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Article

Macroeconomic considerations and motives of sovereign wealth funds activity

Contemporary Economics

Provided in Cooperation with:

University of Finance and Management, Warsaw

Suggested Citation: Urban, Dariusz (2011) : Macroeconomic considerations and motives of sovereign wealth funds activity, Contemporary Economics, ISSN 1897-9254, Vizja Press & IT, Warsaw, Vol. 5, Iss. 2, pp. 42-53,
<https://doi.org/10.5709/ce.1897-9254.11>

This Version is available at:

<https://hdl.handle.net/10419/48850>

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Received: 01 12 2010 | Accepted: 30 06 2011

Macroeconomic Considerations and Motives of Sovereign Wealth Funds Activity

Dariusz Urban¹

ABSTRACT

Sovereign wealth funds are entities regarded as an institutional innovation in the international financial market. Due to the nature of the ownership rights, the investment activity of such entities is still highly controversial. Objections against sovereign wealth funds included the alleged extra-economic goals of their activity.

This article attempts to show that the establishment development and operation of sovereign wealth funds are determined by economic factors. The study presents a description of the international monetary system and the motives for building foreign exchange reserves by countries. It has been evidenced on the basis of the most recent data that some countries have reserves considerably exceeding the level regarded as optimal for the economy. The article presents benefits for the economy from the use of sovereign wealth funds to manage excessive foreign exchange reserves.

KEY WORDS:

sovereign wealth funds, foreign exchange reserves, international monetary system

JEL Classification: E 42, F 33

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Introduction

Sovereign wealth funds are state-owned entities, the basic task of which consists in the allocation of the country's financial reserves. These entities are regarded as an institutional innovation in the international financial market. As opposed to the policy of investing foreign exchange reserves conducted by central banks, a policy assuming a low risk and a low return rate as well as a narrow range of assets purchased, sovereign wealth funds implement investment strategies aimed at achieving higher return rates than before with a simultaneous acceptance of higher risk connected with it. Moreover, investment activity conducted by these entities in domestic and international markets significantly diversifies the asset portfolio, into which

currency reserves of a given country are transferred. Global activity of sovereign wealth funds, which is conducted on a large scale and combined with the lack of even basic information about the operation of these entities, on numerous occasions lead to a situation, in which the activity of sovereign wealth funds is often perceived from the angle of political goals. On behalf of the countries, these entities may fulfil have been established.

The aim of this study is to present the economic conditions of the establishment and development of the sovereign wealth funds. This article is aimed at disputing the claim that the establishment and activity of these entities are motivated by extra-economic conditions, which constitutes one of the fundamental objections brought forward against these entities. The discussion will present the influence of key macroeconomic factors determining the development of such funds, which, in the author's opinion, should include

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the specificity of the present-day international foreign exchange market, the globalisation of markets, especially of financial ones and its consequences in the event of crises and the implementation of the strategy of export-driven economic growth.

1. The Establishment and Evolution of the International Foreign Exchange System

The necessity of taking a closer look on the international monetary system established in 1944 results from the fact that the present-day global financial system – within which the sovereign wealth funds under analysis conduct their activity – is built on the same logical structure. It assumes the function of international finance based on one dominating reserve foreign currency, i.e. the dollar and the resulting consequences for both the country issuing the reserve currency and for the rest of the world. It also determines the function of sovereign wealth funds in the international market, which, despite being regarded as an institutional innovation in the global financial market, conduct their activity according to the restrictions and principles of the present-day international foreign exchange system.

As K. Nęczyński proves, the Bretton Woods system established in 1944 was supposed to create the foundations for free trade and monetary stability, while at the same time preventing the use of interventionism. The concept of foreign exchange rates, according to which currencies would be exchanged at fixed rates, was best suited to achieve these goals. The Bretton Woods Agreement legally sanctioned the dollar position as the reserve currency for the entire world monetary system. The stability of the reserve currency was to be ensured by its fixed connection with gold, which according to the parity, was 35 USD per ounce (Nęczyński, 2003:10-11). All the other countries were obliged to keep the exchange rate of their currency within the 1% limit of the declared parity against the dollar. As it was argued by Dam, the world financial system established in Bretton Woods was like a solar system, in which the American dollar played the role of the sun (D' Arista, 2009: 639; Hall, Hondroyiannis, Swamy & Tavlas, 2009: 4-5).

The asymmetry of the financial order constructed in this way had several sources. Firstly, the United States became the only creator of the reserve currency

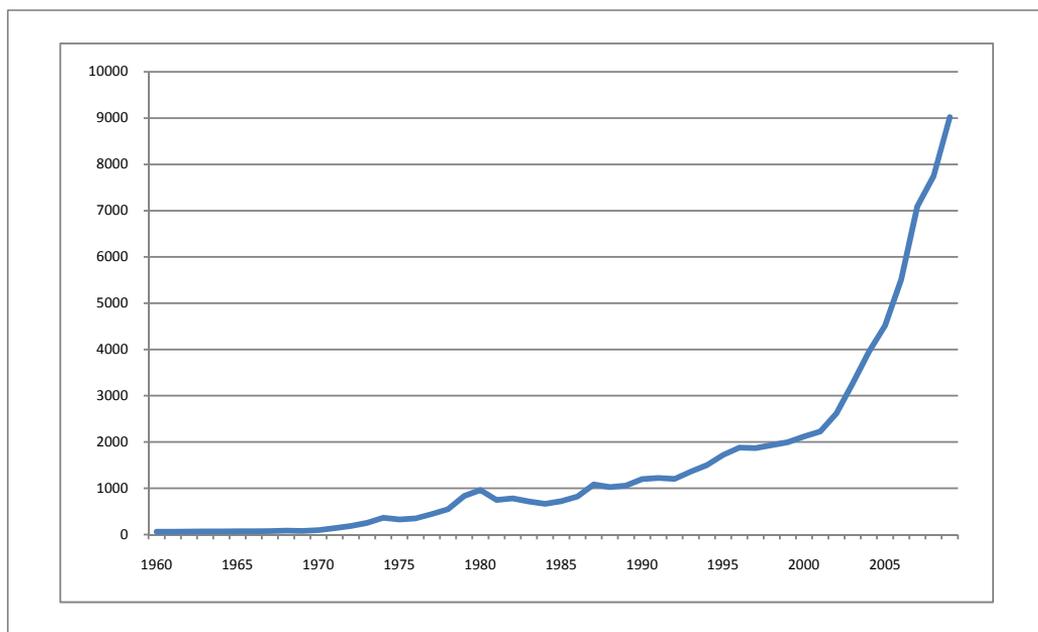
for the entire international financial system, which determined the amount of the reserve currency, the world price and inflation levels. Secondly, the issuer of the reserve currency was de facto released from the obligation to intervene in the dollar exchange market; therefore, such interventions had to be undertaken by other countries, while the reserve currency issuer's role was to ensure its liquidity. Thirdly, the right to dollar-gold conversion was assigned only to governmental institutions. In this way, the financial system of the rest of the world lost the possibility of sending economic signals to the reserve currency issuer's country, which would review its monetary policy implemented at a given time. In the original version of the Bretton Woods system, as it is argued by Costabile, gold constituted an anchor, with which the reserve currency – the dollar – was connected. This imposed the necessity of maintaining discipline as regards the external balance on the issuer, at least to some extent. It remains debatable how far these restrictions occurred in practice, as a view can be found in the literature that, in fact, until 1971 the dollar could not be exchanged for gold pursuant to a gentlemen's agreement (Costabile, 2009: 83). Despite the afore-mentioned construction errors, the system operated without major reservations. The dollar was perceived as a stable currency by the economies of Western Europe and Japan that rose after the war and the United States accepted the imbalance in trade exchange between the USA and its allies. This situation was dubbed "favourable imbalance". Problems became apparent when it turned out that countries began to prefer payments in gold rather than in dollars for their excess exports to the USA (Nęczyński, 2003:14-17).

To improve the international financial system and to reduce the inequalities in trade exchange, numerous actions were taken, which, however, did not stabilise the system, as they were not capable of balancing the excessively expansive monetary policy implemented by the USA. This policy could not be reconciled with the principles of the world's financial order established in Bretton Woods. Only as a result of the Jamaica Accord signed by the member countries of the International Monetary Fund in 1976, new arrangements became effective, which shaped the architecture of the world finance for decades. This agreement sanctioned floating exchange rates and the selection of the specific method for the foreign exchange rate management was

left at the individual countries' discretion. However, the lack of a defined and commonly accepted reserve currency introduced a new risk into the world's monetary system. The system of collective reserve currencies – despite the fact that the majority of the countries still chose the dollar – forced the countries to increase their foreign exchange reserves significantly

(Fig. 1.). They became a method of coping with foreign exchange fluctuations and external imbalances. A particularly distinct increase in the reserves, which usually had the form of government bonds, occurred in developing countries and in rising markets (Ping & Chao, 2009: 8-11).

Figure 1. The level of foreign exchange reserves in the years 1960-2009 (in billions US dollars)



Source: : the author's own work on the basis of the World Bank data.

Visco pinpoints that the international monetary system, which has been in operation since the suspension of dollar for gold exchangeability (the actual fall of the Bretton Woods system), is not really a system, but the outcome of open preferences of individual countries as regards the foreign exchange rate, with very small or virtually absent international supervision at the same time. The regime of fixed exchange rates has never been replaced with a system of floating rates, and what we have now can be considered a hybrid solution. In practice, most countries' foreign exchange policy has been characterised by fear of fluctuations and the resultant high level of foreign exchange interventions for the past 35 years (Visco, 2010: 74-75). A description of

the currently applicable agreements in the area of international finance as a non-systemic solution can also be found in the latest studies by employees of the International Monetary Fund (Mateos y Lago, Duttagupta & Goyal, 2009: 5).

A different point of view on the operation of the present-day international monetary system is presented by Dooley, Folkers-Landau & Garber (Dooley Folkerts-Landau & Garber, 2004; Dooley, Folkerts-Landau & Garber, 2009). Namely, they suggest that the system of current agreements and connections in the area of foreign exchange rates is a simple continuation of the Bretton Woods system – to distinguish it from the original system, they call it Bretton Woods II or the re-

vived Bretton Woods. They prove that just like during the post-war years, asymmetry between the centre and peripheral economies also occurs today. According to this hypothesis, to keep the growth strategy based on exports, peripheral countries keep their currencies below their actual market value (by controlling capital flows and by fixed exchange rates), thus accumulating enormous foreign exchange reserves. These reserves mostly have the form of USA low-interest treasury bonds. In this case, the costs of accumulating such reserves are smaller than the benefits from adopting such a developmental strategy (Hall, Hondroyannis, Swamy & Tavlas, 2009: 10). As it is argued by Dooley, Folkers-Landau & Garber, this system is transitional, supported and it is still evolving as with time, another group of countries, that is “aspiring for being peripheral”, will emerge and they will follow the previously established pattern (Dooley Folkers-Landau & Garber, 2004: 308).

In summary, it needs to be emphasised that the present shape of world monetary agreements inevitably generates imbalance, which is manifested by a huge deficit in the United States, on the one hand, and accumulation of unprecedented amounts of foreign exchange reserves in developing countries, on the other hand.

2. Motives for Building Foreign Exchange Reserves

The motives for accumulating ever larger foreign exchange reserves are also caused by reasons other than the specificity of the international financial system. Griffith-Jones & Ocampo define four basic motives responsible for the accumulation of foreign exchange reserves: the wealth substitution motive, the resilient surplus motive, the counter-cyclical motive and the self-insurance motive (Griffith-Jones & Ocampo, 2010: 14-18).

The first motive concerns countries with abundant natural resources and is connected with the surplus resulting from the extraction and sales of these resources. The accumulation of reserves in this case is a form of exchanging one form of assets - natural resources for another form characterised by greater liquidity. In the case of lack of reserves, the surplus created in this way would be allocated to domestic investment projects or consumed. The consumption of raw materials undermines the legitimacy of their exploitation, while investing in the domestic market may result in

the Dutch disease (also called the resource curse or the Paradox of Plenty). Reserves of a given country allow for geographic diversification, which can ensure a constant growth also when the revenues from the sales of natural resources decrease.

The second motive results from the permanent structural surplus in trade exchange, which is achieved by some countries implementing the policy of keeping the exchange rate of their currency below its market value, which makes it possible for them to be competitive compared to other trade partners. Because of the lack of exchange rate, which would ensure proper balance, this surplus is “resistant” to both the advancing economic growth (and the growing inclination to imports) and the slow, crawling appreciation of the foreign exchange rate. It is true that a violent increase in the foreign exchange rate in these countries may first result in the surplus reduction, but at the subsequent stage, it may lead to recession, a reduction in the demand for imported goods, an increase in savings and the occurrence of speculative bubbles in various classes of assets in the domestic market. Japan in the 1980s is an example of such a chronology of events.

The counter-cyclical motive for having reserves assumes their accumulation under conditions of surplus, which is most frequently accompanied by periods of economic growth and their use during periods of lower economic activity in a given country. Fluctuations of both prices in world markets and changes in the economic activity of commercial partners may be the source of such a cyclical development. In both cases, this may result in overheating of the economy under boom conditions and the resultant inflation in the domestic market and the appreciation of the nominal foreign exchange rate and, finally, appreciation of the real exchange rate.

The self-insurance motive for accumulation of reserves by developing countries is based on the conviction that the foreign capital flow to these countries is characterised by cyclicity, and thus, these countries are exposed to the risk of capital outflow. The higher the fluctuations in the capital flow are and the more open a given economy is, the higher the risk is. It particularly applies to emerging markets, in which the progressing cash flow liberalisation was characterised by the occurrence of a series of economic and financial crises called sudden stops. They were characterised by a sud-

den stop of foreign capital inflow to a given economy and/or a simultaneous strong capital outflow from this economy. Nearly 100 cases of sudden stops have been identified in the past 25 years and the average costs incurred by the affected economy for this reason have been estimated at approx. 10% GDP (Hutchison, Noy & Wang, 2010: 973-974).

A significant increase in the reserves of these countries is perceived as a form of protecting the country against the potential crisis (Table 1). Realizing that

the loss of access to financial markets is a drawback of financial globalisation and that financial tools, which can be used in the case of a sudden stop of the capital inflow (or its violent outflow), are limited, these countries treat these reserves as a kind of war chest (Durdu, Mendoza & Torrenes, 2009: 194). An increase in a country's financial liquidity by accumulation of foreign exchange reserves is this country's self-insurance mechanism in the event of crises in world markets (Alfaro & Kanchuk, 2009: 23).

Table 1. Mean values of the characteristics of the countries investigated and the test for equality of means

Country	Year of crisis occurrence	Foreign exchange reserves as GDP %		
		Before the crisis (from 1985 to the year preceding the crisis)	After the crisis (from the year after the crisis to the year 2004)	Change in the reserve level
Argentina	1994	3.20	8.65	+5.42
	2001	5.04	11.54	+6.51
Brazil	1998	4.36	7.65	+3.30
Chile	1998	16.93	20.49	+3.57
Columbia	1998	9.42	12.21	+2.97
Ecuador	1999	7.35	3.89	-3.46
Hong-Kong	1998	34.16	68.85	+34.69
Indonesia	1997	6.53	18.69	+12.17
South Korea	1997	5.03	21.26	+16.23
Mexico	1994	4.64	7.29	+2.65
Malaysia	1997	25.18	39.54	+14.36
Pakistan	1998	1.90	8.51	+6.61
Peru	1998	9.25	16.66	+7.41
Philippines	1997	6.05	16.69	+10.65
Russia	1998	3.05	12.46	+9.41
Thailand	1997	14.84	28.01	+13.17
Turkey	2001	5.67	13.57	+7.90
Uruguay	2002	7.18	20.06	+12.87

Source: Durdu, Mendoza & Terrones, 2009: 195.

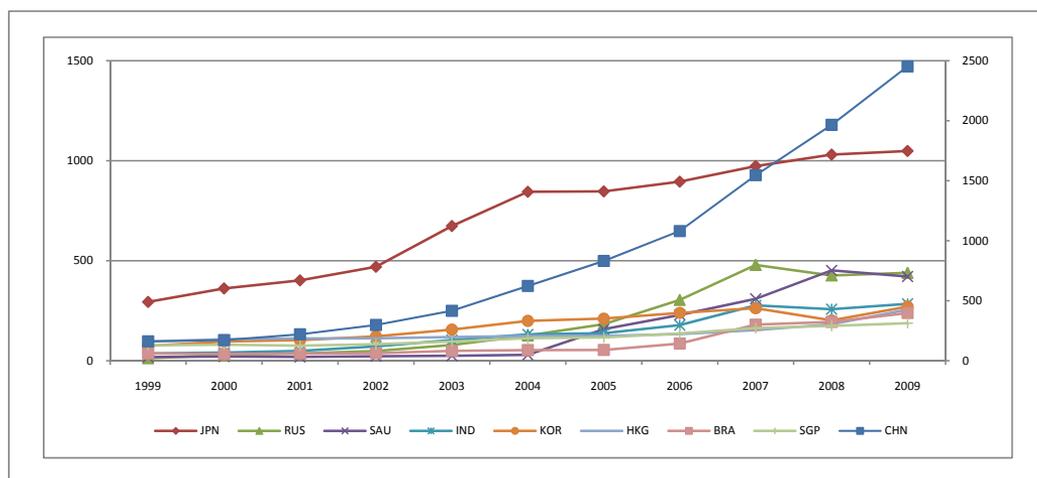
The self-insurance motive for the accumulation of reserves is connected with the phenomenon of adjusting the reserve level in a group of countries. The issue of the influence of the foreign exchange reserve level accumulated by the adjacent countries on the level of the reserves accumulated by a given economy was first touched upon by Fritz Machlup (1966). He compared the behaviour of economies in this respect to the behaviour of his wife regarding the accumulation of new clothes in her wardrobe: the appearance of a neighbour wearing new clothes each time conditioned subsequent purchases of clothes by his wife. As regards economies, the Machlup hypothesis (keep up with the Joneses, Mrs. Machlup wardrobe hypothesis) means that the target level of a country's foreign exchange level is influenced by the size of reserves accumulated by the adjacent countries. The latest empirical verification of this hypothesis was presented by Cheung & Sengupta. They proved that in the years 1980-2007, the level of foreign exchange reserves accumulated by countries, such as Argentina, Bolivia, Brazil, Chile, Columbia, Ecuador, Mexico, Peru, Uruguay and Venezuela, can be accounted for (apart from other variables) by the phenomenon of adjusting the reserves of a given country to the reserve level in the region (Cheung & Sengupta, 2010). Similar studies confirmed the occurrence of the afore-mentioned phenomenon among a group of Asian countries (Cheung & Qian, 2009), including China, India, Indonesia, Japan,

South Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. The authors provided an empirical confirmation that the level of foreign exchange reserves in the years 1980-2004 was adjusted to their general level in the group. The appearance of an additional dollar in the form of reserves from one of the countries resulted in an increase of the foreign exchange reserves in the group by 60 cents. This effect was even stronger during the period following the Asian crisis, i.e. after 1997.

Another factor responsible for the increase in the global reserve level is the application of growth strategies based on exports. According to this concept the accumulation of reserves by some Asian countries is a by-product of this kind of growth strategy. However, as Aizenman & Lee (2007) pointed out, this factor determining the size of foreign exchange reserves is weaker than the demand caused by the self-insurance motives.

The research conducted by Eichengreen & Raco-Garcia showed that a further increase in the capital mobility and a rise in capital flow connected with it. This will result in more countries abandoning the unstable foreign exchange rate mechanisms (various types of floating exchange rates and soft variations of fixed exchange rates) to adopt floating exchange rates (Eichengreen & Raco-Garcia, 2006: 416). This can further enhance the tendency towards accumulation of foreign exchange reserves by countries.

Figure 2. Increase in foreign exchange reserves in selected countries in the years 1999-2009 (in billions of US dollars)



Source: the author's own work on the basis of the World Bank data.

The data presented in Fig. 2 prove that in the group of countries under analysis, an increase in the value of the accumulated reserves is taking place. The fact that the nine countries mentioned below held 62% of the global reserves in 2009 deserves to be emphasised, which shows a significant concentration of this phenomenon. China is the leader in this area (the right-hand side in the figure), as it holds twice as much foreign exchange reserves than Japan, which is ranked second. A similar scale of disproportion occurs between Japan and Russia and Saudi Arabia, which follow it in the ranking.

In summary, it must be stressed that the motives for accumulating foreign exchange reserves can be basically divided into two groups. The first of these includes self-insurance, precautionary motives, which come down to treating reserves as a specific form of insurance of a country participating in the global economic system against the risk induced by such a developmental strategy. The other group, on the other hand, encompasses competitive, mercantile motives where reserves are used for the achievement of economic objectives – to achieve the competitiveness of exports.

3. Models of Foreign Exchange Reserves

Due to the differences occurring between economies, there is no index, which would precisely describe the optimal or sufficient levels of reserves which should be accumulated by a given country. The following measures concerning the appropriate reserve level an economy should have are commonly accepted and the most frequently mentioned in the literature on foreign exchange reserves (Green & Torgerson, 2007: 3):

- Reserves in relation to short-term debt or the Greenspan-Guidotti rule. According to this approach, the size of reserves in developing countries should make it possible to cover the debt with the debt repayment time limits shorter than a year. At the same time, this is the most frequently used indicator of an economy's sensitivity to a foreign exchange crisis.
- Reserves in relation to the monetary aggregate M2. In the approach proposed by Wijnholds & Kapteyn, M2 depends on the foreign exchange regime, the level of reserves considered to be appropriate for a country ranges from 5 to 20%. The justification of the use of this point of view is an economy's sen-

sitivity to capital withdrawal and the trust to the local currency value can be measured by the monetary reference to the level of reserves.

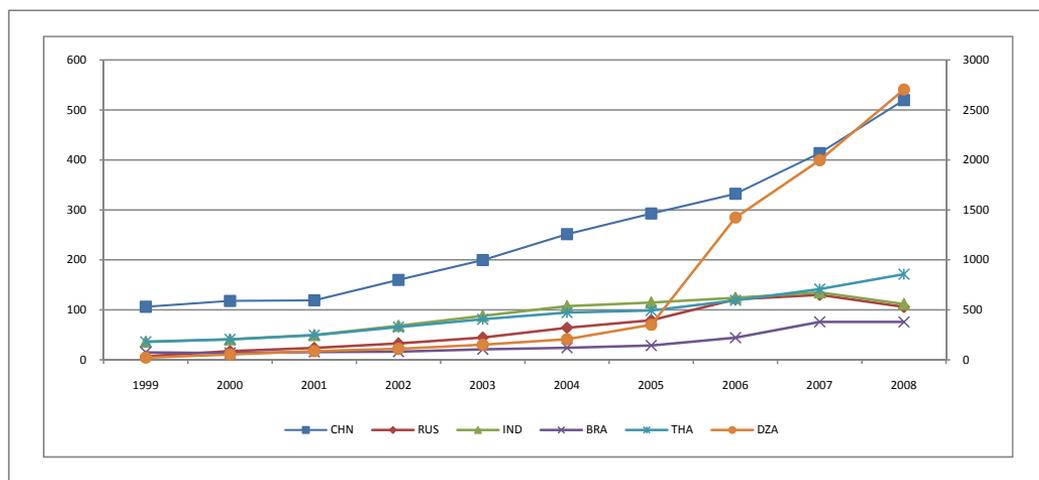
- Reserves to the size of imports. The index considered to be optimal for countries with the low income level and at the same time, those without full access to international capital markets. The most frequently quoted reference level is the level of reserves making it possible to cover three months of exports.
- Foreign exchange reserves to GDP. This measure is the least economically justified, as the gross domestic product is not a measure of risk, which could take place in the case of crisis. Therefore, there are no grounds to compare the level of reserves to the gross national product in a given country.

On the basis of the data presented in Fig. 3, it can be concluded that in the analysed countries, the level of the reserves they had accumulated did not exceed the level of total external debt in 2008. Brazil is the only exception here, where the foreign exchange reserves to total debt ratio was at the level of 76% in the last year of the analysis. It shows that the reserve level defined by the Greenspan-Guidotti rule was significantly exceeded. In the case of Algeria (the scale on the right-hand side of the diagram), the reserves are 27 times higher than this country's current total debt. The data presented in Fig. 4, on the other hand, prove that, except for Russia in 1999, the reserves of all countries exceeded the reference level defined by the value of three months of imports in the period under analysis (market with a dotted line in the diagram). Saudi Arabia's foreign exchange reserves were sufficient to cover the equivalent of 28 months of imports in 2008.

Beck & Fidora made an attempt to assess the size of excessive reserves accumulated by various countries in 2007. In the method which they adopted, they determined the excessive reserve level as the difference between the total reserves and one of the two values considered to be the benchmark: three months of import value or the short-term debt value. According to their calculations, the global value of excessive foreign exchange reserves accumulated in the world's economy in 2007 is at the level of 3023 billion USD (Beck & Fidora, 2008: 14).

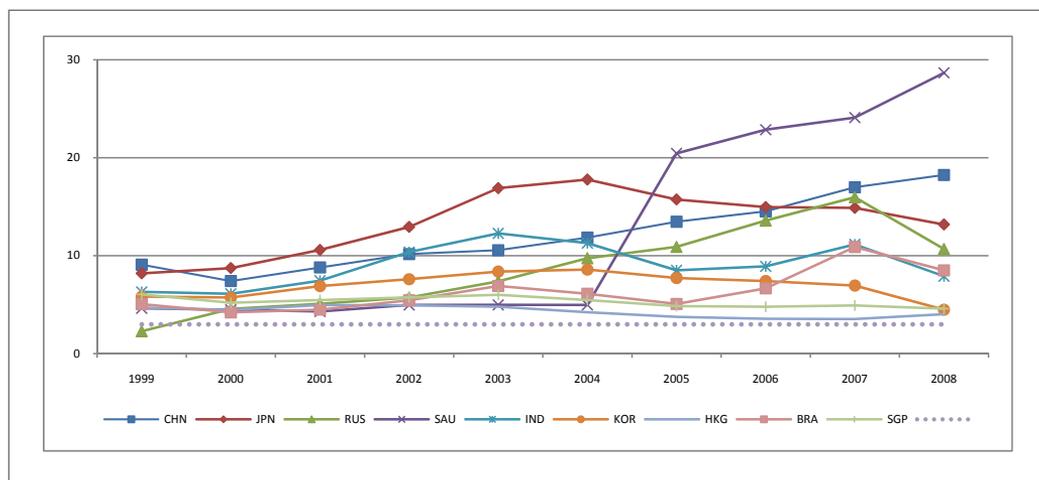
Keeping excessive reserves by developing countries is expensive for two reasons. Firstly, these funds could

Figure 3. The level of foreign exchange reserves in selected countries in relation to the total external debt in the years 1999-2008 (in %)



Source: the author's own work on the basis of the World Bank data.

Figure 4. The relation of the total foreign exchange reserve value to the monthly imports in selected countries in the years 1999-2008 (monthly imports cover)



Source: the author's own work on the basis of the World Bank data.

be allocated to more effective investment projects. Secondly, the occurrence of the alternative cost is connected with holding reserves. Assuming that a given country has external debt, the difference between the rate, at which funds are borrowed in international markets, and the return rate achieved from the allocation of reserves, represents the cost of lost opportunities,

which is incurred by a given economy in connection with keeping the reserves (Akdogan, 2010: 3). The cost of keeping excessive reserves by developing countries was estimated by Rodrick at the level of one percentage point of the GDP (Rodrick, 2006: 9). In the context of the costs of keeping excessive reserves, it needs to be mentioned that the competition of countries in accu-

mulating foreign exchange reserves accounted for by Machlup leads to an increase in the demand for these reserves over the level, which can be explained in terms of economic factors. The consequence of such a strategy of competition between the countries is an increase in the costs incurred by these countries in connection with keeping the reserves (Cheung & Sengupta, 2010: 12). On the other hand, Levy-Yeyati proves that an increase in the reserves by one percentage point lowers the costs connected with the financing of external debt by 0.5 percentage point. In this case, the reserves are treated as a form of indirect security on the loan granted, which makes it possible to reduce the risk bonus - expected by investors financing a given country's debt (Akdogan, 2010:5).

The data presented above make it possible to conclude that the level of reserves, which are currently kept by numerous countries, considerably exceeds the indexes regarded as optimal. Considerable alternative costs connected with the possession of excessive reserves make it necessary to manage the reserves held by the individual countries in a more effective way than before. It becomes possible owing to the application of innovative investment tools, i.e. sovereign wealth funds.

4. Sovereign Wealth Funds as Tools of Effective Management of Excessive Foreign Exchange Reserves

Sovereign wealth funds are defined as special investment funds created by a state or state-owned entities with the main task consisting in long-term asset investment outside the given country (IMF, 2007:45). Two basic sources of funds, which are available to these entities, are revenues from the sales of natural resources and surpluses achieved in trade exchange. These funds are a relatively new phenomenon in the world's economy. Their greatest development took place in the years 2000-2010, where half of the 50 largest funds of this type were established. The remaining funds were established in the years 1990-1999 (17%) and before the year 1990 (27%)(IFSL, 2011:4). The establishment and development of sovereign wealth funds were discussed in D. Urban's article, "Sovereign wealth funds – a new challenge for corporate supervision" (Urban, 2010: 40-43). At present, this category of investment entities encompasses 53 funds (www.

swfinstitute.org, of 25.06.2011), most of which comes from Asia and the Near East 37% and 36% respectively (IFSL, 2011:4). The data presented in the latest study by Monitor Group show that the most direct investments of these funds were connected with the financial sector, over 60% of which took place in BRIC countries, while 35% in OECD countries (Monitor Group, 2011:12-17). Fundamental macroeconomic benefits for a country with such funds will be presented below.

The consequences of a capital inflow to the economy (exceeding the outflow stream or exceeding the economy's absorption capabilities) are a commonly known issue. They generally include: inflation, speculative bubbles, appreciation of the foreign exchange rate, excess liquidity and imbalance of the financial sector. This forces the country's monetary authorities to take neutralising/sterilising actions. Thus, the growing stream of capital inflow makes it necessary to intervene on a larger scale, which, in turn, is conditioned by having larger and larger reserves, which can be used for sterilisation. The emergence of sovereign wealth funds has created an alternative possibility of managing the inflowing capital stream. Thus, it became possible to transfer capital abroad and to allocate it to foreign assets and not by means of intervening in the domestic monetary market. There are two kinds of benefits from this activity. Firstly, a similar goal as in the case of domestic sterilisation can be achieved – i.e. inflation prevention and prevention of speculative bubbles as well as being able to keep the competitiveness of the economy, owing to the foreign exchange rate stabilisation. Secondly, foreign sterilisation, which is possible owing to the existence of sovereign wealth funds, allows for allocation of domestic capital to assets with a higher return rate. According to Areaza, Castilla & Fernandez, sovereign wealth funds are an alternative to sterilisation implemented by monetary authorities. Prevention of negative consequences of capital inflow is possible by, among other things, foreign exchange interventions, changes of mandatory reserves in banks or taxing the inflowing capital. Such activities are always costly and difficult to perform in the long run (Areaza, Castilla & Fernandez, 2009: 26).

As presented in the study by the International Monetary Fund (IMF, 2008: 4), sovereign wealth funds offer numerous financial and economic benefits for the founding countries. These include facilitation connected with

inter-generation transfer of savings from income obtained from the sales of non-renewable natural resources as well as the possibility of preventing economic fluctuations caused by changes in the prices of export goods. They prevent greater diversification of the investment portfolio and the focus on the return rate, thus reducing or even eliminating the alternative costs connected with keeping the reserves. The investment activity of sovereign wealth funds means safe and responsible asset management for countries with a high level of reserves.

Sovereign wealth funds established in recent years mostly come from developing countries and emerging markets. These countries have achieved a high rate of economic growth during the period of increasing oil prices and have experienced considerable capital inflow, which has allowed them to accumulate considerable foreign exchange reserves. Due to the low market return rate, they were forced to allocate these reserves to an alternative group of investment tools, which made it possible for them to extend the existing investment portfolio to include new groups of assets. Apart from investing reserves assuming a higher return rate than before, sovereign wealth funds can be also used as a form of security in the event of shocks, which could affect the sectors responsible for manufacturing of goods and exports. This is achieved by investing in assets, whose return rate is negatively correlated with the return rate of assets with risks regarded as the basic risk a given country is exposed to (Lam & Rossi, 2010: 305).

De Larosière proved that a low return rate in financial markets was the result of permanent recirculation of surpluses generated by trade based on undervalued currencies and imports of resources from developing countries and emerging markets. These countries allocated their surpluses to US securities and other assets with similar risk, which resulted in lower profitability of these securities. Under the conditions of common liquidity with simultaneous low profitability, investors actively searched for a higher return rate (De Larosière, 2009: 7). Sovereign wealth funds became a way of ensuring higher profitability of invested assets. The view that an investment strategy aimed at the achievement of a higher return rate and higher risk connected with it was partially inevitable can also be encountered in the literature on these entities. This was caused by a growth of sovereign wealth funds and assets managed by sovereign wealth funds, which was quicker

than the rate of growth of assets regarded as the traditional source of allocating reserves, including securities issued by the United States, Great Britain and euro countries (Areaza, Castilla & Fernandez, 2009: 32).

Research conducted by Deutsche Bank (Deutsche Bank, 2007: 5) showed that the actual return rate on investment in government securities has been approx. 1% over the past 60 years. In the case of portfolio consisting of 60% shares and 40% government securities, the return rate was approx. 6%. High likelihood of dollar devaluation with the simultaneous near-zero level of percentage rates in the American market may cause purchases of US dollar denominated debt securities to become an even less profitable investment strategy, which will probably result in an even greater interest in a different form of asset management offered by sovereign wealth funds.

Ping & Chao proved that under the conditions of the present-day monetary system, the achievement of simultaneous stability of the exchange rate and keeping the purchase power of the reserves are possible only by creating a monetary union - as in the case of the Euro zone - or by management of the reserves by sovereign wealth funds for the whole group of countries, whose currencies are not the reserve currency. Taking into consideration the length of the process of monetary union establishment, which requires the coordination of the expectations of all the participants, the establishment of sovereign wealth funds becomes a far more practical solution (Ping & Chao, 2009: 12).

As regards countries with considerable natural resources and limited absorptive capabilities, the activity of these entities makes it possible to limit or completely eliminate the resource curse connected with it. Countries, such as Qatar or Kuwait, are incapable of allocating all their reserves in the domestic market in an effective manner as this might result in price disturbance and speculative bubbles (Cehajic, 2009: 18). Investment activity for these countries can be conducted by using institutional innovations such as sovereign wealth funds. This makes it possible to access a broad range of assets in international markets with simultaneous fulfilment of the objectives of the national monetary policy.

Conclusions

The aim of this study was to present economic conditions of the function of sovereign wealth funds. Original conditions encompass the specificity of the

international foreign exchange system, which makes it necessary for the countries to hold considerable foreign exchange reserves. These reserves significantly exceed the indices considered to be optimal for the countries under analysis. It has been shown in the article that sovereign wealth funds can be an alternative form of foreign exchange reserve management.

The analysis conducted in this article proves that the development of institutional entities called sovereign wealth funds is determined by economic factors. In the first place, they include the necessity of managing the inflowing capital to prevent it from causing negative consequences for the economy in the form of excess liquidity, speculation and foreign exchange rate appreciation. Secondly, the objectives of these entities include the minimisation of the alternative cost resulting from holding considerable capital by transferring it to other assets ensuring the highest possible return rate.

It also needs to be underlined that the architecture of the global finance in its current condition will probably continue to generate global imbalance, which will result in a further increase in the level of foreign exchange reserves accompanied by a growing interest in alternative forms of investing these reserves. Sovereign wealth funds are innovative tools in this area. Their activity makes it necessary to redefine the existing paradigms concerning the allocation of foreign exchange reserves. These entities can be treated as specific substitutes for national monetary authorities, supporting central banks in the achievement of monetary goals in the domestic markets, and, on the other hand, as important entities of the global financial market, the operation of which ensures the countries of their origin an effective way of managing excessive foreign exchange reserves.

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