

THE ROLE AND THE IMPACT OF SOVEREIGN WEALTH FUNDS ON GLOBAL FINANCIAL MARKETS

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Abstract

This paper analyses the impact of sovereign wealth funds (SWFs) on global financial markets. It presents back-of-the-envelope calculations which simulate the potential impact of a transfer of traditional foreign exchange reserves to SWFs on global capital flows, and also this paper analyses the impact of Sovereign Wealth Funds on economic success, and the impact of global financial crises on Sovereign Wealth Funds. Finally this paper shows the Stabilizing effects of Sovereign wealth funds.

Keywords: sovereign wealth funds, financial markets, capital flows

INTRODUCTION

Sovereign wealth funds (SWFs), broadly defined as public investment agencies which manage part of the (foreign) assets of national states, have recently attracted considerable public attention. While such national investment vehicles have been operated by many countries for decades, SWFs have only recently become important players in global financial markets as their financial assets under management could soon exceed those of the largest private asset managers and pension funds.

This paper analyses the impact and the role of sovereign wealth funds (SWFs) on global financial markets. This id address the following elements :

1. Definition and types of Sovereign wealth funds.
2. The size and growth of Sovereign wealth funds.
3. Sovereign wealth funds in global financial markets
4. Impact of global financial crises (2007) on Sovereign wealth funds.
5. Stabilizing effects of Sovereign wealth funds.

1. Definition and types of Sovereign wealth funds

1.1. History of Sovereign wealth funds

Kuwait founded the first SWF in 1953, the Kuwait Investment Authority (KIA). KIA's objective was to achieve revenue diversification, since Kuwait was overly dependent on revenue from oil exploration and oil sales. Following KIA, there wasn't a major wave of SWF creation until the 1970s, when Singapore, Abu Dhabi, and Canada all created their first SWFs. Norway set up the most transparent—and among the world's largest SWF in 1990. There was then a second major wave of SWF creation in the 2000s. In 2007, China formed the China Investment Corporation with an initial endowment estimated at \$200 billion, and Russia announced a pair of new SWFs with a combined wealth estimated at \$150 billion. Currently, a number of countries have these funds, and a few more have expressed an interest in establishing one. Most SWFs are located in either oil-producing nations or in economies running trade surpluses.

There are several reasons for the accumulation of net foreign assets by sovereigns and the resulting growth of sovereign wealth funds:

First, the recent commodity price boom has swelled the sovereign asset holdings of commodity-exporting countries where the public sector controls commodity exports or heavily taxes the revenues earned by private commodity exporters. Earlier commodity price booms vividly illustrate the adverse effect on competitiveness of domestic inflation and large real appreciations induced by using these windfall gains for domestic expenditures, particularly when the gains are transitory. For example, the windfall gains associated with the sharp rise in the price of oil in 1973–1974 induced oil-exporting countries to increase government spending; this spending fell sharply when oil prices collapsed in the early 1980s. Consequently, some sovereigns have sought to deal with these concerns by saving a share of the gains in SWFs. In some cases these savings are used as a financial stabilizer if commodity prices fall and depress tax revenue declines. In other cases, SWFs serve as mechanisms to transform concentrated exposure of public assets to volatile commodity prices into a more balanced and diversified global exposure, thereby protecting the income of future generations.

A second factor behind the growth of SWFs is the effort by many emerging market countries to accumulate large stockpiles of international reserves by running persistent current

account surpluses. Many of these countries, particularly in Asia, now hold more reserves than needed for prudential reasons. Attempts to diversify these reserves into potentially higher-yielding assets entail transferring them from the control of the central bank to the Treasury or to quasi-public entities, such as SWFs, with the mandate to pursue financial strategies aiming at higher long-run returns. For example, China recently set up the China⁽¹⁾.

1.2. Definition of Sovereign wealth funds

Sovereign wealth funds are defined as a special purpose investment fund or arrangement, owned by the general government. Created by the general government for macroeconomic purposes, Sovereign wealth funds hold, manage, or administer financial assets to achieve financial objectives, and employ a set of investment strategies which include investing in foreign financial assets. Sovereign wealth funds are commonly established out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports⁽²⁾.

Sovereign wealth funds are fundamentally different from monetary authorities holding official foreign reserves, where liquidity and security issues necessitate a short investment horizon and low risk tolerance. Central banks generally invest their foreign exchange reserves conservatively in safe and marketable instruments that are readily available to monetary authorities to meet balance of payments needs. In contrast, Sovereign wealth funds typically seek to diversify foreign exchange assets and earn a higher return by investing in a broader range of asset classes, including longer-term government bonds, agency and asset-backed securities, corporate bonds, equities, commodities, real estate, derivatives, and foreign direct investment.

1.3. The reasons of establish sovereign wealth funds

Sovereign wealth funds are established for four principal reasons⁽³⁾:

✓ Firstly, most funds held by natural resource exporters act as intergenerational transfer mechanisms, where future government pensions, asset liquidity, and fiscal revenues are guaranteed by today's export earnings. When the country's natural resources are exhausted, therefore, future generations can continue to live prosperously using the earnings of their forefathers.

✓ Next, most sovereign wealth funds of all country types are created to diversify a country's income so that it can respond to shocks to the country's comparative advantages. When a country is faced with a competitiveness crisis, it can call on its sovereign wealth fund assets to reinvest in new sectors of the economy that can revive the country's competitive advantages.

✓ Thirdly, countries establish sovereign wealth funds to increase the return on assets held in their central bank reserves. By investing in securities other than U.S. or European sovereign bonds, they can raise returns above the 3-5% annual returns garnered by most foreign exchange reserve holdings. With rapidly expanding foreign exchange stocks in many emerging markets and the decline of the U.S. dollar—and thus lower returns on dollar-denominated debt—this desire has become increasingly prevalent in recent times.

1.4. Types of Sovereign wealth funds

There are two general types of Sovereign wealth funds Commodity and non commodity. Commodity Sovereign wealth funds are funded by oil or commodity export revenues, and non commodity Sovereign wealth funds are funded by transfers from official foreign exchange

reserves. According to Butt et al., Sovereign wealth funds belong to a continuum of government-owned investment vehicles that include central banks, sovereign stabilization funds, sovereign saving funds, government investment corporations, and government-owned enterprises. Sovereign wealth funds include the following variations: sovereign stabilization funds (designed to stabilize revenue), sovereign saving funds (to act as intergenerational funds), and government investment corporations (to invest in riskier assets like corporate bonds, common stocks, and real.

Table 01: Leading Sovereign Wealth Funds

Country	Fund Name	Assets (billions of dollars)	Inception	Origin of wealth
UAE – Abu Dhabi	Abu Dhabi Investment Authority	627	1976	Oil
Norway	Government Pension Fund – Global	593	1990	Oil
China	SAFE Investment Company	568	1997	Non-commodity
Saudi Arabia	SAMA Foreign Holdings	533	N/A	Oil
China	China Investment Corporation	440	2007	Non-commodity
Kuwait	Kuwait Investment Authority	296	1953	Oil
China – Hong Kong	Government of Singapore Investment Corporation	293	1993	Non-commodity
Singapore	Government of Singapore Investment Corporation	248	1981	Non-commodity
Singapore	Temasek Holdings	158	1974	Non-commodity
Russia	National Welfare Fund	150	2008	Oil
China	National Social Security Fund	135	2000	Non-commodity
Qatar	Qatar Investment Authority	100	2005	Oil
Australia	Australian Future Fund	80	2006	Non-commodity
UAE – Dubai	Investment Corporation of Dubai	70	2006	Oil
UAE – Abu Dhabi	International Petroleum Investment Company	65	1984	Oil
Libya	Libyan Investment Authority	65	2006	Oil
Kazakhstan	Kazakhstan National Fund	58	2000	Oil
Algeria	Revenue Regulation Fund	57	2000	Oil
UAE – Abu Dhabi	Mubadala Development Company	48	2002	Oil
South Korea	Korea Investment Corporation	43	2005	Non-commodity

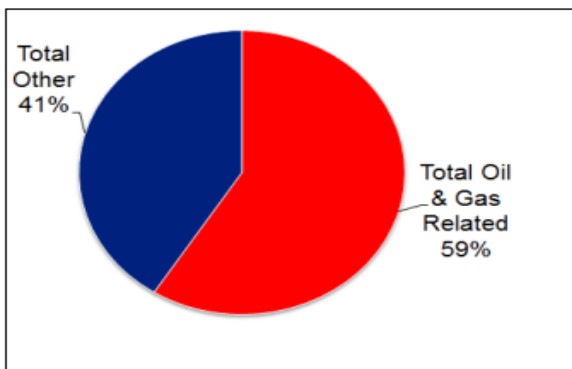
Source : Shai Bernstein, Josh Lerner, and Antoinette Schoar, The Investment Strategies of Sovereign Wealth Funds, Journal of Economic Perspectives, Volume 27, Number 2, Spring 2013, Page 221

1.5.Sources of Funding for Sovereign wealth funds

THE revenue from oil is the most common source, accounting for 39% of the total. As shown in Table 2, most of the world’s largest SWFs are located in oil-producing nations like the UAE, Saudi Arabia, Norway, Kuwait, Russia, and Qatar, which is consistent with oil being the most important source of funding for SWFs. Revenue from non commodity exports is the second

most significant source of funding for Sovereign wealth funds, especially in countries like China and Singapore.

Figure 1 : Sources of Funding for SWFs

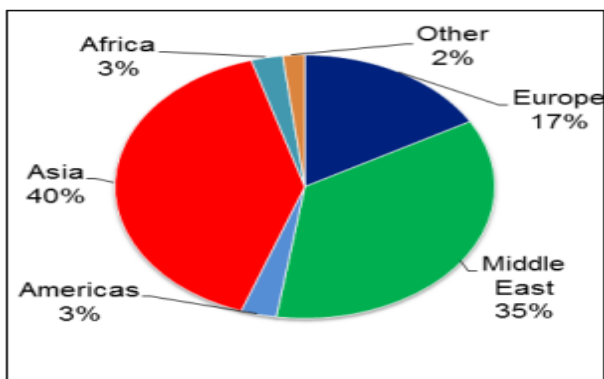


Source : sovereign wealth institute, www.swfinstitute.org:01/12/2013

2.The size and growth of Sovereign wealth funds

While sovereign wealth funds have been around since the 1950s, their recent and rapid growth has created a great deal of interest, and raised some concerns. In 2000, there were about twenty sovereign wealth funds managing total assets of several hundred billion dollars. Twenty new funds have been created since 2000, more than half of them since 2005. Those funds currently manage total assets of between \$2 trillion and \$3 trillion, and their assets are projected to grow in the range of \$10 trillion to \$15 trillion by 2015.

Figure 2: sovereign wealth funds by region



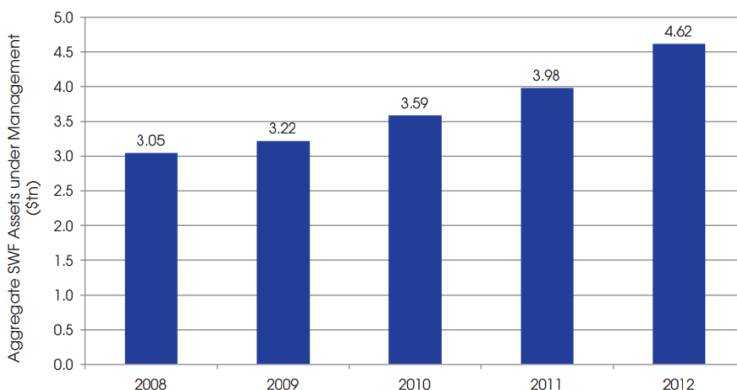
Source : sovereign wealth institute, www.swfinstitute.org:01/12/2013

Total sovereign wealth fund assets are only a fraction of the estimated \$190 trillion in global financial assets or the roughly \$62 trillion managed by private institutional investors. But

sovereign wealth funds assets are currently larger than the total assets under management by both hedge funds and private equity funds (estimated at \$1.5 trillion and \$700 billion, respectively).

Sovereign wealth funds are already large enough to be systemically important, and their growth warrants a calibrated and thoughtful response.

Figure 3: Aggregate Sovereign Wealth Fund Assets under Management, 2008-2012



Source : The 2012 Preqin Sovereign Wealth Fund Review

3.The impact of Sovereign Wealth Funds on economic success:

Each Sovereign Wealth Fund is unique. They have varied investment portfolios, strategies and stated objectives. But the overriding objective of many funds is to ensure that the proceeds from extracting finite resources are shared with future generations. Shorter term objectives like economic stability are also important.

Economic theory suggests that the potential impacts may centre on inflation, exchange rates, government borrowing and growth. There may also be wider impacts on governance and corruption. them described below ⁽⁴⁾:

-Funds may insulate against inflation;

inflation may rise when a lot of money is flowing into an economy from abroad, which could be thanks to payments for exports of commodities or other goods and services. Unless the majority of this money is not spent on locally produced goods and services this will boost domestic demand and could cause the economy to heat up if it does not have enough capacity to meet the extra demand. An additional mechanism that could put upwards pressure on inflation is the money inflow causing a rise in money deposits in the local banking system triggering an increase in credit supply.

One mechanism by which a Fund could influence inflation is if it is used to reduce foreign currency inflows. Instead of these inflows being converted into the local currency and spent, some of them may be kept in a foreign currency and invested abroad using the Sovereign Fund. In this way the Fund may reduce the impact on domestic demand from inflows of money – and so limit the feed through to inflation in the short term.

-Funds may reduce government borrowing costs;

investors in sovereign debt will take a number of factors into account when choosing where to put their money. They will consider, amongst other things, the yield on the bonds, the likelihood of the principal being repaid in full and the currency in which the debt is denominated. Investors may be willing to lend money on better terms to countries which have a Sovereign

Fund, whose assets will often be held in ‘safe’ currencies like US dollars or euros. It may be perceived to reduce the risk of default as the Sovereign Fund could be raided in the event of a crisis.

For countries which borrow in international reserve currencies like the US dollar (common in developing countries whose own currency can be considered too volatile), having a ready supply of foreign currency may also be looked upon favourably by foreign investors; in the event of a currency crisis, resulting in a sharp depreciation of the domestic currency, the foreign currency reserves could be raided to pay the foreign denominated debt.

-Funds may limit exchange rate appreciation:

sudden inflows of foreign currency into an economy can lead to “Dutch Disease”, where appreciation of the domestic currency can damage the Competitiveness of export-reliant sectors like manufacturing.

The mechanisms for this are that the influx of foreign currency is used to buy domestic currency – thus bidding up its value (an exchange rate appreciation). Also any inflation resulting from these inflows will increase the cost of producing goods and in doing so further damage international competitiveness.

As with the potential inflation mechanism, by holding wealth in a foreign currency like US dollars rather than converting it to local currency, a Fund may reduce pressure on the local currency to appreciate (there is less demand for it than if the dollars were sold and used to buy local currency).

-Funds may boost transparency;

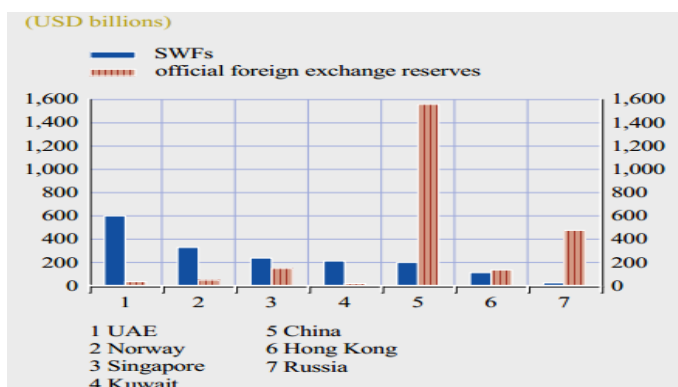
Having money channelled into a Fund may help to increase the transparency of a country’s financial policy and reduce the potential for corruption.

This is because a clear rule based system where, for example, all of the proceeds of an oil export tax are channelled directly into a Sovereign Fund, may reduce the discretionary power of politicians and government officials over these monies. Furthermore, running a Fund is not easy; it requires a professional and financially literate organization. The experience provided by running a Fund may create a conveyer belt of competent bureaucrats, able to assist in running the country. An example of this conveyer belt in action is Tony Tan, who recently became President of Singapore, having previously run the Government Investment Corporation.

3. Sovereign wealth funds in global financial markets

Sovereign wealth funds are estimated to have accumulated between at least USD 2 and 3 trillion, compared with around USD 6 trillion in traditional foreign exchange reserves.⁸ However, even this range estimate is subject to considerable uncertainty as only a small fraction of Sovereign wealth funds report on the size of their portfolio. Comparing the level of traditional foreign exchange reserves with assets managed in Sovereign wealth funds, two observations stand out, Some countries have been accumulating foreign assets in SWFs for a long time and therefore hold relatively modest levels of foreign exchange reserves (e.g. members of the Gulf Cooperation Council like the UAE and Kuwait). In contrast, other countries have accumulated sizeable holdings of traditional foreign exchange reserves – most likely in excess of precautionary levels – but only recently created Sovereign wealth funds with relatively modest levels of assets under management (e.g. China and Russia). Therefore, many observers expect that these countries may in the future increasingly accumulate foreign assets in Sovereign wealth funds or even shift traditional reserve assets into such funds.

Figure 4: Sovereign wealth funds and official Foreign exchange reserves



Source : Roland Beck and Michael Fidora, the impact of sovereign wealth funds on global capital flows, occasional paper series , European Central Bank, 2008, P8

3.1.Sovereign wealth funds and global capital flows

In order to gauge the impact of Sovereign wealth funds on global financial markets, it is useful to consider how an increasing accumulation of assets in Sovereign wealth funds could change the pattern of global capital flows .In fact, countries with large “excess reserves”, i.e. reserves in excess of traditional balance of payments needs, may opt for a more return and less liquidity-oriented portfolio allocation of these assets. Therefore, a comparison of traditional reserve portfolios and market capitalization based portfolios can provide an indication of the direction of future capital flows.

First, excess reserves of major emerging markets are identified using two traditional rule-of-thumb measures. Table 2 shows that the magnitude of excess reserves is indeed substantial, estimated to exceed USD 3 trillion or more than half of

total official foreign exchange reserves to date.

Table 02 : Excess reserves in emerging Asia and oil-exporting economies

(in USD billions)				
	Reserves	3-months imports	Short-term external debt	Excess reserves
China	1,559	254	231	1,306
Russia	420	70	53	350
Saudi Arabia	276	34	22	242
Taiwan	261	67	26	194
Korea	244	109	3	135
India	202	72	15	129
Brazil	175	37	66	110
Algeria	99	10	0	90
Libya	79	6	1	73
Singapore	149	85	40	64
Others	959			332
Total	4,322			3,023

Source : Roland Beck and Michael Fidora, the impact of sovereign wealth funds on global capital flows, occasional paper series , European Central Bank, 2008, P14.

4. Impact of global financial crises (2007) on Sovereign wealth funds :

The financial crisis and ongoing shift of economic power from west to east is changing the environment for sovereign-wealth funds. Since 2007, the assets controlled by SWFs have risen from around \$2.2 trillion to more than \$5 trillion, with the major funds coming from the same “super seven” players: Abu Dhabi (United Arab Emirates), Norway, China, Kuwait, Russia, and two funds from Singapore. In addition, recent years have seen Qatar’s fund grow significantly in size; it crossed the \$100 billion threshold in 2011.

Before the financial crisis, there was increasing suspicion of SWFs. They were seen as opaque and as being driven more by strategic than commercial needs. As a result, there was growing unease in the West about how these massive pools of capital might be deployed, and also about the potential risks that might follow from greater foreign-state influence on important national assets. One example was the outcry over the attempt by China’s CNOOC to buy a stake in a US oil firm, Unocal.

Sovereign wealth funds provided a much-needed source of finance during the crisis, as a number of them injected money into Western financial firms. At the same time, the funds worked with governments and international organizations to establish new principles on transparency, which have guided their conduct since 2008. These voluntary guidelines, known as the Santiago Principles, sought to address worries over their transparency and accountability, aiming to differentiate SWFs from state-owned enterprises. Add in the relative scarcity of long-term investment capital in the West, and recipient nations are now more welcoming of foreign sovereign money.

The financial crisis also strengthened the arguments in favor of states playing a strong role in the economy. In the West, governments have bailed out banks, while globally the free-market “Washington consensus” has lost out to the rising momentum of the state-influenced “Beijing consensus.”

Since the crisis, SWFs have also become an increasingly important factor in economic development in emerging markets. SWFs are not donors; they are asset managers whose role is to seek strong and stable financial returns. And yet, global currents have led them to diversify away from the dollar, without necessarily selling the dollar assets. They are placing a rising proportion of new reserves in other currencies by investing in emerging-market assets.

One place they have put their money is in infrastructure. The long-term investment horizon of Sovereign wealth funds makes them ideal financiers of large infrastructure projects. Asia, for instance, needs \$8 trillion over the next ten years to finance infrastructure projects. No surprise, then, that Asia, along with Africa and Latin America, has been a key destination for sovereign funds in recent years—an important dimension of ever-expanding “south-south” trade and investment. A number of sovereign funds, including those from China and the Middle East, are also allocating more funds to domestic infrastructure. Such investments are strategically beneficial for their own countries and commercially attractive for themselves, given the low risk and stable returns. In short, Sovereign wealth funds are extending the reach of state capitalism, with the funds playing the role of development-finance institutions.

This shift is already visible. In 2010, about 14 percent of all Sovereign wealth fund investments were in infrastructure, according to the Sovereign Wealth Fund Institute, and that figure has probably risen since.

Preqin, a London-based research group, estimates that 56 percent of Sovereign wealth funds are investing in infrastructure, up 16 percent over 2011, with Abu Dhabi alone allocating more than \$30 billion to this asset class. In addition, in 2012, both Angola and Nigeria created Sovereign wealth funds (\$5 billion and \$1 billion, respectively) in which to place some of their oil revenues, with the specific goal of investing a large portion in infrastructure. These funds

have ambitions that go beyond immediate returns; instead, they seek to create the conditions for long-term sustainable economic growth. You could call them sovereign development funds.

Established Sovereign wealth funds are also investing more in infrastructure; the financial crisis has made liquidity less of a priority and long-term returns more appealing. Singapore's Temasek, for example, established Sing bridge in 2009 to develop sustainable Asian infrastructure, including stakes in the Tianjin Eco-City and Sino-Singapore Guangzhou Knowledge City. Temasek is also investing in power projects in India and Vietnam. Malaysia's Sovereign wealth funds has created a special-purpose vehicle to work with the Indian government in financing highway construction. There have also been major investments in the developed world; Britain's chancellor, George Osborne, has even gone to China to encourage it to invest in UK infrastructure projects, and Abu Dhabi's fund has bought a major British water company.

Sovereign wealth funds are likely to continue to grow, even though their reputations are mixed and the questions about their strategic intentions and opaque governance remain. But the critics need to recognize that Sovereign wealth funds are also a new and important element in innovative finance that is, quite literally, bringing power (and water and roads) to the people⁽⁵⁾.

5. Stabilizing effects of Sovereign wealth funds

Sovereign wealth funds can prove to be a stabilizing force in several ways. At the country level, they have allowed states to manage capital inflows, while addressing long-run structural issues, thus providing a basis for sustained economic growth in certain EMEs. At the international level, by virtue of their size and long-term investment strategies, Sovereign wealth funds can be liquidity providers and contrarian investors that support global markets in times of financial stress. These aspects are examined below⁽⁶⁾ :

- **Managing capital inflows:** Sovereign wealth funds can aid in the macroeconomic management of large current account surpluses. By transferring excess revenues into investment funds, states can alleviate inflationary pressures arising from capital inflows that place upward pressure on nominal exchange rates, thus reducing demand for exports and slowing growth. By investing capital inflows offshore, Sovereign wealth funds states can maintain a stable exchange rate in the face of large shocks. However, off shoring capital inflows may become unsustainable or suboptimal, especially when perpetuated indefinitely.

-Addressing longer-horizon structural issues :

Investing excess revenues strategically can provide Sovereign wealth funds states with a means to address structural weaknesses in their economies. Savings funds facilitate intergenerational transfers, allowing future generations to benefit from current favourable economic conditions. Additionally, investing abroad allows Sovereign wealth funds states to import knowledge and technical expertise to develop local industries and domestic infrastructure and provide a basis for sustained growth. As such, strategic investment can help Sovereign wealth funds states reduce both macroeconomic and financial vulnerabilities that may lead to instability in the future.

-Investor profile: Large-scale, long-term investors

One commonly cited advantage of Sovereign wealth fund is that, given their large scale and long investment horizons, they are able to inject liquidity into global capital markets, thereby supplying capital to those who require it. Sovereign wealth funds have an explicit mandate of long-term investment and, thus, can withstand short-term fluctuations, allowing them to act as contrarian investors, investing in times of market distress. This function was clearly exhibited in 2007, when Sovereign wealth funds invested more than \$85 billion in financial institutions in developed economies, helping them to recapitalize after incurring substantial losses associated

with the U.S. subprime-mortgage market. Moreover, since Sovereign wealth funds are not subject to specific capital requirements, they are less likely to liquidate rapidly when markets deteriorate, thus potentially contributing to financial stability.

Because traditional reserve managers seek to preserve the value of their holdings, reserve assets are typically safe, liquid investments offering low returns. Sovereign wealth funds, however, have a different objective: they aim to earn higher returns on their holdings by diversifying across currencies and asset classes. Most notably, this implies a high allocation towards equities. Depending on the size of the Sovereign wealth funds (especially relative to official reserves), this can represent a significant shift and increase in investment earnings.

To secure higher returns, Sovereign wealth funds are effectively accepting a higher level of risk. By diversifying their foreign exchange earnings, Sovereign wealth funds aim to spread the risk in their portfolios across a variety of assets and currencies. Moreover, since Sovereign wealth funds represent an additional source of revenue for governments, this reduces their reliance on any one macroeconomic output (such as oil) at the margin.

CONCLUSION

The paper dealt with the phenomenon of sovereign wealth funds, which have become an important part in the global financial markets and the size of the assets under management, which amounted to more than 4 trillion dollars.

And the importance of these funds are moving the world to create, on the one hand to their ability to perform the role of the reserves of the countries its owner to transfer a portion of the revenues for the benefit of future generations, is also working to diversify sources of GDP to developing new activities, and provision of durable materials and regular States Queen to her, and their importance to maintain the jobs that provided by the companies supporting the capital of troubled companies.

On the other hand lead sovereign wealth funds play an important role in the stability and the absorption of shocks resulting from the temporary decline in the prices of raw materials are allowed to provide a sovereign fund to provide income annually is linked to prices of raw materials, also played sovereign wealth funds play an important role during the recent global financial crisis and this provided resources and financial contribution to the alleviation of the crisis to some countries owners.

REFERENCES

1. Joshua Aizenman Reuven Glick , sovereign wealth funds , stylized facts about their determinants and governance , , NBER working paper series.
2. Udaibir S. Das, Yinqiu Lu, Christian Mulder, and Amadou Sy, Setting up a Sovereign Wealth Fund: Some Policy and Operational Considerations, IMF Working Paper.
3. Bryan J. Balin, Sovereign Wealth Funds: A Critical Analysis, Submitted for review and approved 21 March 2008.
4. www.pwc.co.uk The impact of Sovereign Wealth Funds on economic success.
5. Gerard Lyons, A growing role ,www.mckensyon.com/01/12/2013.
6. Tamara Gomes, The Impact of Sovereign Wealth Funds on the International Financial System ,
1. BANK OF CANADA FINANCIAL SYSTEM REVIEW ,DECEMBER 2008
2. Shai Bernstein, Josh Lerner, and Antoinette Schoar, The Investment Strategies of Sovereign Wealth Funds, Journal of Economic Perspectives, Volume 27, Number 2, Spring 2013.
3. sovereign wealth institute, www.swfinstitute.org.
4. The 2012 Preqin Sovereign Wealth Fund Review.
5. Roland Beck and Michael Fidora, the impact of sovereign wealth funds on global capital flows, occasional paper series , European Central Bank, 2008.