On Asset Allocation’ Studies for Sovereign Wealth Funds

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Abstract
The objective of this work is to analyze, after a review of the economic literature reference, the role of Sovereign Wealth Funds in the economy and in particular in asset allocation choices. In fact, after presenting a review of the literature - as complete as possible on the main aspects the topic being researched, we will proceed to analyze the strategic asset allocation, geographic and sectoral SWFs selected, with the aim of to test the hypothesis of research, namely that, while it is clear that the ultimate purpose of SWFs is the pursuit of goals macro-institutional differentiated according to the different types of fund, all pursuing indiscriminately financial management of its assets aimed at optimizing the relationship risk / return in an absolutely comparable with the “other” institutional investors.

Keywords: Asset Allocation, Financial System, Sovereign Wealth Funds.

JEL: E44, F31, F37, G12, G14

1. Introduction

The term “sovereign wealth fund” was used for the first time by a Russian economist Andrew Rozanov (2005) in an article entitled “Who holds the wealth of nations?”. As regards, however, the definition of sovereign wealth fund, the last, and most internationally accepted, is the one given by the IMF during the so-called "Santiago Principles", according to which sovereign wealth funds are funds 'property investment (direct or indirect) of governments, or national monetary authorities, however, a public agency, and are created to serve macroeconomic, which administer the wealth derived from delectable sources in optical intergenerational resilient against imbalances of national pension systems, isolate the public finances and the balance of payments from fluctuations in the price of exported commodities, invest surplus foreign exchange in order to maximize returns.

Common characteristics of SWFs that differentiate them from other agencies or funds are five: i) they must be owned by a sovereign or otherwise of an institutional entity that can also be sub national; ii) within their portfolio should have investments in foreign currency, which allows you to exclude performing funds in one currency; iii) must have a low level of debt and the absence of withdrawals in the short term reasons that argue in favor of investments that are long-term oriented.; iv) management of the funds must be separate from the official reserves of the central banks and investment criteria are targeted towards higher levels of risk; v) they have to go in search of returns that are beyond the risk-free rate.

The funds that adhere to these parameters can be divided into several categories for which the discriminate are two , namely the source of funds used and the purpose for which such funds are created.

Depending on the source of funds used , you can have two types of funds :

• Commodity Funds generated from the export of oil and other raw materials carried out by state-owned enterprises, or even by private companies but heavily taxed through, for example, royalties. The currency flows directly to the bottom and has no effect on the money supply in the exporting country. The problem of monetary policy, the sterilization of foreign exchange inflows on the money supply to prevent inflation, it is resolved without intervention of the central bank; in front of a surplus in the balance of payments, there is a less urgent the alternative of appreciation of its currency . Note also that the same state can directly hold

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funds thus generated, without formally establish a sovereign wealth fund or a fund equivalent; In this case, the budget of the sovereign wealth fund is incorporated in the state: an aspect which is relevant for the purposes of transparency; these funds are, for the above listed characteristics, mainly in Middle Eastern countries, where the consistent presence of oil makes producing countries are able to rake in huge resources, especially in times when circumstances make that the oil price is high.

- non-commodity funds, generated by exporters of manufactured goods, and manufactured with transfer of currency from the official reserves of the country. The currency is often acquired with central bank intervention in the domestic market, thus increasing the money supply and potentially creating pressure on prices. The alternative of the revaluation arises in a more direct way. The maintenance of the exchange rate is more relevant here, affecting the size of the current account surpluses, the accumulation of reserves, and finally the development of sovereign wealth funds; within this type, the main funds are those in Asia and in particular the funds that belong to the governments of China and Singapore, which draw more benefits from the revenue from privatization or other income tax.

As regards the distribution of SWF according to the source of funds used there is that 62% are commodity funds, while the remaining 38% are non-commodity funds.

### Sovereign wealth funds classification on the basis of source of funds used

<table>
<thead>
<tr>
<th>Commodity 62%</th>
<th>Non Commodity 38%</th>
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Source: SWF Institute, 2013

Treating instead the other discriminate, namely the purpose for which the funds are created, in this case the possible alternatives are four:

- stabilization funds, which are made to reduce the sensitivity of public finances in the face of the volatility of the economic cycle.

- savings funds, which are made with the aim of ensuring an equitable distribution from the international point of view of the proceeds from the exploitation of national resources.

- pension funds, which have similar aims at saving funds but unlike the latter are used to cover the indebtedness pension.

- investment company reserves, which are sovereign wealth funds created to invest foreign reserves, previously accumulated in diversified portfolios, with long-term investment strategies.

Consider these discriminating and looking a bit more closely at the geography of the so-called SWFs, or 44% of the funds would be based in the Middle East, 35% in Asia, 17% in Europe (Russia, Norway), 2% in America, the remaining 2% in other areas, you can see that the largest holders of SWF countries are developing or emerging. This happens essentially for three different reasons:

- Firstly, these countries have difficulty absorbing in terms of investment and consumption of strong trade surpluses generated by exports of manufactured goods or raw materials. The result is largely due to inefficiencies in the financial sector, which fails to meet the financial needs of families and businesses who would like to borrow more likely to invest and consume more;
- Secondly, it is possible that the overall productivity of these countries do not give as high as speculate the neoclassical models and, therefore, is efficient to invest part of their assets abroad.

- Finally, the economic literature has often stressed the extreme volatility of foreign capital which, because of a strong institutional uncertainty, are unreliable for the realization of sustainable development and durable. Much better to rely on domestic savings, the real engine of growth, albeit temporarily invested abroad.

2. Literature Review

The first portfolio analysis of sovereign wealth funds have been made since the year 2008, and are characterized by differences in the positions adopted by the scientific community depending on the definition of sovereign wealth funds is adopted, the resulting sample / reference universe and the type of analysis conduct. In terms of the definitions we have already noted that there are authors that include part of the management of foreign currency reserves made by the Central Banks and SPRFs and this, in addition to expanding the total assets under management in the sector, also affects aggregate analyzes of the portfolio; from the side of the types of analyzes performed we can distinguish the analysis of the stock of the portfolio held by sovereign wealth funds in a given period, from the analysis of the composition of the portfolio carried out by comparing two different periods. Other studies yet comparing the portfolio of sovereign wealth funds with those held by other institutional investors (mutual funds).

One of the first studies that investigated the asset allocation of SWFs in terms of stock was carried out by Balding in 2008. The author, investigating the portfolio choices of SWFs, came to the following results:

- The portfolio of SWFs in 2008 was mainly composed of low-grade bonds risk - classified as investment grade by the major rating agencies given the nature of their "guardians of national wealth." So for example, in March 2008, the Government Pension Fund-Global managed 55% of the portfolio in bonds, primarily the Euro, but also issued by the U.S. and Japan, with the exclusion of high-yield securities, similar funds in Singapore held a portfolio overweighted in bonds - bonds 60 % vs. 40 % equity - and the Russian Stabilization Fund could hold only bonds are rated AAA denominated in euro, dollars or pounds.

- In relation to the composition of the equity portion of the portfolio, sovereign wealth funds hold shares favored with a lesser degree of risk, typically large caps / blue chips: if you consider the equity component of the Abu Dhabi Investment Authority, the Government Pension Fund-Global and Temasek, one can see that more than 70% was made up of large cap stocks, reaching peaks of 90% in the Norwegian sovereign wealth fund.

- Another feature of the equity portion of the portfolio is the preference for domestic equities or belonging to the same geographical area in which the sovereign wealth fund. If we set equal to 100 the total amount of investments held by GIC and Temasek, the percentage of equity investments in optical domestic / regional totals, respectively over 60% and 80%, a percentage that it also reflects the domestic shares held Abu Dhabi Investment Authority.

Contrary to the assumptions made about the impact of the time horizon of reference, it can be seen, at least at first, sovereign wealth funds do not seem to grasp the opportunity to get extra returns by exploiting long-time horizons of asset holdings to more high degree of risk/reward. In fact, despite the dominant presence in the sample of sovereign wealth funds with savings targets in optical intergenerational transfer of wealth, assets held are mainly low risk, being the predominant component of the bond. Following the theoretical indications, only part of the Russian Oil & Gas Fund (typically the component of stabilization) and SAMA (only if considered as a single entity for the management of foreign exchange reserves of Saudi Arabia, and not as part of the management of excess reserves) should hold a preponderance of activity at low risk/return data time horizons pursued in the short to medium term, while the other investment vehicles may take advantage of the equity risk premium or illiquidity risk premium. While, with reference to the preference for domestic investments, this seems to be a certain home bias.
A similar conclusions are reached Chhaochharia and Laeven in 2008, which, by analyzing the portfolio of 12 major sovereign wealth funds, have been shown in the first place, the prevalence of the bond component or liquidity relative to the equity component. In fact, considering the weight of equity on total assets, the authors have verified that it is the Government Pension Fund - Global to have the most equity component, representing 34.95% of the portfolio, followed by Temasek Holdings with a 26.60% and from Khazanah Nasional with a 19.14%.

If you drill down on 260 equity investments made by the same sovereign wealth funds, the same authors noted a lack of international geographic diversification with investments outside the country of origin very limited for all SWFs considered, with the exception of the Norwegian Government Pension Fund. In this regard it may be reported as approximately 67% of the equity component of Temasek Holdings is represented by its listed companies in Singapore, as well as 77% of Khazanah Nasional is invested in Malaysia.

Where the home bias does not appear so strong as in the funds Qatar Investment Authority and Dubai World, the investment is made, however, or in the markets more liquid and thick, represented by the U.S. and the UK or in any case in stock markets in countries with religious affinities, ethnic or linguistic than a country in which the sovereign wealth fund. The equity portfolio of Dubai World for instance has invested approximately 57% in the UK and 20% in the U.S., while the Korea Investment Corporation has acquired stakes in the U.S. for a total of 92% of the equity portfolio.

Another feature of the portfolio represented is the predominance of investments in the energy and financial sectors; particularly interesting is overweight the energy sector made by SWFs in oil-producing countries and seems to show a lack of skill on the part of managers to pursue policies of asset & liability management, in respect of an alleged greater specialization in picking stocks of companies belonging in the areas most well known. Therefore the first two studies examined seem to lean to one side to strategic asset allocation conservative, particularly for commodities funds, in line with the dictates stable portfolio optimization, taking as anchor asset a raw material, on the other in terms of sector allocation, it seems that the type of oil commodity funds do not implement important strategies of diversification of portfolio - especially considering the equity sector - given the overweight in the energy sector and the stock market in the United Kingdom, which, as previously pointed out, has a high percentage of securities belonging to the oil sector. Two other contributions in 2008 sought to determine the asset allocation of SWFs, reaching conclusions in part different from those so far examined: Fernandez and Eschweiler have speculated for the 50 sovereign wealth funds examined in their work most aggressive strategic asset allocation, with a weight of fixed income that varies from 35% to 40%, a weight of stock between 50% and 55%, and the remaining 8-10% invested in alternatives; the authors believe that the weight of alternatives and public equity in the medium to long term is likely to increase up to respectively 15% -20% and 55% - 60% at the expense of fixed-income (20% -30%); This would be consistent with the assumptions of previous exploitation of excess returns by holding less liquid assets for long investment horizons. Mercer instead, while not expressing the weight taken by the various asset classes in the portfolio total of 14 SWFs analyzed, trying to classify them according to the risk tolerance in relation to the type of fund.

3. Sovereign Wealth Funds and Financial Markets

Analysis of the portfolio choices about sovereign wealth funds is one of the aspects that has aroused more interest and on which he has investigated in recent years the scientific community. Since 2007, three were the means by which the various contributions have investigated the portfolio choices of sovereign wealth funds: first, we examined the strategic asset allocation, sector and geography. In more general context were examined two other aspects of the investment decisions of these investment vehicles, represented respectively by the impact of sovereign wealth funds in corporate governance of investee companies - in the case of equity investments - and the impact of the overall impact of such actors in the international financial markets.
Studies that have analyzed the choices of strategic asset allocation, sector and geography were made considering the mode of funding, the objectives, the time horizon of investment, in order to take advantage of any similarities or differences with other institutional investors. Some authors have recently gone so far as to assume an optimal portfolio for some categories of funds (commodity), assuming that the bond as part of the national wealth of a country consists of a raw material, in most cases oil.

A second strand of literature has focused on the impact of sovereign wealth funds in corporate governance, focusing on the one hand the analysis of the reaction of financial markets following the announcement of the acquisition of shareholdings in listed companies, other in the verification of a function is monitoring carried out by the funds in the investee companies, similarly to other institutional investors (which ultimately translates into the debate between activism and passivism of these funds).

A third group of studies is designed to estimate the impact of future changes in asset allocation of SWFs on particular segments of the financial markets - such as the lesser of U.S. public debt financing in the event of a change of strategy on the part of some funds between it is appropriate to mention the China Investment Corporation.

In order to conduct the survey in terms of asset allocation, in this paper we will assume as a hypothesis that SWFs apply the same principles of portfolio management for institutional investors such as mutual funds or pension funds. In fact previously sovereign wealth funds have been included in the category of Institutional Investors and, considering that the same institutional investors adopt specific principles of portfolio management, it is therefore conceivable that the SWFs apply the same logic of management. This comparison is also made more problematic on the one hand due to a structural specificity that distinguishes sovereign wealth funds and mutual funds, represented by different modes of funding, on the other hand the low level of transparency found in these investment vehicles. The mutual funds collect funds from a number of investors and then, ultimately, the private savings. For SWFs financial resources originate either from revenues from sales of raw materials (commodity SWFs) or a transfer of foreign currency reserves in excess carried out by the Central Bank, or even by government fiscal transfers (non-commodity SWFs). Therefore, for non-commodity funds, the main difference concerns the transferor financial resources (no more private, but public), while for commodity funds, the dependence of the financial resources granted by the price of raw materials, poses several problems in terms of asset and liability management, not found in other institutional investors. For example, countries that have set up a sovereign wealth fund to protect against fluctuations in oil prices have the need to invest in assets that have a low or negative correlation with the raw material in question. In addition, SWFs are characterized by a low level of transparency is the fact that not all those investment vehicles make public information about the strategic asset allocation and geographic nor the main positions held. To investigate the asset allocation of SWFs should take into account the fact that these investment vehicles to serve a purpose of an institutional nature. Depending on the type of fund examined, it should be noted that SWFs may pursue the logic of stabilization, in the event that the state budget will seek to neutralize the excessive volatility of the prices of one or more raw materials in the soil or the logic of national savings, when seeking to transfer the nation’s wealth to the next generation or to meet future pension deficit (Sovereign Pension Reserve Funds, SPRFs). Alternatively appointed to manage the foreign reserves in excess, compared to those held by the Central Bank targets for monetary policy, or to invest surplus tax from the State (such as occurs in the government investment company). These objectives can be achieved through institutional financial management focused on maximizing the risk/return. In fact, given that institutional investors and sovereign wealth funds pursuing this logic have a similar behavior to institutional investors, then you can say that even sovereign wealth funds seek to maximize the risk/return ratio, although subject to the objectives of institutional objectives. Against this background, the objective of this empirical analysis is to develop a comparative analysis between SWFs and other investment vehicles in order to assess whether, given the aims, the particular forms of governance and management and operational specificities which characterize the SWFs, these vehicles can be treated as local institutional investors in the asset managed. In particular, this work raises the following research questions. Although the SWFs are characterized by specific institutional goals, we ask:
1. Whether the asset allocation is characterized by the same elements of other Institutional Investors (time horizon, equity risk premium, illiquidity premium, home bias);

2. Whether SWFs are characterized by the phenomenon of so-called “Political bias” or the influence of political logic in the management of the portfolio. This distortion, particularly that of the government investment vehicles, it may be caused by elements of nature inside (internal political bias) arising from the governance structure of the sovereign wealth fund or elements of external nature (external political bias), relating to situations of temporary nature. The time horizon (time horizon) change depending on the institutional objectives pursued. For example, the stabilization funds, given the order to isolate the public budget from the volatility of commodity prices, is likely to have time horizons of short-term investment, unlike savings funds or Sovereign Pension Reserve Fund’s (SPRFs) which, given their goal of transfer of national wealth in intergenerational perspective, it is assumed that they have time horizons of medium to long term. Similarly, the funds they manage excess reserves (reserve investment corporations) are assumed to pursue horizons of medium to long term, given their aim of achieving higher returns than the management of foreign exchange reserves by central banks implemented.

From the point of view of optimal asset allocation, it should be emphasized as investment horizons longer be associated with a higher risk tolerance. This means that, with increasing holding period, the percentage of shares held in the portfolio is expected to increase compared to the bond component - what is associated with the equity risk premium that will be examined in the following section. Therefore it seems appropriate to expect that sovereign wealth funds with an investment horizon of short-term stabilization funds - typically have a large proportion of the portfolio invested in financial instruments in low degree of risk, or money market instruments or bonds with low duration and high ratings, so that they can deal with unexpected and sudden outflows of cash. In this way, the asset allocation of these funds does not differ much from the management of foreign currency reserves made by the Central Banks. In contrast with sovereign wealth funds over the medium to long term, typically saving funds and SPRFs, but also reserve investment corporations, is likely to have a portfolio that is overweight to equities than bonds and in which it can be a share, also relevant assets of alternatives (private equity, hedge funds, real estate).

The equity risk premium, which is the excess return that an individual stock or the stock market as a whole achieved with respect to the risk-free rate: given that in the long run it has been shown that the shares have outperformed other asset classes-including we can mention the bonds short / medium and long term, money market instruments and related tools to inflation - not only in the United States, but in any developed country, it would be reasonable to expect that sovereign wealth funds of savings, the SPRFs and reserve investment corporations holding a portfolio overweight in equities, in such a way as to achieve an excess return linked to the holding of such securities.

The illiquidity premium, or the extra yield demanded by investors to hold less liquid asset: for sovereign wealth funds that invest with a long-term time horizon should be included within the portfolio share of alternative asset classes, such as private equity funds, hedge funds, real estate, so that they can take advantage of the higher yield offered by illiquid assets. For example the already mentioned endowment funds, which have long-term time horizons similarly to saving funds and SPRFs, on average lie approximately 30% of their portfolio in alternatives, just to exploit the illiquidity premium. If these critical factors are intertwined with the peculiar mode of funding and policies in the field of asset and liability management of sovereign wealth funds, it is interesting to carry out a series of considerations first and foremost about the geographical and sectoral asset allocation. In the case of stabilization funds, given the alleged prevalence of short-term assets and low risk, the method of funding could marginally affect the composition of the portfolio. In terms of asset allocation sector, you could possibly discover a limited presence of corporate bonds issued by companies belonging to the energy sector or government bonds issued by countries whose cash inflows arising significantly from the sale of raw materials; that only in the event that its credit risk and the ability to cope with the debt service are influenced by the negative price of the underlying commodities. In the case of funds instead of saving the sector allocation may be an underweight in equities energy, which has a positive correlation with oil prices, for example, in favor of an overweight in the pharmaceutical industry or finance, so as to reduce the overall variance of the portfolio. You could also
have an impact geographical asset allocation of the fund: given that the UK stock market has the highest percentage of equity securities related to the oil sector with respect to total capitalization (over 14% in 2006) is likely to be underweight by oil-commodity type of sovereign wealth funds, in the face of an overweight Japanese stock market - which has a relationship between capitalization of actions related to the oil sector and total market capitalization equal to 1% - and the stock market area - Euro (ratio equal to 6%). In terms of the relationship between strategic asset allocation and mode of acquisition of financial resources more recent contributions have attempted to study the optimal portfolio held by sovereign wealth funds type of commodity, in order to maximize national wealth. These studies assume as a hypothesis that sovereign wealth funds on the one hand manage a portfolio of financial assets, and on the other hand derive much of their assets under management from a raw material present in the country (mainly oil, natural gas, or copper) and listed in the international financial markets. The particular risk / return assumed by the commodity over the years should be considered with a view to building an optimal portfolio. Considering the commodity "oil" the object of analysis as "anchor asset" and trying to optimize a portfolio consisting of three assets, we have arrived at the results shown in the table below.

Optimal portfolio built with 3 asset classes including oil considered as the “anchor”

<table>
<thead>
<tr>
<th>80% Oil</th>
<th>20% Oil</th>
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<tbody>
<tr>
<td>1950-1960</td>
<td>Europe Stock</td>
</tr>
<tr>
<td></td>
<td>S&amp;P500 Total Return</td>
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<tr>
<td>1960-1970</td>
<td>UK 10y Bond</td>
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<tr>
<td></td>
<td>Economist Metal Index</td>
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<tr>
<td>1970-1980</td>
<td>FTSE All Share</td>
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<tr>
<td></td>
<td>100% FTSE All Share</td>
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<tr>
<td></td>
<td>100% World Stock</td>
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<tr>
<td>1990-2000</td>
<td>S&amp;P500 Total Return</td>
</tr>
<tr>
<td></td>
<td>94% UK 10y Bond</td>
</tr>
<tr>
<td>2000-2010</td>
<td>Emerging Market Stock</td>
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<tr>
<td></td>
<td>89% Emerging Market Stock</td>
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<tr>
<td>2010-2013</td>
<td>S&amp;P500 Total Return</td>
</tr>
<tr>
<td></td>
<td>89% UK 10y Bond</td>
</tr>
<tr>
<td></td>
<td>11% Emerging Market Stock</td>
</tr>
</tbody>
</table>

Source: our reworking for 2010-2013 by BALDING C., YAO Y., Portfolio allocation for Sovereign Wealth Funds in the Shadow of Commodity Based National Wealth, cit, 2011, p 19

4. Analyzing the Table Shows Three Kinds of Considerations

- Considering all the decades from 1951 to 2010, the optimal asset allocation includes only a small fraction of the third asset, in most cases. Only in three cases, and assuming a 20% by weight of oil, the remaining asset allocation provides a weight of the third asset class higher than 20%; in the remaining periods the percentage of the asset is less than 20%;
- Resting there on the countries heavily dependent on the performance of the price of oil (80% oil), the optimal portfolio is through the inclusion of asset classes with a risk / return is not particularly high, represented by the World Stock (ex-US), by the S & P 500 Total Return Index and 10 yr from the UK Government Bond Index.
- For countries where oil accounts for 20% of the portfolio, asset allocation should be even more cautious, particularly in the last three decades. The high volatility of oil prices should be offset by the low risk / return assumed by the Japan Government Bonds in 1981-1990, from Euro 16 10 yr Government Bond Index in 1991-2000 and the UK 10 yr Government Bond Index in 2001-2010.

In light of these considerations, it is interesting to see whether the funds for commodity asset allocation strategy will be particularly aggressive even in the case of savings funds, which pursue horizons of medium / long - term savings funds similarly to non-commodity, to reserve investment corporations, to SPRFs - or if
they prevail policies of portfolio management more cautious, given the high volatility of the underlying commodity.

Finally, we will attempt to verify the presence of distortionary effects in asset allocation of SWFs. In particular, two bias could affect the achievement of the objectives of maximizing the risk / return:

1. The home bias, i.e. the investment of a significant portion of the portfolio in domestic activities. This distortion has been demonstrated also in the portfolios of institutional investors, who, in spite of advantages in terms of risk / reward that involves the implementation of a thorough portfolio diversification in international perspective, they tend to favor the purchase of domestic assets.

2. The “political bias”, i.e. the influence of political logic in the management of the portfolio of such investment vehicles. This distortion, particularly that of the government investment vehicles, it may be caused by elements of nature, and then to the governance of sovereign wealth fund or elements of external nature, relating to situations of temporary nature. On one hand, the presence of members belonging to the sphere of national policy within the Board of Directors of the fund may result in the pursuit of political goals at the expense of purely financial goals - that situation could be further emerged clearly from the absence of manager external Members of the management of the fund’s assets.

On the other situations could change the cyclical fund strategy. In particular, it will be interesting to observe the behavior of sovereign wealth funds held following the event of an external shock can change the portfolio of the same, represented by the financial crisis on subprime mortgages, which began to emerge from mid-2007.

In economic situations recessive behavior of SWFs may be characterized by some peculiarities that distinguish them from other institutional investors: on the one hand their governmental nature and modalities of funding (in particular with time horizons of the funds in the medium to long term) could still ensure a steady flow of cash for investment in the financial markets (eg compared to outflows of capital that record the equity mutual funds in recessionary economic situations); other, in particular with reference to the stabilization funds, one might expect a withdrawal of resources, through the sale of assets readily convertible into cash and government bonds, to cope with the rapid decline in commodity prices, in particular the oil, in such a way as to counteract the decline in state revenues. If we focus on the analysis strategies of sovereign wealth funds in situations of exogenous shocks on the side of portfolio management, it could result in a manner similar to other institutional investors, following the logic of a financial nature, or it could emerge a “political bias”-type exterior, in the event that prevailed governmental nature of the investment vehicle.

5. In the First Case Might Arise Two Different Behaviors

a. First, in the face of a significant decline in the prices of riskier assets (equities and alternatives), which entails significant losses especially for saving funds and Sovereign Pension Reserve Funds, you might witness a gradual decrease in the equity component of the portfolio, so as to be able to limit further losses of the Net Asset Value, and a consequent increase in the weight of activities with a lower degree of risk, such as cash or bonds investment grade, with tight deadlines and short duration.

b. In a “contrarian”, some sovereign wealth funds with long-term time horizons with prudent asset allocation before the financial crisis, mainly composed of cash or assets readily convertible into cash, they could take advantage of the heavy sell-off in riskier securities in order to increase weight at a reduced price and make a substantial excess return over the medium to long term.

In the event that outweigh his “political bias” might occur different behaviors with respect to institutional investors:

- The sovereign wealth funds as investment vehicles with peculiar mode of government funding, may represent the only actors with substantial financial resources to invest in international markets to support financial institutions hit hard by the financial crisis could provide liquidity to financial intermediaries belonging to the developed countries, overweighting the banking / finance than other institutional investors.

- The SWFs with higher risk tolerance could provide liquidity to the domestic financial system, with a view to recapitalize the banking sector hit by the crisis. Therefore there may be a different geographic asset allocation, which would coincide with a greater presence in the portfolio of equity securities issued by the same country in which the fund was established; but the preference shares in domestic situations of
exogenous shocks should not be confused with the preference of domestic securities resulting from the distortion mentioned above, known as “home bias”.

In the following paragraphs we will try to address the issues raised, starting with a review of the literature on asset allocation of SWFs, then move on to a review of the literature of the contributions that have examined the impact of any policy distortions “political bias“ on portfolio decisions of SWFs.

6. Conclusion

Since the 90s the number and importance of sovereign wealth funds has grown exponentially. The subprime mortgage crisis erupted in August 2007 has brought many of these funds to gain strategic positions in industries and leading institutions in mature markets such as Europe and the United States. In the years of the great global financial crisis, the weight of sovereign wealth funds has doubled from 3% to 6% of world GDP, their number rose from 45 to 62 over the past five years and is expected to reach 70 in 2015 by as noted in the financial markets lies the true and actual fortune SWFs.

The assets managed by Sovereign Wealth Funds has grown from 2 to 5.1 trillion U.S. dollars over the period and is estimated to reach 10 trillion U.S. dollars in 2015. Continuing a conclusion on the present state of SWS in Italy they currently hold equity interests in 36% of listed companies, in 25% of those in the UK, while this figure falls between 17% and 19% with regard to the French and German companies. In our country were made in 2011, Sovereign wealth funds' investments for 500 million. From the review of the literature that has addressed the issue of SWFs and the empirical verification was carried out in this work, concerning the analysis of the asset allocation of the Sovereign Funds, seems to be confirmed the hypothesis that these investment vehicles in the medium to long term, to act by adopting the same logical investment of other institutional investors, as seems to emerge in the short period, a deviation from the objective of asset allocation seeks to optimize the management of portfolio in financial terms. In particular, the research carried out here shows that the time horizon is certainly a key element in the construction of the portfolio of SWFs, so similar to what happens in mutual funds and pension funds. In fact, within the time frame considered investment vehicles with over the medium to long term - typically saving funds, the Sovereign Pension Reserve Funds and Reserve Investment Corporation - have increased component share of the portfolio compared to that of liquidity and the bond in order to take advantage of the higher yield associated with holding, in the medium to long-term securities equity, which is the equity risk premium. In addition, always the same categories of SWFs have progressively introduced - and in particular in 2010 - ever larger shares of assets alternative, namely shares in hedge funds, private equity, commodities and real estate with the objective of achieving excess returns over the long term resulting from the possession of assets characterized by a lower degree of liquidity, ie the so-called illiquidity premium.

The analysis carried out also follows that the same method of funding used by SWFs and affect determine the portfolio choices: the commodity funds, assuming that pursue the goal of stabilization, hold asset allocation is more conservative than the non-commodity funds. It seems, however, consistent with the portfolio optimization techniques that provide for such “Anchor asset” raw materials whose prices over the years have been characterized by high volatility, such as, for example, the oil.

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