DETERMINANTS OF THE SOVEREIGN WEALTH FUNDS AND THE BRAZILIAN CASE*

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ABSTRACT

This article studies the sovereign wealth funds (SWF), which, especially after the establishment of the Chinese SWF, in 2007, gained importance in the economic debate and are considered today as a significant institutional investor. This article analyzes the macroeconomic indicators of the countries with SWF and proposes that the determinants for their establishment are: significant current account surpluses; dependence on exports of fuel and ore; and/or high levels of domestic savings. In this context, the case of the Brazilian Sovereign Fund (BSF), established in 2008, stands out. The reasons for the establishment of the Brazilian fund appear to be related more to the adoption of this type of financial instrument by major developing countries and the dynamics between domestic authorities responsible for economic policy than to the macroeconomic fundamentals of the country. The BSF could become a traditional sovereign wealth fund, if used in the future to save the revenues of Brazilian pre-salt oil exports. The change, however, would not happen in the short term.

Keywords: international reserves; sovereign wealth funds; current account balance; fuel exports; domestic savings.

RESUMO

Este artigo estuda os fundos soberanos de investimentos (FSIs), que, principalmente depois da criação do FSI da China, em 2007, ganharam importância no debate econômico e são considerados, hoje, como investidores institucionais significativos. Ao analisar as características macroeconômicas dos países que possuem FSIs, este artigo propõe que os determinantes para seu estabelecimento são: superávits significativos de conta corrente; dependência das exportações de combustíveis e minérios; e/ou altos níveis de poupança interna. Neste contexto, o caso do Fundo Soberano do Brasil (FSB), criado em 2008, sobressai. As razões para o fundo brasileiro parecem estar mais associadas à adoção deste tipo de instrumento financeiro por importantes países em desenvolvimento (PEDs) e à dinâmica entre as autoridades domésticas responsáveis pela condução da política econômica que aos fundamentos macroeconômicos do país. O FSB poderá tornar-se um FSI tradicional, se for utilizado, no futuro, para acumular os recursos das exportações brasileiras de petróleo do pré-sal. A mudança, no entanto, não aconteceria no curto prazo.

Palavras-chave: reservas internacionais; fundos soberanos de investimentos; balanço de conta corrente; exportações de combustíveis; poupança interna.

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1 INTRODUCTION

The sovereign wealth funds (SWF) have gained importance in the economic debate and they are considered today as significant institutional players. The Organization for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF) have created work groups to study the topic, and the major investment Banks have disseminated reports warning on the impact of this new financial instrument in the markets.

The term *sovereign wealth fund* describes, according to Truman (2008a), a separate set of financial assets held or controlled by governments that include assets abroad. Other definitions are more restricted and exclude funds investing in the domestic market. This article takes on Truman's definition (2008a), but it does not consider the pension funds and the sub Federal entities' funds.[1]

The SWFs exist since the 1950s when Kuwait and Saudi Arabia's funds were created. The purpose was simple: to accumulate funds from natural resources exploitation for future use and to allow for long term investments with high returns. Oil is a finite resource; therefore, a mechanism was necessary in order to save revenues and to promote inter-temporal optimization of consumption. Additionally, the SWFs could invest in several categories of assets, which would allow higher returns than those obtained from international governments' reserves. Other objectives, such as avoiding exchange rate excessive valuation and making available an instrument of government's anti-cyclic operation were also considered, but the principle governing the operation was related to the establishment of savings for future generations with revenues derived from natural resources exploitation. During the following decades, new countries decided to have similar instruments and the objectives were broadened.

In 1974, Singapore set up the Temasek to control government's assets in its major domestic enterprises. The country was undergoing a process to become a major exporter of manufactured goods, and it increasingly accumulated trade surpluses. Temasek, along with the Government of Singapore Investment Corporation, established in 1981, was the first SWF of a country that did not fit in the category of natural resources exporter. The fund's objective was related not just to resources savings, but also to the active management of the country's development.

The United Arab Emirates set up, in 1976, the largest SWF in activity which manages US$ 627 billion. Chile set up its fund in 1985 with resources from copper exports. Norway also decided to set up a sovereign wealth fund in 1990, aiming at reserving profits from oil exploitation, which was discovered in the North Sea, for future generations. The number of existing SWFs doubled in the past decade. There are currently 43 sovereign funds in operation, according to the definition used in this paper.

1. Definition based in Aizenman and Glick's work (2009).

The issue presented is: why only now, after decades of operations, do the SWFs drew so much attention? The answer seems to be associated to the establishment of a Sovereign Fund by China in 2007 and the growing role of the developing countries in the international scene. Symptomatically, every paper on the SWFs included in this paper's bibliography, was written from 2007 on, because before there was not a significant amount of papers on the topic. The Chinese sovereign wealth fund put the developed countries in alert and it encouraged other developing countries, including Brazil, to establish similar funds. Currently, China has reserves of over US$ 2 trillion and its SWF was initially capitalized with US$ 200 billion. The potential to influence markets and the fear that it is used by the Chinese government to pursuit strategic goals led developed countries' governments and private sector to an "analytical race", aiming at understanding SWFs and to assess the risks of their operations. Additionally, legal controls on foreign investments were reinforced, and several operations were discouraged with the premise that they affected the recipient country's interests.

The reaction of developed countries to SWFs investments was exacerbated due to strong global macroeconomic imbalances. The greatest imbalance takes place between developed countries, with deficits in their current accounts, and developing countries presenting surpluses. It is worth noticing that some large developed countries, such as Japan and Germany, also have surpluses, and they depend on exports to keep the strength of their economies, while contributing for the global imbalances as well.

The accumulation of international reserves arose as a result of such imbalances. The major feature of this accumulation of reserves, during the last decade, was the growing participation of the developing countries,[2] which, with greater economic power, began to demand for more importance in the global decision making process. The Group of 20 (G20), which includes major emerging countries, actually replaced in economic issues the Group of 8 (G8) that was limited to the developed countries. It was in this context of changes in the global economic governance that the Brazilian Sovereign Fund (BSF) was created, in 2008.

In addition to this introduction, this article includes, in its Section 2, a discussion on the theory of international reserves, which huge accumulation in the past years, mainly among developing countries, is associated to the increasing number of sovereign wealth funds. Section 3 summarizes the SWF major features, comments on the existing literature on the topic and highlights the macroeconomic and political scenarios that allowed for proliferation of this type of fund. The determinants of the SWFs are analyzed in Section 4 through statistical analysis of data from countries with sovereign wealth funds. The Brazilian case is studied in Section 5, which highlights the particularity of the BSF. Section 6 concludes the paper.

2. Reserves increased fourfold between 2001 - 2009, and BRIC's member countries (Brazil, Russia, India, and China) accounted for almost half of this increase (44%).

2 INTERNATIONAL RESERVES AND THE NEW MERCANTILISM

The discussion on sovereign wealth funds is inserted in a broader debate on international reserves. The significant increase in number of SWFs during the past decade is related with the vertiginous accumulation, without precedence in history, of international reserves mostly by the developing countries. After the 1997 Asian crisis, the importance of reserves increased as a cushion against capital flight. However, the current accumulation seems to surpass reasons usually associated to reserves, resulting in a discussion of a new type of mercantilism practice by countries that manage their exchange rates in order to get high trade surpluses – markedly China.

This is not the first time that reserves are brought into the economic discussion, as Flood and Marion have noted (2001). The discussion during the 1960s on the needed reforms of the Bretton Woods system led many analysts to question if the level of international reserves was adequate and if these were optimally distributed among countries. By the end of the 1970s and the beginning of the 1980s, researchers were interested in evaluating if demand for reserves had changed after the collapse of Bretton Woods. They were also curious in knowing if the developed and developing countries differ in their demands for reserves. The attention over the topic decreased when the premise that international reserves would be stable and, probably, low, during a time marked by exchange rates flexibility and high mobility of capital, was disseminated.

It was necessary, according to Flood and Marion (2001), by the end of the 1990s, to revive the debate on international reserves, considering that 20th Century's last decade had been marked by three trends that influenced their accumulation: the growing mobility of capital; the intensity of financial crises; and the increase in the number of countries that adopted the floating exchange rate regime. The authors sustained that greater mobility of capital, although in some respects beneficial, resulted in high levels of uncertainties in the international economy and in greater vulnerability of some countries to financial crises, partially explaining reserves accumulation.

Griffith-Jones and Ocampo (2008) highlight that there is clear evidence that the international reserves accumulation by developing countries started with the series of financial crises, mainly the Asian crisis in 1997. Therefore, it was a rational response of the developing countries, as a way to get insured against future turbulences. IMF policies, imposed to countries that needed extra resources, were considered excessively intrusive; therefore, they represented an additional factor motivating reserves accumulation. The financial deepening contributed also for greater demand of precaution, considering the risks of the flight of short term capital for the economy.

Aizenman and Lee (2007) stated that the 1997 Asian crisis led to deep changes on the demand for international reserves. The magnitude and the speed of changes in

capital flows surprised major observers. Many analysts saw the region as less vulnerable than Latin America, which had suffered the Mexico crisis in 1994. Southeast Asia was characterized for greater trade openness, better fiscal policies, and stronger growth of the product. In spite of it, it had contraction of the product and investment, emptying of credit and banking crises. The international reserves began to be seen as an insurance against this sort of shock. But the authors state that, to this precaution reason, it was added the modern incarnation of mercantilism: accumulation of reserves motivated by competitiveness of exports. Under this strategy, accumulation of reserves may facilitate exports growth by preventing or diminishing local currency appreciation. The precaution reason is associated to risks of product contraction, flight of capital and volatility, while the mercantilist perspective sees accumulation of reserves as part of the industrial policy.

The mercantilist explanation was first presented by Dooley, Folkerts-Landau and Garber (2003), particularly for the case of China. The authors argue that current global economic dynamics is the same that was predominant during the Post-War period, under the Bretton Woods system. The United States, in the 1950s, were the Center, with uncontrolled capital and goods markets. Europe and Japan, which had their capital destroyed by the war, comprised the emerging periphery. The peripheral countries of that time adopted a strategic development policy based in devaluated currencies, in controlling capital and trade, in accumulation of reserves and in using the central region as financial intermediary in order to provide credibility to their financial systems. The United States, in return, financed the periphery in the long term by means of direct foreign investments (DFIs). When Europe's development strategy changed into that of a free market and the end of financial controls, the fixed exchange rate regime collapsed into the floating regime of the 1970s.

In the authors' view, in the period that followed, there was no important periphery that could use the strategy of growth based in exports. The communist countries were irrelevant for the international monetary system.

Most other developing countries – especially the former colonies – either considered socialism as a possibility or adopted import substitution industrialization systems. Such development strategy was hostile to trade and fostered the production of domestic goods that could not compete globally, resulting in inefficient accrued capital. With the discredit of the socialist model by late 1980s, and the collapse of the Soviet Union during the period of 1989-91, a new periphery was attached to the Center composed by the United States, Europe, and Japan. The new peripheral countries were leaving behind decades of closed systems, with inefficient capital stocks, repressed financial systems and manufacturing goods that did not have enough quality to be exported towards the Center. The Washington Consensus encouraged some of those countries to a development strategy that involved

immediate annexation to the Center through opening of their capital markets. Other countries, however, mostly in Asia, chose the same peripheral strategy adopted by Europe and Japan, during the Post-War, devaluating their currencies, intervening in their currency exchange markets, imposing controls, accumulating reserves, and fostering growth based in exports to the Center countries. The authors conclude that the incredible success of this second strategy resulted in the return of the international financial system to the Bretton Wood's format. In some point in the future, the current Asian periphery will reach development stages in which they may join the Center and let their currencies float. At this time, other large countries, like India, will take place in the emerging periphery. The authors conclude, then, that the Bretton Woods system does not change; it only changes the periphery.

Dooley, Folkerts-Landau and Garber (2003) divide the current world into three main economic and currency exchange zones: the trade balance region, Asia; the center country, the United States; and the capital account region, comprised by Europe, Canada and Latin America. Asia, as a region based in trade balance, is concerned mainly with their exports to the United States. Exports lead to growth; therefore, their governments are willing to buy North American government bonds without much consideration on risks and returns. These countries currency exchange policy is interventionist in order to keep the exchange rate under control. Countries from the capital account region, on the opposite, have floating exchange rates, and their governments are concerned with risk/return of their international investments positions. The United States do not try to manage their exchange rate and act as intermediary for the system described by the authors. Dooley, Folkerts-Landau and Garber (2003) stress the fact that criticism in the United States are concentrated in China's devaluated currency, but not that of Japan, whose exports compete more directly with the North American goods.

According to Dooley, Folkerts-Landau and Garber (2003), Latin American countries have to choose: either to join Asia, in the trade balance region, or join Europe, in the capital account region. Those who are impatient for promoting growth by means of exports will advocate for the Asian model, with their exchange rates devaluated and attached to the dollar, and they will promote interventions and control over capital. Contrastingly, the Central Banks and the IMF tend to favor for floating exchange rates and mobility of capital from the European region.

It is worth noticing that, in spite of the 2008 financial crisis, the system described by Dooley, Folkerts-Landau and Garber (2003) does not seem to have collapsed. China continues to keep its exchange rate devaluated and it does not seem to be willing to promote significant changes in its growth strategy. It uses, to that end, the rhetoric that the country still has a large number of poor and its per capita income is one tenth of that in developed countries; therefore, it cannot

opt for measures that affect domestic income increase.[3] Additionally, there is not any sign of change in the investors' behavior who still are willing to finance North American debt, despite the twin deficits. It is important to highlight that during the crisis the US Treasury bonds were considered as safe heaven by private investor. Governments continue to accumulate reserves nominated in Dollar, mainly because of the confidence crisis currently experienced by the Euro Zone.

3 SOVEREIGN WEALTH FUNDS

The first SWF, in accordance with the current definition for this kind of fund, was created by Kuwait, in 1953, when it still was a United Kingdom colony. According to the Sovereign Wealth Fund Institute,[4] Sheikh Abdullah Al-Salem Al-Sabah's objective was to reduce the Emirate's dependence on a single non-renewable commodity. Resources from oil exploitation would be invested in the financial market, aiming at ensuring, at least partially, income for future generations. Until 1970, just two other countries had created SWFs: Saudi Arabia, also an oil exporter, and Kiribati, a country rich in phosphate. Since then, the number of sovereign wealth funds doubled in every decade, achieving the current 43 existing funds.[5] In addition to commodities exporting countries, the example was followed by large manufacture exporters which also get high trade surpluses in their transactions with the rest of the world.

Despite the increase in the number of SWFs, over 50 years went by without greater attention was paid to this type of financial instrument at governments' disposition. The situation changed radically when, in March 2007, China announced that it would create a sovereign wealth fund.[6] Since then, the academy, investment banks, international organizations, think tanks, and governments themselves turned to study the SWFs. The Chinese initiative generated an "analytical race", aiming at defining these funds, delimiting their particular characteristics, estimating their volume, projecting their impact and, finally, creating rules for their operation. The first articles on the topic sought to understand the phenomenon and they manifested a certain surprise with the SWFs, as shown by the title of Stephen Jen's article (2007a), director of the Morgan Stanley bank and one of the first to study the topic: *Sovereign wealth funds: what they are and what's happening.* The first issue dealt was SWFs definition. There is not a particular one that has predominated, with variations that range from more comprehensive concepts involving any kind of investment fund controlled by the government to the more restricted that exclude funds investing in the domestic market. Chart 1 summarizes the definitions presented for the SWFs.

3. Prime-Minister Wen Jiabao's speech at UN 65th General Assembly in December 23, 2010. Available at: <http://gadebate.un.org>.

4. Site at internet: <www.swfinstitute.org>.

5. The number of existing SWFs depends on the definition used. The concept used by this article excludes sub Federal entities' funds and pension funds, as it will be detailed further on in the text.

6. According to Martin (2008), the Chinese SWF was announced, for the first time, in March 2007. Officially, the fund was established in September 2007.

CHART 1
Definition of SWFs

Author	Definition[1]
Clay Lowery – quoted by Jen (2007b)	Investments vehicle of government that invests in assets nominated in foreign currency and whose management is separated from the official reserves.
Jen (2007b)	The SWFs need to have five characteristics: sovereignty; high exposition to foreign currencies, no explicit liability – which excludes pension funds; high tolerance to risk, and long term investments horizon.
IMF (2008)	The SWFs are investment funds of governments, created for a variety of macroeconomic purposes. Usually, they are financed by transfer of long-term assets that are invested abroad.
Truman (2008a)	SWF is a term that describes a separate set of financial assets owned or controlled by governments that includes assets abroad.
OECD (BLUNDELL-WIGNALL, HU and YERMO, 2008)	SWFs are sets of assets owned and directly or indirectly managed by governments to achieve national objectives.

Elaborated by the author.
Note: [1] Our translation.

Definitions leave a relative margin of flexibility, acknowledging the complexity of this new type of instrument, and they allow that funds with marked difference be encompassed as SWFs. The next step of the researches was, therefore, to set a typology of these funds, differentiating them in accordance with their investment form, the type of applications for their resources and their main objectives. The existing SWFs do not fit in just one category, having more than one objective and way of financing, but they may be classified in accordance with their major characteristics.

Chart 2 has the classifications of these funds.

CHART 2
Classification of SWFs

Author	Classification
Fernandez and Eschweiler (2008)	Way of financing: i) commodity; ii) fiscal; and iii) foreign reserves
Sovereign Wealth Fund Institute[1]	Way of financing: i) oil and gas; ii) copper; iii) phosphate; iv) diamonds and minerals; and v) non-commodity
Fernandez and Eschweiler (2008)	Objectives: i) stabilization of revenues; ii) savings for future generations; iii) holdings; and iv) generic
IMF (2008)	Objectives: i) stabilization; ii) savings for future generations; iii) investments of international reserves; iv) development; and v) pension

Elaborated by the author.
Note: [1] Available at: <www.swfinstitute.org>.

With the SWFs defined and classified, it was possible to estimate the volumes of resources involved in their operations. The first estimates seem to be exaggerated, in terms of relative size and their growth potential (JEN, 2007a).

The surprise which these funds were initially received may have generated this initial overestimation that, as it shall be seen, resulted in cautious reaction by governments. Resources under SWFs management are indeed significant, but their importance compared with other financial instruments still is relative. The estimates of resources managed by these funds are summarized in table 1.

TABLE 1
Assets of the SWFs
(In US$ trillion)

Author	Current assets	Assets in 2015
Kern (2007)	3.2	-
Blundell-Wignall, Hu and Yermo (2008)	2.6	-
Sovereign Wealth Fund Institute[1]	3.3	-
Jen (2007a)	2.9	12
ING Bank (2009)	3.5	6.8

Elaborated by the author.
Note: [1] Available at: <www.swfinstitute.org>.

The largest SWF is the Abu Dhabi Investment Authority, from the United Arab Emirates, as shown in table 2. It is worth noticing the extreme concentration of these funds. The five countries with the largest SWFs have 68% of the total managed resources.

TABLE 2
Sovereign Wealth Funds
(In US$ billion)

Country	Fund	Date of foundation	Assets (Jun./2010)	Origin of resources
United Arab Emirates	Abu Dhabi Investment Authority	1976	627,0	Oil
	Investment Corporation of Dubai	2006	19,6	Oil
	International Petroleum Investment Company	1984	14,0	Oil
	Mubadala Development Company	2002	13,3	Oil
	RAK Investment Authority	2005	1,2	Oil
Norway	Government Pension Fund – Global	1990	443,0	Oil
Saudi Arabia	Saudi Arabian Monetary Agency Foreign Holdings	1952	415,0	Oil
	Public Investment Fund	2008	5,3	Oil
Singapore	Government of Singapore Investment Corporation	1981	247,5	Non commodity
	Temasek Holdings	1974	122,0	Non commodity
China	China Investment Corporation	2007	288,8	Non commodity
	China-Africa Development Fund	2007	5,0	Non commodity

(Continues)

(Continued)

Country	Fund	Date of foundation	Assets (Jun./2010)	Origin of resources
Hong Kong (China)	Hong Kong Monetary Authority Investment Portfolio	1993	227,6	Non commodity
Kuwait	Kuwait Investment Authority	1953	202,8	Oil
Russia	National Welfare Fund[3]	2008	142,5	Oil
Libya	Libyan Investment Authority	2006	70,0	Oil
Qatar	Qatar Investment Authority	2005	65,0	Oil
Algiers	Revenue Regulation Fund	2000	54,8	Oil
Kazakhstan	Kazakhstan National Fund	2000	38,0	Oil
South Korea	Korea Investment Corporation	2005	30,3	Non commodity
Brunei	Brunei Investment Agency	1983	30,0	Oil
France	Strategic Investment Fund	2008	28,0	Non commodity
Malaysia	Khazanah Nasional	1993	25,0	Non commodity
Iran	Oil Stabilization Fund	1999	23,0	Oil
Chile	Social and Economic Stabilization Fund	1985	21,8	Cooper
Venezuela	National Development Fund	2005	20,0	Oil
	Macroeconomic Stabilization Fund – FEM	1998	0,8	Oil
Azerbaijan	State Oil Fund	1999	14,9	Oil
Nigeria	Excess Crude Account	2004	9,4	Oil
Bahrain	Mumtalakat Holding Company	2006	9,1	Oil
Brazil	Brazilian Sovereign Fund	2008	8,6	Non commodity
Oman	State General Reserve Fund	1980	8,2	Oil and gas
Botswana	Pula Fund	1994	6,9	Diamonds and minerals
Mexico[1]	Oil Income Stabilization Fund	2000	6,8	Oil
East Timor	Timor-Leste Petroleum Fund	2005	5,0	Oil and gas
Trinidad and Tobago	Heritage and Stabilization Fund	2000	2,9	Oil
Vietnam	State Capital Investment Corporation	2006	0,5	Non commodity
Kiribati	Revenue Equalization Reserve Fund	1956	0,4	Phosphate
Gabon[2]	Fund For Future Generations	1998	0,4	Oil
Indonesia	Government Investment Unit	2006	0,3	Non commodity
Mauritania	National Fund for Hydrocarbon Reserves	2006	0,3	Oil and gas
Sudan[2]	Oil Revenue Stabilization Account	2002	0,1	Oil
São Tomé and Príncipe[2]	National Oil Account	2004	0,02	Oil
Total			**3.255,12**	

Source: Sovereign Wealth Fund Institute. Available at: <www.swfinstitute.org/fund-rankings>.
Elaborated by the author.
Note: [1] Data of June 2009.
[2] Data of 2007.
[3] The amount includes the Reserve Fund, which, as the National Welfare Fund, replaced the Stabilization Fund, created in 2004.

About 70% of the assets are concentrated in SWFs whose main source of resources are commodities exports, predominantly oil and gas (69% of total). Only 1% of SWFs resources may be associated to minerals exports, whose main example is

Chile. The other funds (non commodity) represent 30% of total resources and they are, in their majority, owned by large manufacture exporters, such as China and Singapore.

The SWFs created in the past decade emerged in a context of macroeconomic imbalances and international reserves accumulation by part of the developing countries.[7] Aizenman and Glick (2007) consider the phenomenon of these funds as byproduct of the international reserves growth. The commodities exporting countries would have learned that use of resources derived from temporary price increases may result in inflation and exchange rate appreciation, as well as jeopardize international competitiveness. The increase of commodities prices in 1973 did not show as sustainable in the 1980s, and had significant drops. The recent increase in commodities prices, therefore, was profited in a more rational way, and part of the gains was accumulated in SWFs. A second factor motivating these funds increase, according to the authors, is the developing countries efforts to decrease the costs of maintaining international reserves. Many of these countries have reserves above what would be necessary due to prudential reasons, and there is a move to get higher returns by transferring the control of part of the reserves from the Central Banks to a SWF.

The reasons for reserves accumulation and SWFs proliferation, therefore, may be found in the economic theory related to precaution, stability, and diversification. However, the phenomenon of these funds cannot be fully understood without political considerations. Both, the creation of funds and the reactions that they generated are related to discussions on the role of the State in managing the economy and to the increasing presence of developing countries in the international scenario.

The economic importance of the so-called *emerging countries* in the past decade increased significantly. The issue, as presented by Santiso (2008), is that "the Center is increasingly less central and the Periphery is increasingly less peripheral". The growth is not boosted anymore only by the OECD countries, which now represent less than 55% of the world product, compared to 75%, five decades ago. In 2007, the emerging economies traded, for the first time, more among themselves than with OECD countries. With the 2008 financial crisis, originated in the United States and with harmful repercussion in Europe, this trend was accentuated.

These changes could not happen without reactions and discussions on the new global order. One of the main debates has been about the role of the State in the economy. The North American and European governments interventions to prevent a greater catastrophe during the 2008 financial crisis, which generated the largest drop in the product since the II World War (IMF, 2009), was seen as a recognition that the State had trusted too much on markets.

7. Developing countries had current account surplus of US$ 703 billion in 2008, while developed countries registered a deficit of US$ 493 billion. The size of the difference had a drop in the past two years due to the financial crisis, but it shall return to pre-crisis levels in coming years, according to IMF projections (2010). International reserves accumulation, which achieved US$ 9.4 trillion in 2009 (The World Bank, World Development Indicators. Available at: <http://data.worldbank.org/indicator>), emerged as a result of such global imbalance.

According to Bremmer (2010), in perhaps a too simplistic evaluation, two systems would be in competition. Capitalism with strong state intervention, promoted mainly by Russia and China, in addition to Saudi Arabia and Venezuela, presents a growing challenge to private corporations and to Western free market capitalism. Some emerging countries, like Brazil and India, would be between the two systems, and they would have to choose between the two options. In face of such scenario, the author advocates for an alliance between the United States and Europe to face a "war" for hearts and minds as a mean to promote Western capitalism.

The political discussion on the SWFs is inserted in this context. Some countries, such as Singapore, France, and Brazil, seem to wish to use this type of instrument to boost their domestic economies. The French President, Nicholas Sarkozy, when announcing France's SWF, stated that its objectives would be to provide support to economic activity and to prevent the denationalization of French enterprises.[8] The French fund was idealized as one of the main instruments for the country's industrial policy. In the same line of France and Singapore's funds, the Brazilian fund, which will be analyzed later in the text, has among its stated objectives to support the internationalization of domestic enterprises.

The launching of China's SWF, in 2007, was seen as one more step of State intervention in the economy, and it generated a strong reaction from developed countries' governments, which feared the strategic use of SWFs to buy enterprises, to take hold on major sectors and to acquire technologies. The United States Congress called in Edwin M. Truman, from the Peterson Institute, to analyze these funds. Truman (2008b) stated that the SWFs did not present a new significant threat to the United States security and to its economic interests. However, the author mentions some cases that, such as China and potentially Brazil, raise concerns regarding conflict of interests, because the sovereign funds can be used to promote domestic enterprises.

As Cohen remembers (2009), there was little fear regarding geopolitical ambition of the first countries to have SWFs – for example, Kuwait – and those that followed later its example – for instance, Norway. Investments seem to be conservative and beneficial to the recipient countries. But, the establishment of the Chinese fund, followed by Russia announcement concerning the establishment of the Reserve Fund and the National Welfare Fund, with total resources of US$ 150 billion, changed the situation.[9] Individually, the developed countries began to review the legal instrument at their disposition to deal with the new investors, representing a change in the favorable environment for foreing direct investments that predominated in the 1980s and

8. Speech by the President of France, Nicolas Sarkozy, made in the Department of Loir-et-Cher, in November 20, 2008.
9. In February 2008, Russia announced that the Stabilization Fund, created in 2004, would be split into two entities, the Reserve Fund and the National Welfare Fund.

1990s. Cohen (2009) notes that, in 2000, of the 150 regulatory changes related to SWFs monitored by the United Nations Conference on Trade and Development (UNCTAD), almost all of them (147) were toward liberalizing investments. The trend underwent inflection even before the creation of the Chinese and Russian SWFs. In 2005, the Chinese corporation China National Offshore Oil Company (CNOOC) tried unsuccessfully to buy the Union Oil Company of California (Unocal),North American oil producer. In 2006, the United States negative political reaction made the state enterprise Dubai Ports World to give up in taking control of the North American operations of the Peninsular and Oriental Steam Navigation Company (P&O), British ports operator bought by the United Arab Emirates Company. Cohen states that, since 2005, at least 11 major countries, in economic terms, representing two fifth of all world FDIs, decided to change their laws to expand control or full ban investments in certain sectors (UNITED STATES, 2008b; MARCHICK and SLAUGHTER, 2008).

The multilateral economic institutions were set into action to respond to the challenge presented by the dimension of the new SWFs. The G8, gathered in Heiligendamm, Germany, in June 2007, stated that restrictions on investments by these funds apply only to a limited number of cases that concern mainly to national security. Cohen (2009) stresses that, four months later, under pressure from the United States and France governments, the G8 Finance Ministers formally requested that OECD and the IMF analyzed the issue. The IMF would develop guiding principles for the SWFs behavior, and the OECD would concentrate on recipient countries.

In the IMF, a series of meeting, called International Working Group of Sovereign Wealth Funds, was called in November 2007. Less than one year later, the 24 Principles of Santiago were adopted, which should govern SWFs operations (IWG, 2008). Cohen (2009) stresses the negative reaction by some of these funds, which did not consider the treatment as fair, taking into consideration that there are no rules for financial investors similar to the SWFs. The author mentions the executive vice-chairman of the Chinese SWF (China Investment Corporation – CIC), who stated: "We don't need outsiders to come tell us how we should act". Despite the reaction, the United States Treasury was able to persuade Abu Dhabi and Singapore, owners of the two largest SWFs, to issue a joint communicate, in March 2008, letting go of "geopolitical objectives" (UNITED STATES, 2008a).

According to Cohen (2009), OECD works were less productive than those of the IMF. After less than six months of deliberations, OECD Investments Committee had limited itself to rectify the status quo, in a report of April 2008 (OECD, 2008). The document only recommends countries to use national security exception with restraint.

The fear of the developed countries governments concerning SWFs proliferation seems to have been exaggerated. A series of studies, which analyzed the phenomenon with greater detail and with less political bias, reached the conclusion that the majority of SWFs investments did not differ from traditional investors' operations, such as pension funds and hedge funds. Only a few SWFs, like those of France, Singapore, and Brazil are explicitly targeted to promote domestic enterprises and may be associated to greater desire of State interference in the economy. Avendaño and Santiso (2009) analyzed investments of a group of these funds and found that differences between investments in SWFs stocks and other institutional investors are less evident than originally thought. To demand that these funds disclose their investments strategies and portfolio allocation will set them in disadvantage in relation to other investors. Balding (2008) also analyzed SWFs portfolios and reached similar conclusions to those of Avendaño and Santiso (2009), stating that these funds seem to operate like ordinary investors. SWFs managers diversify risks by applying in stocks, debt bonds, and alternative instruments.

The threat of the Chinese SWF, boasted in 2007, did not reflect in practice yet, at least in the developed countries, which rely in legal instruments to deal with investments considered as strategic. The Chinese vice-Minister ensured that CIC would not invest in foreign markets in sectors considered as strategic, such as in air transportation, telecommunications, and oil, attempting to diminish political reaction to the fund (CHINA, 2007). Wu and Seah (2008) called attention to political reaction of Western governments, mainly from the United States government, and they suggest that the CIC keep its cautious attitude in investments as a way to prevent been treated as another of the "Chinese threats".

The 2008 financial crisis contributed to change developed countries' opinion regarding SWFs. The stabilizing operation of some of the main funds led to the question raised by Couturier, Sola and Stonham (2009): "*Are sovereign wealth funds white knights?*" The authors state that private corporations can deal with the SWFs as ultimate saviors, prepared to provide financing when other sources of credit are inaccessible. The authors remind, however, that these funds are requiring stiffer terms to provide their resources, considering their privileged bargaining position and a history of losses with large investments in sectors that were weakened by crises.

The influent investment bank Goldman Sachs (O'NEILL, NIELSEN and BAHAJ, 2008) also came out advocating for the SWFs, stating that those have two major and positive functions: they allow for developing countries to invest their profits for future use and they provide for highly demanded resources to countries depending on foreign capital. In spite of acknowledging that these funds could provide more information on their operations, in order to increase the transparency level of the sector, the authors stress that the major issue is the change in the structure of

global economic governance. The developed countries governments cannot demand more information on SWFs beyond those they disclose about their reserves management and require from other investors in their jurisdiction. The authors conclude that, instead of criticizing the SWFs, some large developed countries with excessive reserves, such as Japan and the Western Europe, should create their own sovereign wealth funds.

4 DETERMINANTS OF THE SOVEREIGN WEALTH FUNDS

There are, currently, 43 SWFs owned by 35 countries according to table 2. Sovereign wealth funds are different among themselves, regarding financing modes and investments objectives. Countries that own funds also present wide diversity, ranging from Mauritania, with per capita Gross Domestic Product (GDP) of US$ 450, to the wealthy Norway with per capita GDP of US$ 41,000. Some of the features, however, seem to be common to almost all countries that have established SWFs. As previously seen, the creation of sovereign wealth funds was in the beggining related to the desire of accumulating wealth derived from exploitation of exhaustible natural resources. Therefore, the first characteristic marking SWFs owner countries is a high dependence on fuel – in most cases, oil – and ore exports.

The establishment of SWF by large exporters of a single commodity is related to several objectives acknowledged by the economic theory. As highlighted by Das (2008), the invention of the new instrument, in the beginning of 1950s, was motivated by the necessity of dealing with excessive liquidity. When countries have excessive liquidity, it is not desirable or possible to channel all resources for current consumption through increasing imports. The author stresses that exploiting possibilities of inter-temporal use is the most prudential way of dealing with wealth, mainly when resources result from minerals, precious stones, and oil exploitation, which are non-renewable natural resources. In these cases, the SWF operates as a pragmatic way of saving resources for future generations. Even when there is still availability of natural wealth to be exploited, notes Das (2008), the economy may face volatility of prices and supply. In these situations, the SWFs may help to stabilize revenues.

The second macroeconomic feature present in the majority of countries that have decided to create SWFs is the positive balance in current accounts. The sovereign funds are used as a way to accumulate abroad surplus resources in order to prevent exaggerated appreciation of the exchange rate, which could harm the exporting performance of the economy, resulting in the so-called “Dutch disease”.[10]

10. The term "Dutch disease" refers to difficulties that natural resources exporting countries have to maintain an exchange rate that allows for their industry to remain competitive. The denomination arose in 1977, when the magazine The Economist described Netherland's drop in exports after the discovery of important natural gas reserves in 1959.

In addition to countries depending on one major natural resource exploitation, that achieve surpluses in their trade balance, there are more recent cases of countries that accumulate international resources by means of robust manufactured goods exports.

The Chinese wealth fund, despite being the fund that called attention to the SWFs phenomenon and set the developed countries in alert, finds justifications in the economic theory. The growth of China, intensively based on industrial exports, resulted in reserves accumulation that reached US$ 2.7 trillion in 2010.[11] According to Zhang and He (2009), an adequate level of international reserves is necessary to deal with international trade and finance, but the huge volume of accumulated reserves also poses serious risks for China. Firstly, the opportunity cost of Chinese reserves is increasing. The largest portion of the Chinese reserves is invested in the United States Treasury Bonds, which are liquid and safe, but provide low returns. Secondly, the currency exchange risk may lead to a significant drop in Chinese reserves purchasing power. Since the reform of the currency exchange regime of the renminbi, in July 2005, the Chinese currency has been gradually appreciated in relation to the dollar, leading to annual losses for China's reserves. Lastly, the authors highlight that the accumulation of reserves led to excessive liquidity in China's financial markets. In order to offset the inflationary impact of dollar purchases, the Chinese Central Bank has issued bonds for sterilization, but the practice does not seem to be sustainable. In this scenario, Zhang and He (2009) state that the Chinese government has two alternatives to deal with the challenges: either decrease the accumulation of reserves, which would have to be considered within the scope of structural economic change that would foster domestic consumption, or to manage reserves by means of a more active policy that seeks to get higher returns from investments. The second alternative led to the establishment of the CIC, which sought to diversify investment of reserves through purchases of stocks, commodities, real estate, and other financial products.

In addition to be fuel and ores exporters and/or have high surpluses in current account, a third characteristic, which is also found in the majority of the countries that have created SWFs, is the expressive volume of domestic savings. Countries that have sovereign funds save large ratios of their domestic product, and the SWFs emerge as an alternative to keep part of the savings in the international markets, in investment with long term horizon.

Table 3 shows the mentioned features (fuel and ore exports, surpluses in current account and domestic savings), in addition to the reserves ratio to GDP and per capita GDP. Countries that have created SWFs and with population over 200 thousand inhabitants were included.[12]

11. IMF Estimates (2010).

12. Kiribati (100 thousand inhabitants) and São Tomé and Principe (160 thousand inhabitants) were not considered in spite of having created SWFs in 1956 and 2004, respectively.

TABLE 3
Countries with SWFs: economic indicators (2004-2008)

Country	Current account balance/GDP %	Fuel exports/total exports %	Ores and metal exp./ total exp. %	GDP per capita 2000 US$	Reserves/ GDP %	Domestic savings/GDP %
United Arab Emirates	13,17	69,93	1,72	24.033	21,29	41,22
Norway	15,78	66,24	6,98	41.226	15,30	38,41
Saudi Arabia	25,84	90,00	0,22	9.902	9,30	49,58
Singapore	22,26	13,40	1,35	27.589	97,99	49,72
China	8,14	2,07	1,93	1.633	40,25	50,50
Hong Kong (China)	11,77	1,84	4,45	31.970	74,61	31,96
Kuwait	41,66	94,67	0,16	21.503	14,34	53,68
Russia	8,55	58,46	7,29	2.654	27,64	33,75
Libya	37,24	n. d.	n. d.	7.206	101,54	57,80
Qatar	29,52	89,59	0,14	29.217	11,45	66,23
Algiers	20,25	97,67	0,50	2.128	70,99	55,04
Kazakhstan	(1,37)	68,24	13,46	2.135	17,84	43,26
South Korea	1,24	5,20	1,97	14.436	24,87	31,72
Brunei	53,30	94,81	0,06	18.261	6,15	52,59
France	(0,72)	4,03	2,52	23.254	3,92	19,79
Malaysia	15,35	14,27	1,41	4.804	50,69	42,82
Iran	7,54	78,63	1,30	1.948	n. d.	40,49
Chile	2,23	1,68	60,03	5.853	13,63	31,87
Venezuela	13,45	88,30	2,43	5.357	17,94	38,10
Azerbaijan	10,36	84,41	1,24	1.556	12,03	53,86
Nigeria	15,54	95,12	0,15	457	26,28	n. d.
Bahrain	11,08	77,53	14,49	15.463	19,86	50,02
Brazil	0,60	7,20	10,43	4.137	9,56	19,77
Oman	10,39	89,96	1,01	9.215	16,37	45,25
Botswana	11,24	0,16	16,47	4.369	67,51	46,67
Mexico	(0,79)	15,20	2,26	6.352	8,51	23,61
East Timor	n. s.[1]	n. d.	0,00	309	46,20	n. d.
Trinidad and Tobago	26,80	68,58	1,35	9.939	32,81	45,02
Vietnam	(5,32)	23,01	0,65	576	23,12	28,75
Gabon	17,88	69,45	4,42	4.069	9,96	56,63
Indonesia	1,23	27,02	8,71	994	12,25	29,34
Mauritania	(23,43)	23,71	60,33	450	4,79	2,88
Sudan	(10,86)	87,51	0,49	468	4,61	18,24

Source: IMF (World Economic Outlook Database), for the current account balance and the World Bank (World Development Indicators), for the remaining indicators.
Elaborated by the author.
Note: [1] East Timor current account balance is 193%.
Obs.: 1. n. d.: Not available.
2. n. s.: Not available.

Table 4 compares selected macroeconomic rates of countries that have SWFs with the global average, in order to highlight high surpluses rates of current account, fuel exports, international reserves and domestic savings.

TABLE 4
Average of economic indicators of countries with SWFs and global average (2004-2008)

Country	Current account balance /GDP	Fuel exports/ total exports %	Ores and metal exp./total exp. %	GDP per capita 2000 US$	Reserves/GDP %	Domestic savings/GDP %
Average of countries w/ SWF	12,19	51,87	7,19	10.105	28,55	40,28
Global average	(1,70)	16,74	7,76	8.226	18,89	19,10

Source: World Bank (World Development Indicators) and IMF (current account balance).
Elaborated by the author.

Only three examples do not fit among exhaustible natural resources exporters countries[13] or with significant current account surpluses:[14] South Korea (fund created in 2005), France (fund created in 2008) and Brazil (fund created in 2008). If domestic savings is considered also, outstanding countries are just France and Brazil, considering that South Korea saves 32% of its GDP.

5 THE BRAZILIAN CASE

In October 2007, one month after the establishment of the Chinese sovereign fund, the Ministry of Finance (MOF) of Brazil confirmed the intention of having a similar financial instrument (FAZENDA, 2007). Russia announced its entry in the club of countries with SWFs in February 2008, leaving only India, among BRIC countries, without a SWF. These funds were seen as the offensive side of emerging markets State capitalism, using as resources the billionaire international reserves accumulated in the past decade and the renewed speech in favor of a more active role of government in the economy as a mantra. For the Brazilian government it was only natural that the country should also covet the new investment mechanism. Brazil's reserves, at the time, were US$ 180 billion and they reached US$ 289 billion in 2010. The historical external debt no longer was a significant concern and the country became a net external creditor.

The project to create the Brazilian SWF, emblematically, was announced officially with the new industrial policy, in May 2008, at the National Economic and Social Development Bank (BNDES) (NOVA.., 2008).

13. Defined, by the author, as countries whose fuel or minerals exports represent more than 15% of total exports.
14. Defined, by the author, as countries presenting current account surpluses higher than 8% of GDP.

The Productive Development Policy would lower the cost of domestic investments and exports, including the expansion of the Exports Financing Program (Proex) from R$ 500 million to R$ 1.3 billion. The BSF, in its turn, would support investments abroad of the Brazilian enterprises, confirming the State support toward a more active international performance by national businessmen. Five objectives were listed in the Ministry of Finance presentation on the BSF (BRASIL, 2008): to support the country's strategic interest projects; to expand profitability of financial assets held by the public sector; to increase public savings; to decrease the fluctuations in the economic cycles; and to promote the internationalization of Brazilian enterprises. The MOF stressed that the economic scenario was favorable for the creation of the BSF, mentioning the high level of the international reserves, Brazil's net external creditor position, the consistent fiscal policy (nominal surplus result in the first quarter of 2008), and the investment grade received from major risk rating agencies.

The BSF was created by the Law no. 11,887, of December 24, 2008, in order to promote investments in assets in Brazil and abroad, increase public savings, mitigate economic cycles effects and foment strategic interest project of the country located abroad. The description highlights the different purposes between the BSF and what it is defined as a traditional SWF. The Brazilian fund does not aim at managing part of the international reserves as a means to get higher financial returns, as are the cases of China and South Korea, or saving exports resources from a certain natural resource, as it is the case of the Persian Gulf countries' SWFs. The BSF has strategic objectives related to the promotion of growth and the maintenance of economic stability.

The 2008 Law was complemented by Decree no. 7,055, of December 28, 2009, regulating the BSF, and Decree no. 7,113, of February 19, 2010, which created the Executive Board of the Brazilian Sovereign Fund (CDBSF). The decrees attribute to the MOF the responsibility to operate this fund, but submit to the CDBSF, comprised also by the Ministry of Planning, Budget and Management (MP) and by the Central Bank of Brazil (BCB), decisions related to maximum allocation in each class of assets, approval of national strategic interest projects, the preparation of budgetary proposal and definition of its internal by-laws. The BSF was capitalized with initial contribution of R$ 14 billion by the Treasury. In June 2010, it was announced that the BSF would buy stocks of *Banco do Brasil* (BB) (FUNDO., 2010a) and, in September 2010, the MOF informed that the fund would be used to capitalize Petrobras, related to planned investments by the state enterprise to exploit the pre-salt oil (MP..., 2010). Around 80% of the BSF assets is applied in stocks of Petrobras and 10% in those of BB (FUNDO..., 2010b). The portfolio of the Investment and Stabilization Fiscal Fund (FFIE), whose sole shareholder is the BSF, is monthly informed by the Securities and Exchange Commission (CVM).[15]

15. Information on the FFIE available at: <http://www.cvm.gov.br>.

The debate on the BSF was intense, first in newspapers, and later, in the academia, which recently began to disseminate the first studies on the Brazilian fund. In the press, due to the nature of the media, the discussion was often more passionate. The executive director of Brazil in IMF, Paulo Nogueira Batista Jr., came out in defense of the fund, stressing that the National Treasury action should be welcomed, as with what happens in the United States, where the Federal Reserve System (Fed) and the Department of the Treasury share currency exchange authority, working coordinately (BATISTA JUNIOR, 2008). Mariano Laplane evaluated positively the BSF, and highlighted its developmental feature, with potential to accelerate the internationalization process of Brazilian firms (REHDER, 2008). Criticisms were concentrated in costs associated to the BSF, in the still high total public debt, in Brazil's fiscal and current accounts deficits, and in the low internal savings (GIAMBIAGI, 2008; NAKANO, 2008; KUNTZ, 2008).

Academic analysis on SWFs, as well as public debate in the press, were also marked by favorable and contrary stands regarding the establishment of the fund, in accordance with the author. Sias (2008) highlights that "the sovereign fund became a powerful economic policy instrument, since it assists the fiscal, monetary, currency exchange, and industrial policies". The author highlights that countries that established SWFs improved the management of their economy by institutionalizing the anti-cyclic feature of government expenditures, mitigating the currency exchange appreciation problem, and diversifying investments abroad. Bello (2008) notes that, by providing resources to national enterprises abroad, the SWF would be operating as a development fund and not as instrument to increase international reserves profitability. The author questions possible transfer of SWF resources to BNDES and she states that this bank would have conditions to access the international market directly in order to finance its operations. Freitas (2009), in a paper on oil revenues and the institution of the sovereign wealth fund, advocates that there are strong economic policy arguments favoring the creation of the SWF, but reminds that the objective of dampening economic cycles or accumulating savings for future generations can be achieved by means of the adequate control of public spending. The difference between the Brazilian case and other countries that have created SWFs is emphasized by Caparica (2010), who reminds that Brazil does not have surpluses in current account and cannot rely in high domestic saving rates. Additionally, the author notes that "the fiscal policy has not been anti-cyclic, which serves a strong argument opposing the creation of the Brazilian Sovereign Fund". Finally, he states that Brazilian interests rates are the highest in the world and, therefore, it will be difficult for the Brazilian fund to be able to offer returns over the public debt cost. Lima highlights also the specificity of the Brazilian fund and states that the government (...) seeks to use an economic policy instrument mistakenly denominated as sovereign fund, ultimately, to improve Brazilian industries competitiveness abroad (LIMA, 2009, p.106).

As previously pointed out, Brazil appears – like France – as a country that created its SWF without having the main features of the other countries that have such instrument; which are, sustained current account surpluses, dependence on fuel exports and high levels of domestic savings. The specificity of the Brazilian case is evidenced in table 5.

TABLE 5
Average of economic indicators of countries with SWFs and data from Brazil (2004-2008)

Country	Current account balance /GDP %	Fuel exports/ total exports %	Ores and metal exp. / total exp. %	GDP per capita 2000 US$	Reserves/ GDP	Domestic savings/GDP
Average of countries w/ SWF[1]	12,56	53,36	7,08	10.291	29,16	40,96
Brazil	0,60	7,20	10,43	4.137	9,56	19,77

Source: World Bank (World Development Indicators) and IMF (current account balance).
Elaborated by the author.
Note: [1] Excluding Brazil.

The decision of creating the SWF, in this context, cannot be explained by the fundamentals of the Brazilian economy. The fund was created as one of the development funds that, according to the IMF (2008), assist socioeconomic projects or promote industrial policies to boost the country's GDP growth. The MOF evidenced the character of the SWF when it established, among the fund's objectives, the support to the country's strategic interest projects. After the 2008 financial crisis, when it was clear that developed countries governments were – actually, they always have been – willing to make huge sacrifices to defend their national enterprises, it is difficult to criticize the government desire of having a strategic economic role and support the internationalization of Brazilian enterprises.

But one may question if the fund is the best instrument to pursuit such objective. The BNDES, as reminded by Bello (2008), may raise funds abroad and directly finance Brazilian firms' expansion projects. Since 2003, the bank supports Brazilian direct investment abroad, through financing or as shareholder.[16] In August 2009, it opened an office in Montevideo, Uruguay, aiming at structuring and facilitating businesses of Brazilian interest in South America, particularly with the Southern Common Market (Mercosul) member countries. BNDES opened a subsidiary in London, in November 2009, with the objective of increasing the bank's visibility to the international financial community and assisting Brazilian firms' projects abroad.

16. BNDES international operations. Available at: <www.bndes.gov.br/SiteBNDES/bndes/bndes_pt/Institucional/O_BNDES/A_Empresa/internacional.html>.

The BSF, actually, seems to have responded to a MOF's aspiration of having a role in the exchange market. It is worth noticing that, in the United States, the Treasury also has responsibilities on exchange rate management. Among MOF objectives may be the maintenance of more devaluated exchange rates. The perspective of the ministry seems to be aligned with the description of the world made by Dooley, Folkerts-Landau, and Garber (2003), highlighted in Section 2 of this article. Brazil should be concerned in keeping the exchange rates devaluated in order to promote growth by means of exports and to establish itself close to the "Asian group", which profits from the competitive advantage of the exchange rates to supply goods for Europe and the United States. The constitution of the Brazilian Sovereign Fund arises, in this context, as an instrument to support the MOF view on the international position of Brazil, a view that would differ from that of the BCB, responsible for managing the Brazilian huge reserves.

For mitigating the exchange rate appreciation, the alternative to the creation of the BSF would be a more active role of the BCB, as well as the possibility to introduce ways of controlling or taxing foreign capital. A more restrictive fiscal policy, which would contribute to the fall of Brazilian real interest rates, would also have impact on exchange rates. The debate continues in Brazil over the exchange rate issue, but the Brazilian Sovereign Fund, until now, did not reveal itself as an effective instrument to deal with the issue.

Another objective of the BSF, according to the Decree of its creation, is to create public saving. Brazil, as it has been said already, is characterized by relative low levels of domestic savings. The increase of public saving could help changing the situation. But, again, the issue is to evaluate if the BSF is the best available instrument for the Brazilian government to attain such goal. It is worth noticing that the constitution of the fund in itself does not help this savings, as stressed by Freitas (2009). The fund serves as an instrument for using saved resources, but it does not foster the generation of fiscal surpluses directly. The existing alternatives for the use of the resource that may be eventually saved should also be evaluated. The decrease of existing debt would be an alternative to the creation of the fund which would have a positive impact on interest rates. Another option would be the creation of sectorial funds dedicated to, for example, infrastructure investments.

Therefore, the reasons for the creation of the Brazilian fund are more associated to the economic policy and to the dynamics among authorities responsible for the country's economic management than to economic fundamentals. The BSF could be justified by pure economic theory if it had been created with resources from Brazil's international reserves. As in the South Korean case, this fund would decrease the cost of carrying reserves, by investing a portion of those reserves in more profitable long term assets. Perhaps the MOF intension was that, by initially proposing the creation of the fund, but it was not made feasible due to the BCB's different view on the issue (BC..., 2008).

However, the BSF may become a traditional SWF if oil exploitation of pre-salt layers turn Brazil into a major exporter of the commodity. Throughout the past decade, Brazilian fuel exports have grown and they reached US$ 18.7 billion in 2008, or 9.5% of total exports, falling back to US$ 15.0 billion in 2009, or 9.8% of total exports, due to the financial crisis.[17] According to BNDES projections, Brazil's oil exports may reach US$ 108 billion in 2030, in a scenario that takes into consideration oil price at US$ 85.00 per barrel (BNDES., 2008). In more optimist scenarios, with the price of barrel in US$ 143.00, oil exports would reach US$ 182 billion, which would represent 5.6% of the GDP, according to BNDES. The projections consider that significant pre-salt commercial exploitation would begin in 2015.

The pre-salt oil exploitation could lead Brazil to have economic indicators similar to those of countries having SWFs today, because it would increase the importance of fuel in the country's exports, and it would imply growing trade and current account surpluses. Additional resources, moreover, could help increasing domestic savings by collaborating with public finances. Therefore, the three determinants of the sovereign wealth funds would be impacted. However, according to projections, Brazil would still have to wait over one decade for the change to take place.

6 CONCLUSION

The announcement of the creation of China's sovereign wealth fund, in 2007, called attention of the international community to this kind of financial instrument controlled by the governments. The developing countries, which in the last decades have accumulated huge volumes of international reserves, looked at the SWFs as a way to increase profitability of their assets and to decrease carrying costs. Nevertheless, the developed countries had a cautious reaction. They encouraged international organizations to study the topic, and they created behavioral guides for these funds in spite of not encouraging this type of control for similar instruments, such as the hedge funds. Additionally, they increased the regulatory power of competent authorities in order to protect sensitive sectors and deal with funds that set strategic interests ahead of the economic rationale.

The concern is justified by the global macroeconomic imbalance and by the SWFs potential, which already add up around US$ 3 trillion in assets and can increase much more in the coming years. The majority of these funds, however, do not operate in a strategic way. They are instruments used to accumulate resources of countries that are large natural resources exporters – mainly oil -, such as the United Arab Emirates and Norway, or manufacturing goods, such as China and South Korea. Applications are of long term, if compared to those of Central Banks, but most of the SWFs

17. The World Bank (World Development Indicators), for the 2008 data, and Ministry of Development, Industry and Foreign Trade (MDIC), for 2009

investments are passive, without stock control, aiming at higher returns than those of the North American government bonds.

The countries that decided to create SWFs are characterized by fuel and ores exports, sustained current account surpluses and/or high levels of domestic saving, as evidenced by statistical analyses in the Section 4 of this article. In this context, the case of Brazil stands out. The country has recorded current account deficits, does not depend on oil exports and it has relatively low level of domestic savings. The rationale for creating the traditional SWF, therefore, does not seem to work for the Brazilian case. The decision of establishing the BSF is more related to the adoption of this kind of financial instrument by major developing countries, and the dynamics among authorities responsible for the country's economic management than with economic fundamentals.

However, the situation may change if Brazil becomes a large oil exporter with the pre-salt layer exploitation. If the current hypotheses are confirmed, the country will become a major producer and exporter of the commodity and it will start to register current account surpluses. Brazil would get closer, in macroeconomic terms, to countries that today count on SWFs. Nevertheless, the change would not happen in the short term.

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