Note de l’Ifri

The new challenges for oil-based sovereign wealth funds

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Quentin Boulanger

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Abstract

Sovereign wealth funds (SWFs) are often presented as an effective instrument for managing hydrocarbon rents, reducing the impact of the volatility of oil or gas revenues on the economy, separating expenditure from income, and promoting a more transparent management of the rent. The asset allocation strategy has become more complex with the rapid rise in oil prices between 2007 and 2014, and the substantial financial reserves accumulated in hydrocarbon-producing countries, switching from an approach of wealth management to an approach of investment and financial optimisation. Hence, these funds have become major players on the international financial and industrial scene. Moreover, with the discovery of new hydrocarbon resources in recent years, particularly in Africa, the strategies of new funds appear to be moving towards a new goal of local economic development. But the unforeseen collapse of crude oil prices in recent months poses a new risk for some SWFs based on hydrocarbon revenues, which has to come to the aid of their economies and focus on their main principle of macroeconomic stabilisation.
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Introduction

Although the inception of the first SWFs can be traced back to the 1950s, these public investment funds have become major players on the international financial scene since the 2000s. During the financial crisis, the involvement of some SWFs in the international financial markets was unprecedented. These funds provided liquidity to the markets and prevented the collapse of stock exchanges by means of a long-term investment horizon, while supporting several banks, such as CITI Bank by the Abu Dhabi Investment Authority or Morgan Stanley by the China Investment Corporation\(^1\). In 2007 and 2008, the total assets in the financial sector accounted for 42% of SWFs' investments (Kern, 2009). This impact has caused deep concern on the international financial stage because of the effects of these investments, sometimes in strategic areas, on business and foreign markets. The link between the investment decisions of these new players and their potential desire to exercise political influence was at the heart of the concerns of several G7 countries, especially as many SWFs are characterised by high opacity about their strategy\(^2\).

Out of the 75 funds listed by the Sovereign Wealth Fund Institute in December 2014, 48 were created after 2000, with revenues largely generated from oil, gas, or mineral exports. This development is closely associated with the rapid rise in oil prices between 2007 and 2014, as well as higher prices for minerals, resulting in substantial foreign exchange reserves for the producer countries. An oil-based SWF is first of all designed as a tool for managing hydrocarbon rents, reducing the impact of the volatility of oil or gas revenues on the economy, separating expenditure from income, and promoting a more transparent management of the rent. However, the asset allocation strategy has become more complex with the considerable financial reserves accumulated by hydrocarbon-producing countries, switching from an approach of wealth management to an approach of investment and financial optimisation. In addition, with the discovery of new hydrocarbon resources in the


last few years, particularly in Africa, the strategies of new funds have focused on local economic development. However, the fall in crude oil prices seen since June 2014, is becoming a critical issue for many SWFs funded by oil and gas exports, and these funds are being used to support and stabilise the economy.

The objective of this paper is to analyse the change in SWFs’ strategies in recent years, by adopting a comparative approach between the different type of funds, while taking the economic characteristics of the countries and the current climate of the fall in crude oil prices into account.
Objective and typology of SWFs: the progressive evolution towards a financial approach

SWFs are public investment vehicles in principle aiming to invest fiscal or trade surpluses in a long-term approach, by managing a diversified portfolio of national and international financial assets separately from the country’s official foreign exchange reserves. Faced with a significant currency influx, the inception of these SWFs helps to prevent the risk of the national economy overheating, by ensuring a balance between the economy's absorptive capacity and the monetary supply. In raw material-producing countries, these funds are considered to be instruments for managing the rents.

They now have a substantial financial impact on the international financial stage. In December 2014, nearly 7,000 billion dollars were managed by the SWFs, an amount three times greater than that of 2007. As a comparison, the total size of assets managed by the SWFs is two to three times greater than that of hedge funds, but much less than that of pension funds (which accounted for over 24,000 billion dollars in 2013 according to OECD data).

The funds supplied by revenues from raw materials (oil, gas, and to a lesser extent phosphate, copper, diamonds or minerals) account for 61% of the total amount of SWFs' assets (59% for oil- and gas-based SWFs). The sources of other SWFs come from foreign exchange reserves related to a lasting positive balance of trade.

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Chart 1: The 15 largest SWFs in the world
(December 2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Fund name</th>
<th>Assets in billions of $</th>
<th>Inception date</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>Government Pension Fund - Global</td>
<td>893.0</td>
<td>1990</td>
<td>Oil</td>
</tr>
<tr>
<td>Un. Arab Emirates</td>
<td>Abu Dhabi Investment Authority (ADIA)</td>
<td>773.0</td>
<td>1976</td>
<td>Oil</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>SAMA Foreign Holdings</td>
<td>757.2</td>
<td>Na</td>
<td>Oil</td>
</tr>
<tr>
<td>China</td>
<td>China Investment Corporation</td>
<td>652.7</td>
<td>2007</td>
<td>Others</td>
</tr>
<tr>
<td>China</td>
<td>SAFE Investment Company</td>
<td>567.9</td>
<td>1997</td>
<td>Others</td>
</tr>
<tr>
<td>Kuwait</td>
<td>Kuwait Investment Authority (KIA)</td>
<td>548.0</td>
<td>1953</td>
<td>Oil</td>
</tr>
<tr>
<td>China - Hong Kong</td>
<td>Hong Kong Monetary Authority Investment Portfolio</td>
<td>400.2</td>
<td>1993</td>
<td>Others</td>
</tr>
<tr>
<td>Singapore</td>
<td>Government of Singapore Investment Corporation</td>
<td>320.0</td>
<td>1981</td>
<td>Others</td>
</tr>
<tr>
<td>Qatar</td>
<td>Qatar Investment Authority (QIA)</td>
<td>256.0</td>
<td>2005</td>
<td>Oil &amp; Gas</td>
</tr>
<tr>
<td>China</td>
<td>National Social Security Fund</td>
<td>201.6</td>
<td>2000</td>
<td>Others</td>
</tr>
<tr>
<td>Singapore</td>
<td>Temasek Holdings</td>
<td>177.0</td>
<td>1974</td>
<td>Others</td>
</tr>
<tr>
<td>Australia</td>
<td>Australian Future Fund</td>
<td>95.0</td>
<td>2006</td>
<td>Others</td>
</tr>
<tr>
<td>Un. Arab Emirates</td>
<td>Abu Dhabi Investment Council</td>
<td>90.0</td>
<td>2007</td>
<td>Oil</td>
</tr>
<tr>
<td>Russia</td>
<td>Reserve Fund</td>
<td>88.9</td>
<td>2008</td>
<td>Oil</td>
</tr>
<tr>
<td>Russia</td>
<td>National Welfare Fund</td>
<td>79.9</td>
<td>2008</td>
<td>Oil</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Oil- and gas-based SWFs in the world</strong></td>
<td><strong>4,292</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>7,057</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Na: Not available
Initially, the inception of a SWF enables an oil-exporting country to escape the natural resources curse, a well-known phenomenon in oil-exporting countries associated with the Dutch disease\(^5\) and with a high governance deficit. These public investment funds have primarily macroeconomic objectives. They enable the exporting country to cope with the high volatility of oil revenues, while minimising the effects of the Dutch disease in the short term, and in the long term, establish financial revenues for future generations, particularly when the oil reserves will be exhausted. These funds also help to make the use of oil rents more transparent.

Many oil-exporting countries have established a stabilisation fund which accumulates revenues when the oil price exceeds a certain threshold and becomes a source of revenue when the price is lower than a pre-defined minimum price. The stabilisation of government revenues and the reduction of the volatility and uncertainty related to crude oil exports help to avoid any disruption of public investment programmes and attract new investments. However, as emphasised by Raymond (2009), this simple principle becomes complex to implement, as long as transitory price variations are \textit{a priori} difficult to differentiate from permanent changes. Many countries have introduced this type of fund, such as Chile (Economic and Social Stabilisation Fund), Iran, and Russia (Oil stabilisation Fund). Because they are based on a source of uncertain and volatile revenue, these funds will tend to adopt an investment strategy similar to that of central banks, geared towards safe and liquid assets, such as treasury bonds issued by governments, which account for 70% of their assets (Hassan et al., 2013). This contra-cyclical role in relation to world oil prices is fundamental for economies that are heavily dependent upon the hydrocarbon sector.

Saving funds for future generations help, in turn, to maintain intergenerational equity. They are regularly funded by a fixed percentage of oil revenues and reinvested in financial assets on the international capital market. These funds can be found in the United Arab Emirates (UAE) with the Abu Dhabi Investment Authority (ADIA), or else in Libya or Russia (National Wealth Fund). These

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\(^5\) The \textit{Dutch Disease} refers to the odd contrast between, on the one hand, a rather depressed domestic economic situation (declining industrial production, investments and profits, with a soaring unemployment rate), and on the other, a large surplus balance of trade (strong currency and high surplus in the current account). This disease occurs when the massive influx of oil revenues drives up the actual exchange rate of the country’s currency, making most other exports uncompetitive. The economy has to cope with the destruction of the non-oil tradable goods. The oil sector absorbs a part of the workforce in other sectors of the economy, as the factors of production are better paid. The oil-exporting countries become dependent upon oil revenues. In addition, the disappearance of the manufacturing sector results in a loss of \textit{learning by doing} a characteristic specific to this sector, generating positive externalities on the rest of the economy because of the acquisition of knowledge and technological progress (Aoun, 2011).
funds are characterised by high flexibility and a particularly long investment horizon, which allow them to become involved in riskier investments.

Mainly concentrated in south-eastern Asia (China, South Korea or Singapore), non-oil-based funds financed by surplus from the current account are essentially optimisation funds, which aim to maximise the return on the foreign exchange reserves held.

Finally, some SWFs are pursuing a development goal and are seeking to allocate resources for long-term, socio-economic projects with a strategic importance for the local economy and industrial development, like in the UAE (Mubadala) or in Iran (National Development Fund). This type of fund is used to manage a part of the national wealth and to finance local investment in the absence of a developed local financial market (Raymond, 2009).

Generally, sovereign funds established in countries rich in natural resources have multiple objectives: stabilisation and saving (Azerbaijan, Botswana, Trinidad and Tobago, and Norway); savings and pension (Australia); or stabilisation, savings and development (Kazakhstan). At the time of their inception, these funds often begin to invest in low-risk assets (such as bonds), and then gradually diversify into equities before focusing on alternative asset classes (real estate, hedge funds, private equity, or infrastructure) (Banque de France, 2012). This pattern is the one which was adopted by the Norwegian SWF.
Box 1: The Norwegian SWF

Norway set up an oil-based SWF in 1990, which only became effective in 1996 due to the recession in the early 90s. It was designed on the one hand to cover against the risk of declining oil production, and on the other to ensure a source of additional revenue with the increasing retirement of the baby-boom generation. The Ministry of Finance entrusted the operational management of the fund to the Norwegian Central Bank.

The Government Pension Fund Global is now the largest SWF in the world, with more than $890 billion in total assets in December 2014. Fully integrated in the Norwegian budget, the SWF contributes up to 4% of returns on investment annually to the country’s budget.

The Norwegian fund is characterised by a high degree of transparency and clearly discloses its socially responsible investment strategy. Investments are made solely abroad and must comply with ethical rules. In 2013, the Norwegian fund invested 61.5% in equities, 37% in fixed-income securities, and 1% in real estate. In addition to certain criteria, which have been established for several years to exclude certain companies from its investment portfolio, particularly in the armaments or tobacco sectors, the SWF announced in February 2015 that it had withdrawn from 32 coal-mining companies in 2014 because of environmental damages.

For the period 2014-2016, the SWF is primarily planning to increasingly gain full ownership of the acquired assets and to take shareholdings in targeted companies. The number of companies in which the Norwegian SWF owns more than 5% of the shares should increase to more than 100 in 2016.

New strategies for asset allocation and rent management

*Investment diversification in geographical terms and by asset type*

The financial crisis in 2008 marked a turning point in the investment strategy of SWFs. In 2008, around 60% of direct investments made by SWFs from the Gulf countries were in financial assets in difficulty (KPMG, 2013), and between 2007 and 2009 investments by SWFs in the financial markets lost 45% of their value (Kern, 2009).

While the foreign exchange reserves have remained substantial in the wake of the financial crisis, many SWFs have increasingly adopted investment strategies in alternative asset classes, which are less volatile than the financial sector, but with a high, short-term return on investment (real estate, energy services, manufacturing6) – as demonstrated by Alhashel (2014) in a complete literature review on the investment strategies of SWFs.

6 See Fei and Xu (2011).
This diversification strategy into alternative assets helps protect the national economy from fluctuations in oil prices. Investment in complementary assets is part of the main goal of stabilisation. In addition to investments in fixed-income securities guaranteeing stable revenues, investment in assets with no cyclical dimension (for example in the pharmaceutical industry, energy services, or real estate) helps to ensure a higher return on investment when the oil price falls. In 2010, for example, the Qatar Investment Authority (QIA) explained its holding in Veolia Environnement on its website by this approach of complementarity (Fei and Xu, 2011).

The Kuwaiti SWF, the Kuwait Investment Authority (KIA), one of the oldest SWFs, is the 6th largest in 2014 in terms of managed assets. It has both a stabilisation objective and an intergenerational savings role. The fund has historically been a conservative investor turning mainly to treasury bonds and in developed countries. In 2005, this SWF basically revisited its investment strategy.

In accordance with the recommendations of an external auditor, KIA adopted a new asset allocation strategy in 2005 with the objective of doubling its managed volumes by 2015. This ambitious

goal involves optimising the return on investments which has lead KIA to be more present in emerging markets and to focus on direct investments in the private sector and in alternative assets (including real estate). Between 2004 and 2010, the proportion of alternative investments in KIA’s total portfolio increased from 13 to 27%.

Since 2006, KIA along with diversifying its mandate, has reformed its organisational structure to ensure the quality of its investment choices and their compatibility with its main role of managing oil rents. This reform moves towards a greater specialisation, particularly through the creation of departments dedicated to managing specific assets, including alternative assets and non-cyclical securities.

Similarly, SOFAZ, the Azeri SWF founded in 1999, is a stabilisation and savings fund. It traditionally invests in fixed-income securities in euros, dollars or yen. In October 2011, amendment 519 to the “investment policy of the oil-based SWF of the Republic of Azerbaijan” expanded the fund’s mandate and authorised investment in different currencies (for example the yuan, rouble, and Turkish lira among others), in line with opening up to new countries and markets (gold and real estate). This diversification has helped SOFAZ to see returns on investments increase by 0.9% in 2010 and 2011, to around 2% for 2012 and 2013.

In terms of the geographical distribution of their investments, many SWFs have been turning to emerging markets in Asia, Brazil, or Russia since 2009, like the Norwegian or Singaporean SWFs. However, this trend appears to have been losing momentum since 2011, mainly because of slower growth in emerging countries. In 2013, the main areas of interest for direct investments by SWFs were Europe (37%), Asia-Pacific (18%), but also non-Asia Pacific countries such as Russia, India, or Turkey (18%), and the United States (16%) (Bocconi, 2013).

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9 See the SOFAZ website, <www.oilfund.az/en_US/about_found/logo.asp>. 
The uncertain growth of sovereign development funds

With the exploitation of new fossil resources (offshore or non-conventional hydrocarbons), SWF projects have increased in recent years, particularly in Africa, where many countries like Angola, Nigeria, or Ghana have created their own SWFs. The African funds only represent 2.2% of the total amount managed by the SWFs, but several other countries like Tanzania, Zimbabwe, Mozambique, or Zambia are planning to establish SWFs in the coming years (Dixon and Monk, 2011). The assets of these funds would a priori be focused on local economic development goals.

This local investment role is not specific to the new African SWFs. This development objective can be found in the mandate of the Kazakh, Malaysian, UAE, or Russian funds (Gelb et al., 2014). Since 2005, the KIA has been setting a local economic development goal by supporting the financial and real estate sectors through funding SMEs (KPMG, 2013). This strategy is also adopted by the Temasek fund, which originates from the initial state development strategy of Singapore through public investment and creating national companies (Raymond, 2009). Therefore, this local development role is added to the initial objectives of stabilisation and saving.

The strategy of the new Nigerian SWF forms part of a development fund approach. This fund (Nigeria Sovereign Investment Authority - NSIA) was created in 2011 and replaced the previous one (Excess Crude Account). It has the threefold objective of stabilisation, savings, and development. With an initial endowment of $1 billion, the NSIA has allocated $400 million to the stabilisation fund, 200 million to the savings fund, and 400 million to funds for infrastructure. Only the last fund has a mandate to invest in Nigeria, and the other two are placing their assets abroad. In December 2014, NSIA assets increased to $1.4 billion. This formal division of roles helps to protect the Nigerian economy from over-investment at local level and to create complementarity between the national development role and the two macroeconomic goals of stabilisation and savings (Capapé, 2012).

The growth of these SWFs in Africa is related to the rapid accumulation of foreign exchange reserves since the start of the 2000s. However, with the drop in oil prices in recent months, high uncertainty surrounds the sustainability of these reserves and the future of these young SWFs.
The focus of SWFs on local development reinforces the operational management challenges of the fund, since it involves establishing a co-ordinated strategy between the fund manager, the state, and the institutional players dedicated to development. It requires regular monitoring of investments so that they do not exceed the absorptive capacity of the national economy, and therefore requires use of an external auditor or the creation of a dedicated monitoring department. The Pula fund of Botswana, established in 1994, preferred to focus on the objectives of stabilisation and savings and to adopt a conservative approach with the management of liquid and fixed-income assets. This fund is often quoted as an example of successful management of its declining mining revenues and has accumulated assets accounting for nearly 40% of its GDP.

Gelb et al. (2014) advocate for the respective roles of development banks and SWFs to be clearly distinguished. To be effective, the funds’ asset allocation should only choose projects with a sufficiently high return on investment, and not associated with political objectives. These selection criteria should be established at the inception of the fund. The case of the Angolan SWF, created in October 2012, reflects the fragility of asset allocation strategies when economic development becomes a political priority. This SWF seeks to diversify asset allocation at national and international level. It is not a stabilisation tool, but its objective is to diversify the economy. The President of the Republic of Angola has full authority to approve the fund’s investment policy, annual and multi-year budgets, operational management reports, and annual investment strategy (GeoEconomica, 2014). This high involvement by the political...
authorities raises concerns about the effectiveness of investment management.

So, these diversification strategies into new types of assets and markets are gradually part of an optimisation or economic development approach that requires a redefinition of the mandate of SWFs in general. This complexification of the investment strategy also increases the requirement for financial expertise, but also for independence of investment decisions vis-à-vis the political authorities. This new asset allocation strategy should be accompanied by a change in the organisational structures of SWFs (Bauer and Rietveld, 2014).
Assessment of SWFs in terms of governance and economic stabilisation

The Santiago Principles as evaluation criteria

Given the expansion of SWFs and the reorientation of their investment strategy, the management of SWFs has become a major concern for multilateral institutions since 2008 (European Commission\textsuperscript{10}, IMF and OECD) due to their size and their ability to disrupt the financial markets.

In October 2008, 26 SWFs belonging to the intergovernmental working group established at the IMF developed a guide of good practices (Generally Accepted Principles and Practices or GAPP), known as the Santiago Principles. The group also relied on contributions from the World Bank, OECD, European Commission and representatives of several host countries, including France, the United Kingdom, Australia and the United States. In October 2014, 31 SWFs, whose total assets account for 4,000 billion dollars, committed to adopting these principles (GeoEconomica, 2014).

The Santiago Principles have three basic objectives. Firstly, they are primarily intended to ensure the independence of the SWF from the political authorities. They establish a distribution of rights and obligations between the state as shareholder and the fund managers, favour investments related to financial profitability, and promote monitoring of the funds by the financial markets worldwide. The second objective is related to improving the level of transparency of the funds in both their asset structure and their strategy. So, the GAPPs allow the SWFs to clearly set out their objectives, their legal framework, and their investment strategy. These components must be determined in coordination with other institutional players in the country (including the Central Bank and the Development Bank). Finally, the principles focus on the internal governance framework, and on the application of the

\textsuperscript{10} A communication from the European Commission dated February 27, 2008 about “A common European approach to Sovereign Wealth Funds”, \url{http://europa.eu/legislation_summaries/internal_market/single_market_capital/mi0003_en.htm}. 
standards and procedures promoting accountability and operational independence of the sovereign funds management (see Appendix I)\textsuperscript{11}.

Although their implementation is based solely on a voluntary approach, the criteria drawn up as part of the Santiago Principles are used to monitor change in the bodies governing the operation of SWFs. The degree of compliance of the funds with this code of good practice, which is evaluated on an annual basis by an external auditor, remains highly heterogeneous, as shown in the table below.

**Chart 6: Santiago Compliance Index – SCI in 2014**

<table>
<thead>
<tr>
<th>SWF</th>
<th>Grade</th>
<th>SWF</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Fund of Timor Leste</td>
<td>A</td>
<td>China Investment Corporation</td>
<td>C+</td>
</tr>
<tr>
<td>PRF/Economic and Social Stabilisation Fund (Chile)</td>
<td>A</td>
<td>Abu Dhabi Investment Authority</td>
<td>C+</td>
</tr>
<tr>
<td>Future Fund (Australia)</td>
<td>A-</td>
<td>GIC Private Limited (Singapore)</td>
<td>C+</td>
</tr>
<tr>
<td>New Zealand Superannuation Fund</td>
<td>A-</td>
<td>Khazanah Nasional Berhad (Malaysia)</td>
<td>C+</td>
</tr>
<tr>
<td>Government Pension Fund Global (Norway)</td>
<td>A-</td>
<td>National Development Fund (Iran)</td>
<td>C+</td>
</tr>
<tr>
<td>Heritage and Stabilisation Fund (Trinidad and Tobago)</td>
<td>A-</td>
<td>Russia Direct Investment Fund</td>
<td>C</td>
</tr>
<tr>
<td>Alaska Permanent Fund</td>
<td>A-</td>
<td>Kuwait Investment Authority</td>
<td>C</td>
</tr>
<tr>
<td>Heritage Fund (Alberta/Canada)</td>
<td>A-</td>
<td>Libya Investment Authority</td>
<td>C</td>
</tr>
<tr>
<td>Broadly compliant ($475 billion)</td>
<td></td>
<td>Not compliant ($304 billion)</td>
<td></td>
</tr>
<tr>
<td>State Oil Fund of Azerbaijan</td>
<td>B+</td>
<td>Qatar Investment Authority</td>
<td>D</td>
</tr>
<tr>
<td>Pula Fund (Botswana)</td>
<td>B+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria Sovereign Investment Authority</td>
<td>B+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSC National Investment Corporation (Kazakhstan)</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temasek Holdings (Singapore)</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserve/National Wealth Fund (Russia)</td>
<td>B-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundo Soberano de Angola (Angola SWF)</td>
<td>B-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The SWFs: National Pensions Reserve Fund (Ireland), JSC Samruk – Kazyna (Kazakhstan), Fondo Strategico Italiano (Italian Strategic Fund) and Oil Revenues Stabilisation Fund (Mexico) are not graded, although they are signatories to the GAPPs.
- The SCI is based on an assessment by GeoEconomica which takes the actual public disclosure of information required in the Santiago Principles into account.


\textsuperscript{11} For a full analysis of the issues of the Santiago Principles, see Bertin-Delacour (2009).
Recently established funds, such as the Chilean (2006) or the Australian (2012) SWFs are considered as being fully compliant with the Santiago Principles. The Nigerian or Angolan sovereign funds adopted the Principles last June and may be pursuing the practices broadly. These results suggest that the implementation of these recommendations appears to be, to a certain extent, easier at the time the fund was established, than by upgrading an already well-established governance structure.

This ranking also shows that the most financially powerful SWFs, especially those of the Gulf countries, such as Kuwait, Qatar, or the UAE, scarcely comply with these Principles. Much information is not made public, such as the general approach to funding, withdrawal or spending operations of the sovereign fund (GAPP 4), or the performance of assets and investments (GAPP 23). The case of Kuwait is particularly interesting in this respect, as the law prohibits any disclosure of information about the KIA’s financial activities. Therefore, these countries still reveal little about the operational independence of their SWFs or their financial or economic orientation.

So, this ranking highlights a wide disparity in terms of transparency and governance of SWFs. It is also important to note that some SWFs, which have not signed the Santiago Principles, also have very low levels of transparency, such as the Algerian, Venezuelan or Brunei funds. Moreover, Behrendt (2010) has shown that the implementation of the principles appears to be broadly correlated to the quality of the fund’s host state institutions, as estimated through the use of the democracy index developed by the Economist Intelligence Unit.

**How effective are oil-based SWFs in the current climate of falling prices?**

The marked drop in oil prices in recent months is reflected by a substantial loss of income for hydrocarbon-producing countries which may amount to $375 billion in total for all the OPEC countries in

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12 According to Article 8 (of Law No. 47 of 1982), “The members of the Board of Directors, the employees of the Authority or any of those participating in any form in its activities, may not disclose data or information about their work or the position of the invested assets, without a written permission from the Chairman of the Board of Directors, and this prohibition remains in force even after cessation of the relation of the person with the business of the Authority”, [www.kia.gov.kw/En/About_KIA/Mission_Principles/Pages/default.aspx](http://www.kia.gov.kw/En/About_KIA/Mission_Principles/Pages/default.aspx).

2015\textsuperscript{14}. With an oil price down by 60% between June and December 2014 (from 115 to 46 dollars per barrel), most of the oil-exporting countries are not able to cover public expenditure, which is now putting significant pressure on the budget, particularly in order to meet growing social demands or infrastructure development goals. Therefore, many producer countries will record significant fiscal deficits in 2015 (IMF, 2015). Among these countries, Saudi Arabia is forecasting a deficit of $39 billion in 2015, but the drop in oil revenues is far from representing an immediate threat to the kingdom, like other Gulf countries, as the accumulated financial reserves in their SWFs over the last ten years are substantial.

However, several oil-producing countries are highly affected by the collapse of oil prices and have used their SWFs to alleviate the negative effects of the falling prices on the economies, which remain highly dependent upon hydrocarbon exports. Hence, the Russian economy, which has already been greatly weakened by the western sanctions, is bearing the brunt of the sudden collapse in the crude oil prices, resulting in a sharp depreciation of the rouble and negative growth prospects (-3\% growth rate in 2015 according to the IMF, 2015). In particular, the National Welfare Fund was asked to support several Russian banks and companies in difficulty, including businesses in the energy sector, such as Rosneft and Novatek\textsuperscript{15}. Similarly, Kazakhstan announced last November a yearly payment of $3 billion between 2015 and 2017 from the National Fund (which has an asset portfolio valued at $77 billion) to support the economy\textsuperscript{16}. The Iranian parliament has also recently approved the use of $4.8 billion from the SWF to compensate for the collapse of oil revenues\textsuperscript{17}.

Therefore, the function of SWFs in stabilising the economy has become critical again with the collapse of crude oil prices since June 2014. Some studies have investigated the effectiveness of SWFs as a stabilisation tool, even if a thorough assessment appears to be difficult to compile to date, given the recent creation of a large majority of the funds. The study by Davis \textit{et al.} (2001) shows that government expenditure in Chile, Kuwait, and Norway is uncoupled from price fluctuations in the exported resource. Fasano (2000)

\textsuperscript{14} Except for Iran according to data from the Energy Information Administration, <www.eia.gov/todayinenergy/detail.cfm?id=19231>.

\textsuperscript{15} See the graph "Approved and Pending Requests to Russia National Welfare Fund (MWF)", <https://infogr.am/approved_and_pending_requests_to_russias_national_welfare_fund_nwf>.


\textsuperscript{17} See the press release, "Iran to Spend up to $4.8 bln from Sovereign Fund on Oil Development", \textit{Reuters}, 24 February 2015, <http://in.reuters.com/article/2015/02/24/iran-budget-oil-idINL5N0VY3C120150224>.
confirms these results for Chile, but finds that in Oman government expenditure is closely linked to the oil price, despite the existence of a SWF. These authors conclude that countries which have adopted conservative expenditure policies are those which have established a fund for non-renewable resources, and are therefore countries which are already virtuous in their fiscal discipline. Shabsigh and Ilahi (2007) establish that the implementation of an oil-based SWF tends to reduce inflation and macroeconomic volatility. These results are also confirmed by Bagattini (2011) who proves that the establishment of a stabilisation fund helps to offset the fiscal balance for the non-oil sector and to reduce the public debt. He also shows that one of the key factors for success remains closely linked to the stability of the fund management rules. Finally, Sugawara (2014) shows that countries which have established stabilisation funds are characterised by less volatility in expenditure than countries which have not used this type of instrument.

One of the main challenges identified by the SWFs remains related to compliance with the operational rules governing the fund’s operation, in the event of exogenous shocks and severe fiscal pressures impacting on management of the fund. In the ’80s and ’90s, the rules governing the funds for Alaska, Alberta, Oman, and Papua New Guinea were amended. Some governments adjusted the crude benchmark price up (value from which revenues are deposited in the oil fund), like Kazakhstan, Russia, or Trinidad and Tobago. The Iranian stabilisation fund, which was initially established to help develop the private sector, has often financed different government expenditure, such as imports of refined products in 2006 and 2007 or the public deficit. In the case of Chad, the SWF rules were amended several times between 1999 and 2006 by the government, and the fund for future generations was finally abolished, causing an unprecedented stand-off between the Chadian government and the World Bank, which was behind the tool put in place to manage the oil rent.

Therefore, it appears, as Baude (2012) highlights that the success of a SWF remains closely linked to the political will and the existence of a broad agreement among the political and economic entities about the establishment of the fund, which commits the country and its fiscal policy in the long term. So, a SWF will be an effective oil rent management tool if it is accompanied by strict fiscal discipline and sound governance, with high transparency about the management method and allocation of revenues (Raymond, 2009).
Conclusion

SWFs have initiated a process of redefining their asset allocation strategies in order to meet not only stabilisation and savings roles, but also to maximise return on investment and development. This change in investment does not call into question the role of the funds as managers of oil rent, but shows a strong ambition to become financial players in their own right. The new trends regarding asset allocation strategies remain uncertain today. Many SWFs are also involved in a process of changing their internal governance, showing their long-term ambition.

The ability of this new strategy of complementary investments to fulfil a stabilisation function in the current climate of the sharp fall in oil prices will be put to the test when, in some cases, the change in governance systems of the SWFs is not yet completed. Indeed, some funds still have not reached a level of specialisation and sufficient independence to manage a more complex asset portfolio. Yet, the effects are starting to be felt on the economies of oil-exporting countries, particularly with the strong slump of the rouble in Russia or the naira in Nigeria, or even with the announcement of cuts to civil servants’ salaries in Venezuela. The Gulf countries appear to be better equipped financially at this stage, with substantial reserves accumulated in their SWFs in the last ten years, but many other funds, particularly the newer ones, have to deal quickly with this unexpected decline in oil revenues.
Appendix 1: The Santiago Principles or Generally Accepted Principles and Practices (GAPP)

- The legal framework for the SWF should be sound and support its effective operation and the achievement of its stated objective(s).
- The policy purpose of the SWF should be clearly defined and publicly disclosed.
- Where the SWF’s activities have significant direct domestic macroeconomic implications, those activities should be closely coordinated with the domestic fiscal and monetary authorities, so as to ensure consistency with the overall macroeconomic policies.
- There should be clear and publicly disclosed policies, rules, procedures, or arrangements in relation to the SWF’s general approach to funding, withdrawal, and spending operations.
- The relevant statistical data pertaining to the SWF should be reported on a timely basis to the owner, or as otherwise required, for inclusion where appropriate in macroeconomic data sets.
- The governance framework for the SWF should be sound and establish a clear and effective division of roles and responsibilities in order to facilitate accountability and operational independence in the management of the SWF to pursue its objectives.
- The owner should set the objectives of the SWF, appoint the members of its governing body(ies) in accordance with clearly defined procedures, and exercise oversight over the SWF’s operations.
- The governing body(ies) should act in the best interests of the SWF, and have a clear mandate and adequate authority and competency to carry out its functions.
- The operational management of the SWF should implement the SWF’s strategies in an independent manner and in accordance with clearly defined responsibilities.
The accountability framework for the SWF’s operations should be clearly defined in the relevant legislation, charter, other constitutive documents, or management agreement.

An annual report and accompanying financial statements on the SWF’s operations and performance should be prepared in a timely fashion and in accordance with recognised international or national accounting standards in a consistent manner.

The SWF’s operations and financial statements should be audited annually in accordance with recognised international or national auditing standards in a consistent manner.

Professional and ethical standards should be clearly defined and made known to the members of the SWF’s governing body(ies), management, and staff.

Dealing with third parties for the purpose of the SWF’s operational management should be based on economic and financial grounds, and follow clear rules and procedures.

SWF operations and activities in host countries should be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which they operate.

The governance framework and objectives, as well as the manner in which the SWF’s management is operationally independent from the owner, should be publicly disclosed.

Relevant financial information regarding the SWF should be publicly disclosed to demonstrate its economic and financial orientation, so as to contribute to stability in international financial markets and enhance trust in recipient countries.

The SWF’s investment policy should be clear and consistent with its defined objectives, risk tolerance, and investment strategy, as set by the owner or the governing body(ies), and be based on sound portfolio management principles.

The SWF’s investment decisions should aim to maximise risk-adjusted financial returns in a manner consistent with its investment policy, and based on economic and financial grounds.

The SWF should not seek or take advantage of privileged information or inappropriate influence by the broader government in competing with private entities.

SWFs view shareholder ownership rights as a fundamental element of their equity investments’ value. If a SWF chooses to exercise its ownership rights, it should do so in a manner that is consistent with its...
investment policy and protects the financial value of its investments. The SWF should publicly disclose its general approach to voting securities of listed entities, including the key factors guiding its exercise of ownership rights.

- The SWF should have a framework that identifies, assesses, and manages the risks of its operations.
- The assets and investments performance (absolute and relative to benchmarks, if any) of the SWF should be measured and reported to the owner according to clearly defined principles or standards.
- A process of regular review of the implementation of the GAPPs should be engaged in by or on behalf of the SWF.

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