

**POLITICAL ECONOMY OF SOVEREIGN WEALTH FUNDS
IN THE OIL EXPORTING COUNTRIES OF THE ARAB
REGION AND ESPECIALLY THE GULF**

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Working Paper 1143

October 2017

The authors express their gratitude to Camden Ball, Hossain Pazooki and Ke Ke for their research assistance in collecting and analyzing relevant material and in the empirical analysis. They also express their appreciation for the many useful comments received on an earlier draft presented at the Workshop on Sovereign Wealth Funds of the Arab Countries at the International Finance Corporation in Washington, D.C., Sept 9-10, 2016. Especially useful have been the comments of Adeel Malik, Diaa Noureldin, Ibrahim Elbadawi, and Kamiar Mohaddes.

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First published in 2017 by
The Economic Research Forum (ERF)
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Egypt
www.erf.org.eg

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Abstract

In no other region of the world are Sovereign Wealth Funds (SWFs) as numerous, long-standing and diverse as in the Arab region. Unlike funds serving some of the same functions in other parts of the world, Arab SWFs are for the most part funds set up, and in many cases headed, by the sovereign heads of state or their family members. This paper traces their origin and their evolution over time in general terms, showing the role of environmental changes, such as those in oil prices, regional political changes (e.g. the Arab Spring) and individual country needs and priorities, and outlines a political economy model that helps to explain both the determinants and effects of SWF activities. Arab SWFs are shown to serve some six different functions, which vary from one SWF to another and over time. A central theme in the political economy framework is the notion of a social contract between the sovereign and the citizenry wherein the citizenry agrees to being excluded from information and management of the SWF in return for being assured of a reasonable standard of living. While a common characteristic of these SWFs prior to the global financial crisis was their extreme lack of transparency, the political economy model is drawn upon to explain why transparency may have been increasing in some SWFs but not others, and the possible consequences thereof. The paper concludes with some suggestions for improvement in both the Arab SWFs themselves and related policy reforms.

JEL Classification: F4, O4, P1

Keywords: Sovereign Wealth Funds, Arab Countries, Political Economy, GCC

ملخص

ليس هناك في أي منطقة أخرى من العالم، تعتبر صناديق الثروة السيادية عديدة وصغيرة ومتنوعة كما هو الحال في المنطقة العربية. وخلافاً للأموال التي تخدم بعض الوظائف نفسها في أجزاء أخرى من العالم، فإن صناديق الثروة السيادية العربية هي في معظمها الأموال التي يتم إنشاؤها، وفي كثير من الحالات يرأسها رؤساء الدول ذات السيادة أو أفراد أسرهم. وتتبع هذه الورقة أصلها وتطورها بمرور الزمن بشكل عام، وتظهر دور التغيرات البيئية، مثل التغيرات في أسعار النفط والتغيرات السياسية الإقليمية (مثل الربيع العربي) واحتياجات وأولويات البلدان الفردية، وتحدد نموذج الاقتصاد السياسي التي تساعد على شرح كل من محددات وأثار أنشطة صندوق الرعاية الاجتماعية. ويظهر أن صناديق الرعاية الاجتماعية العربية تخدم ست وظائف مختلفة، تختلف من صندوق إلى آخر وبمرور الوقت. ويتمثل أحد المواضيع الرئيسية في إطار الاقتصاد السياسي في مفهوم عقد اجتماعي بين السيادة والمواطنين حيث يوافق المواطنون على استبعادهم من المعلومات وإدارة صندوق الرعاية الاجتماعية مقابل ضمان مستوى معيشي معقول لهم. وفي حين أن السمة المشتركة لصناديق الثروة السيادية هذه قبل الأزمة المالية العالمية هي افتقارها الشديد للشفافية، فإن نموذج الاقتصاد السياسي يستند إلى تفسير لماذا كانت الشفافية تتزايد في بعض صناديق الثروة السيادية ولكن ليس غيرها، والعواقب المحتملة المترتبة عليها. وتختتم الورقة ببعض الاقتراحات للتحسين في كل من صناديق الرعاية الاجتماعية العربية نفسها وإصلاحات السياسات ذات الصلة.

1. Introduction

Arab Sovereign Wealth Funds (SWFs) have pioneered the genre of resource-based SWFs in several respects and have grown to be among the largest in the world. Yet, some of these funds have been established only very recently and with somewhat different objectives and modes of operation, often focusing more heavily on the region and the host country itself. The Gulf Cooperation Council (GCC) countries own some of the largest and most successful commodity SWFs in the world but also some very weak ones. Such diversity and evolution over time deserve explanation. While not intended to provide an encyclopedic account of the different Arab SWFs, the purposes of this paper are (1) to draw on political economy modeling to illustrate the potential benefits and costs of widely acknowledged non-transparency in operating these SWFs, and (2) to explain some notable differences in their origin and evolution over time, including in their degree of transparency in the face of changing global circumstances (such as oil prices, regional alliances, and country needs over time).

Features that will be treated include the creation, organization, and objectives of the SWFs in the Arab region, the way in which their investments are made, who makes these investments, the sectoral and geographic patterns of these investments, and the economic or political shocks which may trigger changes in these objectives, strategies and investment patterns over time.

Much of the diversity in funds and strategies derives from the many different functions that SWFs can fulfill. These include providing (1) a financial wealth fund from which the sovereign and his citizens may be able to live after their oil and gas resources are depleted, (2) a means of stabilizing government expenditures and thereby the overall economy over time in the face of the extreme volatility in oil revenues that oil exporting countries have experienced since 1970, (3) a means of supporting and developing cooperation with other friendly nations in the region so as to prevent conflict with other nation states either within the region or elsewhere, (4) a way of achieving asset diversification so as to reduce revenue and income risk arising from heavy dependence on oil, (5) a vehicle for strategically attracting foreign technology and investments of the type that can help diversify the economy and raise its international competitiveness and thereby long-term economic growth, and (6) somewhat relatedly, a means of obtaining sufficient holdings in enterprises and industries abroad that could complement those either currently in existence or under consideration for future development in the country.

Especially since there are more of these funds within the Gulf countries than elsewhere, and that they started there and therefore for which we have the longest time coverage, we focus our attention on the SWFs of the six Gulf countries (Bahrain, Kuwait, Oman, Saudi Arabia and the United Arab Emirates (UAE)) but include comparisons with other Arab countries and beyond when useful. Since all six of the Gulf countries are monarchies (but with some variation in the degree of involvement of the general citizenry in government from one country to another), we pay special attention to the political economy considerations in general and to the “social contract” between leaders and citizens, and to various challenges to that social contract such as in the Arab Spring uprising. In this political economy setting, we also pay attention to changing relationships both among the Gulf countries themselves and with other countries both in the region and elsewhere. Since all the SWFs under study are financed by oil revenues, we also pay special attention to how the SWFs have been adjusting to changing oil prices. We also pay considerable attention to the widely noted lack of transparency and dubious institutional quality in the Arab and especially GCC SWFs, and some changes in this respect over time and across countries.

As in virtually all studies of Arab SWFs, we deem it important to acknowledge the strikingly limited degree of information disclosure from these SWFs about their investments, their earnings and their decision-making procedures. Yet, we attempt to take advantage of information from a wide variety of sources, including newspaper articles, published articles,

websites, unpublished PhD dissertations by nationals of the countries and even leaks from insiders.

The organization of the paper is as follows. Section 2, which follows, focuses on some general elements political economy analysis relevant to SWFs in the Arab region but does not provide a formal theoretical model. This is followed in Section 3 by a review of the political economy origins of several key SWFs, calling attention to both similarities and differences across countries. Section 4 turns to common characteristics of Gulf and other Arab SWFs such as their lack of transparency, dubious objectives and institutional quality, their reactions to threatened sanctions from the West, the creation of the International Working Group on SWFs, the General Agreement on Principles and Procedures (GAPP) and the creation of the SWF Institute and the International Forum for SWFs. Much of this happened in the aftermath to the Global Financial Crisis of 2008-9, and because of reactions to investment failures and changing leaders. Section 5 elaborates on the Social Contract and its relation to State Building, and to challenges to the sustainability of the Social Contract. The next two sections deal in greater detail with these challenges to the social contract and the role of SWFs in that respect, first in Section 6, to the regional rivalries and conflicts arising especially in the Arab Uprising, and then in Section 7, to the present era of low oil prices, and the reactions of SWFs and Gulf governments to these lower oil prices. Section 8 presents our conclusions, including policy recommendations.

2. Political Economy of the Arab SWFs

As the term Sovereign Wealth Fund (SWF) suggests, SWFs are funds owned by the state, which, especially in the Arab region, are typically headed by a monarch or sovereign. As will be shown in the brief narratives presented below on many of the different SWFs of this region, their circumstances tend to vary considerably in a number of different ways from one to another and over time. Their circumstances differ in the relative strengths of non-governing elites, the citizenry, and the size, strength and nature of the possibly differing subgroups within each of these groups (i.e., different tribes, religious groups, business and professional groups, and geographic regions), in the relative importance of non-oil sectors, the magnitudes of accumulated wealth funds, the relative size of resource rents in GDP, the degree of multiplicity of SWF objectives, heterogeneity in SWF staff, the degree of development of existing institutions such as the rule of law, control of corruption, bureaucratic quality, risks concerning internal conflict or religious tensions, the extent of civil rights and press freedom, and also in the relative size of the citizenry and foreign expatriates in the population. They also differ in how and where the sovereigns might want to invest with their funds.

Political economy models of the sovereigns and of their SWFs (see, e.g. Grigorian 2016 for a rather specific version and Liang, Marden and Nugent 2016 for a number of variants) are therefore usually set up as ones in which the sovereign is trying to maximize his utility, subject to the relevant constraints in the form of possible ouster or disruption by either existing elites, or non-elite citizenry who also have their own interests in mind. Components of the sovereign's utility may include personal or family wealth, duration in power, as well as prestige deriving from the wealth or happiness of the country as a whole, and quite possibly also monopolistic control of information. Likewise, the utilities of the local elites may depend on business or professional success and that of the non-elite citizenry on the availability of employment as well as access to public goods. The utilities of non-citizen expatriates are generally not considered in this, although as we point out in our conclusions abuse of non-citizens may damage reputations which could serve to limit the benefits of oil to all parties. Given the likely multiplicity of objectives of the SWFs and the different types of skills that may be needed in any one SWF or SWF function, political economy insights are also derived for their efficiency, and for the teamwork and trust among its staff members, especially considering their heavy reliance on foreign experts.

Such models can be used to derive specific hypotheses concerning the likely actions to be taken by the several different actors in these models in the face of certain shocks to the system. Among the shocks whose effects might be analyzed through such a political economy lens are changes in the size of the rents (from changing oil prices), investment or banking failures, the emergence of sibling rivalries, the discovery of corruption at high levels, external pressures, religious or tribal conflicts, demographic pressures in the form of the rising share of educated youth, and their demands for employment at high wage rates and access to public goods for their families, and externalities arising from such events as those of the Arab Spring in other countries. The narrative provided in this text pay attention to the evolution of these factors over time. Some generalizations with respect to SWFs and their behavior from these simple elements of such a political economy setting are obvious but others are not. We suggest several of both:

First and foremost, because the sovereign may wish to keep secret what he is doing with his SWF (such as the extent to which it concentrates in the private interests of the sovereign) and may not wish any corruption or even any investment failures to be detected, in general information about the management, investment allocations, returns on investment and reinvestment decisions are likely to be kept under very strict control.

Second, exceptions to this rule might well be expected when (as is frequently the case) there are strong threats to the monarchy or jealousy frictions within the elites such as between religious groups within the citizenry and especially within the elite. In this case, certain information might need to be shared with those members of the elite to assure them that their interests are also being attended to. When the contending elites are other members of the royal families, this might suggest that rulers may wish to have one or more of their favored sons or other relatives to initiate or take over SWFs to demonstrate to the relevant powers their capacity to succeed the existing ruler at his death.

Third, there may exist threats to the proper functioning of the SWFs, such as lack of trust between different components of the staff (such as between nationals and expatriates), elites and non-elites, and between all these and the royal family members at the top. Trust may be difficult to promote when each member of the team has no idea about what the others are doing and how hard they are working. Some trust-inducing means of averting such threats may be to make full information available to each individual or department in the system about what the other is doing so that collective monitoring, diligent task evaluation can take place and coordination encouraged.

Fourth, since any oil revenues spent on employing citizens in the government sector or providing them with public goods and subsidies cannot be deposited into SWFs for asset accumulation or other purposes will detract from the potential success of SWFs to achieve their objectives, sovereigns should have the incentive to see that appropriate budgetary institutions are in place and fiscal policies designed to mitigate excessive volatility and cyclicity and to reduce excessive government consumption expenditures and especially in supplying large numbers of government jobs at high salaries. This might imply making sure that the sovereign and his family members monopolize the whole fiscal side of the government and again lock out other elites who might want to be favored with subsidies and regulations. Yet, on the other hand, to avoid breaking the social contract without reducing potential inflow of oil revenues into the SWF, this may well require that the monarch assists domestic elites and perhaps foreign enterprises in providing high quality private sector jobs for non-elite citizens (in place of government jobs and/or public goods or to increase military expenditures).

Fifth, although this is rarely a facet of existing political economy models of SWFs, any one monarch and SWF should be fully aware of, and be in contact with, others like them as well as the kind of businesses they work with in other countries of the region. For this reason, monarchs

might well see it their mutual interest to cooperate. Together, they can better protect themselves against potential rivals than they can independently. Further, they might well find it advantageous to take advantage of possible complementarities in their investments, such as by choosing the locations of public infrastructure on different sides of common borders to benefit local firms and activities or in complementary industries to provide needed jobs. Shifting political relations within the region of the sovereigns, as well as of the citizens, may provide motivation for new types of joint ventures and cooperation among SWFs and the businesses they promote.

Sixth, because in most oil exporting countries the monarchies were from the beginning rather dependent on certain local elites such as merchants and other businessmen, another particularly useful means of reducing tensions between the sovereign and local elites, as well as to contribute to private sector job creation mentioned above, is by way of support to private sector banking in the community. Cultivation of well-functioning investment evaluation within the SWFs can of course be useful in promoting the development of a well-functioning domestic financial sector, both banking and equity finance.

Seventh, early in their history one would expect SWFs to place their investments almost exclusively in developed countries of the West because the financial markets and institutions in such countries are the most developed and risk-hedging is most possible. Yet, if for some reason, the West should impose constraints on such investments; this might force reforms of the SWFs to make their investments more welcome in the West. So too, if the firms and economies outside of the developed West should start to grow faster than those in the West, we could also understand why they might wish to invest there but not necessarily to reform their secretive operations to assure unfettered placement of their investments.

As indicated by the six different functions that SWFs can perform (listed in the previous section), it should also be realized that SWFs can do many different things and meet many different objectives. As a result, any more detailed political economy model designed to capture a specific setting in which a particular SWF may be operating may be of limited value in generalizing hypothetical extensions to other quite different circumstances. Therefore, given the breadth of our coverage across quite different SWFs and countries and changes therein over time, rather than constructing a more formal political economy model applicable to a very specific setting and to address a specific question or issue, we take advantage of the aforementioned rather general political economy framework for explaining developments that will be identified in subsequent sections of this paper. Clearly, it admits to many different circumstances that may lead to quite different outcomes.

Nevertheless, as will be pointed out below (especially in Section 5) in the Gulf setting in which oil was discovered almost simultaneously with or soon after the creation of some monarchies (perhaps with foreign help), some such monarchs faced very considerable and widespread challenges to their reign. In such circumstances, this rather general political economy framework may turn into the more simplified model known alternatively as the “Social Contract” or “Authoritarian Bargain”. In this context the monarch’s assertion of ownership of this oil and of ruling power can occur only if that ruler commits (and fulfills that commitment) to make sure that any and all such potentially threatening groups, perhaps the entire citizenry, have their basic needs and aspirations satisfied (for example through jobs and public goods derived from that resource). As we shall show, even this highly simplified version of our political economy framework seems to explain quite successfully how some of these Gulf countries have responded to various new structural and other challenges (often in the form of oil price shocks) that have occurred over time.

Indeed, in what follows we provide at least brief descriptions of the sometimes similar but also quite often very different circumstances in which the different SWFs may find themselves at

different points in time from their beginning until the present day. In so doing we attempt to demonstrate differences in the way these shocks are handled as different components of this general picture of political economy objectives and constraints come into play.

Since even very large SWFs are but a small part of the economy and of the state sector itself, we also deem it important to realize that both the behavior of the SWFs and their effects are likely to be strongly influenced by the country's risk setting and governance and other institutional characteristics of the state in general.

3. Origins and Evolution of Arab SWFs

This section will start with a bit of Arab SWF history, explaining both how, when and why these funds in different countries were established and then how, when and why they evolved as the host territories or countries transitioned from colonial or protectorate status to that of independent monarchies or other kinds of nation states.

It is very true that several of the Gulf countries and especially Kuwait have very deservedly been recognized for having been pioneers in creating oil-based Sovereign Wealth Funds (SWFs). Indeed, the basis of that first SWF, currently known as the Kuwait Investment Authority (KIA), was established in 1953 by Sheikh Abdullah al-Salem al Sabah, who was the ruler of Kuwait from 1950 to 1963. Known originally as the Kuwait Investment Board, its function was to provide a fund for the future and to promote diversification of the economy. The fund itself was established in 1960, just before the country's independence in 1961, and became known as the General Reserve Fund (GRF). It was to receive all revenues (including oil revenues) as well as to hold government assets (Baghat 2011).

Saudi Arabia's Saudi Arabian Monetary Agency (SAMA) was established even earlier in 1952 by King Abdulaziz Al-Saud, the founder of Saudi Arabia, to serve as that country's central bank and to handle the international transactions and reserves. But only beginning in 1973 when oil revenues began to far exceed expenses, did its SWF function develop as more attention began to be turned to asset accumulation and management. Nevertheless, since Saudi Arabia also has a much larger population than either Kuwait or any of the other GCC countries, SAMA's management has been more associated with consumption smoothing and risk management than long term objectives like foreign asset accumulation and caring for future generations. Even though the asset management and long-term objectives of SAMA have become stronger and more important in recent years, since 2009 at least there has arisen debate concerning the merits of creating a separate SWF institution that would focus more explicitly on the longer-term objectives typical of SWFs (Diwan 2009). Even today, however, a significant portion of its assets are more short-term oriented, reflecting a very conservative investment orientation, with heavy emphasis on bonds, thereby satisfying the demands for liquidity and safety (Alsweillem et al 2014). Especially in its early years, SAMA reflected western influences since it grew out of the Saudi Hollandi Bank (which was part of the Netherlands Trading Society), the country's first bank and which since 1926 held the country's gold reserves (Sovereign Wealth Fund Institute). According to Alsweillem et al 2014 U.S. officials had also urged King Abdulaziz to create a central bank with some of these responsibilities. In designing its banking and other regulations, SAMA also received considerable assistance from the US Federal Reserve.

Abu Dhabi's Abu Dhabi Investment Authority (ADIA) was founded in 1976 by Sheikh Zayed bin Sultan Al-Nahyan. While oil had been discovered in small quantities beginning in 1958, large quantities were discovered only in 1963 (Shemirani (2011, p.68)). The Amir of Abu Dhabi at the time was Sheikh Shakbut bin Sultan Al-Nahyan who was against spending the oil revenues on the grounds that he feared that it would undermine the country's traditional social fabric. Other members of his family, on the other hand, believed that change was both important and inevitable, and suggested that he steps down (Zahlan 1998, 110). That he did, and was

replaced by his more managerially experienced younger brother Sheikh Zayed bin Sultan Al Nahyan. Just before independence and the creation of the UAE in December 1971, Sheikh Zayed created the Abu Dhabi National Oil Company (ADNOC). But, according to Abdelal (2009) and Alsweilem (2014), the formation of ADIA followed the organizational structure that a British colonial officer had set up for the royal family in the 1960s, and which materialized in the form of the Financial Investments Board within the Department of Finance in 1971. The 1976 date of ADIA's founding makes it abundantly clear that the sharp rise in oil prices beginning in 1973 and the already large estimates of the Emirate's oil reserves are what triggered the creation of ADIA. ADIA is funded from the profits of Abu Dhabi's National Oil Company (ADNOC) which are first transferred to Abu Dhabi's Department of Finance which in turn allocates one portion of these to the Abu Dhabi Emirate's budget and the remainder to ADIA. Although headquartered in Abu Dhabi, ADIA also has long maintained an office in London.

At first, ADIA seemed to be modeled on the investment strategy of UK pension funds, but as will be shown below; it has evolved substantially in many different directions since then. Over the years ADIA has grown enormously in funds (amounting to something like \$770 billion in 2014), and in terms of employees (20,000), some 40 percent of which are foreign and said to come from over 40 different countries (Kechichian, 2010, 92)¹ It has numerous different departments specializing in different kinds of investments. ADIA is still very largely under the control of the royal family. The ruler himself, Shaikh Khalifa bin Zayed Al Nahyan, serves as Chairman of ADIA's Board of Directors, and his brothers and sons also serve as Board members (constituting at least half of the total number of Board members).

Yet, as Grigoryan (2016) has pointed out, even though the undisputed leader of the Al Nahyan family has been the key political leader of Abu Dhabi since the mid-18th Century and comes from the dominant Bani Yas tribe, there have always been numerous potential rivals (as indicated by the aforementioned replacement of Sheikh Shakbut by Sheikh Zayed as Abu Dhabi was setting up its oil company ADNOC and subsequently its largest SWF (ADIA)). Indeed, as a result of this, the Board of Directors of ADIA and other of Abu Dhabi's SWFs (ADICO, Mubadala and IPIC) and include other key members of the Al Nahyan family but from different Sections of the Bani Yas and even other tribes (Davidson (2006) and Grigoryan 2016 p 169-170). For this reason, the inclusion of others who are deemed potential rivals or otherwise important to the long-standing rule of the monarch into the Boards of Directors of SWFs can also be seen as a means of encouraging loyalty of potential rivals and thereby protecting themselves against these or other rivals and strengthening the existing regime.² This Abu Dhabi example supports the second major implication derived from our political economy framework of the kind of exceptional circumstances where, in the presence of potential rival from another tribe, the monarch might want to share information and governance over his SWF with a potential rival rather than keep it all to himself as in the standard case. This experience may also help explain why ADIA as discussed below has been a leader among SWFs in willingness to compromise with the West in making information about SWFs more available and by helping to form (and indeed in co-chairing) the International Working Group of SWFs.

Oman followed in 1980 by creating an SWF of its own, the State Government Reserve Fund (SGRF). This action was prompted by three factors: (1) Oil was discovered in 1962, with first production and exports realized by 1967. (2) Sultan Qaboos bin Said al Said (who had deposed his father as Sultan of Oman in 1970) consolidated what previously were two quite different areas of Oman, namely, its coast and interior, part of which had been ruled by a religious leader, into a single country, and initiated an ambitious development program for the entire country.

¹ Note that Abdelal (2009), however, just a few years before, had indicated that percentage to be 70%.

² See also Hatton and Pistor (2011).

(3) The sharp rise in oil prices from 1973 provided Oman with very rapidly increasing revenues and an exceptionally rapid growth of its GDP. One difference from the previously mentioned cases is that Oman's total oil reserves were deemed to be relatively modest, suggesting that oil production on a large scale may not last very long.

When oil prices peaked and the SGRF was created in 1980, an impressive fiscal rule was established, whereby 15 percent of the country's annual oil rents should be deposited into the SGRF. Yet, as a result of the subsequent fall in oil prices, by 1986 this rule was deemed unachievable and trimmed back to 5 percent. Beginning in 1991, moreover, the government had to start to withdraw from this fund and even to borrow from it to cope with a rapidly rising debt brought about in part by a long period of conflict with rebels supported in part by the People's Democratic Republic of Yemen. As oil prices began to rise again after 1999, by 2002 this fiscal stabilization objective was dropped, allowing the fund to become once again a major source of investment. Indeed, by 2006, again by decree of Sultan Qaboos bin Said al-Said, a second SWF was created, namely, the Oman Investment Fund (OIF) concentrating more exclusively on long term investment. Funds for the OIF are supplied directly by the country's Ministry of Finance. Although UK and other western influences existed in Oman (as they had in Kuwait and Abu Dhabi), their role was clearly much smaller, but with concerns about fluctuating oil prices, the importance of a future after oil, and the presence of other risks (like domestic and international conflict, and sizeable international debt) posing much greater challenges. As documented by Al-Saidi (2012), as recently as 2012 and perhaps even today, the governance of the SGRF comes under the Ministry of Finance, headed by the Sultan, with little consultation with other government agencies and without any outside monitoring. There is, for example, no involvement of the parliament or the rest of the public in its operation, and no publication of budgets, assets, returns on those assets, etc.³

Since Kuwait and Oman (along with Bahrain) are the GCC countries that have progressed furthest in allowing for some degree of consultative or even legislative involvement of the citizenry outside of the royal families, it is important to point out that these SWFs were all created prior to any such progression. In none of these countries did their consultative (appointed) or legislative (elected) assemblies exist at the time of SWF creation nor is it believed that the general populace played any kind of a role in their creation.

Although Bahrain was another early entry among the Gulf States into the oil industry, it has always been a small producer and production has been declining from its peak for several decades. Yet, precisely because of the relatively short lifetime of its oil exports, Bahrain has always had a genuine concern for life after oil and the need for diversification away from oil. King Hamad bin Isa al-Khalifa and others have chosen Singapore as a model of how a small island economy can become diversified and develop into a high quality entrepot and industrial hub. Among the industries Bahrain has developed are important ones like aluminum (which makes use of its cheap, locally available natural gas for refining bauxite into aluminum), airlines, entertainment, communications and banking (including Islamic finance and insurance). Many of its leading firms are state enterprises. In 2002, the king established an Economic Development Board to improve the efficiency of Bahrain's industries and increase the role of the private sector in them and their international competitiveness, with Crown Prince Sheikh Salman bin Hamad al-Khalifa as the Chair of its Board of Directors. In 2008, again by royal decree, Bahrain's SWF, Mumtalakat Holding Company, was established. The holding company nature of this SWF was very different from the aforementioned SWFs in the Arab region but was modeled along the lines of Singapore's large and successful Temasek. It does not receive oil revenues but rather uses its existing portfolio of assets (largely consisting of firms based in Bahrain) to increase its assets through the profits of its holdings and, when

³ See also Rippenburg (1998) and Al-Said and Al Fouri (2016).

necessary and possible, by borrowing. It makes strategic investments designed to increase the country's international competitiveness, and since 2008 to facilitate and coordinate with the country's ambitious Vision 2030 plan for long term growth and diversification (Chaturvedi 2014).

Although going beyond the confines of the GCC, especially to provide an example which is not a monarchy, another fund listed on the SWF Institute's website as a Sovereign Wealth Fund within the Arab world is Algeria's Fund for the Regulation of Receipts (FRR) established in 2000. Some analysts (Shahin and El Achkar 2013, and Talahite and Beji 2013) argue that it is in fact not an SWF because in practice it seems to be primarily a means of managing Algeria's debt and as a mechanism for shielding government expenditures from external auditing. In any case, once oil revenues started to increase since 2000, it became identified as one of the fastest growing SWFs in the world and especially in Africa.

The political economy of FRR's origin is rather distinctive and provides a substantial contrast with that of SWF creation in the GCC countries. For Algeria, the decade of the 1990s is frequently referred to as the "Black Decade". By the late 1980s, the country's industrialization program had resulted in failure and the fall in oil prices resulted in a period of political instability and serious social turmoil, including anti-government riots. The government responded by increasing government expenditures but increasing its fiscal deficits and causing debt to accumulate. By 1990 Algeria was in a debt crisis in which it was no longer able to borrow, and no investments could be attracted from abroad. While in principle foreign oil companies would have been willing to invest in further exploration for oil and gas at this time, because of the extremely harsh restrictions on foreign oil companies after the country's nationalization of oil in 1971, in fact they were very unwilling to do so. As a result, Algeria was forced to enter a Structural Adjustment Program with the IMF which imposed extremely tight constraints on fiscal spending.

As Algeria emerged from this program, but with continuing instability and high unemployment, the country's government expenditures (still financed largely out of oil revenues) changed from an emphasis on capital investment to one emphasizing current expenditures and especially subsidies for food, housing and fuels. Not surprisingly, the IMF and other international financial institutions pressured Algerian authorities to adopt expenditure rules and a SWF to mitigate the unfortunate inefficiencies of pro-cyclicality in general and such sizable subsidies. Near the end of the 1990s, oil prices fell to less than \$10 a barrel, their lowest level since the early 1970s, further underscoring the need to protect fiscal operations and the overall economy from sudden swings in oil prices.

Not surprisingly, while still threatened by political instability and opposition, the Algerian government created its Fund for Regulation of Receipts (FRR) in 2000. It was set up as a Trust Account within the Treasury, with potentially two types of investment (short-term, and long-term) and without much in the way of limitations, but with an explicit requirement that this Trust Account would be outside the regular government budget and hence not shared with either the legislature or the public. It would limit the portion of oil revenues that would go into the regular government budget, especially those oil revenues attributable to an oil price above a certain reference price level upon which the budget was formulated. Thanks to both rising prices of oil after 1990 and a 40 percent increase in production of oil and gas, the assets of the FRR rose sharply from 0 in 2000 to over \$ 70 billion in 2013 (Sovereign Wealth Fund Institute website (12/17/2015)). Seemingly, it was designed to reduce both procyclicality and exchange rate appreciation arising from rising oil prices. The latter benefit arose from the fact that these funds were taken out of the Central Bank's portfolio of liquid assets and thus sterilized which otherwise would trigger money supply increases and hence inflation as well as exchange rate appreciation. The fact that it was adopted in such a politically conflictive situation is reflected

in the fact that it was adopted (via the Supplementary Budget Law of 2000) without having been approved by the country's Parliament (Talahite and Beji 2013). This atmosphere is also reflected in the fact that from its inception it has remained virtually totally non-transparent, even to the point that Shahin and El Achkar (2013) describe it as a vehicle whereby the expenditures carried out under the umbrella of the FRR can totally avoid the need for monitoring and auditing.⁴

Clearly, the timing of the creation of all the relatively early SWFs reflected the sudden importance of oil (thanks to rising oil prices and/or oil production), but also the needs to deal with the volatility of its oil rents, to smooth consumption over time, to effectively manage risks through asset diversification and to accumulate additional assets for the long-term future. So too, the ways in which these SWFs were set up reflected in most cases the desire to be quite non-transparent and quite surely under the control of the state leaders, be they sovereigns, or military leaders. As such, this experience is supportive of the first of the six general propositions derived from our general political economy framework. Especially early on, they also reflected western influences, derived alternatively from semi-colonial, commercial or military protection origins. It should also be clear that at their beginnings, the functions to be served by the SWFs were not very clearly differentiated and multiple in nature.

One other characteristic that is evident from the creation of SWFs in at least one Arab country is the tendency to set up new separate funds rather than revise or redirect the main existing fund in that state to initiate new subdivisions. Notably, this tendency seems to be especially prominent in the United Arab Emirates. Not long after having created the aforementioned ADIA in 1976, in 1982 the subsequent ruler of Abu Dhabi, Sheikh Khalifa bin Zayed al-Nahyan, who also served as both UAE president and Chairman of the Board of ADIA, established a new SWF, half owned by ADNOC and half owned by ADIA, namely, The Abu Dhabi Investment Corporation (ADIC) to focus on investments in oil and chemicals. One of Sheikh Zayed's sons, Sheikh Mansour bin Zayed al Nahyan was named as its Chairman of the Board. In 2002, however, still another new SWF, Mubadala, was founded with the then Crown Prince, Sheikh Mohammad bin Zayed al-Nahyan, as its head. In 2007 another SWF, the Abu Dhabi Investment Council, was created as an off-shoot of ADIA and again chaired by Sheikh Mohammad bin Zayed al-Nahyan (and with three other sons of Shaik Zayed also on the Board) to focus on local investment holdings. In 1984, Abu Dhabi created another more specialized SWF specifically for investments in the energy sector, the International Petroleum Investment Company (IPIC). This one has gotten involved in energy projects in a number of different countries, but also including various pipelines in the region. Also in 2007, another SWF of the UAE was established, the Emirates Investment Authority, its Chair once again being Sheikh Mansour bin Zayed al Nahyan who is also Deputy Prime Minister of the UAE. This SWF specializes in investments in the GCC. In 2009 the ADIC SWF was transformed into Invest Abu Dhabi and re-directed to attract new investments to the country. It does not receive funds from oil but is a government funded public stock company wholly owned by the Emirate of Abu Dhabi.

These experiences seem to be supportive of two different implications derived from our general political economy framework in Section 2. First, this tendency to have different sons or other relatives of the ruler get experience in SWFs can be interpreted as evidence in support of the second generalization drawn from the version of the model where there may be competition among members of the ruling family for succession to the throne. Second, the tendency over time to set up new SWFs to deal with quite different objectives, such as economic diversification from oil, is consistent with the fifth generalization suggested in Section 2.

⁴ In recent years there has been discussion of a proposal to create a new SWF which would be more focused on the long run and facilitating the revitalization of the industrial sector (Belaicha et al (2012/3).

Other SWFs have been initiated by the Dubai Emirate, namely, the Investment Corporation of Dubai founded in 2006 as an offshoot of the Emirate's Ministry of Finance with a focus like that of Mubadala on diversification in the emirate. Its chair is Sheikh Mohammed bin Rashid Al Maktoum, ruler of Dubai and Vice President and Prime Minister of the UAE. Two others are: Dubai Holding founded in 2004 and Dubai World established in 2006. The latter was initiated by one of the closest allies to Sheikh Mohammed bin Rashid. After a financial breakdown resulting from becoming overly indebted, Sheikh Mohammed restructured its Board of Directors, and appointed his uncle Sheikh Ahmed bin Saeed Al Maktoum (the successful manager of Emirates Airline for many years) as its Chairman. In 2005 even the relatively resource-poor emirate of Ras Al Khaimah (RAK) established its own SWF, the RAK Investment Authority, with its ruler as its chair.

Two factors which would seem to contribute to this proliferation of SWFs within the UAE and the key roles played by members of the ruling families are (1) the federal or even confederation character of the UAE, and (2) that ability to manage has often been deemed to be an important characteristic in the internal selection of successors to incumbent monarchs. Lying behind (1) is the fact that all seven emirates constituting the UAE have their own governments, and each emirate is the owner of the oil located within its boundaries and has its own Ministry of Finance and Central Bank. All the responsibilities of government are reserved for the individual emirates except those explicitly assigned to the federal government (such as the military and foreign policy) (Soto 2016). Also, leaders from each of different emirates are essentially competitors for various leadership positions in the federal government and the individual emirates as well. They can also be eligible for important official positions within the GCC.

Lying behind (2) is that an existing ruler can be replaced by another member of the royal family with better managerial experience and skills. As noted above, this was exactly what happened in Abu Dhabi in 1971 when Sheikh Shakhbut bin Sultan Al-Nahyan was urged to resign and be replaced by the Crown Prince. One can understand, then, the desire of different prominent members of the different royal families to demonstrate such managerial experience and capabilities and one could hardly think of anything better than becoming head of a SWF and managing it well. At the same time, since in some of these cases it is the assets of the ruler himself that are on the line, and the risks involved in the UAE businesses and real estate constitute much of the assets of UAE SWFs (other than ADIA) in such highly volatile times, one can also understand the desire of the rulers to be very careful in their choice of managers. As should be clear from the above comparisons, the more recently established SWFs, such as those of Abu Dhabi (after ADIA), Dubai, Bahrain, and Qatar, are quite different in their objectives and to some extent organization and operation than the earlier ones initiated by their GCC partners such as the KIA, SAMA and ADIA. Many of these are more oriented to the home country and to diversification and some have attempted to be more strategic in trying to attract firms to locate in the country or to invest in countries with which they have close affinity and trading relationships. Some of these such as Bahrain's Mamtalakat, and Abu Dhabi's Mubadala have attempted to be much more transparent in their investments and processes whereas many others are extremely non-transparent. While in all these cases, the relatively high and rising oil prices at the time contributed substantially to the decision to initiate the SWF, in the Bahraini case, the decision was even more strongly driven by the need to use existing assets as a means of generating additional assets in the future and increased competitiveness of some of the country's leading firms and industries. Another commonality is that they are viewed as important vehicles for helping existing monarchs and other government leaders to live up to their respective social contracts (to be discussed in section 4 below).

The GCC funds' investment strategies have evolved over the years since their establishment. Real estate and infrastructure assets with higher yields have been receiving an increasing share

of their funds' allocations, in addition to which private equity investments have received investments by the GCC SWFs. Financial institutions, particularly after 2008, became one of the global asset classes in which the GCC funds invested. Kuwait Investment Authority, for example, has made investments in companies across a wide range of sectors including BP, Daimler AG, Merrill Lynch and Citibank. Qatar Investment Authority has also generated a heavily diversified portfolio of assets with stakes in Porsche, Tiffany, Credit Suisse, Bank of China, Sainsbury's, LVMH and Barclays. The latter has become particularly controversial, with Barclays being accused by the British authorities of "improper conduct in its dealings with Qatar". This led to some speculation about the deal, including that Barclays sold its shares to Qatari SWF mainly to "avoid a bailout from the UK government and, by extension, UK government control" (Morris, 2014).

Following the Arab uprising, Egypt received the largest amount of FDI, accepting 25.6 billion euros from various GCC investment institutions (including those of the SWFs), which formed 49 percent of total FDI flows into the country. Within the MENA region Turkey ranked second, with 9.0 billion euros, followed by Jordan with 7.5 billion euros of investments from the GCC (Talbot, 2010).

The UAE has become the main GCC investor in Egypt and other Arab countries of the region, with total investment of 35.8 billion euros, followed by Kuwait and Saudi Arabia, respectively investing around 11 billion euros in the region. By 2008, 421 companies of UAE origin had started operations in Egypt. Of these, 64 were construction companies, 44 were in financial services, 125 in other services, 40 in agriculture, 38 in tourism, 87 in the industrial sector, and 23 in communication and information technology (Gulf News, 2009). Until the 2011 Revolution, Egypt remained the main recipient of GCC investments. The privatization of some state-owned enterprises in the country has accelerated FDI inflows (Bazoobandi, 2014).

Abu Dhabi SWF investments in Europe and particularly in the United Kingdom have attracted a great deal of attention. Other than the official sovereign wealth investments, the private wealth of the Abu Dhabi royal family, the Al Nahyans, has also been directed towards the UK for many years. According to Evening Standard, by 2015 Al Nahyan had become the largest landowner in Mayfair after the Duke of Westminster. For example, Abu Dhabi Investment Authority owns the Lanesborough (a Regency-style Hyde Park Corner institution), and has made a £640m investment in Marriott hotels across the UK (Ashton, 2015).

4. Lack of Transparency, Evolution to the Santiago Principles: Determinants and Effects

The purpose of this section is to identify and explain some of the dynamics in the evolution of the GCC and other Arab SWFs over time. Given their lack of transparency, indeed the extreme secrecy in the actions, investments, and returns on those assets, much of our attention is devoted to that lack of transparency, to the repercussions thereof on SWF performance, and to reforms therein over time.

Especially after the sharply rising oil prices beginning about 2000, and continuing up to the World Financial Crisis of 2008, the fact that these revenues were being held in such secretive government-owned SWFs made western governments, banks and businesses increasingly alarmed about the threat to world financial markets and the competitiveness of private firms posed by these SWFs. While Norway and subsequently Chile and Singapore were developing good reputations for their openness and business-like manner of operation of their SWFs, it was the SWFs of the Arab world which were perceived as the greatest threats to the West in general and to the US post 9/11, 2001. It was suspected and in some cases with some empirical basis for it, that these Arab SWFs were acting strategically and thus could manage to buy out competitor firms in the West. The financial crisis of 2008-9, during which the prices of firm

equities on the main stock markets of the US, UK, Germany and France plummeted, made this threat even more challenging.

While much of that concern on the part of the west has subsequently dissipated somewhat, we deem it relevant to our political economy analysis of Arab SWFs to examine some of the reactions of the SWFs to these concerns over time. This is especially relevant because many evaluators of the comparative performance of different SWFs have pointed to the lack of transparency, poor risk management and weak governance of SWFs as factors lying behind the poor performance of some SWFs (Truman 2008, Aizenman and Glick 2008, Kotter and Lel, 2011, Alhashel 2015). It is also relevant since such concerns may well arise whenever an Arab or other SWF should attempt to buy a substantial share in a western firm, and especially when it is in a sensitive industry like finance or high tech in which Arab SWFs have become interested.

Let us begin with the experience of Abu Dhabi's ADIA, one of the Arab world's earliest and largest SWFs. Thanks to Abu Dhabi's rising petroleum production and rising oil prices throughout much of the period since its creation, ADIA's assets were growing rapidly even before the real spurt in oil prices after 2001. Its investment team was largely foreign and generally invested in a very conservative and well diversified manner.⁵ Yet, because of the further rise of oil prices after 2001, Arab investors seemed to become more aggressive and willing to bear somewhat greater risk in their investments. In any case, when the US stock market crashed in 2007, the US portion of ADIA's overall asset portfolio fell well below its pre-specified balanced portfolio target share. ADIA reacted by departing from tradition by buying a sizable 4.9% share of Citibank to bring the U.S. share of its assets up to the target level and at the same time extending to Citibank large loans at high interest rates. Not surprisingly, this put ADIA at the center of controversy and further triggered the already large concerns in the US about the threat of SWFs taking over American corporations.

In the face of these growing fears, with the help of a US public relations firm (Burson-Marsteller), ADIA circulated a statement declaring that its motive for this investment was economic, not political, and that its investment should be in the interest of Citibank and the US. Indeed, it found implicit approval of its actions from a prominent NY congressman (Congressman Charles Schumer). To head off additional concern and perhaps damaging restrictions on the part of the US government, ADIA officials sent a letter to Western finance officials, including US Treasury Secretary Henry Paulson, outlining its "practices and principles for investing" (Abdelal 2009, p. 321). The result of this was that in March 2008 Secretary Paulson invited ADIA to help establish a set of principles to which investing organizations like the SWFs should adhere. The International Working Group (IWG) of Sovereign Wealth Funds was created and met in May 2008, co-chaired by a senior representative of ADIA and an IMF department head. By October 2008, the IWG had arrived at an agreement on a set of Generally Accepted Principles and Practices (GAPP) for SWF behavior and organization which became known as the "Santiago Principles". There are 24 individual components of these principles. Another consequence of ADIA's actions was that ADIA became a member of the Sovereign Wealth Fund Institute (SWFI) which maintains records on each individual SWF and its degree of compliance with each of these components of the Santiago Principles. Truman (2008, 2010) and Bagnall and Truman (2014) coded the compliance of each SWF with each of the twenty-four Santiago Principles and then added an additional nine elements deemed relevant, but not corresponding directly to the Santiago Principles, aggregated these into four categories (Clarity of Objectives, Governance, Investment, and Risk Management) and into an overall "Total" in what is called the SWF Scoreboard.

⁵ Some exceptions will be identified below.

What is quite clear from the ADIA example and the creation of the Santiago Principles is that the incentive for this compromise agreement on the Santiago Principles, and subsequently for many SWFs to comply with these principles, was two-fold. First, the SWFs could feel such compliance to be necessary to gain acceptance of their investments in target countries without cost-increasing restrictions and delays on their investments. Second, it could benefit the SWF because the receipt of investments from SWFs with greater transparency and reputations for high quality could serve as a positive signal for that recipient firm to other investors in the target countries, thereby inducing the recipient firms (and their host countries) to do more to entice such SWFs to invest more.⁶ In recent years it has also been thought, by some at least, that this would give the higher quality and more transparent SWFs greater clout in getting the target firms to make reforms designed to improve their performance and hence their long-term profitability. Hence, many, but by no means all, SWFs have begun to see it in their interest to adopt the kinds of rules and policies recommended by the SWF Institute. The results have been (1) increasing numbers of SWFs committing to improving their compliance with the Santiago Principles and (2) increasing realization by the western countries receiving these investments that they were on balance benefitting from them by helping to balance their payments and generating investment activity (Bazoobandi 2013 160-161).⁷

Even though ADIA has remained one of the less transparent SWFs and, still to this day, most of its Board members have been members simultaneously of both the royal family and the business elites (Bazoobandi 2012), this exposure and its membership in the SWFI has indeed induced it to be significantly more transparent than it had been earlier. Indeed, since 2009 it has been publishing annual reports, hosting a website with a fair amount of relevant information, including some on its administrative structure, its investment team and its auditing procedures (Alsweilam 2014, 8, 9). As shown in Table 1 in 2015 it received a score of 6 (out of a possible 10) on the widely used Linaburg-Maduell SWF Transparency Index. This is not especially high on the rankings of different SWFs on that index, the SWFs of Norway, Bahrain's Mumtalakat, Abu Dhabi's International Petroleum Investment Co. and Azerbaijan's SOFAZ⁸ all receiving top scores of 10. Yet, this score represents a substantial increase over the score of 3 that it received in 2008 when it joined the SWFI and helped to put forward the Santiago Principles. Without doubt a considerable part of its improvement in transparency should be attributed to its membership in SWFI which shares what it deems as best practices with its members and offers advice to each country on how to improve. Because of this influence and the large and high quality of its staff and organization, by 2013 ADIA received a score of 58 on the SWFI's overall SWF Scoreboard, demonstrating a 56 percent improvement over its 2007 rating but still well below Norway's score of 98.

Being an early member of the SWFI, however, has not always triggered improvement in SWF Transparency and Compliance with the Santiago Principles. Qatar's QIA is one such example of this. Even though Qatar has from time to time hosted the meetings of the International Forum for SWFs and been an SWF with a remarkable track record for growth in assets, its scores on both the SWF Scoreboard and the Total Santiago Compliance Index in 2012 were second lowest on the list in Table 1 (with only Libya's LIA with a lower score).

⁶ Subsequently, Kotter and Lel (2011) cite evidence in favor of this by showing that announcements of the purchases of a certain equity by SWFs and other banks of high transparency and investor quality have a stronger positive effect on stock market prices than those of less transparent or lower quality ones. See also the overall quite supportive review of the subsequent literature on the effects of SWF quality on the value of firms in which they have invested.

⁷ For example, as Behrendt 2008, p. 15 pointed out, during the international financial crisis of 2007-8, one of the few crises that started almost exclusively in western countries, Arab SWFs contributed substantially to the bailouts of the following major global banks: Citigroup, UBS, Morgan Stanley, and Merrill Lynch. According to a later report from a former Goldman Sachs banker, one Arab SWF also seemed to be involved in a never completed deal with Goldman Sachs (Buhayar and Besak, 2015).

⁸ Azerbaijan was also the first country to be validated as compliant with the Extractive Industries Transparency Initiative (EITI).

As in most other GCC countries, the CEOs of the QIA have generally been important members of the royal family and hence with other important responsibilities. As these leaders change positions, this can bring about very distinct changes in the investment strategies of such SWFs over time. For example, between 2003 when the QIA was founded and June 2013, the QIA was headed by Sheikh Hamad bin Jassim whose other responsibilities included Foreign Minister from 1992 to 2013 and Prime Minister between April 2007 and mid-2013. While serving as Foreign Minister over this period of over 20 years, Sheikh Hamad transformed this tiny state into an important player in world politics. Among other things that he accomplished during this period were (1) to stake out international positions for Qatar within the GCC that are quite different from those of Saudi Arabia (traditionally the dominant state in the GCC), (2) to become very close to Western powers with which he entered into various investment partnerships, France (especially after Sarkozy's election in 2007 after which Hamid bin Jassim was the first head of state to meet Sarkozy and investments were made in Lazard and Credit Suisse), UK (where the QIA has made large investments (a 14.9% stake in the London Stock Exchange, becoming the largest shareholder in Barclay's and a substantial one also in Sainsbury, Germany (where QIA bought a 17% share in Volkswagen), and in conflict zones throughout the region where he used investment funds as a means of promoting mediation efforts such as the Doha Agreement in Lebanon, multiple attempts to stop the conflicts in Syria, and in Yemen, and with world football's FIFA to bring the World Cup to Doha in 2022.⁹ As noted by Behrendt (2014), the success of Qatar's foreign policy objectives was to a significant extent attributable to QIA's investments. Not surprisingly, its investment patterns became very different after the end of Hamad bin Jassim's leadership.

Note also from the entries of the LM Transparency Index in Table 1 (and related scores on the SWFI Index of some other oil SWFs with relatively high scores on the overall SWFI Index) are relatively more recently created ones, such as Bahrain's Mumtalakat, Dubai's Dubai International Capital and those of relatively nearby non-Arab countries Azerbaijan and Kazakhstan. What might explain this? In the case of Mumtalakat, some credit should probably be given to its close relationship to Singapore which has developed one of the most highly evaluated SWFs in the world, Temasek. Dubai's International Capital Investment and Abu Dhabi's Mabadala are also relatively new SWFs with relatively high scores on the SWF Scoreboard. All three of these are somewhat more narrowly focused SWFs than the earlier more general-purpose funds, implying that there may be less need for privacy in explaining decisions within a single area than among several. Another characteristic afforded by comparisons across countries and indexes is that a fund can be scored quite high in terms of the Linaburg –Maduell Transparency Index (as in the case of Mumtalakat but not so high in the other components of the SWF Scoreboard), or low in the Transparency index but high on the SWFI Scoreboard reflecting compliance with the Santiago Principles (as is the case for Dubai International Capital).

By comparing the 2008 and 2015 entries for Transparency and the 2008 and 2012 scores on the SWF Scoreboard, the general trend of SWFs on both these dimensions has been upward, again attributable in part to the work of the IWG and its creation of an agreement of the GAPP on the Santiago Principles and the creation of the SWF Institute, and its growing membership and advice offered to its members. Nevertheless, there are several notable exceptions with no improvement at all on Transparency for the SWFs of Algeria, Libya, and Sudan. Note also that the information was deemed insufficient to attempt to score several other important Arab SWFs on the SWF Scoreboard of Compliance to the Santiago Principles, such as Iraq's Development Fund, the Oman Investment Fund, Saudi Arabia's SAMA and Public Investment Fund, and the UAE's Emirates Investment Authority. There was also only very modest improvement in

⁹ For references see, e.g., Behrendt (2013), Kamrava (2013), Massoudi and Allen (2014), and Ramesh (2016).

Oman's SGRF scores on both the Linaburg–Maduell Transparency Index and the SWF Scoreboard over the 2007-2012(5) period.

Yet, perhaps things may be changing at the SGRF. Notably, in an innovative attempt to compare both transparency and compliance with the Santiago Principles of the SGRF with that of Norway's highly rated Government Pension Fund (GPF) in the face of the quite complete absence of reports and data on the SGRF, Al-Saidi (2012) utilized a carefully designed interview method (with carefully selected but anonymous officials from both the SGRF and GPF and related institutions in each country), he found the virtually complete absence of not only transparency but also of auditing, accountability, supervision, and quantity and quality of staff. At the SGRF he found that there were less than 100 professional staff members, none with training in the relevant areas of finance, and that almost all investment decisions were largely made by the Sultan. Somewhat surprisingly, despite general popularity of the Sultan, Al-Saidi's interviews also detected severe criticism and resentment for this which was also linked to what many regarded as SGRF's relatively poor record in allocating its investments. While it is not possible to identify a causal link between the apparent existence in 2012 of such resentment, notably in Feb 24, 2014 the SGRF leadership introduced (with an announcement on its Website) of a new "Whistle-Blowing Policy aimed at encouraging SGRF staff to report illegal practices and incidents that violate the relevant ethical behavior at work, and disclose any concerns directly related to SGRF and its operations". Indeed, at the end of 2014 the SGRF issued an impressive Annual Report (SGRF 2014) that announced a number of other initiatives taken in that year and to be followed in subsequent years (hiring of 35 new highly specialized employees, providing specialized training for these employees both in Oman and elsewhere, new units and frameworks for Risk management and Compliance and new investment initiatives both internationally (especially in collaboration with China and Spain) and in Oman itself targeting specific sectors and fostering investment in the private sector. Perhaps even more importantly, in April 2015, it was reported (Chowdhury 2015) that SGRF, which since 2009 had been a permanent observer of the International Forum of Sovereign Wealth Funds (IFSWF), had applied for full membership in the IFSWF and that its application had been accepted.¹⁰

Yet, despite the possible progress coming in Oman's SGRF, we are left with the question of why the other SWFs with low transparency and compliance with the Santiago Principles are still much less inclined to be transparent than the others. One factor can be their lesser interest in international investments and more emphasis on domestic investment where Western concerns would be less important (Bazoobandi 2013, 160). Since for domestic investments, pleasing the officials of the host country is no longer a benefit, it clearly can reduce the incentive of those SWFs focusing on domestic investments to be transparent and to demonstrate adherence to the Santiago Principles in comparison with those SWFs focused on investments in western countries. For this reason, this factor might well help explain the lower scores for Algeria's Revenue Regulation Fund, and for the SWFs of Dubai, Libya, and Sudan. In the case of SAMA, even though its assets are largely international, a much larger percentage of its holdings have been taking the form of bonds, rather than equity (which is where the reputational benefits of transparency would seem to come into play (Seltzer and Ziemba 2009)).

Given the fact that the home countries of all the Arab SWFs are far from democratic, and that several of them are also classified by the World Bank, the Fraser Institute, and the Economist's Intelligence Unit as having relatively low Freedom from Corruption Indexes, another important reason for low Transparency can be fear that, if the information should get out about corrupt

¹⁰ The announcement stated that "By becoming a full member of the IFSWF, SGRF is taking one more step towards greater transparency and governance practices as well as strengthen ties with the international community of sovereign funds". Abdulsalam bin Mohammed al-Murshidi, Executive President of the SGRF said: "By joining IFSWF, we commit ourselves to respecting international norms with regard to transparency and to seek to apply better governance practices".

or fraudulent actions or just plain inappropriate favoritism to friends and family on the part of the SWF, it could badly damage the reputations of the SWF principals (CEO, Board Members, Investment Committee Chairs etc.). This would be especially damaging, given the fact that these SWF principals are largely limited to members of the ruling families in the GCC, and of the military elsewhere. We suggest that this fear of being identified as the possible cause of a failed investment, corrupt act or favoritism to friends could well be an important contributor to the low scores for SWF Transparency and compliance with the Santiago Principles for quite a few of the SWFs listed in Table 1. On the other hand, where there is press freedom and democracy as in Norway, SWF leaders would know that, even the slightest suspicions about improprieties would likely be sufficient to ensure their removal from office, the incentives to be transparent and compliant with the Santiago Principles would be very high. Note that in Table 1, Norway had top scores of 10 on the Linaburg-Maduell Transparency Index in both 2008 and 2015, and the highest scores of 32.5 on the Santiago Principles Compliance Index and of 98 on the SWF Scoreboard for 2012.

Given the availability of at least crude indexes of these sorts for a number of SWFs and corresponding country-level institutional indexes, several scholars have begun to identify at least some significant correlations between some of relevant measures of such variables. Both Setzer (2008) and Behrendt (2010), e.g., produced graphs showing positive correlations between the democracy scores of SWF countries and the scores of the individual SWFs on the SWF Scoreboard in a small sample of SWFs in 2007. Aizenman and Glick (2008) showed a positive correlation between the overall SWF Scoreboard scores and the Voice and Accountability Component Index (also reflecting democracy) from the World Bank Governance Indexes for the same year with a slightly larger sample of SWFs from around the world. Truman (2010) presented a graph revealing a positive correlation between the SWF scores on the Linaburg- Maduell transparency index and those on the SWF scoreboard, suggesting that greater SWF transparency may contribute to the Santiago Principles associated with better quality of the SWF in its investment and risk management activities. He also produced regression results from a sample of 40 SWFs from around the world showing that SWF scores on both the Transparency and the Santiago Compliance SWF Scoreboard were positively related to the Freedom from Corruption and five of the six WB Governance Indexes.

Given that all these institutional indicators are interrelated, however, one can clearly not interpret these relations between democracy, governance and freedom from corruption, on the one hand, and the degrees of Transparency and Santiago Principle Compliance, on the other, as causal in nature. But, they do seem at least somewhat supportive of our conjecture stated above that the SWFs run by autocrats in autocratic countries with at least modest levels of perceived corruption would be less inclined to be transparent and adhere to the Santiago Principles, and that they would be more inclined to be transparent and Santiago compliant when investing in highly developed western countries.

Another factor which could serve as a contributor to greater secrecy could be prior experience with investment failures and investment scandals. For this reason, we turn next to identifying some now known cases of scandals involving fraudulent or extremely bad investments and how they seemed to be treated in different SWFs.

We begin with one involving ADIA which, as we have seen above, beginning in 2008 began to play such an important role in improving transparency and adherence of SWFs to the Santiago Principles. In the 1970s, Sheikh Zayed Al-Nahyan, who was then the emir of Abu Dhabi and who founded ADIA became a founding shareholder in BCCI, a Luxemburg-based bank. BCCI was rejected by US and UK financial regulators (in the US case in trying to buy a New York Bank in 1976 and in the UK case in obtaining a banking license in 1980) because of concerns about its lending capabilities. Beginning in 1987 BCCI was placed under suspicion

and oversight by international banking supervisors in Basel, Switzerland. In 1988 it was indicted for money laundering in Florida; in 1990 some of its accounts were deemed fraudulent, and by 1991 it was shut down. The trouble for ADIA was that in 1985 BCCI's treasury had been moved to Abu Dhabi, and in 1990 Sheikh Zayed bought (perhaps with ADIA's help) 77% of BCCI's shares. After court investigations, twelve BCCI officials were sentenced to jail, including one who was a member of ADIA's Board of Directors. The Abu Dhabi government has always maintained that it (and thereby ADIA as well) was a victim of the BCCI affair (as reflected in the enormous financial and reputational losses it suffered) rather than a contributor to the scandal. Whatever the truth about this, according to Fletcher Research (2010) and Bazoobandi (2013, p. 86-7), a clear result was to re-enforce (at least until its transformation in 2008) ADIA's already existing trait to be quite non-transparent about its operations despite the facts that the bulk of its investments have generally been international and its staff has generally been recognized for its high quality.

Another example was that of the Kuwait Investment Office, the KIA's investment office in London (created in the 1950s). In the early 1980s this office started making large investments in Spain, several of which were in hotel and resort chains. But then, through a Barcelona-based holding company, it expanded into military hardware, took a majority holding in Union Explosivos Rio Tinto and pursued hostile takeover bids to gain ownership of some 170 firms, accounting for what was estimated to be almost 60% of all foreign investments on the Spanish stock exchange. It also attempted to buy the country's largest bank. When one of its Spanish partners was found to be involved in an infamous sex scandal, the whole Spanish investment program of perhaps \$5 billion had to be abandoned, almost all of which was a financial loss. This crisis and subsequent investigations seemed to cast considerable blame on Kuwait's ruling Al Sabah family (also heading up KIA) for allowing this to happen. All this lasted until well after the conclusion of the Gulf War (during which Kuwait was invaded by Iraq), imposing enormous additional costs on Kuwait (estimated to be \$ 70 billion). This led to a major uprising by Kuwait's Parliament which in turn imposed major constraints on the way the KIA was managed (Balding 2012, 141-8). But, partly because of that enormous scandal, KIA's Board of Directors and employees are prohibited from disclosing data or information about their work or about KIA's invested assets without written permission from the Chairman of its Board of Directors. This may help why Kuwait's KIA had not made more progress on transparency by 2007 and even by 2015.

In contrast to all the SWFs in Kuwait, Saudi Arabia, Oman and the UAE, Saudi Arabia's SAMA and its subsidiary SWFs have been led for many years by foreign professionals and subsequently by prominent Saudi businessmen and banking leaders from outside the royal family. For this reason, it has tended to follow a much more conservative investment strategy (with much of its assets in the form of bonds rather than equity) and to avoid large investment scandals.¹¹ Yet, even though not headed by members of the royal family who would have been especially fearful of having information about their actions and investments leak out, the Saudi SWFs have been especially non-transparent and unable to be rated for conformity with the Santiago Principles. One contributor to this, we suggest, might be that their focus has been on bonds where the signaling benefits to other investors of transparency and Santiago Principles Compliance would not be as relevant as in the case of equity investments.

Still another interesting and on-going example of embarrassing financial losses, although one outside of our GCC focus, is that of the Libyan Investment Authority (LIA) whose

¹¹ The difference between Saudi Arabian and other GCC Investment patterns and investment firm structures and strategies should not be overstated, however, since many investment funds of similar sorts are owned by individual members of the Saudi royal family but are not generally classified as SWFs. In these cases, they are more like the SWFs from other GCC countries in that each is headed by an individual, with a very hierarchical and secretive style of operation and management, in many cases with very considerably risk taking (Bazoobandi and Niblock (2011) and Smith-Diwan (2009).

Transparency score in Table 1 fell from a lowly 2 in 2008 to 1 in 2015 and whose score on the SWF Scoreboard was the lowest of all those on the list. Despite changing regimes after the ouster of Qaddhafi, the LIA was managed by similar types of Boards under the direction of government leaders, (prime ministers, finance ministers, Central Bank heads, and Ministers of Industry and Planning) over the entire period but did not seem to have the large, well paid staffs of the Gulf SWFs. Not surprisingly, the LIA seemed to rely heavily on the expertise of international financial firms. Not unlike other Arab SWFs from 2000 to 2008, the LIA benefitted from rising oil revenues, but then during the World Financial Crisis, it saw some financial advantages in buying into depressed financial institutions in developed countries. Through two

intermediaries (Goldman Sachs and Societe Generale), between January and June 2008 it purchased currency baskets and options in target banks totaling well over \$2 billion but which by February 2010 left them with at most one-tenth of that value. These were not the only losses so that the total value of assets, previously thought to be about \$70 billion, were then valued at only \$ 56 billion. Since that time, especially with divided and changing governments, the internal blame has continued to be turned from one leader to another. Rather pitifully, the LIA has resorted to bringing suits in British courts against the two financial intermediaries for “failing to take into consideration their own inability to evaluate the investment options these firms made to them” despite having paid them several hundred million dollars in consultancy fees (Rappaport et al 2014, Treanor 2016). Given the spreading of the blame among the various otherwise respected government officials involved in LIA, one can once again understand the extremely tight secrecy imposed by LIA leaders on LIA and other personnel.

Transparency, conformity with Santiago Principles, vulnerability to investment disasters, the identities of the CEOs and other SWF officials, and scores on the SWF Scoreboard are by no means the only characteristics of Arab SWFs to have been changing over time. Other important changes in size, character and scope that are notable among Arab SWFs over time derive from (1) when oil prices are falling, their need to focus on the maintenance of stability of their domestic economies, (2) when times are good, their preference to shift their investments in the direction of high growth regions like Asia and away from the regions of relatively slow growth like Europe and North America, (3) when diversification of their own economies becomes important, a more strategic focus on high tech industries or on industries upstream or downstream from oil or on ones particularly strategic to the specialized themes developed in their long term plans (like “Vision 2020”) or on airlines, entertainment (including sports and night life) and (4) politically-driven needs to support economic activity and stabilization in their allies within the broader MENA region. Each of these changes and issues will be dealt with in the following sections. All these changes reflect the last five implications derived from the political economy framework in Section 2.

5. Social Contract in the GCC, A State Building Tool

The establishment of the GCC states in the nineteenth century, through a set of unique state building strategies, was followed by the introduction of a new social contract across the region. The ruling families established their political power in the newly founded states around the Persian Gulf through a series of treaties with the British Empire. (James Onley, 2007) Those treaties indeed granted much-needed international recognition to the GCC states. Achieving such recognition could not have been completed without the ruling families also gaining the support of the local tribes. To unify the local communities, the ruling families had to introduce new treaties in which security, justice and economic support was promised to the local tribes in return for loyalty. Initially however, without that external support, they were facing various forms of upheaval (James Onley and Suleyman Khalaf, 2006). Indeed, the legitimacy of most of the ruling families across the region was being challenged. This prompted them to seek new legitimizing tactics.

Oil has played a crucial role in introducing the new legitimizing strategies of the Gulf monarchs. As oil income began to rise, the GCC ruling families started to intensify their political control over their respective countries. In Kuwait for example, in the year that oil was discovered (1938), the emir dismissed a parliament that was established by the merchants, and appointed a number of his family members to most of the administrative institutions of the government. Other GCC states followed that example. With the exception of Oman, the royal family members have been holding most of the important and sensitive government positions since the foundation of these states (Jane Kinninmont, 2015). One key factor contributing to the political monopoly of the ruling families across the region has been their monopoly over their oil wealth but also somewhat changing political economy conditions within and between these countries. As a result, new definitions for national identity and citizenship have been invented in the region.

One key characteristic shared by the Gulf countries is that citizenship is closely linked to economic benefits. There has been a conscious effort by the ruling families to associate the economic benefits with national identity in order to encourage loyalty. The privileges that accompany holding GCC passports are strongly visible in employment benefits, judicial protections, and government grants and payments. Such privileges have indeed created a social cleavage between the local and expat communities. Being a local citizen of the GCC by default is associated with higher salary payments, and access to financial resources. The access to oil income allowed the regimes across the region to be tax-free, and allowed the oil wealth to be distributed among different local, tribal, ethnic or religious groups. In modern societies, political legitimacy is gained through political mechanisms in which the government is held responsible for use of tax money. In the GCC, however, the social contract has been different: political legitimacy being gained through governmental distribution of resources across the various stakeholders in the society. While the distribution of resources is the main mechanism for defining a unique social contract in the region, at the same time it has also presented the GCC with the following two challenges.

5.1 Sustainability of state-citizen relations

Since the establishment of the GCC states, the ruling families have been successful in managing the economic expectations of citizens. As noted above, the oil income has been the key element of this social contract and the rise of oil prices has allowed the ruling elite in the Gulf to continue their promotion of the national identity through financial benefits. Over the past decades, the oil wealth has been sufficient not only for maintaining the social contract, but also to cushion up various types of assets across the world that are mainly managed through the government-owned investment institutions like SWFs. The oil markets, although often relatively volatile, have maintained a reasonably promising prospect. However, with the introduction of non-conventional hydrocarbon resources, the oversupply of oil in the global market has recently pushed the prices down rather significantly and depressed those market prospects. The oil markets' outlook has raised concerns amongst both policy makers and citizens that maintaining the current level of government expenditure to sustain the social contract may not be possible in the future.

5.2 Sustainability of the economic growth model

Economic growth across the GCC countries has been directly correlated with the various oil booms, the last oil boom beginning in 2003, though with an interruption due to the world financial crisis in 2007-9. Growth has been pushed by significant increases of government spending. Since 2008, the GCC governments' fiscal stimulus packages have been introduced to support local credit markets and private sector economic activities. As the events of the Arab uprising in 2011 were unfolding, the governments of the region announced additional spending focused on wages and subsidies (Chatham House, 2012). These government-led economic growth strategies across the region have been heavily financed by their oil wealth. The recent,

but possibly enduring, decreases in hydrocarbon exports' income may profoundly affect the economic growth prospects in the GCC. Being the largest economy in the GCC and with the largest number of nationals, Saudi economic growth is likely to face more serious challenges than the other GCC states. Projections show that, if the Saudi government takes no action to reduce the country's dependence on oil income, even if the Brent oil price should recover gradually to \$102 per barrel by 2030 and oil production and consumption increase from 10.2 and 2.8 million barrels per day in 2015 to 12.3 and 4.9 million barrels per day in 2030 respectively, the fiscal balance would continue recording deficits. Under such a scenario, the country's foreign exchange reserves will fall while public debt will significantly increase (Jadwa Investment, 2016).

5.3 The need to modify the culture of citizens' entitlement in the face of lower oil prices

Changing the culture that has been created, as the by-product of the current social contract will be another challenge to the policy makers of the region. The current social contract has created varying degrees of entitlement amongst the citizens across the region. Therefore, the ability to achieve the seemingly inevitable reinvention of the social contract in the Gulf due to the very possible enduring decline of oil income will very much depend on the ability of the government to change the entitlement culture. As a result of the current social contract, citizens perceive of the economic benefits provided by the government as their *rights* rather than *privileges*.

5.4 The need for change in labor market policies

The government's labour market policies that have stemmed from the current social contract in the region have also become problematic over time. Since the establishment of the GCC states, public employment policies have been key channels for wealth distribution. The result has been the creation of a much bifurcated labor market. One of the main privileges provided by the government to the citizens has been providing them with secure and well-paid employment opportunities in the public sector. On the other hand, the private sector has been governed by relatively loose labor regulations. As a result, the number of Gulf nationals employed in the private sector has become very low, the clear majority of nationals concentrated in the public sector. With the current demographic structure in the GCC, combined with the prospect of low oil prices, most of the GCC governments will not be able to maintain the policy of continuous recruitment of the ever-growing number of young labour-market entrants into the public sector (Chatham House, 2012). The labor force participation rate among nationals is at its lowest in Saudi Arabia (40% in 2016), UAE (45%), and Kuwait (46%). The average labour force participation rate in the GCC is about 47%, which is amongst the lowest in the region (Jadwa Investment, 2016). Compared to the private sector, the GCC governments have historically offered better pay, shorter working hours, and more secure employment opportunities. As a result, most of the private sector employment opportunities have been filled by foreign labour. As the policy makers of the GCC attempt to decrease their economic dependence on oil income, the government employment opportunities will have to be the subject of reforms. Such reforms will undoubtedly require revising the current social contract.

5.5 How to adjust SWFs so as to better fulfil state building efforts in the GCC?

Historically, the ruling families in the GCC have used SWFs as a tool to support state building strategies of the states, and to boost national identity of the citizens. The GCC governments have sought international recognition through acquiring trophy assets (i.e. Harrods, Chrysler Building, Ferrari type of assets) to gain international recognition for their wealth. Given that these countries are all relatively young, wealth accumulation has been a very clear means for making themselves relevant to the global economy, in the same way as it has been for Singapore for example. SWFs have also been important instruments to help establishing the social contract. In most of the GCC countries the ruling family members have controlled the

government investment institutions, including SWFs. As noted above, while some GCC SWFs have clearly defined mandates, others do not. In such cases, their assets have been controlled and used by the states, wherever, and when, they see the need to protect private interests of their leaders as well as those which they envision as being state interests. The role of KIA in financing the costs of military operation for liberation of Kuwait and post-liberation reconstruction is a rather significant example of the latter.

Yet, very importantly, the asset accumulation strategy of the GCC funds has also been crucial for prolonging the social contract. The control of national assets in the Gulf by the ruling elite and those close to them has indeed had an intergenerational purpose to it which is structured to transfer the control of wealth to the next generations of the rulers to come, who may also maintain the current social contract.

Thereby, these findings provide support for not only the relevance of the Social Contract model but also of several of the implications drawn from the more general model in Section 2.

6. Arab Spring, a Trigger for Economic Revision in the GCC?

Over the past decade, the political elite in the Arab world, including the oil-rich GCC, has focused more on domestic and regional political manoeuvring and has abandoned its earlier emphasis on inequality and basic needs of their populations. Because of the youth bulge stemming from their earlier reductions in very high fertility rates, most of the countries in the Arab world have experienced high unemployment particularly amongst the young men and women, and increasing levels of social dissatisfaction. Their macroeconomic indicators such as those on growth and inflation have been performing poorly and an unusually large share of economic activity has been carried out by the state. In the GCC countries, as noted above, thanks to soaring oil prices, the state sectors have been the employers of the clear majority of nationals, leaving the private sector somewhat underdeveloped and even when well-developed the employers of almost exclusively foreign workers. Most of the successful local private companies have been those with links with the government and often owned by the influential families or individuals.

After decades of economic, social and political difficulties, suddenly in 2011 there arose the largest and the most widespread political mass mobilisation in the Arab world. The political uprisings (ranging from North Africa to the Levant and Southern Arabia) have also resonated in the richer parts of the Arab world. Despite the differences in economic and social circumstances, all the GCC countries, apart from Qatar, have experienced some degree of social and political uprising. The globalised citizens of the GCC, who had been watching the events in other parts of the Arab world as they unfolded through their computer and mobile phone screens, have begun to echo the demands for change and social dignity by their fellow Arab men.

This has presented the GCC leaders with one of the biggest challenges to their political and economic power. Their citizens began to question the previous social contract in which the state controls the key resources and in exchange provides economic prosperity, regional and global recognition, security and justice. In some cases, this went so far as the citizens taking the streets to protest and, especially when this triggered violence, the citizens were met with deadly force. In the case of Bahrain, this was deemed so serious as to lead to intervention by the Saudi military to keep it from going further. This has presented the political leaders of the Arab countries with a challenge, but at the same time a rather unique opportunity for introducing the vital political and economic changes for more inclusive growth. Arab countries in political transition as well as the oil-rich GCC have been presented with a demand by their public to, as Hedi Larbi (2016) put it “recast their values, their political, social and economic choices, their rights and duties, and the role of their states in protecting those values and choices, as well as the systems to hold states accountable to their people.” Yet, again in the

context of Bahrain, she also said that the role of its SWF Mumtalakat in attracting private investors to Bahrain through partnerships could become crucial for the stability of the monarchy.

The GCC economies enjoyed a brief period of sharp increases in oil prices during the initial phase of the Arab Uprising. The rise of oil export income was soon accompanied by the rise in GCC public expenditures. The GCC leaders reacted to the challenges presented to them in the aftermath of the Arab Uprising mainly by channelling financial expenditures in two distinct ways: 1) by introducing new financial packages domestically, and 2) by providing financial assistance to countries going through political transitions.

6.1 The domestic expenditure projects

According to estimates, in 2011 the political unrest in the Arab world prompted \$150 billion in spending pledges across the GCC countries on housing, schools and hospitals “in a bid to avoid widespread discontent and to accommodate social pressures” (Bank of America Merrill Lynch Global Research Note, 2011). Being the home to the largest population amongst the GCC countries, Saudi Arabia has made the largest domestic expenditure packages, accounting for two-thirds of the region’s total.

While the composition of this spending varies across the GCC all the countries share the same motivation, Abu Dhabi and Qatar, for example, have together spent billions of dollars on public sector wage increases. The motivation behind all these expenditures is primarily political rather than economic. The governments have hoped that a sharp increase in domestic spending will reaffirm the social contract, cool off social dissatisfaction, and maintain social and political stability.

The spending strategy of the region has helped the GCC governments to temporarily control the social pressure and demand for change. Nevertheless, it has had significant economic implications. As noted above, some of these government-funded schemes are concentrated in increasing public sector wages and increasing employment capacity of the public sector. For example, Saudi Arabia’s late King Abdullah unveiled more than \$100 billion in social handouts. Abu Dhabi’s government “has focused predominantly on housing projects, and announced plans to allocate AED7bn (\$1.9bn) from its 2011 budget to Emiratis in the form of housing loans” (Elizabeth Broomhall, 2011).

Such schemes will be remarkably difficult to reverse. Since one of the key structural economic challenges of the region is labor reform, the post-Arab Uprising government expenditure packages are expected to delay and further complicate labor reform plans in the region. Moreover, the public sector dominated expenditure policies will further undercut much needed private sector-led growth and the diversification of the GCC economies. As a result, such policies not only delay the overdue economic reforms but they will also continue to expose the region to economic volatility stemming from further dependence on hydrocarbon income to sustain the growth. (Saif and Fakhouri, 2012).

6.2 The regional financial assistance

The post-Arab Uprising financial packages that were extended to Egypt, Jordan, Morocco, Tunisia, and Yemen have formed the main part of the GCC’s regional expenditure. According to the World Bank, in 2011-12, GCC countries provided \$7.1 billion to Arab economies in transition. This represents 40% of total official regional expenditures made by the GCC during this period.

The GCC countries have invited Jordan and Morocco to join the Council. Although, the invitation was seen at the broader regional level as a slightly far-fetched move since none of the two countries are geographically near the Persian Gulf, it was facilitated by the GCC economies’ commitment to provide financial aid to these countries (Fares Braizat, 2011). In

2011, each GCC country has committed to chip in \$2.5 billion over 5 years to create two \$5 billion aid packages extended to both Jordan and Morocco. Each of these packages has proceeded differently. Jordan has cooperated with the GCC to identify suitable projects, while the funds allocated to financial assistance for Morocco has been transferred GCC sovereign wealth funds to invest in Wessal Capital¹² as equity partners (Mustapha Rouis, 2013).

Some of the GCC regional assistance has taken the form of humanitarian aid. Tunisia and Yemen have received humanitarian aid from the GCC aimed at supporting these countries to be able to deal with increasing refugees and the internally displaced. “Though GCC financial support to the transitioning countries was significantly higher in the last two years than in the past, it still fell short of financing needs as illustrated by the widening of the budget balance, the heavy reliance on domestic financing, the drop-in reserves, and the currency depreciation.” In this period (2011-12), the UAE regional expenditure was on average \$430 million a year, more than half of which was absorbed by Jordan. UAE average disbursement in 2009–10 was \$230 million, of which nearly 50% was extended to Yemen. Overall, Egypt received the biggest share (nearly 77%) of the GCC financial assistance distributed within the Arab countries of transition followed by Libya (16%), Jordan (6%), and Yemen (2%) (Mustapha Rouis, 2013).

All in all, the political transition across the Arab world has generated a number of reasons for the involvement of the GCC in the region. In the aftermath of the Arab uprising, the GCC leaders have been presented by both a major challenge and a major opportunity at the same time. The major challenge stems from the urgent need for fundamental reforms and restructuring of their political, economic and social system. The major opportunity on the other hand, is driven from the regional changes that have created a unique chance for the GCC leaders to be an influential force behind shaping the new Middle East. Overcoming the challenge, and using the opportunity that the leaders of the GCC have been facing in the aftermath of the political events in the Middle East and North Africa, will require (among other costs) bearing rather significant financial costs. Given that the economies of the GCC countries rely so heavily on oil export income, the regional leaders would be required to allocate some of this income to cover those financial costs. As the oil markets have entered a cycle of historically low prices, the GCC’s source of income has been significantly limited. Therefore, the region’s policy makers have begun to look into their government’s assets, as accumulated through various investment institutions, as a means of covering such costs.

Virtually all the examples presented in this section suggest the relevance of various implications from variations in the political economy framework in Section 2, and for the considerable applicability of the Social Contract version of that framework.

7. An Era of Cheap Oil and Rising Domestic Consumption

In 2014, global oil prices declined dramatically. As the so-called global oil “supercycle” came to an end, the economic activities in oil exporting countries started to slow down. (World Bank, 2015) The GCC countries have introduced fiscal consolidation measures in response to the downward pressure of the oil prices on their budgets. Such measures however, have not been successful in addressing their fiscal deficits. The long standing structural economic challenges of the region remain and hence require the kinds of reforms in labor and financial markets, and trade that are critical for boosting economic prospects, improving living standards, and creating much-needed jobs.

Heavily subsidized energy prices, harsh weather conditions, lack of efficient public transport, and consumers’ culture have boosted the domestic energy consumption in the GCC rather dramatically. GCC countries consumed an average of 9 tons of oil equivalent (TOEs) per capita in 2014, nearly double the global average of 4 TOEs per capita. The high energy consumption

¹² An investment vehicle set up by the government of Morocco to mobilize investments in tourism and infrastructure.

pattern of the GCC is expected to continue. Over the past four decades, per capita energy consumption in Qatar, Saudi Arabia, and the UAE has grown at an annual average rate of over 2%, compared around 1% per annum in other countries with similar national income levels (International Monetary Fund, 2015). If current trends continue, the capacity to export of hydrocarbon resources in some of the GCC countries, particularly Saudi Arabia that is the home to the largest population in the GCC will fall significantly. Given the GCC's economic dependence on energy revenues and high population growth, a decline in export capacity will further intensify financial and social pressures (Chatham House, 2011).

The GCC's use of fossil fuels (mainly gas) to generate electricity and desalinated water has increased significantly over the past decades. This has already had opportunity costs in terms of limiting the energy export capacity of some of countries in the region. Increasing domestic energy consumption in the GCC also heightens the difficulty of meeting the region's obligations toward meeting the challenges of global warming and environmental sustainability. The need for GCC countries to invest in these electricity and desalination activities will both reduce oil revenues and divert them into the local infrastructure to make these possible and thereby reduce the portion of oil revenues that can be placed in SWFs. In the long-run, therefore, high energy consumption will translate to lower government saving levels. This will not only weaken the role of the GCC funds in the global financial markets but also it will limit the capacity of the region's political elite in maintaining the existing social contract that will jeopardize the future of social and political stability in the region.

The Gulf SWFs have come under immense pressure due to low oil prices. Finding new investment opportunities that would maximize their returns is no longer a priority for the funds. The funds are facing increasing pressures from their sponsoring governments to transfer their foreign assets back to their country of origin for the following reasons: (1) to fill the government's budget gaps, (2) to protect the value of their currencies, and (3) to provide the kind of employment and technology that can help them maintain their social contracts.

The GCC economies have very similar structure stemming from high dependence on oil revenues, and all the GCC oil exporting countries share the pressure of declining oil markets. However, the response of the GCC sovereign wealth funds to such pressure varies. For example: Kuwait, the owner of the oldest SWF of the region (Kuwait Investment Authority) has been under less pressure to liquidate its investments. However, due to the declining oil prices, the country has had less new money to transfer to the KIA. Reports show that Qatar's QIA has been selling its commitments to invest in private equity funds as well as, public shares (Henny Sender, 2016). Saudi Arabia has also been liquidating its assets to meet government expenditure. Analysts believe that the reason for Japan's market drop in early 2016 was substantial disinvestment by Saudi Arabia (Henry Sender, 2016). Since the oil prices started to decline, the Saudi Arabian Monetary Agency (SAMA) has withdrawn over \$73bn of its foreign reserves to maintain the government domestic expenditures, and to pay the cost of military operation in Yemen (Simeon Kerr, 2015).

The low oil prices are expected to have a number of other substantial impacts on GCC economies and government policies. Some of these may be highly desirable. For example, low oil prices can be the facilitator for structural reforms in the form of an efficient taxation system, price liberalization and reduction of subsidies, labor force reforms, and the interest in and ability to attract foreign investors. Saudi Arabia, for example, recently implemented new policies such as: allowing foreign investors to enter the Saudi stock market, and privatizing some government assets. "Kuwait is introducing a corporate tax, a change which the UAE may also adopt. Qatar plans to introduce private-public partnerships to ease government finances" (Henny Sender, 2016).

A combination of low oil prices and regional events such as the Arab Uprising, have prompted the GCC countries to increase their local spending and to redirect a larger share of their foreign investments back into the region. This is reflected in various studies over the past few years. For example, a study by Invesco (an asset management company that works with the GCC sovereign wealth funds) shows that SWFs' investments in the region have increased by 10% between 2011 and 2012. As Henny Sender of the Financial Times put it: "sending money to managers sitting in London and New York with only a portion of it returning home" may no longer be a suitable asset management strategy for GCC funds.

The inward shift of GCC sovereign wealth fund assets seems to be one of the most immediate responses to the regional unrest and global oil market declines. However, such a shift should become a part of a more long-term sovereign wealth management strategy in the GCC. Reports show that the region has planned to invest around \$142bn on mega infrastructure development plans between 2013 and 2020 (Al Bawaba Business, 2013).

Since the beginning of Arab political transitions in 2011, the GCC countries have begun to introduce measures that are aimed at meeting the public demand for social and economic reforms. Ultimately, what the GCC countries should be looking to achieve is to improve their living standards and to help the public with improved business opportunities and employment. Since 2011 the GCC governments have succeeded in preserving macroeconomic stability, yet nevertheless, they have collectively failed to address one of the most fundamental challenges of the region: unemployment. Low oil prices are having a hugely unfavorable effect on the economic stability of the GCC. In the absence of high oil revenue, the GCC policy makers will need to continue seeking solutions from their sovereign wealth that has been accumulated over the period of high oil prices. After all, maintaining the macroeconomic stability of the country of origin has always been one of the main objectives of these funds. Therefore, it is expected that the investment behavior of the SWFs will need to change over the next decade should the low oil prices remain unchanged. Given the volatility of the oil prices and the demand for cash by their sponsoring governments, the GCC sovereign wealth funds are expected to decrease their involvements in assets with long-time investment horizon, like private equity and infrastructure.

Liquidating European Investments: The change in the GCC sovereign wealth funds' investment behavior has already become apparent, as the funds have been more involved in financing government debt at home. So too, the profit maximization strategy will no longer be a key priority of the GCC funds. Instead, the region is expected to see an increasing need to offload SWFs' investments. Arab sovereign funds hold about \$2trn in publicly listed equities worldwide and one-third is invested in European exchanges. Institutional investors like Abu Dhabi Investment Authority (ADIA), Saudi Arabian General Investment Authority (SAGIA), and the Qatar Investment Authority (QIA), have reportedly planned to repatriate around \$700bn of their assets from their European investments (Cyril Widdershoven, 2016). Furthermore, in November 2015, ADIA has publicly announced plans for shutting down its London office (Al Jazeera, 2015). The oil-price decline will therefore, trigger sharp sell-offs by the GCC sovereign wealth funds.

Decrease in the Use of Asset Management Companies: The other change in investment behavior of the GCC funds is related to the governments' push for increasing returns and management of the reserves more efficiently by cutting down on wealth management fees. Western asset management companies have recently reported heavy withdrawals by the GCC sovereign wealth funds of assets deposited with them. By the end of 2015, the GCC sovereign wealth funds withdrew at least \$19bn of their assets from European and American wealth management houses. In 2015, Aberdeen, the third-largest listed fund house in Europe, has reported consecutive outflow of assets by the SWFs. Companies like Invesco, State Street,

JPMorgan, BNY Mellon and Goldman Sachs have also reported similar trends. The high redemptions by the SWFs that are mainly caused by low oil prices are expected to continue (Attracta Mooney, 2015).

Injecting assets into the local projects: Since the beginning of 2015, the GCC funds' outgoing investment volumes have dropped significantly. This is primarily caused by the governments' pressure on SWFs to invest in their respective domestic markets. Sovereign wealth management institutions like ADIA, QIA, SAGIA and SAMA Global Holding, have been more active (than ever) in local private equity, real estate and infrastructure opportunities, and as stressed in Section 3, many of the newer funds are concentrating in these local investments. The region is facing about \$1 trillion deficit in financing the infrastructure projects. Naturally, public sector supplied infrastructure projects have received the most attention from the GCC funds. But, the GCC governments have recently emphasized the importance of strengthening public-private partnership (PPP) in the building of these regional infrastructure projects. Involvement of the SWFs therefore, along with private investors, will be one of the key government tools for expanding and strengthening PPP.

An especially prominent and ambitious example of this is apparent in Saudi Arabia's Vision 2030 designed by McKinsey and Company (Arabiya.net/en Full Text of Saudi Arabia's Vision 2030). This is an extremely ambitious and comprehensive PPP program designed to double the country's real GDP by 2030. It would do so, among other means, by integrating a number of not only Saudi Arabia's but also neighboring countries' special industrial districts with heavy emphasis on petro-chemicals, mining and metals, travel and tourism based on the attraction of FDI from abroad aimed at making these industries internationally competitive with complementary funding from its Public Investment Fund (PIF). According to Vision 2030 which has just been approved in late April of 2016, the PIF would grow at an amazingly high rate so as to become the largest SWF in the world with about \$1.8 trillion in assets by 2030, most of which would be invested in Saudi Arabia. Clearly, this may well be the kind of effort needed to make a success of reducing Saudi Arabia's dependence on oil and achieving industrial diversification. Yet, given the questionable character of Saudi economic and political institutions at present, success in this respect may well constitute an enormous challenge.¹³

8. Conclusion

From the above, it should be clear that the current setting in oil exporting countries of the GCC and other Arab countries would seem to be characterized by each of the following conditions: (1) relatively low oil prices, (2) somewhat slower growth in the formerly most rapidly growing countries of Asia that are large consumers of their exports, (3) rising economic uncertainties elsewhere in the world, (4) a continuing youth bulge with respect to increasing numbers of nationals in the Arab oil exporters (because of their continuing high fertility rates), (5) an eventual rise in female labor force participation rates which, when realized, will further increase the problems of finding adequate job opportunities for nationals, (6) increasing threats of opposition from elites concerned with corruption and excessive favoritism in both government and business, (7) a business environment that is not very competitive, and (8) increasing demands for voice and well-being on the part of citizens in other parts of the Arab world.

These conditions seem to be converging to make sustaining the social contract between leaders and citizens in the oil and gas-rich countries of the Gulf, and elsewhere in the MENA region, in the years ahead extremely challenging. From the trends in orientation within the SWFs and their investments as in the various "Vision 2030" type schemes that GCC countries have adopted, it would also appear as if the private sector is going to have to play a much more

¹³ For an articulate discussion of the various elements of that challenge, such as getting the right people to do it, setting up the right processes, and tying the SWFs to an appropriate political system, see Clark et al (2013).

fundamental role in the development process than it has since the coming of oil. A number of the six different inferences drawn from our broad political economy framework in Section 2 above would seem to suggest ways in which SWFs might be able to help in meeting these challenges and in the development of the private sector.

One possible outcome of this may be the occurrence of political revolutions by the citizenry against the leaders. However, since the sovereign and other leaders of the region also have substantial power in the form of tools for repression, and since the experience to date of attempts at political overthrows and revolutions (even when the overthrows are successful) is hardly very positive, exercising the political revolution option may not be the optimal solution.

Yet, the seven quite different implications drawn from the political economy framework in Section 2 suggests that there may well be quite reasonable alternatives without such a radical action. Although certainly not a cure-all, improvements in the proper management and organization of SWFs could be an important vehicle for helping to find a better way forward and to meeting the sustainability challenge in maintaining the social contract. Accomplishing this, however, will require substantial change in their objectives, reforms in their structure, modus operandi, efficiency, and flexibility, inducing greater cooperation among SWF employees and their supervisors, in the degree of complementarity in fiscal management to reduce the pro-cyclicality of public sector spending (inclusive of the SWFs), increase efficiency and economic competitiveness both at the firm level and at the levels of the national and regional economy. Also benefits could be derived from working with other SWFs and sovereigns and investors from other countries. As should already be clear, success in this respect may require many different types of reforms, and indeed many that go well beyond the confines of SWFs themselves. Yet, since this process will also be full of risks, SWFs might do well to preserve their more traditional risk management objectives.

The presentation of our conclusions is organized as follows: In Section 8.1 we take advantage of our previous analysis of the political economy dynamics of certain overarching influences, such as rising and falling oil prices, changing influences from the world economy, and changes in political leaders from within the ruling families. In Section 8.2, we turn our attention to specific actions which existing SWFs might be advised to undertake to improve their performance and contribute to the broader objectives of greater economic growth, financial stability, social and political development, and regional cooperation. Finally, in Section 8.3, we go on to identify some of the most important other reforms that we believe to be complementary to those in the SWFs themselves, and quite necessary to achieve these broad objectives for the countries and the region at the lowest possible cost.

8.1 Evidence from Sections III-VII Concerning the Relevance of the Political Economy Considerations Outlined in Section II

First, our political economy framework in Section 2 helps explain both the inherent tendency of the sovereigns and thereby SWF heads to be quite non-transparent in the operations and assets of their funds and to maintain the implicit social contract between sovereign and citizens in the traditional way through public sector jobs at high wages and with subsidies. It also explains why sovereigns may want to see their sons become heads of new SWFs to demonstrate their suitability to succeed their fathers to the throne. Yet, it also identifies several factors such as potential threats either to the sovereign from the elites or to the efficient functioning of the SWFs due to lack of trust among their employees which could induce them to make the SWFs more transparent. It also explains why the monarchs from different country SWFs might want to cooperate with one another for mutual protection and the ability to provide additional jobs through complementarities and thereby to make it easier to satisfy their social contracts with their citizens by generating private sector jobs.

Second, this framework also identifies various circumstances which might change over time (external shocks to the model) which might induce changes in the actions taken by the monarch or the citizens. The single most likely common factor triggering changes in SWFs and the actions of sovereigns and the citizenry is the oil price. Reductions in this price of course make it more difficult for sovereigns to live up to their social contracts but at the same time perhaps inducing cost-cutting measures in their operations as suggested in Section 7. Again, in section 7 we also found evidence supporting another implication from the political economy model in a low oil price setting, namely to invest more locally to diversify the economy, reduce volatility and provide private sector jobs. Saudi Arabia in trying to deliver on the promise of its extremely ambitious Vision 2030 plan for development of its non-oil sectors by assigning to its currently rather modest Public Investment Fund a major role in attracting FDI and investments from other SWFs in nearby countries to provide private sector jobs, attract advanced technology to raise its TFP over time, and minimize debt accumulation during a possibly extended period of low oil prices. But changing political relations among sovereigns and neighboring countries could also introduce shocks as might the discovery of huge financial failures or corruption in the operations of the SWFs. So too potential threats from regulatory authorities in countries where SWFs invest could induce changes in the SWFs of various sorts.

Third, our reviews of how different SWFs were initiated in Section 3 and then of how they evolved over time in the wake of the sharp rise of oil prices and asset accumulation by the SWFs 2000- 2007 in Section 4 have demonstrated the relevance of some important implications of the political economy model. Among these have been (1) the importance of high and rising oil prices in the creation and asset accumulation of SWFs, virtually irrespective of regime, (2) evidence that differences across countries in the potential threats to rulers from elites have helped explain differences across SWFs in their openness and transparency, including even as in the case of ADIA inviting elites from a different tribe to sit on its Board of Trustees, and (3) almost without exception the finding that until recently at least SWFs have been operated in a very non-transparent way, irrespective of regime (monarchies or more democratic with legislatures as in Algeria and Kuwait).

Fourth, in Section 4, consistent with the political economy model of Section 2, we have seen how the threats of financial and other regulators in the West to impede SWF investments 2006-2008 helped explain why some but by no means all SWFs (e.g., ADIA, Mumtalakat and Mubadala but not QIA and ADIC) began to become more transparent and to join the Institute for Sovereign Wealth Funds to obtain their guidance on ways of improving their management. Again, consistent with the model of Section 2, in Section 5 we have seen during periods of high oil prices tendencies not only to create new SWFs and enlarge older ones but also to move more of their funds into riskier assets, and ones more focused on rapidly growing areas of the world (such as Asia). Since transparency would be less beneficial and less needed in these more rapidly growing parts of the world, not surprisingly we have seen some of the less-transparent SWFs of the region to have been relatively more prominent in these regions.

Fifth, in Section 4 we have seen many examples of the effects of changing international relations in general and the Arab Spring on changes in the character of SWFs and their investments. The Arab Spring events, seen as a substantial threat to several sovereigns, prompted substantial redirection of investments to other countries in the region such as Egypt and Tunisia. Qatar and its QIA have become amazingly active globally in international relations and in using the political relations developed thereby to leverage investments by their outside investors in Qatar, some of them in sports and cultural activities which have helped make the monarchy very highly regarded among the citizenry (even non-elites). This contrasts from the rather disastrous outcomes of SWFs in the rather clear failed states of the region like Iraq, (and its Development Fund for Iraq) Libya (and its Libyan Investment Authority).

Sixth, in general, we have seen that actual or threats of scandals in the operation of SWFs have tended to reinforce the non-transparency of SWFs to minimize the chance that such events could become sufficiently known and thereby seriously challenge the tenure of the monarchs. Kuwait has provided an example of this. But, there may also have been examples where identified failures or hints of corruption and inefficiency of the SWFs may have led to significant reforms in the SWF. Although still too early to know for sure and with still rather limited information on it, one such very recent such case might well be Oman and its SGRF. As pointed out in Section 4, an impressive 2012 PhD dissertation showed the SGRF to have failed in its asset accumulation (allegedly due to lack of cooperation among staff members and because SGRF's head (a member of the royal family) was taking decisions quite inconsistent with those recommended by the staff. While little is known about the extent to which the findings of this dissertation leaked out, leakage would have seemed likely. In any case, notably within the following three years several pathbreaking reforms were undertaken by this formerly quite secretive and relatively low-performing SWF. As shown in Table 1, there are several other Arab SWFs (like Bahrain's Mumtalakat) which have raised their LM Transparency and SWF scores in recent years in cases where the sovereign faces somewhat greater threat from the local elites stirred up by the ongoing religious and political divide in their country. These different examples support the suggestion in Section 2 that the effect of actual or threats of SWF scandals or failures on subsequent changes in transparency could go in either direction.

8.2 Policy recommendations for reforms of the SWFs themselves

Since we have seen some evidence both in our review of the SWFs in the Arab region suggesting that transparency and closer adherence to the Santiago Principles can (but certainly not necessarily always) lead to improvements in SWF governance and performance, our most straightforward recommendation is to encourage all SWFs of the region to become at least observer- type members of the IFSWF and SWF Institute. Then, at an appropriate time, they should apply to become full, regular members which requires attaining the compliance levels required of regular members. If all SWFs in the region were to become full members of this club, each member would be able to benefit from the reform experiences of all other SWFs. At that point, it might well be useful to establish a GCC regional chapter for both more frequent interaction and to take advantage of complementary among their facilities, and among investments they have made both within the same country and internationally, and among the latter, especially those within the region. This might also facilitate the better integration of SWF activities with the long-term "Vision 2030" type programs that each GCC country has been developing.

From what can be learned from the limited information available on what goes on within existing SWFs, nothing less than major changes is required. Anticipated investment opportunities need to be evaluated objectively from a variety of perspectives. By receiving investments from SWFs recognized for their high quality, the firms in which they have invested should feel advantaged by greater willingness to receive services from other high-quality firms and organizations and be better able to market their products. But, for SWFs to reach that level of qualification, virtually every aspect of their organization and means of operation needs to be improved. The entire culture of many existing SWFs needs to be changed, with much greater emphasis on private sector and international competitiveness. This includes the encouragement of a whole new class of local entrepreneurs, going well beyond the members of the royal family and existing business elites that have been dominant to date in most Gulf countries. Judging by comparative scores of Arab SWFs on the different components of SWF scoreboard relative to those of Norway, the area that seems most in need of improvement is Risk Management. Aside from Kuwait's KIA, not a single Arab SWF has a score as much as 40% of that of Norway in Risk Management. Given the wide variety of useful functions that SWFs can serve (ranging from the very traditional risk minimization to local development in which dynamic externalities

may be very important) and the important differences in the usefulness of different types of investments to fulfillment of these different functions, it is imperative that all relevant decision makers and the SWF itself be very clear about the appropriate priority among these alternative functions at any given point in time. Accordingly, it is also imperative that SWF staffs either have the expertise themselves to identify and evaluate the suitability of different investments aimed at serving the priority functions (or at least to be able to draw on such expertise).

8.3 Policy reforms going beyond the SWFs.

Nevertheless, to make a success of the local investments of GCC SWFs, and to make the GCC economies more stable, diversified, and capable of sustaining long term growth and their respective “social contracts”, the reforms will have to go well beyond SWFs themselves. Especially considering the current situation of low oil prices, steps will have to be taken to improve the overall management of oil revenues and especially budgeting. Recent studies of Arab oil exporters have identified several mechanisms that prevent oil revenues from being allocated efficiently, thereby allowing the oil funds to leak out to unnecessary consumption spending or to destinations unknown. The tracking of oil revenues to the GCC governments must be improved. Then the budgets need to be opened, made more comprehensive, alternative uses of the funds more accurately evaluated and rent-seeking behavior in getting access to these funds minimized. Rules for how much of the oil revenues should be devoted to the SWFs at different prices of oil and considering the current economic circumstances of the country should be adopted as they have been in Norway, Chile and a few other natural resource countries. The scores of the GCC countries on comparable indexes of budgetary openness and quality are extremely low, suggesting the need for major reform in budgetary procedures and evaluation methods.

To provide well-paying jobs for their growing numbers of job seekers in the private sector will require down-sizing of public sector jobs in which high wages are not justified by high productivity and skills. This also means lowering or even eliminating the subsidies offered to public sector workers in terms of pensions, housing allowances, fuel subsidies etc., over those of workers in the private sector. The private sector into which these nationals should go for their jobs should be internationally competitive and sufficiently high in productivity to justify wages and salaries both well above those paid in the private sector at present (which are largely to low wage, low-skilled migrants from other countries) and more than competitive with the wages of nationals in the public sector.

This will certainly require major changes in regulations of various kinds. It will require the phasing out of virtually all kinds of subsidies and the introduction of taxes. The removal of subsidies will be an important step toward assuring open competition among firms in all sectors. But cultivating a competitive environment in countries, where licenses of various types and approvals of various sorts have been so important to entry into business and to gaining access to finance, will require deregulation in many other areas as well. Where regulations are deemed necessary, these regulations and the way in which regulations are enforced should be made as transparent as possible to assure that these regulations do not serve as entry barriers and sources of favoritism by the regulators.

Providing the kinds of jobs that can justify relatively high wage rates to nationals, however, will require attracting much higher technology to private firms in non-oil sectors than at present. Until the time such skills for applying that technology are available from nationals, the labor laws should allow sufficient protection of foreign workers, e.g., with relatively long-term contracts and protection of human rights and civil liberties, to encourage them to come to work in the GCC countries, and allowing them to move from one job to another with permission but without penalty. In the longer run, to see to it that nationals will obtain the skills required for these high productivity industries, substantial reforms will be required in the educational

system to assure that the needed skills will be taught in schools and universities and/or alternatively that firms will have the incentive to develop these skills in their workers through on- the- job training.

Another way to encourage firms to achieve the high productivity to allow them to offer jobs to domestic or foreign workers at reasonably high wage rates will be to take much better advantage of complementarities between firms in different industries (linked in value chains) or to take better advantage of existing or new high quality infrastructure in the different countries of the GCC (as has long been suggested by some political economy specialists (e.g., Awadallah and Malik 2013 and Malik 2015)).

References

- Abboud, Samer N. "Oil and Financialization in the Gulf Cooperation Council", in Matteo Legrenzi and Bessma Momani, eds. *Shifting Geo-Economic Power of the Gulf: Oil, Finance and Institutions* Ashgate
- Adawi, Mohamed and Kami Rwegasira 2012. The Influence of Patterns of Ownership Structure on Transparency in Corporate Governance (Evidence from the United Arab Emirates Listed Companies), *Journal of Transnational Management*, 17 (4), 239-257.
- Abdelal, Rawi 2009. "Sovereign Wealth in Abu Dhabi", *Geopolitics* 14, 317-327.
- Aizenman, Joshua and R. Glick 2008. "Sovereign Wealth Funds: Stylized Facts about their Determinants and Governance", Federal Reserve Bank of San Francisco Working Paper 2008-33.
- Al Bawaba Business 2013., Sovereign wealth funds in GCC focus more on local investments, available at: <http://www.albawaba.com/business/wealth-funds-gcc-490922>.
- Alhashel, Badter 2015. Sovereign Wealth Funds: A Literature Review, *Journal of Economics and Business* 78, 1-13
- Al Jazeera 2015. Shutting up shop: Why's ADIA closing its London office?, available at: <http://www.aljazeera.com/programmes/countingthecost/2015/11/shutting-shop-abu-dhabi-investment-authority-adia-closing-london-office-151122152900758.html>.
- Al-Said, Adham and Alya Al Foori 2016. "Budgetary Process and Fiscal Institutions: The Case of the Sultanate of Oman", Economic Research Forum,
- Al-Saidi, Majid 2012. Analytic Study of Sovereign Wealth Fund Strategies and Policies: A Case Study of Oman Sovereign Wealth Fund. Brunel Business School, Brunel University, 2012.
- Al-Tammimi, Naser 2015. Saudi Oil Policy: To Swing or Not to Swing... That's the Problem" in Valeria Talbot, ed., *The Rising Gulf: The new Ambitions of the Gulf Monarchies*, Milan: ISPI.
- Alswilem, Khalid A., Angeka Cummine, Malan Rietveld and Katherine Tweedie 2015a. *A Comparative Study of Sovereign Investor Models: Sovereign Fund Profiles*, Belfer Center for Science and International Affairs Harvard University, Kennedy School
- Alswilem, Khalid A., Angeka Cummine, Malan Rietveld and Katherine Tweedie 2015b. *Sovereign Investor Models: Institutions and Policies for Managing Sovereign Wealth* Belfer Center for Science and International Affairs Harvard University, Kennedy School
- Anderson, Robert 2016. UAE Sovereign Wealth Fund Hiring In-House to Cut Costs" *Gulf Business* May 18, 2016.
- Ashton, James 2015. How Abu Dhabi's mega-rich are buying up London, available at: <http://www.standard.co.uk/lifestyle/how-abu-dhabis-mega-rich-are-buying-up-london-10178647.html>
- Awadallah, B. and A. Malik 2013. The Economics of the Arab Spring, *World Development* 45, 216-233.
- Bagnall, Allie E. and Edwin M. Truman 2014. ISWF Report on Compliance with the Santiago Principles: Admissible but Flawed Transparency, Washington, D.C.: Peterson Institute for International Economics Policy Brief 11-14.
- Bahgat, Gawdat 2008. "Sovereign Wealth Funds: Dangers and Opportunities", *International Affairs* 84 (4), 1189-1204

- Bahgat, Gawdat 2010. "Kuwait Investment Authority- An Assessment in The Political Economy of Sovereign Wealth Funds" in Yi-chong Xu and Gawdat Bahgat, eds., *The Political Economy of Sovereign Wealth Funds*. Basingstoke: Palgrave Macmillan, 72-87.
- Bahgat, Gawdat 2010. "The USA's Policy on Sovereign Wealth Funds Investment" in *The Political Economy of Sovereign Wealth Funds*, ed. Xu Yi-chong and Gawdat Bahgat. Basingstoke: Palgrave Macmillan, 228-244.
- Bank of America. Merrill Lynch Global Research Note, September 2011.
- Bazoobandi, Sara 2012. "The United Arab Emirates' Sovereign Wealth Funds", Ch 5 in *The Political Economy of the Gulf Sovereign Wealth Funds*. London: Routledge, 73-105.
- Bazoobandi, Sara 2014 "Investment strategies of the sovereign wealth funds from the Gulf Cooperation Council in the Mediterranean: economic or political motivations?" Afkar, 44). [translated to French].
- Bazoobandi, Sara 2015. GCC Sovereign Wealth Funds: Aims and Motives, in Valeria Talbot, ed., *The Rising Gulf: The New Ambitions of the Gulf Monarchies*, Milan: ISPI
- Bazoobandi, Sara and Tim Niblock 2011. "Sovereign Wealth Funds: The Challenge of Transparency", in Matteo Legrenzi and Bessma Momani, *Shifting Geo-Economic Power of the Gulf: Oil, Finance and Institutions*. Ashgate
- Behrendt, Sven 2011. "Gulf Arab Sovereign Wealth Funds: Governance and Institution Building", in Matteo Legrenzi and Bessma Momani *Shifting Geo-Economic Power of the Gulf: Oil, Finance and Institutions*. Ashgate ,143-162.
- Behrendt, Sven 2013. When Money Talks
- Behrendt, Sven 2014. "Revisiting the Investment Policy of the Qatar Investment Authority" *Geoeconomica Sovereign Wealth Funds Update 1* (May)
- Behrendt, Sven 2014. Santiago Compliance Index 2014. *GeoEconomica Sovereign Wealth Funds Update*, October 2014
- Behrendt, Sven 2015. Some Thoughts on Sovereign Wealth Fund Industry Trends *GeoEconomica Sovereign Wealth Funds Update*, September 2015.
- Belaicha, Amira, A. Bouzidi and D. Labaranne 2012/3. "Creation d'un Fonds d'Investissement d'Etat en Algerie: Quel Enjeux" in *Le Construction des Societes Civiles et le Developpement, Modes en Developpement*. 159, 135-149.
- Birks, J.S. and C.A. Sinclair 1982. "The Domestic Political Economy of Development in Saudi Arabia" in T. Niblock. ed, *State, Society and Economy in Saudi Arabia*. London: Croom Helm
- Blundell-Wignall, Adrian and Gert Wehinger 2011. Open Capital Markets and Sovereign Wealth Funds, Pension Funds, and State-Owned Enterprises", in R.A. Fry, W.J. McKibbin and J O'Brien *Sovereign Wealth: The Role of State Capital in the New Financial Order*. London: Imperial College Press 105-146.
- Bolton, Patrick, Frederic Samama and Joseph E. Stiglitz, eds., 2012. *Sovereign Wealth Funds and Long-Term Investing*. New York Columbia University Press.
- Bolton, Patrick and Frederic Samama 2012. "L-Shares- Rewarding Lon-Term Investors" in Bolton, Patrick, Frederic Samama and Joseph E. Stiglitz *Sovereign Wealth Funds and Long-Term Investing*. New York Columbia University Press.
- Boubakri, Narjess, Jean-Claude Cosset and Jocelyn Grira 2016. *Journal of International Financial Markets, Institutions and Money* 42, 60-76.

- Braizat, Fares (2011). Jordan Joining the GCC: strategic regional realignment, Doha Institute, available at: <http://english.dohainstitute.org/file/get/0e0a49b6-9826-413e-8101-6a3701813d81.pdf>.
- Broomhall, Elizabeth 2011. Arab Spring has cost Gulf Arab states \$150bn, Arabian Business, available at: <http://www.arabianbusiness.com/arab-spring-has-cost-gulf-arab-states-150bn-419429.html#.V3o2yYSePJo>.
- Buhayar, Noah and Sonali Basak 2015. "Trott Says Goldman Sought Sovereign Wealth Financing in 2008" www.bloomberg.com/news/articles/2015-11-11.
- Chatham House 2011, Improving Energy Intensity in the Gulf Cooperation Council Countries, (available at: <https://www.chathamhouse.org/about/structure/eeer-department/improving-energy-intensity-gulf-cooperation-council-countries-project>)
- Chatham House, 2012. Middle East and North Africa Programme: Future Trends in the GCC Workshop Summary: Political and Economic Scenarios for the GCC available at: https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Middle%20East/0512gcc_summarytwo.pdf.
- Chaturvedi, R.S 2014. Mumtalakat and Bahrain's National Economic Strategy: Straddling Performance and Liquidity, Tufts University, The Fletcher School.
- Clark, Gordon L. and Ashby H.B. Monk 2012. Sovereign Wealth Funds: Form and Function in the Twenty-first Century" in Bolton, Patrick, Frederic Samama and Joseph E. Stiglitz *Sovereign Wealth Funds and Long-Term Investing*. New York Columbia University Press.
- Clark, Gordon L., Adam D. Dixon and Ashby H.B. Monk 2013. *Sovereign Wealth Funds: Legitimacy, Governance and Power*. Princeton: Princeton University Press.
- Davidson, Christopher M. 2006 "After Shaikh Zayed: The Politics of Succession in Abu Dhabi and the UAE. *Middle East Policy* 13 (1), 42-59.
- Davidson, Christopher M. 2011. The Gulf Arab States and Asia Pacific: Geo-economics and Interdependency in Matteo Legrenzi and Bessma Momani, *Shifting Geo-Economic Power of the Gulf: Oil, Finance and Institutions* Ashgate, 183-198.
- Dewenter, Kathryn L., Xi Han and Paul H. Malatesta 2010. "Firm Values and Sovereign Wealth Fund Investments" *Journal of Financial Economics* 98 256-278.
- Diwan, C. Smith 2009. Sovereign Dilemmas: Saudi Arabia and Sovereign Wealth Funds 14 (2), 345-359.:
- Di Wang, Wendy and Quan Li, 2016. "Democracy, Veto Player and Institutionalization of Sovereign Wealth Funds" *International Interactions*,
- Elbadawi, Ibrahim, Raimundo Soto and Hoda Youssef 2016. "Sovereign Wealth Funds and Macroeconomic Stabilization in the Home Economy"
- Fletcher Research 2010
- Gray, D.F., R.C. Merton and Z. Bodie 2007. Contingent Claims Approach to Measuring and Managing Sovereign Credit Risk, *Journal of Investment Management* 5, 1-24.
- Greene, Edward F. and Brian A. Yeager 2008. Sovereign Wealth Funds – A Measured Assessment", *Capital Markets Law Journal* 3 (3), 247.
- Grigoryan, Artur 2016. "The Ruling Bargain: Sovereign Wealth Funds in Elite-Dominated Societies", *Economic Governance*, 17, 165-184

- Gulf News (2009), Egypt woos investors from UAE in key sectors, January 7, 2009, available at: <http://gulfnews.com/business/investment/egypt-woos-investors-from-uae-in-key-sectors-1.43980>.
- Hadjatory-Tarzaban, Ashley 2009. "A Shift in Power: The Rise of Sovereign Wealth Funds in the Middle East", Unpublished Thesis Robert D. Clark Honors College, Department of Economics
- Hanieh, Adam 2011. *Capitalism and Class in the Gulf Arab States*. Palgrave Macmillan.
- Hatton, Kyle and Katharina Pistor 2011. "Maximizing Autonomy in the Shadow of Great Powers: The Political Economy of Sovereign Wealth Funds": *Columbia Journal of Transnational Law* 50 (1), 1-80.
- International Monetary Fund 2015. Energy Price Reform in the GCC _ What Can be Learned from International Experiences? (available at: <https://www.imf.org/external/np/pp/eng/2015/111015b.pdf>)
- IMF 2016. Middle East, North Africa, Afghanistan, and Pakistan, Regional Economic Outlook.
- Jadwa Investment, 2016.Saudi Vision 2030, available at: <http://www.jadwa.com/en/researchsection/research/economic-research>.
- Jadwa Investment, 2016.Labour Market Update, available at: <http://www.jadwa.com/en/researchsection/research/economic-research>.
- Kamrava, Mehran 2013. *Qatar: Small State, Big Politics*. Ithaca: Cornell University Press.
- Kechichian, Joseph A. 2010. Sovereign Wealth Funds in the United Arab Emirates in Yi-chong Xu and Gawdat Bahgat, eds. *The Political Economy of Sovereign Wealth Funds*, Basingstoke: Palgrave Macmillan, 88-112.
- Kinninmont, Jane 2015. Future Trends in the Gulf, Chatham House Report, available at: https://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20150218_FutureTrendsGCCKinninmont.pdf.
- Kerr, Simeon 2015. Saudi Arabia withdraws overseas funds, available at: <http://www.ft.com/cms/s/0/8f2eb94c-62ac-11e5-a28b-50226830d644.html#axzz4E6YWDgqw>.
- Kotter, J. and U. Lel 2011. "Friends or Foes? Target Selection Decisions of Sovereign Wealth Funds and Their Consequences", *Journal of Financial Economics*, 101 (2), 360-381.
- Larbi, Hedi 2016. Rewriting the Arab Social Contract toward Inclusive Development and Politics in the Arab World, Harvard Kennedy School Belfer Centre for Science and International Affairs Study Group Report, available at: http://belfercenter.ksg.harvard.edu/publication/26465/rewriting_the_arab_social_contract.html
- Lawson, Fred H. 2011. Geo-Political Complications of the US Free Trade Agreements with Gulf Arab Countries" in Matteo Legrenzi and Bessma Momani, eds., *Shifting Geo-Economic Power of the Gulf: Oil, Finance and Institutions*. Ashgate,199-210
- Lee, Yvonne C.L. 2010. "Between Principles and Politics: The Pragmatic Practice of Singapore's Sovereign Wealth Funds", in Xu Yi-chong and Gawdat Bahgat, eds., *The Political Economy of Sovereign Wealth Funds*. Basingstoke: Palgrave Macmillan, 47-71
- McKinsey Global Institute 2015. *Moving Saudi Arabia Beyond Oil: The Investment and Productivity Transformation*

- Marchick, David M. and Matthew J. Slaughter 2008. "Correcting a Protectionist Drift" Global FDI Policy Special Report no 34, New York: Council on Foreign Relations June 2008.
- Massoudi, Arash and Kate Allen 2014. Qatar Replaces Head of \$300bn Fund", *Financial Times* Dec 4, 2014.
- Matthiesen, Toby 2015. "Conservative Monarchies in a Transforming Region" in Valeria Talbot, ed., *The Rising Gulf: The New Ambitions of the Gulf Monarchies*, Milan: ISPI.
- Mitchell, Olivia. S. John Piggott and Cagri Kumru 2008. "Managing Public Investment Funds: Best Practices and New Challenges", *Journal of Pension Economics and Finance* 7 (3), 321-356.
- Momani, Bessma 2011. "Shifting Gulf Arab Investments into the Mashreq: Underlying Political Economy Rationales?" In Matteo Legrenzi and Bessma Momani, eds., *Shifting Geo-Economic Power of the Gulf: Oil, Finance and Institutions* Ashgate, 163-181.
- Mooney, Attracta 2015. Sovereign wealth funds withdraw \$19bn from asset managers, *Financial Times*, available at: <http://www.ft.com/cms/s/0/934f6f1c-9aab-11e5-be4f-0abd1978acaa.html#axzz4E1he64sA>.
- Morris, Martin 2014. SWFs in the Gulf reach new heights through oil reserves, World Finance, available at: <http://www.worldfinance.com/wealth-management/swfs-in-the-gulf-reach-new-heights-through-oil-reserves>)
- Narbonne, Luigi and Valeria Talbot 2015. "The Rising Gulf: What Implications for the EU?" in Valeria Talbot, ed, *The Rising Gulf: The new Ambitions of the Gulf Monarchies*, Milan: ISPI.
- Onley, James 2007. *The Arabian Frontiers of the British Raj: Merchants, Rulers and the British in the Nineteenth Century Gulf*, Oxford Historical Monographs (Oxford University Press, 2007).
- Onley, James and Sulayman Khalaf, 2006. 'Shaikhly Authority in the Pre-oil Gulf: A Historical-anthropological Study', *History and Anthropology*, Vol. 17, No. 3 (2006), pp. 189–208, available at <http://sulaymankhalaf.com/pdf/Onley-and-Khalaf-2006.pdf>.
- Persaud, Avinish 2011. "The Political Economy of Sovereign Wealth Funds" in R.A. Fry, W.J. McKibbin and J O'Brien, eds., *Sovereign Wealth: The Role of State Capital in the New Financial Order*. London: Imperial College Press95-104.
- Ramesh, Randeep 2016. "Qatari Billionaire Cannot be Sued over Torture Claim, London Court Rules" *The Guardian* Feb 15, 2016.
- Reisen, Helmut 2008. "Commodity and Non-Commodity Sovereign Wealth Funds" Working Paper Series Research Notes 28 Deutsche Bank Research July 2008.
- Rippenburg, Carol J. 1998. *Oman: Political Development in a Changing World*. Westport: Praeger.
- Rouis, Mustapha 2013. Response of the Arab Donors To the Global Financial Crisis and the Arab Spring, MENA Knowledge and Learning Series, the World Bank, available at: <http://siteresources.worldbank.org/INTMENA/Resources/QN112.pdf>.
- Saif, Ibrahim and Rand Fakhoury 2012. Lessons from the Gulf's Twin Shocks, Carnegie Europe, available at: <http://carnegieeurope.eu/publications/?fa=47196>.
- Sender, Henny 2016. Lower oil tests sovereign wealth funds, available at: <http://www.ft.com/cms/s/0/ecf838cc-ef61-11e5-aff5-19b4e253664a.html#axzz4E6YWDgqw>.

- Setser, Brad and Rachel Ziemba 2009. "GCC Sovereign Wealth Funds: Reversal of Fortune", Council on Foreign Relations, Center for Geoeconomic Studies Working Paper, January, 2009.
- State General Reserve Fund (SGRF) 2014. Building a Sustainable Future for Oman, Annual Report. Ministry of Finance, SGRF.
- Shahin, Wasseem and El Achkar 2013. "Prospects for Monetary Coordination in the Mediterranean Region: More or Larger Monetary Unions", in Marge Peeters, Nidal Sabri and Wasseem Shahin, eds., *Financial Integration: A Focus on the Mediterranean Region*. Springer.
- Shemirani, Manda 2011. *Sovereign Wealth Funds and International Political Economy*. Burlington, VT: especially Ch. 4: How Abu Dhabi Investment Authority Became an Entrepreneur.
- Smith-Diwan, K. 2009. Sovereign Dilemmas: Saudi Arabia and Sovereign Wealth Funds *Geopolitics* 14 (2), 345-359.
- Soto, Raimundo 2016. Policy Goals, Fiscal Institutions and Macroeconomic Management in the UAE, Economic Research Forum.
- Sovereign Wealth Fund Institute, Saudi Arabian Monetary Agency, <http://www.swfinstitute.org/swfs/sama-foreign> holdings/
- Talbot, Valeria (2010), GCC Economic Presence in the Mediterranean and the Outlook for EU-GCC Cooperation, The German Marshall Fund of the United States, available at: http://www.iai.it/pdf/mediterraneo/GMF-IAI/Mediterranean-paper_09.pdf.
- Talahite, Fatiha and Sami Beji 2013. "Foreign Exchange Reserve Accumulation and the Importance to the Economies of Algeria and Tunisia" in Marge Peeters, Nidal Sabri and Wasseem Shahin, eds., *Financial Integration: A Focus on the Mediterranean Region*. Springer.
- The Economist 2014. "In-house Revolt", Economics and Finance, *The Economist* Nov 1, 2014,
- Truman, Edward 2008. "A Blueprint for Sovereign Wealth Fund Best Practices", Peterson Institute for International Economics, Policy Brief No PB08-3 Washington, D.C.
- Truman, Edward M. 2010. *Sovereign Wealth Funds: Threat or Salvation?* Washington, D.C. Peterson Institute for International Economics.
- Truman Edward, M. 2013 Implementation of the Santiago Principles for Sovereign Wealth Funds: A Progress Report" Policy Brief 13-31 Peterson Institute for International Economics.
- Widdershoven, Cyril (2016), "Analysis: Petro-dollar crunch hits GCC sovereign wealth funds", Investment and Pension Europe, available at: <http://www.ipe.com/news/analysis-petro-dollar-crunch-hits-gcc-sovereign-wealth-funds/10012612.fullarticle>.
- World Bank (2015), Understanding the Plunge in Oil Prices: Sources and Implications: https://www.worldbank.org/content/dam/Worldbank/GEP/GEP2015a/pdfs/GEP2015a_chapter4_report_oil.pdf.
- Xu, Yi-chong 2010. "The Political Economy of Sovereign Wealth Funds" in Yi-chong Xu and Gawdat Bahgat, eds., *The Political Economy of Sovereign Wealth Funds*. Basingstoke: Palgrave Macmillan, 1-25.

Xu, Yi-chong 2010. "Global Disequilibria" in Yi-chong Xu and Gawdat Bahgat, eds, *The Political Economy of Sovereign Wealth Funds*. Basingstoke: Palgrave Macmillan, 245-267.

Zahlan, Rosemarie Said 1998. *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates and Oman*: Reading: Ithaca Press

Table 1: Data on Sovereign Wealth Funds

Table 1. Data on Sovereign Wealth Funds													
Part A: 2008													
Country	Name of SWF	Assets (\$ Bill) 2008	SWF Scoreboard 2007	Linaburg-MalTransparency	OBS2008-10	Oil Rents%of GDP2000-	WB Control of Corr.	WB Govt Effectiveness	WB Political Stability	WB Regulatory Quality	WB Rule of Law	WB Voice and Accountability	Years since Founding
Norway	Govt. Pension F.	322.3	92	10	80	19.5	2.140906	1.964137	1.296489	1.33494857	1.9065539	1.58183082	18
Algeria	Rev. Reg. Fund	58.6	26	1	13	46	-0.67248	-0.67032	-1.48297	-0.6119201	-0.8095043	-1.0678699	8
Bahrain	Mumtalakat Holding	12.8	38	7	10	32.5	0.37206	0.506067	-0.04876	0.69823423	0.49451276	-0.8286023	2
Iran	Nat'l. Dev. F.		33			42.5	-0.47876	-0.51961	-0.79906	-1.4678646	-0.714827	-1.1793538	
Iraq	Dev. Fund				0		-1.43686	-1.76065	-2.31514	-1.7382414	-1.6489548	-1.6765431	5
Kuwait	K. Inv. Auth.	245	55	6	20	57.2	0.794116	0.077064	0.28229	0.21782637	0.58704646	-0.3698734	55
Libya	L. Inv. Auth.	55.8		2	15	55.7	-0.86947	-0.99931	-0.06606	-1.5637976	-0.9098882	-1.7373937	2
Oman	State Gen. Res.Fund	8.2	25	1	8	49.2	0.451166	0.399892	0.905048	0.40178008	0.54769723	-0.7885778	28
Oman	O. Inv. Fund			1	8	49.2	0.451166	0.399892	0.905048	0.40178008	0.54769723	-0.7885778	2
Qatar	Q. Inv. Auth.	60	15	5	0	53.1	0.64715	0.468423	0.893462	0.15526885	0.51109217	-0.5369047	3
Saudi Arabia	SAMA For.Hold.	441		2	1	58.3	-0.30808	-0.26942	-0.23237	-0.0298381	0.14377874	-1.5454528	25
Saudi Arabia	Pub. Inv.F.			3	1		-0.30808	-0.26942	-0.23237	-0.0298381	0.14377874	-1.5454528	
Sudan	Dev. Stab.F.		19	0			-1.17701	-1.19466	-2.1115	-1.3094734	-1.4878666	-1.7099019	3
United Arab Emirates AD	AD Inv. Auth.	512	26	3	5	32.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	32
United Arab Emirates AD	AD Inv.Coun.				5	32.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	1
United Arab Emirates AD	Int. Pet. Inv. Co.	23.3	37	4	5	32.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	24
United Arab Emirates AD	Mabadala	13.7	32	7	5	32.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	6
United Arab Emirates Dubai	Inv.Corp. D.		21	4	5	12.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	2
United Arab Emirates Dubai	D. Internat. Capital		55		5	12.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	4
United Arab Emirates Dubai	Istihmar World		17		5	12.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	5
United Arab Emirates RAK	RAK Inv. Auth.	0.3			5		0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	3
United Arab Emirates Federal	Emirates Inv. Auth.				5	27.5	0.714997	0.763765	0.868055	0.74078882	0.57068608	-0.7505793	1
Overall Mean of SWFs Listed Above but also from		127.8	39.39	4.18	10.05	38.44	0.118	0.111	0.163	0.062	0.057	-0.883	
Part B: 2012-5													
Norway	Govt. Pension F.	878	98	10	84	12	2.129239	1.847057	1.270744	1.54054621	1.945770213	1.670477169	25
Algeria	Rev. Reg. Fund	50	29	1	19	30.1	-0.52126	-0.55193	-1.22989	-1.1280881	-0.73408448	-0.969878946	15
Bahrain	Mumtalakat Holding	10.5	39	10	10	24.1	0.302864	0.521318	-0.7556	0.69941372	0.43835634	-1.11909467	9
Iran	Nat'l. Dev. F.	62	41	5	3	29	-0.7932	-0.53482	-1.29544	-1.5652238	-0.94857837	-1.5676315	4
Iraq	Dev. Fund	18			3	56.2	-1.32939	-1.16467	-2.17041	-1.1529603	-1.58289611	-1.13092431	12
Kuwait	K. Inv. Auth.	592	73	6	20	43.1	0.129275	0.017702	0.283206	0.04796053	0.458257786	-0.565521176	62
Libya	L. Inv. Auth.	66	6	1	21	51.1	-1.30124	-1.32864	-0.76703	-1.4928437	-1.10014435	-1.468213771	9
Oman	State Gen. Res.Fund	34	27	4	8	38.3	0.204764	0.3282	0.612093	0.52510347	0.609483736	-1.014257346	35
Oman	O. Inv. Fund	6		4	8	38.3	0.204764	0.3282	0.612093	0.52510347	0.609483736	-1.014257346	9
Qatar	Q. Inv. Auth.	256	17	5	0	39.2	1.28618	0.898074	1.142204	0.65111046	0.949801837	-0.894345147	10
Saudi Arabia	SAMA For.Hold.	686		4	0	47.6	-0.04722	-0.01661	-0.38028	0.1016181	0.217117874	-1.776970489	32
Saudi Arabia	Pub. Inv.F.	5		4	0	47.6	-0.04722	-0.01661	-0.38028	0.1016181	0.217117874	-1.776970489	7
Sudan	Dev. Stab.F.		18		10	8.1	-1.3767	-1.41022	-2.44906	-1.3894629	-1.25333059	-1.721498319	10
United Arab Emirates AD	AD Inv. Auth.	773	58	6	5	30.1	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	39
United Arab Emirates AD	AD Inv.Coun.	110			5	30.1	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	8
United Arab Emirates AD	Int. Pet. Inv. Co.	68.4	46	9	5	30.1	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	31
United Arab Emirates AD	Mabadala	66.3	65	10	5	30.1	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	13
United Arab Emirates Dubai	Inv.Corp. D.	196	21	5	5	10.7	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	9
United Arab Emirates Dubai	D. Internat. Capital	85.5	55	0	5	10.7	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	11
United Arab Emirates Dubai	Istihmar World	4	17		5	10.7	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	12
United Arab Emirates RAK	RAK Inv. Auth.	1		3	5	10	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	10
United Arab Emirates Federal	Emirates Inv. Auth.	15		3	5	25.1	1.112743	1.093544	0.841653	0.61561738	0.536787987	-0.955313904	8
Overall Mean of SWFs Listed Above but also from		170.6	43.47	4.86	15.4	33.9	0.24	0.295	0.074	0.08	0.104	-1.019	16.2