigger. The Swiss demanded investment guidelines and more transparency.[7]

This research has, however, revealed that the bulk of these concerns are unfounded. In fact, the dominant conceptions that SWFs are used only for balance of payments corrections or as instruments of economic statecraft and foreign policy are not justifiable. All of the SWFs studies here had a virtually constant balance of payments

[2] **"CNOOC Withdraws Its Bid for Unocal," *Asia Times,* August 4, 2005.**
[3] **Hufbauer, Wong, and Sheth, *US-China Trade Disputes: Rising Tide, Rising Stakes.***
[4] **Carter Dougherty, "Europe Looks at Controls on State-Owned Investors," *The New York Times,* July 13, 2007, 3.**
[5] **"Sarkozy Attacks Wealth Funds on Eve of Mideast Trip," *Reuters,* January 12, 2008.**
[6] **Sumeet Desai, "Darling Says Sovereign Funds Need to Follow Rules," *Reuters,* October 19, 2007.**
[7] **Sven Egenter, "Sovereign Wealth Funds Need Rules-SNB's Hildebrand," *Reuters,* December 18, 2007.**

surplus, with only an occasional deficit, which were corrected in the next period or two. Therefore in practice, there was no need for balance of payments smoothing. None of the funds—even the GPF-Global that had incorporated non-commercial motives into its decision-making—was shown to have pursued politically strategic goals for the purpose of exerting power over another state. In the case of the GPF-Global, the non-commercial motives were mainly concerned with socially responsible and ethical principles, rather than politically strategic actions. Norway has indeed communicated with the target states through divestment, exercise of ownership rights, or the mobilization of opinion around universal principles such as human rights, but it has never exerted direct political power over the target state.

Another major finding is that the political economy of crisis induces the same kind of reaction by the owner states of SWFs. At times of crisis the economic strength of the home state is of paramount importance. Therefore, SWFs use their resources to support the domestic economy in times of crisis when it is deemed necessary. These times of crisis also provided an opportunity to examine whether SWFs in fact pursue politically strategic goals. For instance,, as a result of the recent financial crisis assets of many large financial institutions suddenly became underpriced. If they were politically motivated, SWFs could have made direct investments or acquired controlling stakes in those financial institutions. However, as we saw, the flow of investment was reversed from the Western markets to emerging markets. This supports the argument that SWFs do not have politically strategic motives. Instead, they are concerned with the value of the assets under their management. During times of normal economic activity, however, there is no single theory that can explain the behavior of SWFs. As discussed earlier the SWFs' agenda is a reflection of various national systems of political economy.

These findings were based on the close examination of a cross section of four SWFs. The findings of each case were discussed in the respective chapter, but while the micro-level study of SWFs provided in-depth insights into the functioning and purpose of individual fund, it is important to discuss the findings on a more generalized and macro-level. Here, I provide a brief side-by-side review of the case studies.

FOUR CASES, A COMPARATIVE ANALYSIS

The SWFs of Norway, United Arab Emirates, Singapore, and Russia each represent an interesting and unique case. The oldest funds in this group belong to Singapore and the United Arab Emirates. Temasek was established in 1974, only nine years after the country announced its independence, and ADIA was established in 1976, after only five years of independence. Norway, on the other hand, first established the Oljefondet (Petroleum Fund) in 1990, and then, in 2006, established the GPF-Global. The Oil Stabilization Fund in Russia was launched in 2004 and was split into the NWF and the Reserve Fund in 2008.

With the exception of ADIA—a stand-alone body within the Abu Dhabi government—ministries of finance (or their equivalents) are the custodians of the funds, while the management of the fund may have been delegated to other entities. In Singapore and the United Arab Emirates, funds are managed by boards of directors constituted of people closely connected to the government. In Norway, the fund is mainly managed by the investment arm of the Norges Bank, while in Russia the fund is managed by the Ministry of Finance.

Despite the state's ownership and the government guidelines that must be followed, the management of the funds has shown a certain level of independence. The exact level of independence may have been stipulated by government regulations. The management of SWFs is comparable to the management of SOEs, and, as Vernon argues, "[m]anagers of state-owned enterprises commonly try to increase their independence from government apparatus, a tendency variously described as a desire for autonomy or discretion or increased bargaining power."[8]

In the case of Temasek, the board of directors has full control over the operations of the fund and neither the president nor the Ministry of Finance can get involved in the management of the fund. In the case of GPF-Global, the Norges Bank has a small margin within which it can manage the portfolio freely. In the case of NWF of Russia, the quasi independence is, in fact, a result of a power struggle between various centers of influence and authority on the one hand and the minister of finance on the other. As regards ADIA, the issue of independent management is not applicable as all investments have to be approved by the board of directors, who also hold various government posts.

The SWFs of Norway, United Arab Emirates, and Singapore, all have diverse portfolios, both in terms of instruments and geographical distribution of assets. In Norway, 40 percent of the portfolio has traditionally consisted of equities. Since 2007, the allocation of equities has been gradually increased to 60 percent. Although there is no detailed information about ADIA's portfolio structure, approximately 75 to 80 percent of

[8] **Raymond Vernon, *Exploring the Global Economy: Emerging Issues in Trade and Investment* (Cambridge, Mass. and Lanham, Md: Center for International Affairs, University Press of America, 1985), 204-05.**

its portfolio is believed to be made up of non fixed-income instruments. Temasek's portfolio consists entirely of corporate equities. The composition of Russia's NWF portfolio is different from all other funds studies here in that it consists of large highly liquid asset (currency) holdings, deposited with either the central bank or the state-owned Vnesheconombank. A small portion of the assets are also said to be held in bonds. In terms of the market value of each portfolio, GPF-Global (valued at about $455 billion as of end of September 2009) and ADIA remain the two largest funds. There is no official data on the size of ADIA; therefore, it is not possible to determine which of the two funds is the world's largest. The market value of assets under the management of Temasek fell to about $93 billion as of the end of March 2009. The aggregate balance of NWF as of the end of 2009 was also about $93 billion.

With the exception of Temasek, all SWFs examined in this research were established when both the balance of payments and the country's current account were in surplus. The external account framework, as discussed earlier, does not apply to Temasek as it was initially endowed with a portfolio of state-owned companies, instead of the liquid assets derived from external accounts. Since the inception of Norway's Oljefondet in 1990, the country has had a virtually constant balance of trade surplus; only in three years has the balance of payments experienced a deficit. In Russia, both the balance of payments and balance of trade have been in surplus since the creation of the Stabilization Fund in 2004.The balance of trade of the United Arab Emirates has also been in surplus since the creation of the fund. Additionally, none of these funds either were shown to have been intended to provide or did provided resources for balance of payments corrections.

On the other hand, these funds—with the exception of Temasek—were used either systematically or on an ad hoc basis (for instance when the country was hit by the global financial crisis) to support the national budget. In Norway, the economic stimulus package introduced in 2009 required the government to withdraw from the GPF-Global about 14 times more than it withdrew in the previous year (see table 13). The United Arab Emirates has most likely included the return on ADIA's assets as a revenue item in the federal budget for many years. The country has used the Central Bank's massive foreign assets that were accumulated between 2003 and 2007 to fight the recession. In Singapore, running a budget deficit has not been allowed unless the government has already built up surpluses during the same five-year term. Drawing on past reserves is considered unconstitutional, except in the event of extreme need, in which case the approval of both the President and the Parliament is required. The Russian Federation, on the other hand, has relied on both the Reserve Fund and the NWF (and their predecessor, the Stabilization Fund) for budgetary purposes. The NWF assets were even used indirectly to bail out domestic banks and companies last year.

Table 25 summarizes the findings of the four case studies. As discussed earlier in this dissertation, a fund's agenda can develop over time. Additionally, funds can pursue multiple goals at any point in time. The key is to determine the most important goal. This is a difficult task as the goals may occasionally overlap. This is especially the case in regard to the various perspectives discussed under the umbrella of domestic compensation and the general economic argument of balance of payments corrections. Table 25 represents the dominant goals of each fund, based on the most recent available information.

Norway's GPF-Global—the world's most transparent SWF—makes investment decisions that are based on a set of non-commercial principles that are closely aligned with the Norwegian foreign policy. GPF-Global pursues a combination of goals, maintaining a balance between profitability, socially responsible investment, and ethical considerations. As discussed in Chapter IV, Norway has diverged from the purely commercially-oriented investment path of other funds and used the fund to passively impose sanctions on companies whose operations contradict the fund's Ethical Guidelines. Although there is no evidence showing that the fund's financial leverage is applied at a national level and directly over another state, it does not change the fact that the management of the fund is influenced by the state's politics. ADIA, on the other hand, has stayed out of the Emirate's politics and has both acted as a fund manager—seeking (not always successfully) high returns—and provided sources of income for the federal budget. In the absence of reliable information, however, determining which of these goals takes precedence over the other is very difficult.

The case for Temasek and NWF is less complicated. Temasek is mainly the entrepreneurial arm of the state. It has acted in the capacity of a vehicle for privatization of the state-owned companies that were not internationally competitive. It is also barred by law from providing funds for budgetary purposes or any public expenditure. Instead, it has invested the returns in new or existing businesses, some domestic but mainly regional. The management of Temasek and its investment decision making process follow sophisticated business models. The volume of business deals and the manner in which transactions are conducted—such as the extensive use of network of subsidiaries or the development of partnerships—clearly show the state's entrepreneurial skills and spirit, particularly given the absence of a large private sector. In contrast, Russia's NWF has been a vehicle for domestic compensation and has been torn between various centers of power. During its short lifespan, NWF has accumulated liquidity, which has been used for supporting troubled banks and companies affected by the recent financial crisis.

TABLE 25 Economic vs. international political economy

	Economic Perspective	International Political Economy Perspectives		
SWF	BOP Correction	Economic Statecraft	State entrepreneurship	Domestic Compensation
GPF-Global, Norway *		•		
ADIA, UAE				*V*
Temasek, Singapore			•	
NWF, Russia				*V*

* As discussed, the Norwegian fund pursues a different economic statecraft from the tradition view of statecraft, i.e., a benign foreign policy tool without exerting direct power over the target state.

CONCLUSIONS

There are a number of interesting and important conclusions we can draw based on the findings summarized in table 25. First, each SWF is in some way unique. The structure and nature of the SWFs are based on—to borrow Gilpin's term—the state's national system of political economy. As I have emphasized at the beginning of this study, the purpose was not to select a single theoretical perspective that would be the only framework for explaining the behavior of SWFs. A single theory or paradigm is neither sufficient nor appropriate, since the funds were shown to be theoretically progressive, meaning that theoretical perspectives explaining their behavior varied, according to the circumstances. States and the international environment have changed over time and so has the agenda of SWFs. Therefore, depending on specific period of study, SWFs' behavior can be explained within a specific theoretical framework. Notwithstanding these variations, we may conclude that the purpose of these funds is not balance of payments correction. At times of economic austerity, we hypothesized that the funds provide the resources needed for maintaining domestic demand and rescuing troubled industries. During periods when states were not financially constrained, the hypothesis was that the SWFs would pursue the goals for which they were initially created. These hypotheses were shown to be true in the cases of the four funds examined here.

Additionally, within the domestic compensation perspective and the various internal politics associated with it, the types of domestic compensation provided by the investor states are not the same. The evidence suggests that the domestic compensation was not of a corrupt nature but was mainly for managing macroeconomic deficiencies and diversification of the economic base of the country. In the case of ADIA or NWF, for instance, the funds were used to manage fiscal deficits, while for Temasek the diversification of the economy was the immediate purpose of domestic compensation.

Second, by looking at the developmental stage of the state—in both economic and political terms—we can predict the purpose of their fund. The research suggested that the SWFs of states that are both politically and economically advanced and sustainable tend to incorporate non-economic factors in their decision making process. For instance, in Norway—which is a well-established democracy with a stable open economy and a sustainable balance of payments surplus—the fund's agenda has become aligned with the national political consensus and the state's foreign policy. On the other end of the spectrum is the Russian Federation—a state that I would like to call "late capitalizer," after the term "late industrializer" in developmental studies. In Russia, the fund is mainly used for domestic purposes and hence is subject to the influence of domestic politics. In summary, the life cycle of a SWF's agenda is closely related to the national system of political economy.

States such as the United Arab Emirates and Singapore are somewhat in between the two ends of this spectrum. Over the past three decades or so, the United Arab Emirates has had a thriving economy with a stable political system based on what Davidson calls the "neopatrimonial model."[9] Still, the state lacks an appropriate legal framework for economic activities such as debt restructuring and disclosure. Singapore has also had a relatively stable political system with an advanced framework for commercial activities. However, as a city-state, its domestic market is extremely limited. In these types of states, SWFs can act as entrepreneurs, a role that involves taking higher economic risks while being conservative in regard to political risks.

[9] **Davidson, *The United Arab Emirates: A Study in Survival.***

Third, and consistent with the above conclusions, it is inappropriate to pool all funds together and treat them equally, as most analysts and policy makers do. As discussed earlier, both the international environment and the state's domestic structure (in all its political, economic, social, and cultural aspects) change over time. This means that a state's priorities shift in response to the new environment and, consequently, so does the fund's agenda. In other words, SWFs, like living creatures evolve over time. Viewing SWFs—whose owner states are typically not at the same developmental stages—equally can lead to inaccurate generalizations which, in turn, can result in inappropriate decisions. For instance, when a commercially-based fund is deemed political, policy makers in the recipient state can block the entry of the fund into their market. This also deprives the recipient state of new funds that could potentially contribute to the increased economic well-being of the recipient state, without imposing any political risks. SWFs could also bail out failing corporations, in which case the recipient state would not need to transfer the burden of the bailout to taxpayers, withdraw funds from official reserves, or resort to external borrowing. On the other hand, if a politically-oriented SWF is treated as a purely commercial fund, then conflicts are likely to arise between the recipient state and the owner state of the fund. As a point of reference, none of the existing SWFs has acquired any large stakes in a single state.

Fourth, the idea that the level of transparency can serve to indicate the real agenda of a SWF is superficial, naive, and most importantly, logically flawed.[10] As has been shown, Norway's GPF-Global—which is praised as the world's most transparent fund—has incorporated non-economic factors in to its investment decision making. In fact, it

[10] This topic is discussed in a separate paper by the author. For more information see Shemirani, "Sovereign Wealth Funds: The False Promise of Transparency."

has imposed investment sanctions on specific industries or states. The fund has also taken sides with respect to political or military conflicts in Palestine and Israel, Burma and Morocco. So, a lack of transparency can be a reflection of factors other than a hidden agenda. Some states still lack established or advanced corporate laws, property laws, disclosure policies, or an internationally accepted legal framework for commercial transactions. The SWFs of those states would, most likely, follow the local norms or culture. A lack of transparency can also be merely a reflection of the local cultural. While access to many kinds of information is considered a right in the West, some countries view this access as a privilege. This might explain why some funds are reluctant to disclose information. Conclusions and findings discussed here have important implications for the international political economy.

IMPLICATIONS AND FURTHER DISCUSSIONS

First of all, concerns over the possibility of the existence of political motives of SWFs are exaggerated. The fact is, the size of the holdings of these funds in foreign entities is usually small. While, for instance, the Norwegian Storting has allowed up to a 10 percent stake in any single business, the average size of a holding of the GPF-Global was only six percent. The recent global financial crisis also provided an opportunity for testing the funds' investment goals. If any of the SWFs had hidden agendas or intended to gain control over, for example, large financial institutions in the West, they could have done so during and after the recent financial crisis. In fact, SWFs not only showed little interest in bailing out the distressed financial institutions, but also shifted their portfolio away from the troubled markets in the West to emerging markets mostly in Southeast

Asia. This move indicates that economic profit is of greater importance than the implementation of politically strategic decisions or economic statecraft.

A quick note on the use of term "strategic" is needed here. This term means "forming part of a long-term plan or aim to achieve a specific purpose."[11] However, economists and financiers on the one hand, and political analysts and policy makers on the other, tend to diverge in their interpretation of this term. While strategic planning or moves in the business world refers to timely decisions to ensure the economic profitability of an investment, politicians use this term to refer to actions that offer political or military advantage over an opponent. This may have added to the politicians' concern over the motives of the funds. Again, if funds' were used for politically strategic purposes, we would expect them to take over key financial institutions in the West, in order to exert financial power over the recipient states once the crisis was over.

The 2008 financial crisis provided an opportunity for observing possible political strategic takeovers by the investor states. Interestingly, we saw that none of the investor states used their funds for political purposes. In fact, most of the SWFs showed no interest in buying low-priced assets that could potentially provide the investor states with strategic influence. Instead they diversified further and diverted their portfolio, shifting investment from the industrial countries to emerging markets. The states acted as cautious entrepreneurs rather than maximizers of political power. Even in the case of Russia, the fund's resources were not used to gain foreign political influence—the fund's assets were held in form of bank deposits with domestic banks. Moreover, the creation of Stabilization Fund (and later the NWF) was done in such a way that the fund and its

[11] **Catherine Soanes, Sara Hawker, and Julia Elliott, *Paperback Oxford English Dictionary,* 2nd ed. (Oxford; New York: Oxford University Press, 2006).**

resources were somewhat isolated from ongoing domestic factional politics. In summary, SWFs have not been tools of economic statecraft, but their worst, they became objects of contestation among rent-seeking domestic actors.

An important, yet rarely discussed, issue with respect to the relationship between the sending and recipient states of sovereign funds is that there are dependencies that go both ways. While the recipient states have various concerns about the foreign investments, the owner states of the SWFs are also exposed to various risks. The SWFs' investment in foreign states is subject to the same risks any multinational company, for instance, is exposed to when making foreign investment. Foreign investment is always subject to both political and economic risks, including risk of nationalization or expropriation, market crashes, natural disasters, and environmental controversies. During the recent financial crisis, for instance, ADIA incurred massive losses as a result of its investment in Citigroup. In addition to these risks, SWFs investments are subject to political scrutiny that can range from the unwelcoming attitudes of a recipient state to legal and legislative barriers to entry.

Additionally, the recipient states' perception of the motives of SWFs has been a source of concern for the owner states of SWFs. The representatives of a number of SWFs, including those of Norway and Singapore, appeared before various committees of the United States House of Representatives during 2008 and 2009, and testified regarding the agenda of their funds in order to clarify any misperceptions. The representative from Abu Dhabi took the lead in the International Working Group (IWG) of the SWFs organized by the IMF to facilitate efforts for compiling a set of principles and practices that reflect the behavior of the SWFs. The Singaporean fund also published a number of op-eds in the New York Times and occasionally engaged with the public by providing responses to critics. The extensive work of the members of the IWG (later, the International Forum of SWFs), whose members now include representatives from all four SWFs discussed in this study, indicate the collective efforts on an international level to facilitate the operations of the SWFs.

In fact, SWFs are, except for the ownership structure, not much different from some of the large pension or reserve funds. Despite their large size and geographically diverse portfolio, these pension or reserve funds have received little political criticism. The California Public Employees' Retirement System (CalPERS), established in 1932, is in fact very similar to SWFs in terms of both the magnitude and structure of its portfolio. CalPERS held about $205.7 billion worth of assets as of January 20, 2010. In 1999, the board of directors of CalPERS was given absolute and exclusive authority over the administration and management of the pension fund. The fund has a diverse portfolio both in terms of geography and investment instruments. As of the end of October 2009, over 64 percent of the portfolio consisted of equities (domestic and international), and a further 24 percent of fixed income assets (domestic and international), and the rest consisted of cash, real estate equities, and other instruments.[19]

Another example is the Alaska Permanent Fund Corporation (APFC), established in 1980, which holds about $34.7 billion worth of assets as of January 21, 2010.[13] The portfolio of APFC, in 2009, consisted of 38 percent equities, 22 percent bonds, 12 percent real estate, with the rest in cash, private equity, and other forms of investment. While APFC's real estate holdings were confined to the United States, its stock holdings as of

[12] **"California Public Employees' Retirement System," http://www.calpers.ca.gov/.**
[13] **"Alaska Permanent Fund Corporation," http://www.apfc.org/home/Content/home/index.cfin.**

the end of September 2009 were spread over more than 50 different countries, including China, India, Singapore, Norway, and the Russian Federation.[14] Unlike CalPERS, APFC has participated in the International Forum of SWFs.

Today's concerns over SWFs are somewhat comparable to the concerns that both national governments and the international community had at the height of the expansion of multi-national companies (MNCs) in the late 1960s. At the time, many scholars believed that the rise of those new actors undermined nation-states. The opening lines of Vernon's famous book, *Sovereignty at Bay,* capture its tenor very well: "Suddenly, it seems, the sovereign states are feeling naked. Concepts such as sovereignty and national economic strength appear curiously drained of meaning."[15] George Ball, in 1967, predicted increased conflict between MNCs and the nation-state, the former being a modern concept evolved to meet the requirements of the modern age, and the latter being old-fashioned and not adaptable to the complex needs of the present world.[16] Other scholars like Stephen Kobrin, however, argued that neither the end of the nation-states nor compromised sovereignty ever materialized.[17]

The rise of SWFs shows that states are becoming increasingly responsible for the management of their economies. In fact, the revival of the state and its increased intervention in the markets in the wake of the recent financial crisis has already led to a number of fierce debates that may shape future policies in significant ways. Many of the world's largest corporations and financial institutions are now owned or controlled by

[14] Ibid.
[15] Raymond Vernon, *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises,* The Harvard Multinational Enterprise Series (New York: Basic Books, 1971), 3.
[16]George W. Ball, "The Promise of Multinational Corporation," *Fortune* June, no. 75 (1967): 80.
[17] Stephen J. Kobrin, "Sovereignty@Bay: Globalization, Multinational Enterprise and the International Political System," in *Oxford Handbook of International Business,* ed. Thomas Brewer and Allan Rugman (Oxford: Oxford University Press, 2001).

states. This indicates that we need to review our expectations with respect to the role of states, at least on the economic side. Liberal economists and advocates of the Washington Consensus have argued that governments' involvement in the economy should be minimal, but we have entered a new era that requires a greater degree of state intervention. In addition to governments' bail-out plans and stimulus packages, changes in demography have also necessitated increased state spending: "Aging populations will consume ever more public healthcare and ever bigger pensions."[18] In summary, the rise of the SWFs requires a "paradigm shift" in our approach to international political economy.

We have to continuously seek to enhance our understanding of the functioning of SWFs. We need to engage them in further dialogue, and the International Forum of SWFs is only the first step in that direction. At the same time, the political concerns regarding the potential negative impacts of SWFs on the recipient states should be reviewed in close conjunction with the potential benefits of their investments. These funds, with their long-term investment approaches can provide low-risk liquidity. "SWFs could also contribute to greater market efficiency and lower volatility by diversifying the global investor base."[19] Recipient states can direct foreign portfolio investment to specific industries by providing incentives, or providing guarantees of protection from legal risks such as expropriation and nationalization. In summary, "state capitalism" should be appreciated or, at least, regarded with less scrutiny. The sooner everyone recognizes and embraces this paradigm shift, the smoother would be the transition from old percept to the new.

[18] **"Leaders: Stop!," *The Economist,* January 23, 2010.**
[19] **"Sovereign Wealth Funds-a Work Agenda," 12-13.**

Although this research does not support the applicability of the economic statecraft perspective, in its traditional form of pursuing power, to any of the funds studied here, it does not totally refute the possibility of a fund moving in that direction. The funds studied here were the world's largest in their own class (see Chapter III for categorization), and therefore of more importance than other smaller funds. As has been shown, SWFs have various stages of maturity, which depend on both the organizational structure of the fund and the political economy of the owner state. Once all conditions are right—i.e., the political system is durable and government is politically stable, the fund has fully developed processes for financial activities, and more importantly, the state is satisfied that it has sufficient financial resources, for its present and future needs—then it may be more likely that a fund will be used by the government as a means of power. It is, however, difficult to predict whether or when any of the SWFs will reach that level of maturity.

The findings of this research have also underscored the markers based on which we can assess the behavior of SWFs in the future. These criteria—including the structure of the fund's governance and its location within the political administration; the structure of the portfolio; and the geographical diversity of the portfolio—can shed some light on whether the SWFs' behavior is essentially entrepreneurial or, on the other hand, something less salutary. The entrepreneurial funds with the immediate goal of maximizing returns tend to have statutory independence from central banks and other government institutions. These funds typically have a larger portion of their portfolio dedicated to riskier assets, such as equity or real estate, and are usually diversified globally. On the other hand, SWFs with conservative and geographically-limited portfolios tend to be less advanced in terms of entrepreneurial approach. Additionally, funds whose management is not independent of monetary policy makers are—by the very nature of this dependence—constrained in their efforts toward profit maximization. In summary, these markers can be used when evaluating other funds.

An interesting question one might ask is, what keeps domestic political actors from taking control of the funds' resources, especially during times of crisis? By and large, the current study showed that domestic political actors did not take over the funds' resources, and the management of the funds maintained some level of independence from domestic politics. However, we do not know whether the domestic actors chose not to exploit the fund's resources or were simply not able to do so. One possibility is that times of crisis created a quasi domestic political consensus around the necessity and priority of rescue packages and a speedy economic recovery. In other words, domestic political actors agreed to create safeguards that prevented opportunities for the extraction of funds at time of economic crisis. Another possibility is that SWFs may have been far more independent that originally thought. They were unaffected by domestic politics and therefore performed independently of factional political struggle. Whatever the reasons may have been, SWFs preserved a surprising degree of autonomy during the recent crisis, a fact that supports the concept of SWFs as the expression of entrepreneurial states, as opposed to economic statecraft or corrupted domestic compensation (compensating voters or government supporters). Given all this, there are more reasons to study SWFs in their own rights, rather than simply as an appendage of the state.

Future research could focus on a particular group of SWFs—for instance, non-commodity-based funds (such as China Investment Corporation, Australian Future Fund, and Korea Investment Corporation) and sub-national or non-carbohydrate-based funds (such as the Permanent Wyoming Mineral Trust Fund and Kiribati's Revenue Equalization Reserve Fund). Another area for further research is the study of groups of SWFs that share characteristics such as geography, the state of the economy, or the political system. A comparative study of SWFs and major pension funds or corporations that pursue socially responsible goals, focusing on their rate of return or management, could provide further insights into the functioning of these new state-owned global economic actors.

References

"Abu Dhabi - the International Petroleum Investment Co." APS Review Downstream Trends, 2001.

"Abu Dhabi Buys Stake in Anzo." *The New Zealand Herald*, January 18, 2008.

"Abu Dhabi Investment Authority." www.adia.ae.

"Abu Dhabi Investment Authority Accumulates an 8% Stake in EFG-Hermes Holding." *Al Bawaha*, May 21, 2007.

Acher, John. "Norway Oil Fund's Israel Holdings under Scrutiny." *Reuters*, January 6, 2009.

. "Norway Seeks to up Wealth Fund's Ownership Cap." *Reuters*, April 4, 2008.

Acher, John, and Wojciech Moskwa. "Norway Oil Fund Big Buyer of Stocks, Eyes New Deals." *Reuters*, May 29, 2008.

"Alaska Permanent Fund Corporation." http: //www, apfc. org/home/Content/home/index.cfm.

"Apollo Hospitals Group Company, Apollo Health Street Creates an Industry Landmark." Temasek Holdings, 2005.

Armstrong, Harvey W., R. Jouan de Kervenoael, X. Li, and Robert Read. "A Comparison of the Economic Performance of Different Micro-States and between Micro-States and Large Countries." *World Development* 26, no. 4 (1998): 539-56.

Armstrong, Harvey W., and Robert Read. "The Phantom of Liberty?: Economic Growth and the Vulnerability of Small States." *Journal of International Development* 14 (2002): 435-58.

Aslund, Anders. *Russia's Capitalist Revolution: Why Market Reform Succeeded and Democracy Failed.* Washington, D.C.: Peterson Institute for International Economics, 2007.

Auty, Richard M., and Raymond Freeh Mikesell. *Sustainable Development in Mineral Economies:* Oxford University Press, 1998.

"Background Note: Norway's Position in Relation to the International Debate on Sovereign Wealth Funds." Asset Management Department, The Norwegian Ministry of Finance, 2007.

Baldwin, David A. *Economic Statecraft.* Princeton, N.J.: Princeton University Press, 1985.

Ball, George W. "The Promise of Multinational Corporation." *Fortune* June, no. 75 (1967).

Barbary, Victoria, and Edward Chin. "Testing Time, Sovereign Wealth Funds in the Middle East & North Africa and the Global Financial Crisis." London: Monitor Company Group L.P., 2009.

Barr, Colin. "Constellation Loss a Win for Buffett." *CNNMoney.com,* December 17, 2008.

Barr, Nicholas. "Economic Theory and the Welfare State: A Survey and Interpretation." *Journal of Economic Literature* 30, no. 2 (1992): 741-803.

Beck, Roland, and Michael Fidora. "The Impact of Sovereign Wealth Funds on Global Financial Markets." European Central Bank, 2008.

Bennett, Simon. "Temasek's Mapletree Plans to List S$4 Billion REIT." *Bloomberg,* September 12, 2009.

Berglund, Nina. "Oil Fund Takes 'Minor' Hit from U.S. Mortgage Crisis." *Aftenposten,* August 26, 2008.

Blondal, Jon R. "Budgeting in Singapore." Organisation for Economic Co-operation and Development, 2006.

"BNY Mellon Asset Managment Expands Middle East Regional Team." *Zawya,* November 4, 2008.

Briguglio, L. "Small Island Developing States and Their Economic Vulnerabilities." *World Development* 23, no. 9 (1995): 1615-32.

Bryanski, Gleb. "Russia Says No Change to SWF Strategy Despite Crisis." *Reuters,* October 3, 2008.

"Budget Code of the Russian Federation." In *Chapter 13.2, Article 96.10, Clause 3.*

"Budget Highlights, Financial Year 2009: Keeping Jobs, Building for the Future." Singapore Ministry of Finance, 2009.

Burton, John. "Temasek and US's Goodyear Part Ways." *Financial Times,* July 22, 2009.

Butt, Shams, Anil Shivdasani, Carsten Stendevad, and Ann Wyman. "Sovereign Wealth Funds: A Growing Global Force in Corporate Finance." *Journal of Applied Corporate Finance* 20, no. 1 (2008): 73-83.

"California Public Employees' Retirement System." http://www.calpers.ca.gov/.

Cerny, Philip G. "The Competition State Today: From *Raison d'Etat* to *Raison du Monde" Policy Studies* 31, no. 1 (2010): 5 - 21.

. "The Infrastructure of the Infrastructure? Toward 'Embedded Financial Orthodoxy' in the International Political Economy." In *Transcending the State-Global Divide: The Neoconstructuralist Agenda in International Relations*, edited by Barry Gills and Ronen Palan, 251-74. Boulder, Colo.: Lynne Reiner, 1994.

Chan, Fiona. "Goodyear Rumors 'Far from the Truth'." *AsiaOne*, August 1, 2009.

Chang, Ha-Joon, and Robert Rowthorn. "Role of the State in Economic Change: Entrepreneurship and Conflict Management." In *The Role of the State in Economic Change*, edited by Ha-Joon Chang and Robert Rowthorn, 31-50. Oxford: Clarendon Press, 1995.

"Chapter 2: Regulations on Management of the Government Pension Fund-Global." In *Provisions on the Management of the Government Pension Fund*: Ministry of Finance, Government of Norway.

"Chapter 5: The Management of the Government Pension Fund." In *National Budget 2009*: Ministry of Finance, Government of Norway.

Chaudhry, Kiren Aziz. "Economic Liberalization and the Lineage of the Rentier State." *Comparative Politics* 27, no. October 1994 (1994).

. "The Price of Wealth: Business and State in Labor Remittance and Oil Economies." *International Organization* 43, no. Winter 1989 (1989).

"Citigroup to Sell 47.5 Billion in Equity Units to Abu Dhabi Investment Authority." *The Associated Press*, November 27, 2007.

"CNOOC Withdraws Its Bid for Unocal." *Asia Times*, August 4, 2005.

Cohn, Theodore H. *Global Political Economy : Theory and Practice.* 2nd ed. New York: Longman, 2003.

"Commission Recognises Russia as Market Economy." Euroactive.com, http://www.euractiv.com/en/trade/commission-recognises-russia-market-economy/article-l 15282.

The Committee on Financial Services, United States House of Representatives. *Statement by Director General Martin Skancke, Asset Management Department, Norwegian Ministry of Finance*, March 5, 2008.

The Committee on Financial Services, United States House of Representatives. *Testimony by Simon Israel, Temasek Holdings: A Dependable Investor in the United States*, March 5, 2008.

"Companies Excluded from the Investment Universe." Ministry of Finance, http://www.regjeringen.no/en/dep/fin/Selected-topics/the-govemment-pension-fund/ethical-guidelines-for-the-government-pe/companies-excluded-from-the-investment-u.html?id=447122.

"Company Profile: Abu Dhabi Investment Authority." Zawya http://zawva.com/cm/profile.cfm/cidl 000152/.

Cowley, Elizabeth. "Oil-Rich Norway Sets Stimulus Plan " *Wall Street Journal Europe,* January 27, 2009.

Davidson, Christopher M. *The United Arab Emirates: A Study in Survival*, The Middle East in the International System. Boulder, Colo.: Lynne Rienner Publishers, 2005.

Desai, Sumeet. "Darling Says Sovereign Funds Need to Follow Rules." *Reuters,* October 19, 2007.

Dougherty, Carter. "Europe Looks at Controls on State-Owned Investors." *The New York Times*, July 13, 2007.

"Early Paris Club Debt Repayment to Save Russia $7.7 Bin - Kudrin." *RIA Novosti,* June 21,2006.

Egenter, Sven. "Sovereign Wealth Funds Need Rules-SNB's Hildebrand." *Reuters,* December 18, 2007.

Eisinger, Peter K. *The Rise of the Entrepreneurial State: State and Local Economic Development Policy in the United States,* La Follette Public Policy Series. Madison, Wis.: University of Wisconsin Press, 1988.

Eng, Dennis. "Abu Dhabi's $650 USb Investment Arm Wooed." *South China Morning Post,* February 1, 2008.

England, Andrew. "ADIA Makes Play for a Native Minority." *Financial Times,* November 16, 2008.

"The Ethical Guidelines." Ministry of Finance, Government of Norway, http://www.regieringen.no/en.

"External Trade with Commodities." Statistics Norway, http://www.ssb.no.

Farrell, Diana, and Susan Lund. "The New Role of Oil Wealth in the World Economy." *McKinsey Quarterly* January (2008).

"Federal Law No.l73-FZ, Dated October 13, 2008 'Additional Measures to Support Financial System of the Russian Federation,' Article 4." Ministry of Finance of the Russina Federation, 2008.

Fortson, Danny. "EDF Attracts Big Hitters in Auction of £4bn UK Electricity Network." *The Sunday Times,* August 16, 2009.

"Frequently Asked Questions About Temasek Holdings." Temasek Holdings, http://www.temasekholdings.com.sg/pdf/TemasekHoldingsFAQs.pdf.

"FTSE." http://www.ftse.com/index.isp.

Geddes, Barbara. "Challenging the Conventional Wisdom." In *Economic Reform and Democracy,* edited by Larry Diamond and Marc Plattner, 59-73. Baltimore, Md.: Johns Hopkins University Press, 1995.

Gehmlich, Kerstin. "D.Bahn IPO Unlikely This Year, Not Impossible: CEO." *Reuters,* October 30, 2008.

Gerschenkron, Alexander, and Seymour Martin Lipset collection. *Economic Backwardness in Historical Perspective, a Book of Essays.* Cambridge, Mass.: Belknap Press of Harvard University Press, 1962.

Gilpin, Robert. *Global Political Economy of International Relations.* Princeton: Princeton University Press, 1987.

Gilpin, Robert, and Jean M. Gilpin. *Global Political Economy: Understanding the International Economic Order.* Princeton, N.J.: Princeton University Press, 2001.

"The Global Oil Market: A Long-Term Perspective." Samba Financial Group, 2008.

Goh, Keng Swee. *The Economics of Modernization and Other Essays.* Singapore: Asia Pacific Press, 1972.

"Goodwill Contribution by Temasek Group of Companies to Vietnam." Temasek Holdings, 2003.

"Government Pension Fund-Global." Norges Bank, http://www.norges-bank.no/.

"Government Pension Fund-Global, First Quarter 2009." Oslo: Norges Bank Investment Management 2009.

"Government Pension Fund-Global, Second Quarter 2008." Oslo: Norges Bank Investment Management, 2008.

"Government Pension Fund-Global, Second Quarter 2009." Oslo: Norges Bank Investment Management 2009.

"Government Pension Fund-Global, Third Quarter 2008." Oslo: Norges Bank Investment Management 2008.

"The Government Pension Fund Global, External Managers." Norges Bank, http://www.norges-bank.no/templates/article____41392.aspx.

Griffith-Jones, Stephany, and Jose Antonio Ocampo. *Sovereign Wealth Funds: A Developing Country Perspective,* Workshop on Sovereign Wealth Funds. London: Andean Development Corporation 2008.

Gross, Daniel. "Avoiding the Oil Curse, What Norway Can Teach Iraq." *Slate,* October 29, 2004.

Grytten, Ola. "The Economic History of Norway." In *EH. Net Encyclopedia*, edited by Robert Whaples, 2008.

Gulf Oil and Gas: Ensuring Economic Security. 1st ed. Abu Dhabi: Emirates Center for Strategic Studies and Research, 2007.

Gusev, Kirill. "Russian Stablization Fund to Be Invested Abroad." *RIA Novosti,* April 13, 2006.

Hamad Al Hurr Al-Suwaidi, Henry M. Paulson, Tharman Shanmugaratnam. "Open Editorial - the Role That Sovereign Wealth Funds Can Play in Promoting Free-Flowing, Open and Stable Capital Markets." Abu Dhabi Investment Authority, **2008.**

Haskel, Barbara. "Access to Society: A Neglected Dimension of Power." *International Organization* 34, no. 1 (1980): 89-120.

Hassanain, K. "Monetary Control in the UAE." *Middle Eastern Finance and Economics,* no. 1 (2007): 35-44.

Hirschman, Albert O. *National Power and the Structure of Foreign Trade.* Berkeley and Los Angeles: University of California Press, 1945.

"Historical Exchnage Rates." ONDA, 2009.

Ho, Chin Sau. "Singapore, Temasek and Disclosure." *The Wall Street Journal,* August 25, 2009.

Hufbauer, Gary Clyde, Yee Wong, and Ketki Sheth. *US-China Trade Disputes: Rising Tide, Rising Stakes,* Policy Analyses in International Economics 78: Peterson Institute for International Economics, 2006.

Huntington, Samuel P. *Political Order in Changing Societies.* New Haven: Yale University Press, 1969.

International Monetary Fund. "IFS CD-ROM." Washington, D.C.: IMF, 2009.

"Interview Norway's Halvorsen: Oil Fund to Grow in Tandem with Ethical Footprint." *Forbes,* April 13, 2007.

Karmin, Craig, and Carolyn Cui. "Smart-Money Bets on Street Turn Sour-Big Investors Find Some Big Losses; 'Stakes on the Cheap'." *The Wall Street Journal,* September 19, 2008.

Katzenstein, Peter J. *Small States in World Markets: Industrial Policy in Europe,* Cornell Studies in Political Economy. Ithaca, N.Y.: Cornell University Press, 1985.

Kawach, Nadim. "Bond Issues to Help Boost UAE." *Emirates Business 24\7*, May 3, 2009.

. "Saudi Oil Policy 'Linked to Western SWF Moves'." *Emirates Business 24\7,* September 30, 2008.

. "UAE's Overseas Invetsmnet Income to Rebound in 2009." *Emirates Business 24\7,* April 20, 2009.

Kaye, Daniel. "UAE Money Data Reveals Financial System under Stress." National Bank of Kuwait, 2009.

Kern, Steffen. "Sovereign Wealth Funds - State Investments on the Rise." Deutsche Bank, 2007.

Kirzner, Israel M. *Competition and Entrepreneurship.* Chicago: University of Chicago Press, 1973.

. *Discovery and the Capitalist Process.* Chicago: University of Chicago Press, 1985.

. *Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship.* Chicago: University of Chicago Press, 1979.

Kobrin, Stephen J. "Sovereignty@Bay: Globalization, Multinational Enterprise and the International Political System." In *Oxford Handbook of International Business,* edited by Thomas Brewer and Allan Rugman. Oxford: Oxford University Press, 2001.

Koh, Tommy T. B., and Li Lin Chang. *The United States-Singapore Free Trade Agreement: Highlights and Insights.* Singapore: World Scientific Pub; Institute of Policy Studies, 2004.

Kramer, Andrew E. "Russia Approves Loan Plan to Ease Credit Crunch." *The New York Times,* October 10, 2008.

"Kudrin Sees No Threat to Blue Chips." *The Moscow Times,* May 23, 2007.

Kwok, Vivian Wai-yin. "Temasek's Profits Receive Kick in the Shin." *Forbes.com,* August 2, 2007.

Lawder, David, and Gleb Bryanski. "Putin-No Sovereign Wealth Fund in Russia Yet." *Reuters,* June 30, 2008.

"Leaders: Stop!". *The Economist,* January 23, 2010, 11-12.

"Leviathan Stirs Again; the Growth of the State." *The Economist,* January 23, 2010, 23-26.

Lim, Linda, Pang Eng Fong, and Ronald Findlay. "Five Small Open Economies." *In A World Bank Comparative Study. The Political Economy of Poverty, Equity, and Growth.*, edited by Ronald Findlay and Stanislaw Wellisz. New York: Published for the World Bank [by] Oxford University Press, 1993.

Lopez, Ditas. "Temasek Looks to Tap U.S. Bond Markets." *The Wall Street Journal,* October 20, 2009.

Luedde-Neurath, Richard. "State Intervention and Export-Oriented Development in South Korea." In *Developmental States in East Asia,* edited by Gordon White. New York: St. Martin's Press, 1988.

Lyons, Gerard. "State Capitalism: The Rise of Sovereign Wealth Funds." Standard Chartered Bank, 2007.

Mahdavy, Hussein. "The Patterns and Problems of Economic Development in Rentier States: The Case of Iran." In *Studies in Economic History of the Middle East,* edited by M. A. Cook. London: Oxford University Press, 1970.

"Main Results and Trends of Budget Policy 2008-2010." Ministry of Finance, Russian Federation.

"Mapletree." http://www.mapletreeindustrial.com/.

Medetsky, Anatoly. "Billions Pledged for Roads, Homes." *The Moscow Times,* April 27, 2007.

. "Kudrin Says Pension Fund Next up for Stocks." *The Moscow Times,* October 13,

2008.

. "Oil Takes a Trip Past $100 Plateau." *The Moscow Times,* January 9,2008.

"Merill Posts 3rd-Quarter Loss of $5.2 Billion." *The New York Times,* October 16, 2008.

Milner, Helen V., and Keiko Kubota. "Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries." *International Organization* 59, no. Winter 2005 (2005): 107-43.

"Ministry of Finance of the Russian Federation." http://wwwl .minfin.ru/en/.

Moskwa, Wojciech. "Norway SWF Seeks to Block Buffett on Constellation." *Reuters,* December 17, 2008.

Moskwa, Wojciech, and Camilla Knudsen. "Norway's Wealth Fund Says Was Prepared for Lehman." *Reuters,* September 15, 2008.

Nankani, Gobind T. "Development Problems of Nonfuel Mineral Exporting Countries." *Finance and Development* January (1980).

"National Wealth Fund." Ministry of Finance of the Russian Federation, http://wwwl.minfin.ru/en/nationalwealthfund/.

Nemtsov, Boris. "No More Welfare for Russia's Oligarchs." *Radio Free Europe,* February 18, 2009.

"Norway's Oil Fund Faces Losses in 2008." *Reuters,* November 10, 2008.

"Norway's Oil Fund Loses 61 Million Euros on Lehman Brothers." *AFP,* September 15, **2008.**

"Norway Enters Recession: Offical Data." *Agence France Presse,* May 19, 2009.

"Norway Oil Fund Expels Two Companies." *Reuters,* January 30, 2009.

"Norway SWF Takes Domestic View." *Thomson Merger News,* December 31, 2008.

"Norway to Dip into Oil Fund Due to Financial Crisis." *Agence France Presse,* January 7, 2009.

"The Norwegian Oil History." Norwegian Petroleum Directorate (Oljedirektoratet), http://www.npd.n0/English/0m+0D/Nvttig/01ie-ABC/Norsk+oliehistorie/70 tallet.htm.

Nurske, Ragnar. "Trade Fluctuations and Buffer Policies of Low-Income Countries." *Kyklos* 11, no. 2 (1958).

OECD. "Regulatory Reform in Norway, Marketization of Government Services - State-Owned Enterprises." 2003.

"Oil Fund Manager Warns on Spending." *The Moscow Times,* December 19, 2007.

"OLF the Norwegian Oil Industry Association." http://www.olf.no/about-olf/category292.html.

"Order of the Ministry of Finance No. 22, Dated January 24, 2008." Ministry of Finance of the Russian Federation.

"Order of the Ministry of Finance No. 23, Dated January 24, 2008." Ministry of Finance of the Russian Federation.

Otaiba, Yousef Al. "Our Sovereign Wealth Plans." *The Wall Street Journal,* March 10, 2008, A16.

Peck, Malcolm C. *The United Arab Emirates: A Venture in Unity,* Profiles. Nations of the Contemporary Middle East. Boulder, Colo.: Westview Press, 1986.

"Poland Seeks New Shipyard Investor as QIA Stays Out." September 1, 2009.

Prebisch, Raul. *The Economic Development of Latin America and Its Principal Problems.* Lake Succes, N.Y.: United Nations, 1959.

"Press Release 38/2005: Company Excluded from the Government Petroleum Fund." Ministry of Finance, Norway, 2005.

"Press Release 48/2009: Revised National Budget 2009: Continued Expansionary Policies." Ministry of Finance, Norway, 2009.

"Press Release 62/2006: KerrMcGee Corporation Is Again Included in the Government Pension Fund-Global." Ministry of Finance, Norway, 2006.

"Press Release: Abu Dhabi Investment Authority Appoints Bill Schwab as Global Head of Real Estate." Abu Dhabi Investment Authority, 2009.

"Press: Abu Dhabi Invetment Authority Wants Offer for Polish Shipyards as Soon as Possible." *Poland Business Newswire,* October 30, 2008.

"Pressure Tells: Temasek Calls for Polls." *Asia Times,* February 25, 2006.

"Procedure for Management of the Assets of the Stabilization Fund of the Russian Federation." In *Regulation of the Government of the Russian Federation No. 229,* 21 April 2006.

"Provisions on the Management of the Government Pension Fund." Ministry of Finance, Government of Norway.

Remo-Listana, Karen. "Wealth Funds in the UAE Lead Way with Transparency." *Emirates Business 24\7,* March 3, 2009.

"Reserve Fund." Ministry of Finance of the Russian Federation, http://wwwl.minfin.ru/en/reservefund/.

Robertson, David. "Sovereign Wealth Giant ADIA Drops out of Gatwick Race " *TimesOnline,* January 20, 2009.

Robinson, Gwen. "When Is an SWF Not an SWF?" In *FTAlphaville,* 2009.

Rosecrance, Richard N. *The Rise of the Virtual State: Wealth and Power in the Coming Century.* New York: Basic Books, 1999.

Ross, Michael L. "The Political Economy of the Resource Curse." *World Politics* 51, no. 2 (1999): 297-322.

Rugaber, Christopher S. "Abu Dhabi Lays out Investment Principles for Its Government-Run Wealth Fund." *The Associated Press*, March 18, 2008.

Ruggie, John Gerard. "Globalization and the Embedded Liberalism Compromise: The End of an Era?" *MPIfG Working Paper* 97/1 (1997).

. "International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order." *International Organization* 36 (1982): 379-415.

Rugh, Andrea B. *The Political Culture of Leadership in the United Arab Emirates.* New York: Palgrave Macmillan, 2007.

"Russia's Pension Fund Takes out $1.04bln from Stabilization Fund." *RIA Novosti*, December 27, 2005.

"Russian Capital Flight at $33 Bin in Aug-Sept.-Finance Minsiter." *RIA Novosti*, October 17, 2008.

"Russian Financial Agency Should Commence Business Starting 2010." *Cbonds*, August 14, 2009.

"S&P Reaffirms Rating for Arab Banking Corporation." *McClatchy-Tribune Regional News - The Middle East and North Africa Business Report*, June 25, 2008.

Sachs, Jeffrey D., and Andrew M. Warner. "Natural Resource Abundance and Economic Growth." Center for International Development and Harvard Institute for International Development, 1997.

Saleem, Nadia. "Slew of Mergers and Takeovers in Mena Region." *gulfnews.com*, November 8, 2008.

"Sarkozy Attacks Wealth Funds on Eve of Mideast Trip." *Reuters*, January 12, 2008.

Schmandt, Jurgen, and C. H. Ward. *Sustainable Development: The Challenge of Transition.* Cambridge, U.K.: Cambridge University Press, 2000.

Schumpeter, Joseph. *Capitalism, Socialism and Democracy.* New York: Harper and Row, 1962.

"Second Reading Speech for Constitution of Republic of Singapore (Amendment) Bill 2008." Singapore Ministry of Finance 2008.

"Section 3: Government Pension Fund Act: Provisions of the Management of the Government Pension Fund ". Ministry of Finance, Norway, 2005.

Setser, Brad, and Rachel Ziemba. "GCC Sovereign Funds, Reversal of Fortune." New York: Council on Foreign Relations, Center for Geoeconomic Studies, 2009.

Shambayati, Hootan. "The Rentier State, Interest Groups, and the Paradox of Autonomy: State and Business in Turkey and Iran." *Comparative Politics* 29, no. April (1994): 307-31.

Shemirani, Manda. "Sovereign Wealth Funds: The False Promise of Transparency." *Infinity Journal* 1, no. 5 (2009).

"Shipyards' Status Blocks Entry of Potential Investors." *Wasraw Business Journal,* October 30, 2008.

"Singapore's NOL Says Drops out of Race to Buy Hapag-Lloyd." *AFP,* October 10 2008.

"Singapore Temasek to Sell Power Firm PowerSeraya." *Xinhua,* October 7, 2008.

"Singapore: Temasek to Sell Electricity Generator." *Mysinchew.com,* October 8, 2008.

Slevin, Peter. "U.S. Says Russia Now 'Market Economy'; Designation Follows Announcement by EU." *The Washington Post,* June 7, 2002, E.01.

Soanes, Catherine, Sara Hawker, and Julia Elliott. *Paperback Oxford English Dictionary.* 2nd ed. Oxford; New York: Oxford University Press, 2006.

"Sovereign Wealth Fund Institute." http://swfinstitute.org/.

"Sovereign Wealth Funds-a Work Agenda." International Monetary Fund, 2008.

"Stabilization Fund of the Russian Federation." Ministry of Finance of the Russian Federation, http://www.minfin.ru/en/stabfund/.

"Stabilization Fund of the Russian Federation: Funds Flow on the Federal Treasury's Account in the Bank of Russian in Rubles in 2004." Ministry of Finance of the Russian Federation, http://www.minfin.ru/common/img/uploaded/library/no_date/2007/rub2004_eng.pdf.

Stewart, Catrina. "From Battered to 'Island of Stability'." *The Moscow Times,* February **28, 2008.**

Stigset, Marianne. "Norway Bans Dongfeng from Oil Fund; Siemens on Watch." *Bloomberg,* March 13, 2009.

. "Shell Gas Find in Norway May Be Biggest in 12 Years." *Bloomberg,* June 19, 2009.

Stoltz, Aasa Christine. "Norway Says Oil Fund Reluctant to Blacklist States." *Reuters,* June 18,2008.

Strange, Susan. *States and Markets.* New York: Basil Blackwell, 1988.

"The Tan Sri Khoo Teck Puat Estate Agrees to Sell Shares in Standard Chartered to Temasek." Temasek Holdings, 2006.

"Temasek's Revised Charter." *The Wall Street Journal,* August 31, 2009.

"Temasek and Transparency-Ii." *The Wall Street Journal,* July 21, 2009.

"Temasek Cannot Divest Stakes in GLCs Overnight." Temasek Holdings, 2000.

"Temasek Group of Companies Support China's Battle against SARS." Temasek Holdings, 2003.

"Temasek Holdings." www.temasekholdings.com.sg.

"Temasek Holdings (Private) Limited Announces Investments in Fraser & Neave Limited." Temasek Holdings, 2006.

"Temasek Holdings' Subsidiary Acquires 5.5 Million M&M Shares." Temasek Holdings, 2005.

"Temasek Review 2006." Temasek Holdings, 2006.

"Temasek Review 2008." Temasek Holdings, 2008.

"Temasek Review 2009." Temasek Holdings, 2009.

"Temasek's Relief Efforts in Asia's Tsunami Disaster." Temasek Holdings, 2005.

"Thai Shin Says Temasek Stake Sale Depends on Market." *Reuters,* August 24, 2009.

Thomas, Myrna. "Correcting Temasek Misperceptions." *The Wall Street Journal,* September 8, 2009.

Thornton, Emily, and Stanley Reed. "A Power Player Emerges in the Gulf." *BusinessWeek,* no. 4089 (2008): 63-64.

Thucydides. *The History of the Peloponnesian War.* New York: Dutton, 1910.

Toninelli, Pier Angelo. "The Rise and Fall of Public Enterprise: The Framework." In *The Rise and Fall of State-Owned Enterprise in the Western World,* edited by Pier Angelo Toninelli: Cambridge University Press, 2000.

Trebat, Thomas J. *Brazil's State-Owned Enterprises: A Case Study of the State as Entrepreneur.* Cambridge University Press, 1983.

Truman, Edwin M. "A Scoreboard for Sovereign Wealth Funds." In *Conference on China's Exchange Rate Policy.* Washington D.C.: Peterson Institute for International Economics, 2007.

"The UAE Economy: Sustainable in the Face of a Serious Global Recession ". Riadh: Samba Financial Group, 2009.

UNCTAD. "The Vulnerability of Small Island Developing States in the Context of Globalization: Common Issues & Remedies." Geneva: UNCTAD, 1997.

The United States Senate Committee on Banking, Housing and Urban Affairs. *Testimony of Edwin M. Truman, Senior Fellow, Peterson Institute for International Economics,* November 14, 2007.

Van Arkadie, Brian. "The State and Economic Change in Africa." In *The Role of the State in Economic Change,* edited by Ha-Joon Chang and Robert Rowthorn, 31-50. Oxford: Clarendon Press, 1995.

Vernon, Raymond. *Exploring the Global Economy: Emerging Issues in Trade and Investment.* Cambridge, Mass. and Lanham, Md: Center for International Affairs, University Press of America, 1985.

. *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises,* The Harvard Multinational Enterprise Series. New York: Basic Books, 1971.

"Vnesheconombank to Bail out Companies This Week ". *RosBusinessOnsulting (RBC),* October 21, 2008.

Wade, Robert. *Governing the Market.* Princeton, N.J.: Princeton University Press, 1990.

. "The Role of Government in Overcoming Market Failure: Taiwan, Republic of Korea and Japan." *la Achieving Industrialization in East Asia,* edited by Helen Hughes. Cambridge: Cambridge University Press, 1988.

. "State Intervention In "Outward-Looking" Development: Neoclassical Theory and Taiwanese Practice." In *Developmental States in East Asia,* edited by Gordon White. New York: St. Martin's Press, 1988.

"Wealth Funds' Long-Term View May Help Stablize Markets." *IMF Survey,* October 16, 2008.

Weaver, Courtney. "Crisis Silencing Kudrin's Critics." *The Moscow Times,* November 7, **2008.**

. "State Will Start Buying Shares This Week." *The Moscow Times,* October 20, **2008.**

"Weekly Mediterranean (Russia, Urals) Spot Price FOB (Dollars Per Barrel)." Energy Information Administration, 2009.

"The World Fact Book." CIA, https://www.cia.gov/library/publications/the-world-factbook/docs/rankorderguide.html.

Yu, Tony F. "Entrepreneurial State: The Role of Government in the Economic Development of the Asian Newly Industrialising Economies." *Development Policy Review* 15 (1997): 47-64.

Zahlan, Rosemarie Said. *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman.* Rev. and updated ed. Reading, Berkshire, U.K.: Ithaca Press, 1998.

APPENDIX A

LIST OF ACRONYMS

ADB	Asian Development Bank
ADIA	Abu Dhabi Investment Authority
AHSTF	Alberta Heritage Saving Trust Fund
BIA	Brunei Investment Agency
CEB	Council of Europe Development Bank
CIC	China Investment Corporation
DIC	Dubai Investment Corporation
EBRD	European Bank for Reconstruction and Development
E&S SF	Economic & Social Stabilization Fund
FTSE	Financial Times Stock Exchange
GIC	Government Investment Corporation
GLC	Government-linked Companies
GPF	Government Pension Fund
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
IMF	International Monetary Fund
KIA	Kuwait Investment Authority
KIC	Korea Investment Corporation
KN BHD	Khazanah Nasional Berhad
LSE	London Stock Exchange
MAS	Monetary Authority of Singapore
MSCI	Morgan Stanley Capital International
NBIM	Norges Bank Investment Management
NDF	National Development Fund
NF	National Fund
NIB	Nordic Investment Bank

Nil	Net Investment Income
NIIC	Net Investment Income Contribution
NSF	National Stabilization Fund
NWF	National Welfare Fund
NYSE	New York Stock Exchange
PRF	Permanent Reserve Fund
QIA	Qatar Investment Authority
SF	Stabilization Fund
SGRF	State General Reserve Fund

APPENDIX B

SMALL STATES IN ARMSTRONG DATA SET[1]

SUB-SAHARAN AFRICA (20)

Botswana, Cape Verde, Comoros, Congo, Djibouti, Equatorial Guinea, Gabon, Gambia, Guinea-Bissau, Lesotho, Liberia, Mauritania, Mauritius, Namibia, Sao Tome & Principe, Seychelles, Swaziland, Mayotte (F), Reunion (F), St Helena & Dependencies (UK)

SOUTH ASIA (3)

Bhutan, Maldives, British Indian Ocean Territories (UK)

MIDDLE EAST & NORTH AFRICA (8)

Bahrain, Kuwait, Oman, Qatar, United Arab Emirates

Canary Islands (Sp) Ceuta & Melilla (Sp) Madeira (P)

EASTERN EUROPE & CENTRAL ASIA (4)

Estonia, Latvia, Macedonia FYR, Slovenia

WESTERN EUROPE (14)

Andorra, Cyprus, Iceland, Liechtenstein, Luxembourg, Malta, Monaco, San Marino, Azores (P), Faroe Islands (DK), Gibraltar (UK), Guernsey (UK), Isle of Man (UK), Jersey (UK)

[1] **Armstrong et al., "A Comparison of the Economic Performance of Different Micro-States and between Micro-States and Large Countries."**

LATIN AMERICA & CARIBBEAN (26)

Antigua & Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica Panama, St Kitts & Nevis, St Lucia, St Vincent & Grenadines, Suriname, Trinidad & Tobago, Anguilla (UK), Aruba (NL), British Virgin Is (UK), Cayman Islands (UK), Falkland Islands (UK), French Guiana (F), Guadeloupe (F), Martinique (F), Montserrat (UK), Netherlands Antilles (NL), Turks & Caicos (UK), US Virgin Islands (US)

EAST ASIA & PACIFIC (27)

Brunei, Fiji, Kirbati, Marshall Islands, Micronesia (Fed States), Mongolia, Nauru, Palau, Samoa, Singapore, Solomon Islands, Tonga, Tuvalu, Vanuatu, American Samoa (US), Christmas Island (AUS), Cocos Islands (AUS), Cook Islands (NZ), French Polynesia (F), Guam (US), Macao (P), New Caledonia (F), Niue (NZ), Norfolk Island (AUS), Northern Marianas (US), Tokelau (NZ), Wallis & Futuna (F)

NORTH AMERICA (3)

Bermuda (UK), Greenland (DK), St Pierre & Miquelon (F)

APPENDIX C

BRIGUGLIO'S LIST OF SMALL STATES[1]

SMALL ISLAND DEVELOPING STATES (21)

Antigua & Barbuda, Bahamas, Bahrain, Barbados, Cape Verde, Comoros, Cyprus, Dominica, Fiji, Grenada, Kiribati, Maldives, Malta, Mauritius, Seychelles, St Lucia, St Kitts & Nevis, St Vincent & Grenadines, Tonga, Trinidad & Tobago, Vanuatu

LARGE ISLAND DEVELOPING STATES (2)

Jamaica, Singapore

NON-ISLAND DEVELOPING STATES (14)

Belize, Botswana, Congo, Gabon, Gambia, Guinea Bissau, Guyana, Kuwait, Liberia, Mauritania, Oman, Panama, Suriname, Swaziland

DEVELOPED STATES (1)

Iceland

[1] **Briguglio, "Small Island Developing States and Their Economic Vulnerabilities."**

APPENDIX D

KEY THEORETICAL MARKERS

	A) Economic Statecraft B) State Entrepreneurship C) Domestic Compensation	A	B	C
1	Political leaders refer to the fund as a means of statecraft or foreign policy tool	X		
2	Fund manager follows government directives (no independent management	X		
3	Fund invests in sensitive industries such as defense	X		
4	State has historically acted as an entrepreneur and intervened in the economy, or there is the tradition of SOEs		X	X
5	Fund's performance is based on economic principles or fund reacts to movements in the market		X	X
6	Fund's management is delegated to an independent and professional fund manager		X	X
7	Fund's portfolio consists of more risky assets (equities)		X	
8	State is small, traditionally open, resource-abundant or in general, vulnerable to external shocks			X
9	Fund's account is integrated into the national budget and government withdraws fund from its account regularly			X
10	There is a well-established domestic redistribution mechanism			X
11	There is no efficient tax system			X
12	Fund's portfolio is more conservative (less risky assets)			X

APPENDIX E

GPF-GLOBAL'S CASH FLOW[1]

The cash flow of the GPF-Global is calculated as the sum of:

1. Total tax revenues and royalty deriving from petroleum activities collected pursuant to Petroleum Taxation Act (no. 35 of June 13, 1975) and the Petroleum Activities Act (no. 72 of November 29, 1996)
2. Revenues deriving from tax on CO2 emissions due to petroleum activities on the continental shelf
3. Central government revenues deriving from the removal or alternative use of installations on the continental shelf
4. Revenues deriving from the State's Direct Financial Interest in petroleum activities[2]
5. Any government sale of stakes representing the State's Direct Financial Interest in petroleum activities,
6. Central government revenues from net surplus agreements associated with certain production licenses
7. Dividends from Statoil ASA,
8. Transfers from the Petroleum Insurance fund

Less:

1. Central government direct investments in petroleum activities
2. Central government expenses in connection with the Petroleum Insurance fund

[1] "Section 3: Government Pension Fund Act: Provisions of the Management of the Government Pension Fund ", (Ministry of Finance, Norway, 2005).
[2] Defined as operating and other income less operating and other expenses.

3. Central government expenses in connection with the removal or alternative use of installations on the continental shelf
4. Any government purchase of stakes as part of the State's Direct Financial Interest in petroleum activities

Subsequently, net financial transactions associated with petroleum activities are the sum of gross revenues from government sale of shares in Statoil ASA, less government capital contributions to Statoil ASA and companies attending to government interests in petroleum activities.

APPENDIX F

EXTERNAL MANAGERS HIRED BY NBIM[1]

Equity External Managers (as of December 31, 2007):

1. Aberdeen Asset Management
2. Altrinsic Global Advisors, LLC
3. APS Asset Management Pte Ltd
4. Atlantis fund Management Ltd.
5. BlackRock International Ltd. & BlackRock Capital Management Inc.
6. Capital International Ltd.
7. Dalton Capital (Guernsey) Ltd. (FunNex)
8. Fidelity Pensions Management
9. Gartmore Investment Management PLC
10. GLG Partners
11. Intrinsic Value Investors (IVI) LLP
12. Janus Capital Management LLC
13. Legg Mason Capital Management Inc
14. NewSmith Asset Management LLP
15. Primecap Management Company
16. Scheer, Rowlett & Associates Investment Management, Ltd.
17. Schroder Investment Management Ltd.
18. Sparx Asset Management Co. Ltd.

[1] **"The Government Pension Fund Global, External Managers," Norges Bank, http://www.norges-bank.no/templates/article____41392.aspx.**

19. T Rowe Price Associates Inc.
20. Tradewinds NWQ Global Investors LLC
21. Wellington Management Company PLC
22. Columbus Circle Investors
23. Jupiter Asset Management Ltd
24. OrbiMed Capital LLC
25. W.H. Reaves & Co, Inc.

Fixed-income External Managers (as of December 31, 2007):

1. Advantus Capital Management Inc
2. Aspect Capital Ltd.
3. Babson Capital Management LLC
4. Barclays Global Investors, N.A
5. Bridgewater Associates, Inc
6. Daiwa SB Investments (UK) Ltd.
7. Diversified Credit Investments, LLC
8. Ellington Global Asset Management, LLC
9. European Credit Management Limited
10. Hyperion Brookfield Asset Management Inc.
11. Insight Investment Management (Global) Limited
12. Lehman Brothers Asset Management LLC
13. Logan Circle Partners, L.P.
14. Nomura Asset Management U.K. Ltd.
15. PanAgora Asset Management Inc

16. Pareto Investment Management Ltd.
17. Putnam Advisory Company LLC
18. Smith Breeden Associates, Inc
19. State Street Global Advisors
20. TCW Asset Management Company
21. Greylock Capital Management LLC (fond)
22. Smith Breeden Credit Partners LLC (fond)

APPENDIX G

EXCLUDED COMPANIES FROM GPF-GLOBAL[1]

20 Jan 2010	17 Tobacco companies	Tobacco production
19 Nov 2009	Norilsk Nickel (Russia)	Environmental damage
03 Sep 2009	Elbit System Ltd (Israel)	Surveillance system
13 Mar 2009	Dongfeng Motor Group (China)	Sale of trucks to Burma
30 Jan 2009	Textron Inc. (US)	Cluster weapons
30 Jan 2009	Barrick Gold Corporation (Canada)	Environmental damage
09 Sep 2008	Rio Tinto[3] (Australia)	Environmental damage
11 Jan 2008	Hanwha Corporation (South Korea)	Cluster munitions
	Serco Group Pic. (UK)	Nuclear weapons
	GenCorp Inc. (US)	Nuclear weapon parts
09 Nov 2007	Vedanta Resources Pic. (UK)	Environment, Human/Labor
	Sterlite Industries Ltd. (India)	Environment, Human/Labor
	Madras Aluminium Company Ltd. (India)	Environment, Human/Labor
11 Apr 2007	DRD Gold Limited (South Africa)	Environmental damage
06 Dec 2006	Poongsan Corporation (South Korea)	Cluster munitions

'"Companies Excluded from the Investment Universe," Ministry of Finance, http://www.regjeringen.no/en/dep/fin/Selected-topics/the-government-pension-flind/ethical-guidelines-for-the-government-pe/companies-excluded-from-the-investment-u.html?id=447122.

[2] The excluded tobacco companies include, Alliance One International Inc., Altria Group Inc., British American Tobacco BHD, British American Tobacco Pic., Gudang Garam tbk pt., Imperial Tobacco Group Pic., ITC Ltd., Japan Tobacco Inc., KT&G Corp, Lorillard Inc., Philip Morris International Inc., Philip Morris Cr AS., Reynolds American Inc., Souza Cruz SA, Swedish Match AB, Universal Corp VA and Vector Group Ltd.

[3] A joint venture partner with Freeport McMoRan Copper&Gold Inc. in the Grasberg mine in Indonesia.

06 Jun 2006	Wal-Mart Stores Inc. (US)	Human/Labor rights violation
	Wal-Mart de Mexico SA de CV (Mexico)	Human/Labor rights violation
	Freeport McMoRan Copper & Gold Inc	Environmental damage
05 Jan 2006	BAE Systems Pic. (UK)	Nuclear weapon parts
	Boeing Co. (US)	Nuclear weapon parts
	Finmeccanica Sp.A. (Italy)	Nuclear weapon parts
	Honeywell International Inc. (US)	Nuclear weapon parts
	Northrop Grumman Corp. (US)	Nuclear weapon parts
	United Technologies Corp. US)	Nuclear weapon parts
	Safran SA (France)	Nuclear weapon parts
31 Aug 2005	Alliant Techsystems Inc. (US)	Cluster bomb parts
	EADS Co. [4]	Cluster bomb parts
	EADS Finance BY [5]	Cluster bomb parts
	General Dynamics Corporation (US)	Cluster bomb parts
	L3 Communications Holdings Inc. (US)	Cluster bomb parts
	Lockheed Martin Corp. (US)	Cluster bomb parts
	Raytheon Co. (US)	Cluster bomb parts
	Thales SA. (France)	Cluster bomb parts
06 Jun 2005	Kerr-McGee Corporation[6] (US)	Violation of ethical norms
22 Mar 2002	Singapore Technologies Engineering	Anti-personnel landmines

[4] European Aeronautics Defense and Space Company (EADS Co.).
[5] Bonds of EADS Finance BV were excluded as the company was indentified with its parent EADS Co.
[6] Revoked in 2006.

APPENDIX H

ADIA EXECUTIVES[1]

BOARD OF DIRECTORS

Sheikh Khalifa bin Zayed Al Nahayan, Chairman

Sheikh Sultan bin Zayed Al Nahayan

Sheikh Mohammed bin Zayed Al Nahayan

Sheikh Ahmed bin Zayed Al Nahayan, Managing Director

Sheikh Mansour bin Zayed Al Nahyan

Sheikh Mohammed bin Khalifa bin Zayed Al Nahyan

Mohammed Habroush Al Suwaidi

Dr. Jua'an Salim Al Dhaheri

Hamad Mohammed Al Hurr Al Suwaidi

Saeed Mubarak Rashid Al Hajeri

MANAGEMENT

Sheikh Ahmed Bin Zayed Al Nahyan, Managing Director

Salem Rashed Al Muhanadi, Executive Director, Finance and Administration

Khalifa Al Mansouri Executive Director, Accounts

Hareb Masood Al Darmaki, Executive Director, Private Equity

Hussein Sayegh, Executive Director, Operations

Mohammed Saif Al Suwaidi, Executive Director, Treasury

Majid Salem Al Roumaisi, Executive Director, Real Estate

[1] **"Company Profile: Abu Dhabi Investment Authority."; "Abu Dhabi Investment Authority."**

Mohammed Ahbabi, Executive Director, Internal Audit

Hamad Kurdous Amri, Executive Director, Alternative Investments

Saeed Mubarak Rachid A1 Hajeri, Executive Director, Emerging Markets

Salem Mazouy, Executive Director, Valuation and Follow Up

Khalifa A1 Muhairi, Executive Director, Information Technology

Mohammed Hinai, Finance and Administration Director

Abdulrahman A1 Qumzi, General Services Director

Majed A1 Rumaithi, Human Resources Director

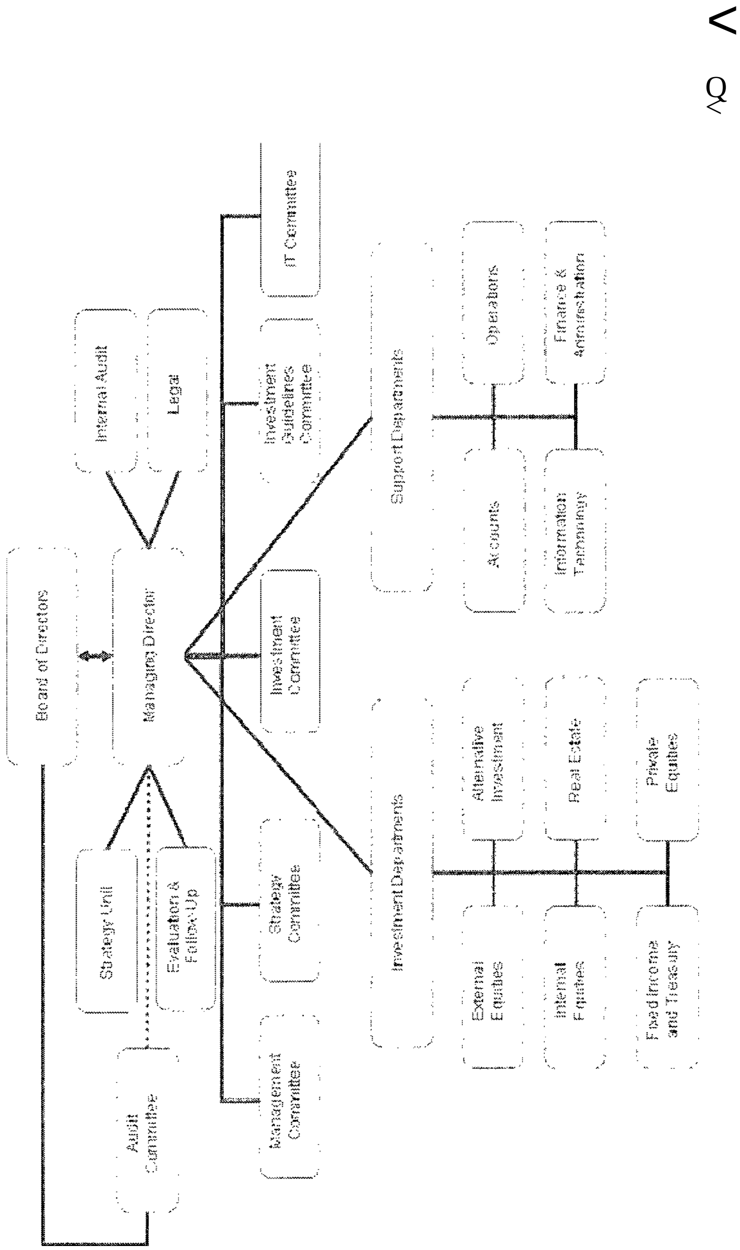
Bill Schwab, Global Head of Real Estate (since January 2009)

Jean Paul Villain, Head of Strategy (also Senior Investment Advisor)

Euart Glendinning, Global Head of Corporate Communications and Public Affairs (since May 2008)

APPENDIX I

ORGANIZATIONAL CHART OF ADIA[1]



[1] "Abu Dhabi Investment Authority."

APPENDIX J

TEMASEK BOARD OF DIRECTORS[1]

S DHANABALAN

Chairman since September 1996 (also Chairman of DBS Group from 1999 to 2005; Chairman of Singapore Airlines from 1996 to 1998)

KWA CHONG SENG

Deputy Chairman and Director since September 1997 (also current Chairman and Managing Director of ExxonMobil Asia Pacific; a Board Member of DBS Group; previously Chairman of MediaCorp)

HO CHING

Executive Director and CEO since January 2004 (wife of the Singapore Prime Minister; Director since January 2002; President and CEO of the Singapore Technologies Group from April 1997 to December 2001)

KUA HONG PAK

Director since November 1996 (also a Board Member of PSA International)

KOH BOON HWEE

Director since November 1996 (also Chairman of DBS Group; previously Chairman of Singapore Airlines, and Singapore Telecommunications)

[1] "Temasek Holdings."

GOH YEW LIN

Director since August 2005 (currently Managing Director of GK Goh Holdings, and Board Member of the National University of Singapore)

SIMON ISRAEL

Executive Director since July 2006 (Director since August 2005; previously 10 years with the Danone Group as Chairman Asia Pacific)

TEO MING KIAN

Director since 2006 (also Permanent Secretary of the Ministry of Finance and Permanent Secretary of National Research and Development in the Prime Minister's Office; Current Chairman of Accounting and Corporate Regulatory Authority and Inland Revenue Authority of Singapore; Executive Chairman of the Singapore Economic Development Board from February 2001 to October 2006.)

MARCUS WALLENBERG

Director since July 2008 (also Chairman of Skandinaviska Enskilda Banken (SEB), SAAB AB and AB Electrolux; Deputy Chairman of L M Ericsson; also a recent Chairman of the International Chamber of Commerce.)

APPENDIX K

TEMASEK MAJOR HOLDINGS[1]

	Percent*
FINANCIAL SERVICES	
Bank of China Limited **	4
China Construction Bank Corporation **	6
DBS Group Holdings Ltd	28
Hana Financial Group Inc **	10
ICICI Bank Limited **	8
NIB Bank Limited **	74
PT Bank Danamon Indonesia Tbk **	68
Standard Chartered PLC	19
TELECOMMUNICATION & MEDIA	
Bharti Airtel Limited	5
MediaCorp Pte. Ltd	100
Shin Corporation Public Company Limited **	42
Singapore Technologies Telemedia Pte Ltd	100
Singapore Telecommunications Limited	54
REAL ESTATE	
CapitaLand Limited	40
Mapletree Investments Pte Ltd	100

[1] **"Temasek Holdings."**

TRANSPORT & LOGISTICS	
Neptune Orient Lines Limited	66
PSA International Pte Ltd	100
Singapore Airlines Limited	55
SMRT Corporation Ltd	54
INFRASTRUCTURE, INDUSTRIAL & ENGINEERING	
Keppel Corporation Limited	21
Sembcorp Industries Ltd	49
Singapore Technologies Engineering Ltd	50
ENERGY & RESOURCES	
Singapore Power Limited	100
TECHNOLOGY	
Chartered Semiconductor Manufacturing Ltd	59
STATS ChipPAC Ltd	84
CONSUMER & LIFESTYLE	
Fraser and Neave, Limited	15
Li & Fung Limited	5
Wildlife Reserve Singapore Pte Ltd	88

* Data as of March 31, 2009.

** Includes stakes acquired through wholly-owned Fullerton Financial Holdings.

APPENDIX L

STABILIZATION FUND AGGREGATE BALANCE[1]

As of			dollar (billion)	ruble (billion)
30	January	2008	157.38	3,851.80
1	January	2008	156.81	3,849.11
1	December	2007	144.43	3,517.05
1	November	2007	147.60	3,649.25
1	October	2007	141.05	3,519.09
1	September	2007	132.91	3,409.07
1	August	2007	127.48	3,263.56
1	July	2007	121.68	3,141.35
1	June	2007	116.85	3,026.68
1	May	2007	113.70	2,920.50
1	April	2007	108.11	2,812.21
1	March	2007	103.55	2,708.85
1	February	2007	99.77	2,647.21
1	January	2007	89.13	2,346.92
1	December	2006	83.21	2,189.52
1	November	2006	76.62	2,049.30
1	October	2006	70.73	1,894.09
1	September	2006	64.73	1,730.64
1	August	2006	82.14	2,207.33

[1] **"Stabilization Fund of the Russian Federation."**

APPENDIX M

RESERVE FUND AGGREGATE BALANCE[1]

As of first of		dollar (billion)	ruble (billion)
December	2009	45.07	2,238.58
November	2009	77.18	2,242.09
October	2009	76.37	2,298.00
September	2009	85.74	2,706.82
August	2009	88.53	2,811.34
July	2009	94.52	2,957.54
June	2009	100.95	3,127.93
May	2009	106.81	3,551.47
April	2009	121.06	4,117.67
March	2009	136.33	4,869.74
February	2009	137.34	4,863.80
January	2009	137.09	4,027.64
December	2008	132.63	3,661.37
November	2008	134.60	3,572.78
October	2008	140.98	3,559.19
September	2008	142.60	3,504.62
August	2008	129.68	3,040.37
July	2008	130.30	3,056.52
June	2008	129.32	3,069.94
May	2008	129.80	3,069.47
April	2008	130.48	3,068.43
March	2008	127.81	3,082.28
February	2008	125.19	3,057.85

[1] **"Reserve Fund."**

APPENDIX N

ELIGIBLE FOREIGN ENTITIES FOR INVESTMENT[1]

1- AUSTRIA: Autobahnen- und Schnellstrassen- Finanzierungs- Aktiengesellschaft (ASFINAG) and Oesterreichische Kontrollbank Aktiengesellschaft (OKB)

2- THE NETHERLANDS : Bank Nederlandse Gemeenten (BNG)

3- FRANCE: Caisse d'Amortissement de la Dette Sociale (CADES), Credit Foncier de France (CFF), and Dexia Group

4- CANADA: Export Development Canada (EDC)

5- UNITED STATES: Federal Farm Credit Banks (FFCB), Federal Home Loan Banks (FHLBanks), Federal Home Loan Mortgage Corporation (Freddie Mac), and Federal National Mortgage Association (Fannie Mae)

6- SPAIN: Institute de Credito Oficial (ICO)

7- GERMANY: Kreditanstalt fur Wiederaufbau Bankengruppe, and Landwirtschaftliche Rentenbank

8- UNITED KINGDOM: Network Rail MTN Finance CLG Pic

[1] **"National Wealth Fund."**

VITA

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Manda Shemirani is a PhD candidate with a focus in International Political Economy. She was a 2003-04 Chevening scholar at the Cardiff Business School, United Kingdom, where she earned her MSc in International Economics, Banking and Finance, with distinction. Manda has worked with a number of multinational corporations in different countries, most recently in the risk management department of a major maritime and shipping company. She is also the Vice President-Partnerships of the Organization of Women in International Trade—an international organization that fosters international trade and the advancement of women in business.

Manda's research interests include various topics related to sovereign wealth funds, multinational corporations, globalization, and interdependence. The first half of the current research has earned her an award at the International Studies Association-South conference in October 2009. Manda has received a number of enquires about her current research from various parties, including the Oxford SWF Project.