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SOVEREIGN WEALTH FUNDS AND SOCIALLY RESPONSIBLE INVESTMENT

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Abstract: Long-term investors, such as sovereign wealth funds (SWFs), Islamic finances and sovereign pension funds (SPF) are major players in socially responsible investing. This paper makes a comparative analysis of management practices of different funds during the current economic crisis. The analysis includes observations of the activities of sovereign funds of BRIC (Brazil, Russia, India and China), but also of older SWFs, such as the Norwegian and Kuwait Investment Authorities. The case study shows the different aspects of their performance in terms of the guidelines of sustainable development. These discussions must inform new macro and global economic policy.

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Irina PEAUCELLE¹

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INTRODUCTION

Pension funds are buffers of accumulated indirect or deferred wages. For this reason their owner is the sovereign active working population. During their expansion, pension funds stand out as a gradually separated from the employee and later from the worker. A rich economic literature is dedicated to the role of pension funds in the formation of a new type of capitalism. For instance, G. Clark (2000) and S. Montagne (2006) analyse the way the development, first based on tradition and then on legally established requirements for private and employer-sponsored pension funding bodies, becomes a typical system of financial management mechanisms of accumulation and economic growth.

The first sovereign wealth fund, the Kuwait Investment Authority, was founded in 1953. However, sovereign wealth funds (SWF) began to rapidly evolve in the early 21st century, becoming major players in global finance. According to a Deutsche Bank statistic (Kern, 2009), in 2008 SWFs were more than twice the size of hedge funds, approximately half the size of world gold reserves, and their assets corresponded to 16% of pension funds, but to 70% of public pension reserve funds. The source of the first SWF, as of the majority of later formed sovereign funds, is absolute ground rent.

The theoretical background of the nature of this rent lies in "classical" financial theory that emerged in Europe between the 16th and 20th centuries and examined the rules of accumulation, management and use of public property. Absolute rent is (see Marx, 1867) an income of a monopolist, the owner of the land and/or natural resources, which usually exceeds the income earned by capitalists investing the same amount of capital in other economic sectors, where the average rate of return is determined by competition. Since the owner of land and natural resources in most countries is the entire population, the absolute rent from their use belongs to the entire population, which can democratically create a sovereign fund and manage it according to general interests. Often the sovereign state controls the governance of the SWFs.

The source of state wealth funds can also derive from the activities of state enterprises, the earnings of privatisations, the balance of payment surpluses and the revenues arising from fiscal surpluses, including foreign exchange reserves of central banks resulting from international operations of public finances.

The sovereign funds prosper at a time when, on the one hand, finance takes over the economic methods of regulation, and when, on the other hand, the idea of sustainable development prevails in the social sciences. Indeed, financial literature was dominated in the last half of the last century by the so-called neoclassical theory. This theory rests on three principles: 1) the economic power of the state depends on the economic prosperity of the private sector, the main actors of which are large corporations; 2) the state minimizes its interference in the private sector; and 3) earnings and capital markets are the main sources for the financial development of corporations. Based on the principles of neoclassical economic theory, financial mathematics became a dominant field. Some reputed authors, recipients of the Nobel Prize in Economic Sciences, work in this area. Harry Markowitz² originated the modern portfolio theory. James Tobin³ won the Prize for the analysis of "financial markets and their

² Markowitz, H.M. (1959). *Portfolio Selection: Efficient Diversification of Investments*. New York: John Wiley & Sons

³ Tobin, J. (1958). Liquidity Preference as Behaviour Towards Risk. *Review of Economic Studies* 25.1: 65–86.

relation to expenditure decisions, employment, production and prices". William Sharpe⁴ was awarded the prize for work on the theory of asset valuation in a model of equilibrium with risk factors. And Black & Scholes⁵ won for evaluating the assets of an arbitration scheme. Rich with such support, the economic performance of SWFs is often evaluated in comparison with other financial vehicles guided by private interests, such as hedge funds and private equity funds.

However, the sovereign pension and sovereign wealth funds by their nature are vehicles of public interests. Sustainable development, which takes account of contemporary and future generations' interests, is a most important social requirement, addressed to global governance. The management of the SWFs is a financial way to facilitate the strategic development of nations and the realisation of their major demands. They become the long-term public investors whose social responsibility implies the practices of capital use incorporating extra-financial measures into the evaluation of industries to favour those that cause lesser risk for society, the environment and sustainable development. Financial institutions are socially responsible if they provide their services primarily to industries which: 1) meet internationally recognized standards and conventions (excluding normative) and do not draw their revenues from controversial activities (excluding sector), 2) are considered as best in their industry (less risky, choosing responsible innovations), and 3) initiate dialogues among different social actors to focus on strategies for sustainable development.

In this paper we proceed by case studies of some SWFs and SPFs with the objective of verifying their ability to serve public aspiration for socially responsible management of public capital.

1. ECONOMIC ADVANTAGES AND LIMITATIONS OF SWFS: THEORETICAL AND EMPIRICAL ISSUES

SWFs are influential, long-term investors. Financial bodies with such characteristics have been considered by theoretical and empirical economic literature. Authors analysing SWF performance from the firms' point of view have for background the work by Shleifer and Vishny (1986). This article shows that large shareholders resolve better than small ones the free-rider problem because they have much stronger motivation for supervising the firms. A state is such a large and motivated shareholder.

Using agency cost theory, Jensen and Meckling (1976) conclude that large investors (like SWFs) can force the firms to operate in their own interest and against the interests of employees and managers. Sometimes, when the investor does not act for objective risk-adjusted maximisation of profit, it causes a decrease in the value of firm equity. Because of this aspect of likely non optimal, from an economic point of view, states' introduction into industrial investment policy has to be controlled. An empirical study by Bortolotti, et al. (2009) reveals that indeed SWFs acquire often stakes in underperforming enterprises. But, as the stocks of firms receiving SWF equity investments increase significantly on the announcement of this capital inflow, smaller investors welcome the SWF as a shareholder. Nuno Fernandes (2009) empirically studied SWFs' holdings of shares in 8000 firms in 58 countries, between 2002 and 2007, and concluded that firms with weighty SWF shares have

⁴ Sharpe, W. F. (1964). Capital Asset Prices - A Theory of Market Equilibrium Under Conditions of Risk. *Journal of Finance* XIX (3): 425-42.

⁵ Black, F. & Scholes, M. (1973) The pricing of options and corporate liabilities, *Journal of Political Economy*, vol.81, pp.637-659

on average a better economic performance. Unfortunately they invest disproportionately in favour of financial institutions, and on average have a strategy of not investing massively in high-technology industries or in firms operating in areas involving important R&D expenditures.

1.1. Social responsibility of financial vehicles

Socially responsible investors by definition give preference to projects that promote environmentally sustainable development, citizens' level of life and cultural diversity. Which type of existing financial institutions best fulfils this definition? An active engagement in ethical economic practice epitomizes the Islamic financial services industry. Islamic law (Sharia) prohibits interest fees for both lending and accepting money, usury and investment in forbidden economic activities, such as alcohol and gambling. It includes also a prohibition of uncertainty in contractual terms and conditions. The objective of Islamic finance is to engage only in moral purchasing and ethical investment. According to this doctrine, the deployment of capital has to arise from the sale and lease of assets in the real economy.

Kabir Hassan (Hassan, 2007) writes that the reorganisation of banking on the basis of profit sharing rather than interest was proposed by Anwar Qureshi in 1948 and Mahmud Ahmad in 1952. In 1973 the Islamic Development Bank was founded by 54 shareholding member states. The Bank is designed to promote the social and economic development of member countries in accordance with Islamic jurisprudence. The unit of account of the Bank is the Islamic dinar, equivalent to 1 SDR (Special Drawing Rights) – international foreign reserve exchange assets allocated by the International Monetary Fund. The nominal value of the SDR is derived from a basket of currencies: dollars, yen, pounds and euros. Following this example, the First Summit of BRIC, in 2009, (see later in the text) proposed to enlarge the number of currencies into a basket for IMF reference, and to use the new SDR as the worldwide reserve currency in the place of US dollars.

In the last decade Sharia Compliant financial assets have been growing at over 10% per annum. Islamic financial instruments are coming into capital transactions, especially in commercial banks, but also into insurance and funds management. For example, Kuwait Central Bank notifies that between April 2003 and April 2008 the Bank holdings shift towards the Sharia Compliant investment holdings. Thus, local assets of this type increased 775%, foreign assets 723%, foreign liabilities 2650%, and net foreign assets 408% (Balding, 2008, p.31).

Islamic financial institutions were impacted by the global financial crises of 2008-2009, but they have been more resistant than conventional banks. This relative resilience can be explained by the prohibition on selling something that one does not own and by the avoidance of speculative investments, which were the principal causes of the crisis. Rich with such experience, in May 2010 Germany prohibited short selling of a series of shares, and prohibited the purchase of default credit swaps or bonds of European countries by investors who do not possess a base asset.

Conversely, SWFs of Muslim countries are conventional investors, probably because the ethical behaviour requirement applies solely to Islamic users, and Islamic SWFs invest around the world. For example, if we look at the portfolio of the Kuwait Investment Authority Public Equity holdings (historically the first SWF in the world) we can see that among its 50 major holdings 11 of them are invested in bank, insurance and other financial institutions, not

necessary respecting Islamic law⁶. More dramatically for the image of a potentially responsible investor, there are on its list two producers of tobacco (British American Tobacco Plc and Imperial Tobacco Group Plc).

Among non Islamic institutions, the interest in responsible investing appeared first in Brazil, when the bank Unibanco initiated socially responsible investing research in 2001. Firms related to environmental and social problems were considered. On the basis of this study the Brazilian Socially Responsible Investing Fund was created, called Fundo Ethical, to support potentially good practices. In Europe and the United States socially responsible investing among institutional investors is booming since that episode (see ORSE (2009)).

The largest European SWF, the Norwegian Global Fund, is considered the most transparent (a very important characteristic for responsible regulation of a public financial vehicle) and socially responsible. The Norwegian Finance ministry engages the social responsibility of the Fund by publishing guidelines for the observation and exclusion from the Fund's investment universe ethically prejudicial assets. For instance, in 2008 Wal-Mart, an international retailer, was disqualified for violation of human rights; Boeing was excluded for producing nuclear weapons; and Raytheon, an American industrial corporation manufacturing defence systems, was excluded for producing cluster munitions. Some years ago among the Funds' major holdings there were the securities of tobacco companies Altria Group Inc and Japan Tobacco Inc (Balding, 2008). In 2010 the Norwegian SWF ethical guidelines involves exclusion of tobacco related companies, saying that this practice contributes to development of good international standards within responsible investment practice and exercise of its active ownership rights.

1.2. Transparency

Usually the state represents the public interest, and the SWF is considered as one of the instruments of state and/or national economic policy. Their management has to be transparent and approved by their owner, which is above the entire working population. At the same time it is necessary to consider that the state is accountable to the people, but the Funds, as they exist, are accountable only to the state⁷, reminds jurist Larry Cata Backer (2009). The population and firms need to comprehend the usage of the SWF, hence the transparency. Dissimilar preoccupations motivate the need for transparency in Western economic spheres. Western countries are concerned by current huge accumulations of foreign reserves in some non OECD countries and require transparency from SWFs domiciled in these countries.

⁶ However, the Kuwait Investment Authority is not listed by Failaka as an Islamic financial institution.

⁷ An example of non respect of transparency and of breach of duty towards the people shows the Federal Law of the Russian Federation, dated 17.12.2009, and government resolution "Of suspension of action of government acts relating to formation and use of oil and gas incomes of the federal budget and of incomes under control of National Funds", dated 21.04.2010, which stipulate that between 1 January 2010 and 1 January 2013 the Financial Ministry of RF will not published any information about the formation and use of the Reserve Fund and of the National Wealth Fund. They stipulate also that the government of the RF will not report receipt and use of oil and gas incomes of the federal budget, nor report about the formation of Sovereign Funds as a part of records about execution of the federal budget. The reports must be available for the Audit chamber of the RF.

Table 1. Foreign exchange reserves in BRIC (2006)

| | 2006 \$ billions | % change 2001-2006 | Share of GDP 2006 | Reserves/GDP 2001-2006 |
|--------|------------------|-----------------------|----------------------|---------------------------|
| Brazil | 86 | 139 | 8 | 1.4 |
| Russia | 295 | 807 | 30 | 8.4 |
| India | 170 | 276 | 19 | 3.7 |
| China | 1 066 | 403 | 41 | 8.6 |

Source: Truman (2008)

The requirement of transparency, in this case, should serve as proof of non-infringement of their previous private property rights (intellectual or industrial PRs) and privileges. Indeed, the SWFs came to life as consequences of the disequilibrium of the world economy related, on the one hand, to strong specialisation of different nations either in commodities or mass industrial production or services or finance, and, on the other hand, to disproportional weight given to the US dollar as a basis of the transactions among these poles. Western post industrial nations, specialised in financial activities, watch with fear the situation when international reserves are concentrated out of their frontiers, and US economy is fragile. In the paper of Chalamish (2009), among many others on the subject of western nations' anxiety, we find a list of protective measures that he suggests for blocking the SWFs' investments abroad. Such measures include a demand for transparency, national regulations blocking foreign SWFs' investment in state enterprises and in strategic sectors; individual selection of proposed investments or acquisitions; and a policy to ensure that investments do not serve an interest of SWF owners. It should be noted that not only Western countries bear of intervention of foreign funds in their economic domain. For instance, the Norwegian SWF wanting to invest in solar energy in India met obstacles from Indian government; the enterprises of this industry are only feebly profitable, thus the Indian government suspected the state-owned fund of Norway of some political interests harmful for India.

1.3. SWF objectives

The primary purpose of public pension funds is to finance defined benefit obligations. For that purpose they need to produce a high-income return to correspond to actuarial expectations and pay benefits. Assets of a non-financial nature and long-term liabilities need the specific instruments of risk management, which should be added to traditional tools utilised by a pension fund if we want it to become a responsible investor.

The sovereign-wealth funds have various purposes, such as: saving an accumulation for future generations, helping to realise socio-economic projects, protecting the economy against commodity price fluctuations, or promoting scientific, ecological and technological restructuring. No one fund can implement all the above objectives.

Following their targets, some types of sovereign funds can be identified: pension reserves, investment funds aiming to reduce the cost of charges for the reserves, and funds for carrying out key long term macroeconomic policy, since their investment horizon is larger (Weinberger, Golub, 2007) than those of hedge funds or private equity institutions, which fulfil speculative management.

Accordingly, the 8th principle of the "Santiago principles", elaborated by an international working group of SWFs (IWG, 2008), the governing body of a SWF should act in the best interests of the fund. In that respect the recommendations adhere to the tradition of the Norwegian Sovereign Fund, named the Government Pension Fund-Global, the objective of which is to earn the maximum income relative to the level of risk specified by the finance ministry. Thus, the Norwegian Fund is conceived to behave as private agent and its role in macroeconomic strategy is principally participative rather than regulatory. We do not agree with this limiting assessment of the sovereign funds' functions, and consider that the funds' governing bodies should act as regulators in the best economic and social interests of the population. The investment flows have to work in domestic or foreign industries, participating in globally responsible economic reorganisation.

Economic literature reveals through theoretical models and actual cases studies some positions on these questions. The stylised model by Aizenman and Glick (2009) suggests that the SWF should opt for much greater investment in foreign equities, while the Central bank manages its foreign exchange reserves with limited diversification in order to minimise the downside risk of sudden crisis. In reality the majority of sovereign funds manage general public savings by investing them in a variety of corporate funds and other financial instruments, particularly in equities, bonds and funds of different countries. The paper by Bortolotti et al. (2009) points out that on average the biggest SWFs, among the 28 funds analysed by the authors, invest in their home countries only in 21.6% of cases, in relation to the number of investment projects, and at the level of 16.3% in terms of their value. According to Balding (2008), such funds as the Russian Stabilisation Fund and the China Investment Corporation are the most domestically focused major funds. These funds can play easily the role of regulator.

1.4. Responsible investor SWF – example for other investors

According to the findings of Bortolotti et al. (2009) smaller investors welcome a SWF as shareholder. This suggests that SWFs are good vectors to incite financial institutions to have a high regard for ethical conventions, using negatively screened criteria and positive ones, investing into enterprises promoting sustainability. This weight in financial spheres gives SWFs the possibility of stabilising financial speculative movements by reducing the volatility of asset prices and lowering the liquidity of risk premiums.

The SWFs may become the major mechanism for regulating the world economy through the governance formula of responsible investment. Incarnating the public interests they can have a long term goal of modifying the ethical norms of domestic and recipient firms for more and more social relevance. For that purpose the strategic axe of responsible investment must be enforced by public authorities according to the citizens' aspiration: finance and social innovation, preference for extra financial criteria, long term problem solving, ecological projects, the introduction of good governance practices, and the pursuit of sustainable development.

1.5. Fostering equitable development

The political force of sovereign wealth funds can be appreciated through their willingness to facilitate the development of poor regions. State-owned investment mechanisms from different countries are able to join efforts creating supra sovereign wealth funds for that purpose. Attempts in this direction have been made by South Korea, Azerbaijan, the

Netherlands and Saudi Arabia. The governments of these countries have agreed to try an experiment transferring to the World Bank the management of future common supra funds for development.

1.6. SWFs and SPFs during the financial crisis

Sovereign Pension Funds and Public Pension Reserve Fund (SPF) are funds created by government or social security institutions to contribute to the financing of pay-as-you-go pension plans. The largest SPF in terms of the ratio asset/GDP is the Norway fund, with a ratio of 83%. In OECD countries on average the sum of assets held by the SPF was equal to 24% of GDP (OECD 2007). During the period of financial prosperity the OECD SPFs preferred to have a low percentage of bonds in their portfolios and a high proportion of more risky assets such as domestic and foreign shares. For example, the French Fond de Réserve pour les Retraites allocated 62% of its total assets to shares and 26% to bonds and the rest was invested in other assets, likely riskier (private equity, hedge funds). As a result, the French pension fund suffered more during the crisis⁸ in comparison with conservative funds, which by law were mandated to invest in low risk assets (Spain, USA). The Russian autonomous pension funds invested before the crisis nearly 60 percent of its assets in riskier equities and shares, following the French example of portfolio composition.

Table 2. Structure of assets allocation in autonomous pension funds, BRIC 2006, in percent of total investment

| | Equities or Shares | Bonds | | | Cash and equivalent | Land& Buildings | Mutual funds | Loans | Other investments | |
|--------|--------------------|-------------|---|-----------------------------------|---------------------|-----------------|--------------|------------|-------------------|------------------------------|
| | | | Of which: Issued by public Administration | Of which: Issued by privat sector | | | | | | Of which: Foreign Investment |
| Brazil | 21.0 | 15.9 | 12.9 | 3.0 | | 3.3 | 56.4 | 1.8 | 1.6 | |
| Russia | 59.9 | 26.9 | 8.0 | 18.9 | 9.4 | 0.3 | 1.7 | | 1.8 | |
| China | 24.2 | 53.7 | | | 9.5 | | | | 12.6 | 11.0 |

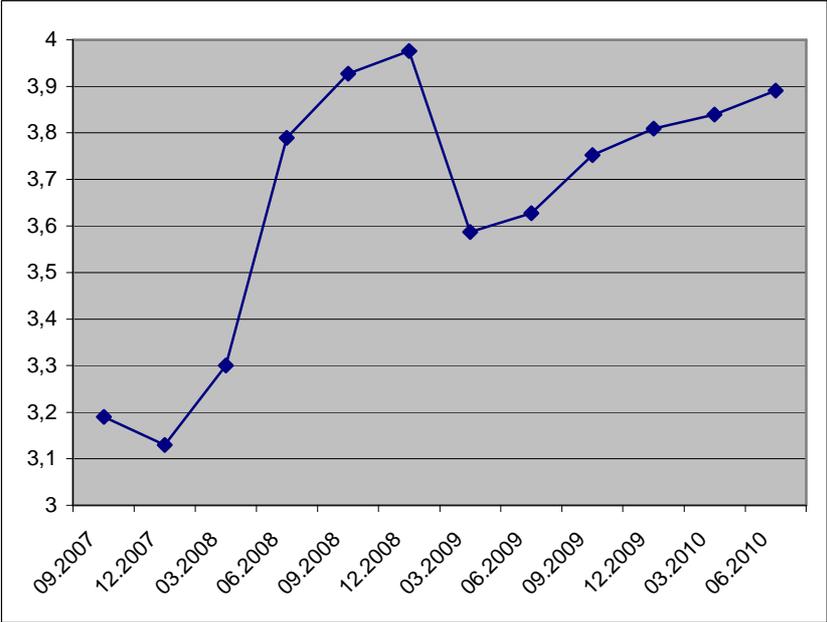
For China: Asset allocation refers to the NSSF, as asset allocation information for the reserve funds is unavailable

Sources: *OECD Pension Markets in Focus: November 2007*, Issue 4

During the financial crisis the value of portfolios held by SWFs declined. According to Kern (2009) their equity portfolios lost 45% between December 2007 and early 2009, reducing the overall portfolios by around 18%. Recent data, reported by the SWF institute, show by contrast an enforcement of Funds during these quarters (in terms of market size), but a sudden drop between December 2008 and Mars 2009, followed by a subsequent gradual rise until June 2010.

⁸ Fond de reserve pour les retraites lost 25% of value in 2008. It was certainly a consequence of the collapse at exchanges, rather than accelerated retirement of an aging population, as the government interpreted this phenomenon.

Graph 1: Sovereign Wealth Fund Market Size 2007-2010 (in percentage)⁹



Source: Sovereign Wealth Fund Institute, updated June 2010

Commodity SWFs suffered during the crisis principally because they were affected by sudden erosion of revenues as a consequence of oil price decline in 2008.

Graph 2: Oil price in London



Source : Бизнес информер <http://www.oilru.com/dynamic.phtml>

For instance, the aggregate amount of the Russian Reserve Fund fell three and half times, between January 2009 and April 2010.

⁹ Market size reflects official disclosure, fund creation, investment activity, and capital injections

2. BRAZIL, RUSSIA, INDIA, CHINA (BRIC)

The abbreviation BRIC appeared in 2001 in the vocabulary of the investment bank Goldman Sachs. The group of countries Brazil, Russia, India and China had similarities, among which some very important characteristics for potential financial and investment expansion: they are big countries and capital exporters; they had high growth rate during a decade; and traditionally the government regulated the financial sector. Their political and financial power came out after the beginning of the credit crisis in the USA in 2007. BRICs became the leading countries in terms of foreign exchange reserves. China occupies the first place on the list, with 2454 billion USD (June 2010) or approximately 31% of total world reserves. Russia is in third place, with 453 billion USD (June 2010) of exchange reserves stock. The Indian reserves in March 2010 represented 277 billion USD, and they were 5th largest in the World. Brazilian reserves in July 2010 were large at 255 billion USD, which corresponded to 8th place in the best credit rated nations. Brazil and Russia have a mixture of state and private control of capital flows; as for India and China, their states are even stronger in control and regulation of capital spheres. The export strategy of Brazil and Russia is determined by their comparative advantages on commodity products; India and China successfully use their advantages of modern industrialisation and service diversification.

In the crisis year 2009 the chiefs of BRIC countries met for a first summit in Russia (Ekaterinburg), where they broadly discussed alternatives to the US dollar as the global reserve currency. Brazilian and Russian economic developments are particularly vulnerable when the dollar weakens because commodities are priced in dollars. The majority of Brazil's foreign reserves are held in dollars. Russia in this period still measured financial flows against the dollar-euro basket, but looked to diversify the risk by switching to IMF bonds. China and Russia agreed to use the rouble and yuan in bilateral trade to lessen dependence on the dollar. Russia come to a decision to increase the share of the Chinese currency yuan in its foreign currency reserves up to 1 – 1.5 % in detriment of gold and GB pounds. India is less concerned by the dollar's troubles, since it does not have dollar denominated debt, and the Indian government introduced capital control to protect its domestic currency, the rupee.

The first summit of BRIC proposed to expand the number of currencies in the basket of IMF and to use the new SDR as a worldwide reserve currency in the place of US Dollars. Brazil, Russia and India each bought 10 billion in bonds from the IMF, and China purchased 50 billion. These loans were intended to help revive world trade and to benefit net exporters like the BRICs. More generally, the BRICs seek to take a larger role in the world financial system.

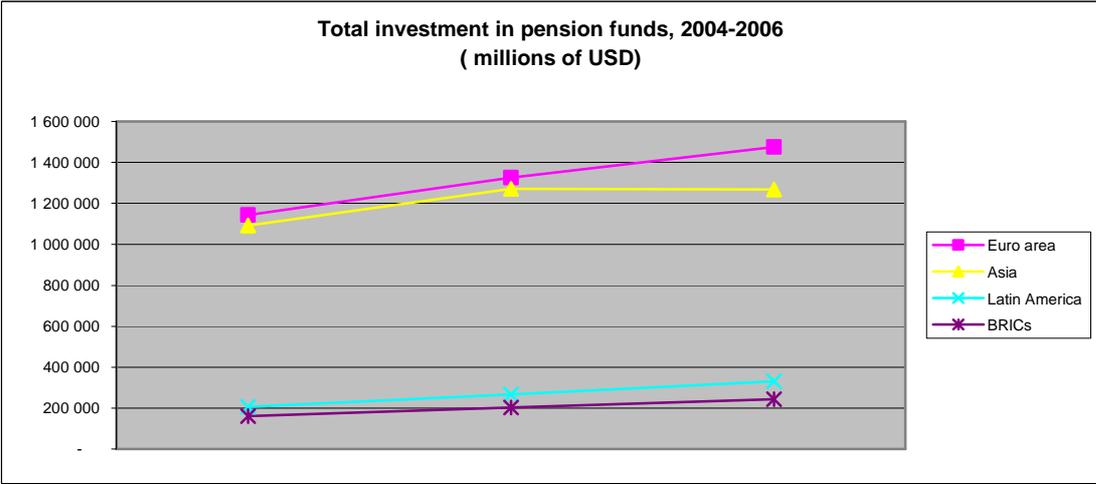
The second summit of BRIC leaders took place in June 2010 in Brazil, where mainly industrial projects within the BRIC were concretised. The cooperation agreement was signed between the Brazilian bank BNDES, the Vnesheconombank of Russia, the EXIM Bank of India, and the State Bank of China for Development on cooperation and interaction in the spheres of high-tech, investment and energy. The inter-bank association was initiated with the objective of elaborating the most promising joint projects and assuring their financing. BRIC's cooperation brings into play existing bilateral starting points. The financial cooperation idea presumes usage of the experience of state banks in the organisation of funding development projects in key sectors. For instance, the know-how of the Development Bank of Brazil in support of the aircraft industry in Brazil, which is now one of the most competitive in this global sector, may be shared among other banks of the association. Russian and Brazilian banks elaborated a project for joint development and production of airplanes for Russian regional aviation. China will construct metal enterprises in Brazil.

2.1. SWFs of BRICs

2.1.1. Pension funds

The BRIC pension funds are unevenly distributed in their domestic economies. The weight of pension funds in 2007 corresponds to 15% of GDP in Brazil, to 5.6% of GDP in India, to only 1.5% of GDP in Russia, and to a minor portion in China. In absolute terms the total investment in pension funds of BRICs occupies relatively modest place compared to investments in other regions, like OECD countries, euro area countries, Asian and Latin American countries,

Graph 3: Total investment in pension funds



but in terms of growth of their assets, between 2004 and 2006, BRICs with 23.3% growth rate show significant improvement compared with 9% of average growth rate in the world (OECD, 2007).

2.1.2. BRICs' participation in world-wide thinking of the SWF role

In October 2008 an international working group of sovereign wealth funds published the generally accepted principles and practices for SWFs, called “Santiago principles” (IWG, 2008). China and its China Investment Corporation, Russia with the Reserve Fund and the National Wealth fund were among the members of the group. India and Brazil participated at the meeting as recipient countries. The accepted principals can be implemented on a voluntary basis, each of which is subject to home country laws, regulations and obligations. They treat commercial and property rights aspects of SWF management, and are subject to the influence of neo-liberal economic thought.

2.2. Brazil

The sovereign Fund of Brazil is a new non-commodity fund established in 2009. The Fund is required to support national companies in their export activities, and more broadly it is a mechanism for anti-cyclical development and for promoting investment in projects of strategic interest to Brazil abroad and within the country. Therefore the advisory board to manage the fund’s investment strategy is composed of ministers of planning and finance, and the president of the central bank. The Fund anticipates using financial instruments, such as corporate bonds, rather than diffusing the capital of firms. At the beginning of 2010 the government formalized rules of operation: the federal treasury cannot sell domestic

government securities held in the Fund to make new investments. The Fund's investments must be made in assets that have good investment grade ratings from no less than two ratings agencies.

PREVI Pension Fund (Pension Bank for Banco do Brasil staff), closed private pension funds, was established for employees of the Bank of Brazil. This is the largest pension fund, and the Bank of Brazil is the largest bank in the country. It works to provide for its employees and their dependents social security benefits to complement benefits provided by the state social security system. PREVI operates two pension plans (Plano 1 and Plano Futuro) and a cumulative Foundation (Plano Peculio). The first of these, DB - Defined Benefits plan, is closed to new participants since December 1997. The second falls under the category of schemes with variable contributions, which means it operates on a DC - Defined Contribution - in the saving period and on a DB, when the employee retires.

PREVI seeks to be the best benefit plan administrator in Brazil and an international benchmark by indicators among which it accentuates socio-environmental responsibility. Its ethical principles are expressed in such values as justice, respect, commitment, solidarity, and democracy.

The profitability of the fund in 2007 was equal to 37.08% (according to the annual report). It brought together 31% of the total assets of Brazilian pension funds and guaranteed an average payment, more than twice the average secured by all Brazilian funds (including itself). Judging from the appearance in the Report for 2007, the methods applied by the PREVI Fund correspond to international standards of portfolio art and to standards of forecasting and risk control. But with the onset of the crisis and until September 2008 the fund lost 5.29 billion dollars. The rate of return was negative in 2008 (minus 11, 4%). The year 2009 was a year of recovery for PREVI. After pessimistic forecasts in the first few months, the year of 2009 brought some positive results. The Plano 1 profitability was 28.25%, and the profitability of Previ Futuro's investments reached the 27.16% mark, far greater than the actuarial target of 10% for each.

The Brazilian economy began consolidating in the middle of 2009. Public banks, especially Banco do Brasil, which closely met government guidelines, sustained the offer of credit in the most critical moments, thus acting as a lever to recovery. In the Report 2009 PREVI's administration explains these encouraging results for the Brazilian economy by three factors. The first one was stabilizing inflation and maintaining the lowest interest rate in recent Brazilian history. On the one hand, this element kept fixed income profitability at low levels; on the other hand, it was essential for returning to credit and investments. The second factor was the recovery of the Stock Exchange, which became possible due to the profitability of companies that were properly equipped to face the crisis (like the aircraft industry), and to a very strong sign of foreign investor trust in the future of the Brazilian economy. The third factor was the increasing attractiveness of the real estate market. Lower interest rates facilitate long term financing, and real estate has increased in value.

Due to these favourable factors, the long term investment allocation strategy adopted by PREVI was improved, with an average profitability well above the actuarial goal. For Plan 1, this represented a substantial surplus recovery. For the PREVI Futuro Plan, it represents increased savings value accumulated. In the long term, this should allow better retirement conditions.

In 2009 PREVI, with two Brazilian companies, Petros and Funcef, realised a strategic move aiming to consolidate one great Brazilian company in terms of infrastructure (INVEPAR). With this support, INVEPAR won the right to operate highways in Sao Paulo and acquire complete control of the Rio de Janeiro metro. In the case of Metro Rio, PREVI and other partners financed the structured operation to purchase 19 trains. The trains are being built in China. This represents an example of socially responsible investment, due to which Rio de Janeiro will be a city with the cleanest, safest, and most efficient means of transportation.

Considering the negative role of derivatives in the spread of the financial crisis, their volume was limited to 20% of the invested sum and they were mandatorily constrained. New constraints are: 1) prior risk assessment; 2) existence of appropriate internal control systems; 3) record of transactions in the stock exchange or futures and commodities; 4) performance of clearinghouse and settlements as transaction counterparts; and 5) strict rules forbidding transactions left uncovered by buying operations.

2.3. Russia

2.3.1. Pension fund

The retirement fund of the Russian Federation was created December 22 1990 for the state's management of the finances of pension provision. It is an out of state budget fund. The financial stocks of the Pension Fund come from compulsory insurance instalments paid by employers and citizens.

In 2010 the Retirement fund has implemented a series of socially significant functions such as:

- Account of insurance resources provided from compulsory pensioner insurance;
- Assignment and payment of old age pensions, disability pensions, pensions at the occasion of loss of the family supporter;
- Person accounts of the participants of the system of compulsory pensioner insurance; interaction with employers - the payers of insurance pensioner instalments;
- Control of the funds of the pensioner system, including part of the labour pension constituted by accumulation, which is implemented through the state controlling company (Vneshekonombank) and private controlling companies;
- Realisation of the State Program of joint pension financing;
- Control of insurance funds acting on compulsory pensioner insurance and compulsory medical insurance;
- Formation of federal social additional provisions to social pensions, with a view to ensure that aggregate retirement income of retired persons would not be lower than the subsistence minimum of pensioners.

In Russia besides the Retirement Fund there are two other state off-budget funds: the Fund of social security and the Fund of compulsory medical insurance.

2.3.2. Sovereign wealth funds

Despite liberalisation of its economy in 1992, on which a lot of hope was placed, Russia still failed to implement a modernisation of its industrial structure. Over the years the country lacked sufficient capital and experienced difficulties in accessing long term financial credits. Western countries have provided Russia short term credits beneficial only for maintaining the

level of household consumption, which demand was effectively satisfied, but through imports of consumer goods from creditor western countries. Domestic industry and agriculture were stagnating. Then came a period of high oil and gas prices, when Russia could accumulate big foreign currency reserves, but as its financial system was deficient, capital flowed abroad. It became clear that Russia needs funds that could be used as collateral for the obligations of domestic and foreign investors. The first stabilization fund was created for these purposes and was divided later into two specialised funds.

The Reserve Fund of the Russian Federation, established February 1, 2008, as part of the federal budget, isolated and managed to use its capital in the event of insufficient oil and gas revenues for financial support of the economic program. The normative value of the Reserve Fund in its absolute amount is determined as 10% of projected GDP for the relevant planning period. It is financed by oil and gas revenues from the federal budget in excess of the amount authorized by the oil and gas transfer, and through income from the management of the funds. Going forward the Reserve fund fulfils insurance functions, covering deficits of budget and pension funds.

During 2008 at 13 different dates the operations of inflow transactions to the Reserve fund took place, according to legislative authority. Funds flow on the Federal Treasury's account in euros, in US dollars and in GB pounds. The only outflow in 2008 was realised in November from the US dollars account, which corresponded to the purchase of RF currency for correction of the RF reserve position in the International Monetary Fund. This process of Reserve fund accumulation was affected by sudden erosion of budget revenues as a consequence of the oil price drop in 2008.

During 2009 the dominant flows were outflows from euro, dollar and GB pound accounts corresponding to the purchase of RF currency¹⁰ for financing the federal budget deficit. The outflow operations were authorised by the order of the Ministry of Finance¹¹. This year the dollar outflows occurred four times to purchase the Russian currency for correction of its reserve position in the International Monetary Fund. Another six outflow transactions in US dollars corresponded to purchase of RF currency for oil and gas transfer accumulations. The inflows in Dollars took place seven times, four of which were at the end of November and beginning of December 2009. Inflows in euro and GB pounds were more numerous, on eleven different operation dates. Earlier 2010 all flows were outflows for financing the federal budget deficit. Consequently this fund is now just about exhausted.

The second Russian SWF issuing from the Stabilisation fund, the *National Wealth Fund*, is part of the federal budget also and its prime purpose is to co-finance voluntary pension savings of citizens and to cover the deficit of the Pension Fund of Russia. The Fund is formed partly by transfers from the Reserve Fund if the latter exceeds the rate of 10% of GDP. The assets of the fund are placed in the accounts of the Central Bank of Russia in foreign currency (U.S. dollars, euros and GB pounds sterling). The Central Bank is the principal agent for management and pays interest for the use of liquidities. The Government sets a list of

¹⁰ Note on Russian Central Bank: The bank of Russia conducts scheduled purchases of foreign currency within realisation of measures on transition to the mode of inflation targeting. Volumes of scheduled purchases of foreign currency are installed in view of conjuncture of inside exchange market, course of execution of federal budget and the evaluation of conditions of balance of payments for supplying of stable functioning of the banking industry and neutralisation of expectations regarding dynamics of the rouble exchange rate. Scheduled purchases are implemented only in the case of excess of the proposal of foreign currency above demand on it.

¹¹ According to Order of 10.03.2009, 19 outflows were realised; to Order of 20.05.2009, 5 outflows; to Order of 23.06.2009, 3 outflows; to Order of 22.07.2009, 4 outflows, and to Order of 17.10.2009, 19 outflows.

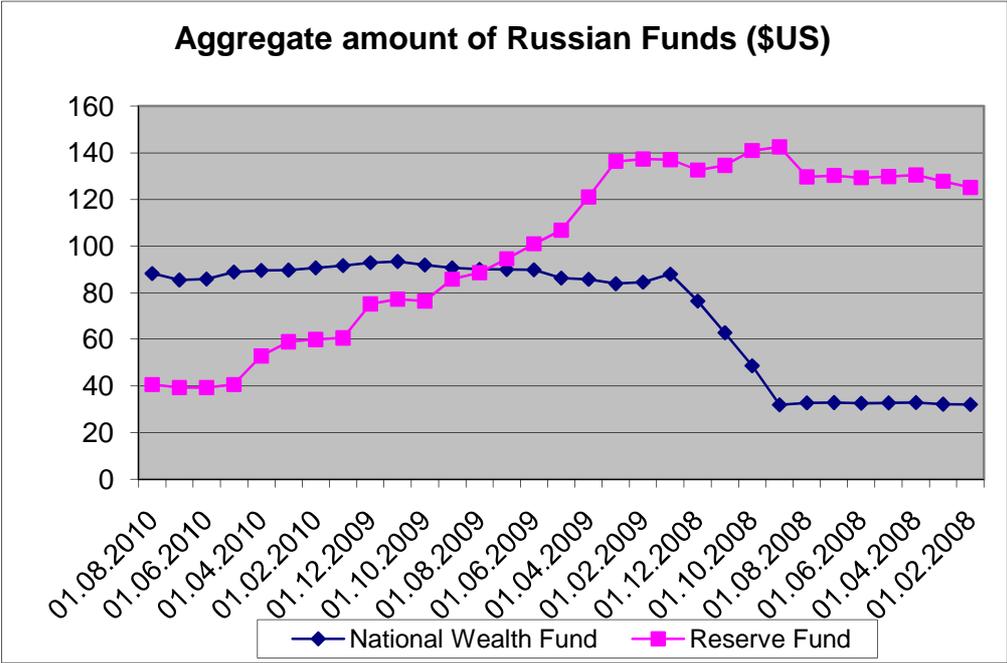
requirements for financial assets where a virtual portfolio of financial instruments is estimated and the value of the average yield. Financial assets with a high level of risk are not included in the list of assets allowed to conduct operations. The Fund is financed only in sovereign debt obligations, debt securities of foreign agencies and the central banks of Austria, Belgium, Britain, Germany, Denmark, Ireland, Luxembourg, the Netherlands, USA, Finland, France and Sweden¹², as well as in debts of international financial organizations: Asian Development Bank, Bank of Europe Development Council, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, International Financial Corporation, International Bank for Reconstruction and Development. The issuer of debt, a foreign bank or credit organisation must have a rating of long term credit not below “AA-” by classification rating agencies. If the bought liabilities no longer meet the requirements, they must be sold within one month after the date of this discrepancy.

In contrast with other countries using natural resource earnings to create the funds and use them to diversify and invest, Russian SWFs are not used directly for these tasks. Thus, Russian SWFs do not hold domestic state owned listed equities and no foreign state owns listed equities. In Russia the owners of such equities are oil and gas giants Gazprom and Rosneft. These two largest state assets (Balding, 2008) hold listed equities, valued at 246 billion US dollars in 2007. Some authors consider that Gazprom is a Russian investment SWF. During 2008 there were only inflows into the National Wealth Fund in all three foreign currencies.

In 2009 Russia entered into recession and tax revenue fell. In comparison with the previous year the GDP decreased 7.9% in 2009, industrial production declined 10.8% and investment in fixed capital fell 16.2%. In such a critical situation the Russian government chose to use the sovereign funds for sustaining interior demand and for improving the domestic financial system. Outflows from the National Wealth Fund began at the end of July 2009, when the euro, dollar and GB pound purchase of RF currency for placement on deposit at the state corporation Vnesheconombank (VEB) according to the Regulation of the Government of the RF. There were 15 other outflows for placement on deposit with VEB, and only 4 inflows in December 2009. In 2010 until August there were outflows: a purchase to co-finance voluntary pension savings of Russian citizens (in April), the operation in favour of VEB (in April). And there were inflows, the investment of the funds. In January it was decided to use the National Welfare Fund to finance VEB infrastructure projects. Thus the funds from the Fund placed in VEB deposits will be provided to the mortgage crediting agency as loans (with annuities of 7% and 8.5% and end of the term 31.12.2019 and 31.12.2020 respectively), to credit the small and medium size enterprises (with annuity of 8.5% and end of the term 31.12.2017), to credit the Agency for housing mortgage lending (with annuity of 8.5% and end of the term 1.06.2020). Two billions US dollars were deposited in 2010 from the National Wealth fund at a rate of 2.75 percentage points above the London interbank offered rate, with the limit date of return the 31 October 2011. (Sources: Ministry of Finance of RF). In April 2010 the funds were used to plug the budget deficit and to increase the pension reserves of the state.

¹² Greece and Iceland are not on the list of states in debt securities of which National Wealth Fund could be placed. In such a manner, downward rating of Greece should not have an effect on the cost of Russian stock. In autumn 2008 the credit rating agencies, which monitor Iceland's sovereign debt, lowered their ratings. For instance, Standard & Poor's Ratings Services lowered Greece's long-term credit rating to BBB from A-. On 7 October 2008, the central bank of Iceland announced that they had been in talks with the Russian authority, over a €4 billion loan from Russia. The loan would be given across three or four years, with an interest rate 30 to 50 points above LIBOR. In November the Icelandic government reported that Russia has offered only \$300M (Sources: Wikipedia). In April 2010 Standard & Poor's Ratings Services lowered Greece's long-term credit rating to BB+ from BBB+, dropping the debt-plagued country's rating below investment grade.

Graph 4 Aggregate amount of Sovereign Funds of Russia quarterly.
 (Attention in following graph: on the axe X more recent data 01.08.2010 is located on the left)



Sources: Ministry of Finance of Russian Federation, 08.08.2010
<http://www1.minfin.ru/ru/nationalwealthfund/statistics/volume/index.php?id4=6412>

Thus, the Russian Reserve fund is emptying out and the National Wealth fund is stagnating because the government since March 2009 uses them to cover budget deficits. In the document describing the principals of budget policy for 2011-2013 it is announced that the fund inflows into the Reserve Fund and into the National Wealth Fund will no longer be provided. It is planned to use the amount of the National Wealth Fund as the source of financing the deficit of the federal budget up to an amount equal to the amount of the purchase to co-finance voluntary pension savings of Russian citizens. In this way the earlier accumulated amount of capital of this Fund will be preserved.

Table 3: Forecasting of Aggregate amounts of Funds in percent of GDP

| | 2010 | 2011 | 2012 | 2013 |
|-----------------------------|------|------|------|------|
| Reserve Fund | | | | |
| %GDP at 01.01. | 4.1 | 0.5 | 0.09 | 0.08 |
| %GDP at 31.12 | 0.7 | 0.09 | 0.09 | 0.08 |
| National Wealth Fund | | | | |
| %GDP at 01.01. | 6.2 | 5.2 | 4.6 | 4.2 |
| %GDP at 31.12 | 5.8 | 5.1 | 4.5 | 4.1 |

Source: Ministry of Finance of RF

In the future the National Wealth Fund can be used more intensively to cover the federal budget deficit only at the approach of adverse conditions of economic development, such as a

reduction of the price of oil below 75 dollars per barrel or a growth rate of the economy below 5%. The Reserve Fund will be depleted, and the National Wealth Fund will be used for resolution of political issues, engaged first of all in effecting the state's commitments in the domain of pension provision.

A short history of Russian Sovereign Wealth Funds reveals some examples of accumulations of natural rent resources. In fact, the Funds were useful in the crisis period to sustain the Russian economy and its financial sector. Both Funds participate in sustaining domestic consumption. It was necessary to use such regulation because in the crisis of 2009, in constant prices the level of consumption compared to the previous prosperous year 2008, was only 93.6%. The share of household consumption increased drastically, and was the biggest since 1992, 63.8% GDP. At the same time, due to Sovereign Funds, real depositable money incomes augmented (102 % as of the previous year), and real fixed pension size grew significantly (111%). The relative amount of incomes in relationship to subsistence minimum level and the relative amount of average fixed pensions in relationship to subsistence minimum level signified the improvement of living standards of all populations (in terms of money incomes) and the aged population in particular

Table 4: Russia, 2000-2009 Living standard of population, Russia, 2000 - 2009
LIVING STANDARD OF POPULATION

| | 2000 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|--------------------|-------|--------------------|-------|-------|-------|-------|
| Actual final consumption of households % of GDP | 52.3 | 57.6 | 57.3 | 56.6 | 57.4 | 56.8 | 63.8 |
| % as of the previous year ¹⁾ | 105.9 | 110.2 | 110.5 | 109.9 | 112.4 | 109.4 | 93.6 |
| Real disposable money incomes, % as of the previous year | 112 | 110 | 112 | 113 | 112 | 102 | 102 |
| Real fixed pension size ²⁾ , % as of the previous year | 128 | 106 | 110 | 105 | 105 | 118 | 111 |
| Subsistence minimum level in percent to previous year | 120 ⁵⁾ | 113 | 119 ⁵⁾ | 113 | 112 | 119 | 112 |
| Rapport to subsistence minimum level, (percent): | | | | | | | |
| of per capita money incomes | 189 | 270 | 269 | 298 | 328 | 325 | 328 |
| of average monthly accrued wage | 168 | 259 | 263 | 288 | 327 | 348 | 337 |
| of average fixed pensions ²⁾ | 76 | 106 | 98 | 100 | 102 | 115 | 127 |
| Population with money incomes below subsistence minimum level: | | | | | | | |
| mln. persons | 42.3 | 25.2 | 25.2 | 21.5 | 18.7 | 18.9 | 18.5 |
| percentage of the total population | 29.0 | 17.6 | 17.7 | 15.2 | 13.3 | 13.4 | 13.1 |
| percentage as of the previous year | 84.9 ⁵⁾ | 86.0 | 87.7 ⁵⁾ | 85.3 | 87.0 | 101.1 | 97.9 |
| Coefficient of funds (coefficient of differentiation of incomes), times | 13.9 | 15.2 | 15.2 | 16.0 | 16.8 | 16.8 | 16.7 |
| Real minimum wages, as percentage of the previous year | 106.9 | 111.0 | 110.4 | 122.1 | 137.6 | 134.4 | 168.6 |

Sources: Federal State Statistics Service <http://www.gks.ru/wps/portal/english>

¹⁾ At constant prices.

²⁾ 1995, 2000 r. - with compensation.

³⁾ Since 2000 according to changes of the norm-legal base and methodology for compilation of the size of subsistence minimum (see methodological guidelines page) the assessment published is based on data determined by the Government of the Russian Federation for I-IV quarters of respective years.

⁴⁾ In 2005 the structure of the consumer goods basket was revised to determine the subsistence minimum value, based on the Federal Law №134-FZ "On the subsistence minimum of the Russian Federation".

⁵⁾ By comparable methodology of subsistence minimum compilation.

Looking at official statistics on living standard of Russian population (table 4) we can do some observations about its evolution during the crisis year 2009. The share of actual final consumption of households in GDP decreased in 2008, as compared to previous years, and represented 56.8% of national product, allowing others utilisations of resources, for example for modernisation of economy. In crisis' 2009 year the share of households consumption increase drastically, and was the biggest since 1992, 63.8% GDP. In constant prices the level of consumption weighed against the previous prosperous year 2008, represented only 93.6%. At the same time, real disposable money incomes augmented (102 % as of the previous year), and real fixed pension size enlarged significantly (111%). The relative amount of incomes in relationship to subsistence minimum level and the relative amount of average fixed pensions in relationship to subsistence minimum level signified the improvement of living standard of all population (in terms of money incomes) and aged population in particular (First ratio changes from 325% in 2008 to 328% in 2009, the second, from 115% to 127%). By contrast, financial situation of working population depreciated in the crisis in view of the fact that the average monthly wage in relationship to subsistence minimum level diminished from 348% in 2008 to 337% in 2009 and that in spite of increase of real minimum wages, as percentage of the previous year, 168.6%. The coefficient of differentiation of incomes¹³ stays very high (16.7 times) attesting large inequalities. In total 18.8 million persons live with money incomes below subsistence minimum level that represents about 13% of Russian population (small decline of both numbers in 2009).

The National Wealth Fund via VEB participates, albeit a modest amount, in realisation of the strategy of economic modernisation and restructuring.

2.4. India

2.4.1. Pension fund

The largest sovereign pension fund of India is the Employees' Provident Fund. This centralized storage fund works by a defined contribution. Asset management is carried out by the Governing Council, whose members are representatives of the state, trade unions and industrial enterprises. The Fund primarily invests its assets in domestic government bonds, debt obligations of state-owned enterprises and projects with a social purpose.

In November 2008, the state decided that from January 2009 mandatory contributions to the Employees' Provident Fund will be reduced from 11% to 8% of salary, and this rule will

¹³ The coefficient of income differentiation (the coefficient of funds) is a ratio between the average levels of money incomes of 10 percent of the population with the highest incomes and 10 percent of population with the lowest incomes.

apply for 2 years. According to the Minister of Finance of India, declining levels of assessments should help to increase the purchasing power of the population covered by this pension fund. During the economic crisis, this measure may enhance consumption, thus stimulating economic activity in the country.

2.4.2. SWF in question

The increase of foreign exchange reserves in India has been dramatic since the beginning of this century. The GDP growth rate in the pre-crisis period was around 9.5%. These trends were a consequence of economic policy modification, which became outward oriented. Exports rose, and for some years the current account balance of India has had a surplus. The inflows of FDI were remarkably higher, especially between 2005 and 2007. According to its charter, the Reserve Bank of India has no right to use funds in foreign currency for investment abroad in financial instruments other than treasury instruments.

So far, in India there is no sovereign fund of wealth accumulation. The Indian government began by establishing in 2006 a public India Infrastructure Finance Company Limited, owned and controlled by the government, with the objective of financing major infrastructure projects of India that require huge investments. The Company offers financial assistance through lending directly to viable infrastructure projects, and refinancing banks and financial organizations for long term loans. Long term debt, in this case, denotes a debt provided to the project company where the average maturity for repayment exceeds 10 years. The loans are guaranteed by the government (against huge foreign currency reserves, for instance).

In 2008, the Government discussed the possibility of establishing a SWF, which would support economic growth. In the paper by Chaisse et al. (2010) we find the description of a discussion by Indian economists on the advantages and shortcomings of ways to solve the problem of the surplus of foreign currency reserves via a SWF in India. The arguments in favour of a SWF were similar to the majority of opinions in other articles on the subject, indicating the necessity of diversification of risk-adjusted portfolio management, which could not be run only by the Central Bank. Opponents predicted likely inflationary consequences of every type of foreign currency reserves over accumulation. Others consider that the time to create a SWF is not opportune because of the financial crisis and economic depression, when the potential volatility of currencies is too high, and the mistakes of evaluation are more frequent. The current account balance since the start of the crisis is deteriorating and it is not clear if a SWF could be fully funded. Moreover, the increase in Indian reserves has been caused by speculative capital inflows on the capital accounts, and they are exposed to likely sudden outflows by foreign investors.

The probable investment strategies of the SWF could be to increase returns on reserves, and to guarantee energy resources. Investments abroad could involve metal, iron and services. The accumulated experience of the India Infrastructure Finance Company Limited of financial management could be useful for future SWFs and this state company could even become its administrator.

2.5. China

China holds four huge SWFs, three of which have their identifiable objectives. The *Investment Company of State foreign exchange management* (SAFE) exists since 1997. The company manages the foreign reserves of China. In the list of the world's largest sovereign

funds it ranked in fourth position in 2010. During the first period of existence this investment company was placing its assets in safe financial instruments. Later, with the emergence of a competing state-owned company, the China Investment Corporation (CIC), in the spring of 2007, SAFE began to buy shares and high-risk bonds and to make direct investments, particularly in companies of the oil industry of West European countries (Total, BP, Royal Dutch, Shell Plc). Falling stock markets in 2008 led SAFE to losses.

Established in 2007, the *China Investment Corporation* (CIC) was in 2010 in fifth place among the largest sovereign funds worldwide. Its sources of capital are special issue treasury bonds, and for this reason CIC has to pay dividends to the State Council as its owner. China Investment Corporation aims to improve the governance of key state-owned financial institutions, and to help Chinese enterprises expand abroad.

In the beginning CIC has made important investments in financial sectors. It purchases equity stakes in financial institutions such as the investment bank Morgan Stanley (5,6 milliards dollars US), funds of private equities Blackstone (3 milliards \$), and JC Flowers (3,2 milliards \$) (Park & Estrada, 2009, and Zhang, 2010). Failure of Lehman Brothers and systemic financial disaster on the American continent affected the situation of Chinese institutions that invested in American financial vehicles. The financial crisis provoked radical modifications in investment strategy. For example, in August 2010 CIC has sold shares of the investment bank Morgan Stanley (US\$70.4 million) to cut its ownership to less than 10 percent.

China Investment Corporation is bringing into play the management principles of the prosperous Sovereign Wealth Fund, Temasek (Singapore). Like the Singapore Fund, the CIC started to develop many active investment patterns. The total value of Temasek investment programs was vaster than that of CIC, and the total number of its projects was 510. Compared to average Temasek projects, the value of average CIC investment projects was more sizable. There were only 12 projects to finance in 2008 (Bortolotti et al., 2009). Two years later the amount of an average transaction of CIC decreased considerably and did not exceed 8 billion US dollars. Now CIC manages more domestic investment projects, some of which are quoted on the Hong-Kong stock exchange.

In the beginning the China Investment Corporation had to borrow in appreciating currencies in order to buy assets nominated in depreciated currencies. In connection with the lowering of prices of shares of leading companies of energy and mining industries in the world, CIC started investing in their securities. Subsequently the Fund continues to diversify industrially (mining, construction, agriculture, equipment construction) and geographically (Australia, Central and South Asia¹⁴) its strategies of investment. Now CIC plans to be an active shareholder in companies of countries such as Brazil (iron export sector) and Mexico, by increasing direct investments. China has increased investments in resource-related companies by purchasing a 45 percent stake in the Russian Nobel oil group (Zhang, 2010) and in environment (the largest French water treatment company, Veolia). CIC acquired in February 2010 more than two percent of the UK private euro equity fund, Apax Partners. It plans also to work together with Intel Capital to invest the next generation technology, by combining China's assets with the technology expertise of Intel Corporation. The investments in the financial sector have to do with Asian companies such as Hong-Kong Group CITIC (at the level of 40% of capital stock).

¹⁴ Oil of Kazakhstan, mining in Indonesia, coal in Mongolia

Table 5: CIC: Global investment portfolio distribution in August 2010

| Asset Class | Percentage of Fund |
|----------------------------------|--------------------|
| Listed Equities | 25.0% |
| Special situations ¹⁵ | 18.9% |
| Fixed income | 18.0% |
| Hedge funds | 9.4% |
| Inflation protected | 8.8% |
| Cash | 8.6% |
| Private equity | 7.0% |
| Other assets | 4.3% |

Source: Sovereign Wealth Fund Institute, August 2010

Thus during the financial crisis of 2008-2009 CIC shifted investments away from the financial sector in general, and away from volatile sectors of the American and European continents, in particular, into Middle East, Asian, Russian, and Brazilian economies with their agricultural, energy, real estate, industrial and other innovation sectors.

The National Social Security Fund (NSSF) pension fund was created by the Central Committee of the Communist Party and State Council in 2000. This Fund is a strategic reserve fund and aims to be a solution to the problem of the aging population. Its funding sources are: fiscal allocations of the central government, capital derived from reduction or transfer of state-owned shares, investment proceeds and equity assets, and allocations from the lottery public welfare fund. The former source of funding is explicitly condemned by ethic principle of some socially responsible financial institutions, such as Islamic finance, for example, for which gambling is a forbidden economic activity.

For some years NSSF realised domestic investments: bank deposits, treasury bonds, financial bonds, corporate bonds, securitised products and stocks. NSSF had shown a significant increase in allocation to shares, which represented 1.3% of its portfolio in 2001, and 24.2% in 2006 (OECD, 2007). The percentage of bonds in the total investments of NSSF grew also in this period, from 46.8% to 53.7%. Recently it began to invest abroad through external money managers rather than through direct investments. The Social Security Fund, which administers NSSF, reported in 2008 its first annual loss, equal to 6.8% on its investments. The loss was due to the previous year's share market fall.

In 2007 China Development Bank established the special investment vehicle in Africa *China-Africa Development Fund*. Debts incurred by the China Development Bank are fully guaranteed by the central government. The fund is able to invest in stocks, convertible bonds, and other types of investment, as quasi-equity investments and a fund of funds. This fund makes equity investments in 27 projects in Africa with a total value of 540 million US dollars, which will likely lead to an increase in investments by Chinese companies up to 3.6 billion US dollars (source: information by Chinese Ministry of commerce, January 2010).

¹⁵ Asian Special Situation Fund invests in special situations stocks and smaller growth companies in Asia, excluding Japan. Companies included in the portfolio are businesses in a recovery situation, launching a new product, undergoing restructuring or introducing new management. As at 31.07.2010 Industry breakdown up to 5% was: Financial – 35%, Information technology – 20.5% Consumer discretionary – 14.5%, Materials – 6.5%, Industrials – 6.3% Telecommunication services – 5.6%. China represented 35.4% of Funds' geographic breakdown. Fund performance year by year: 2006: + 40%, 2007: +37%, 2008: - 46%, 2009: +64%. Source: <https://www.chartbook.fid-intl.com/fi/current/2726.pdf>

CONCLUDING REMARKS

A successful example of pension capitalism in the last half of the 20th century brought about the idea of the possibility of combining investment strategic policy with the financial management of public assets. Since the beginning of this century Brazil, Russia, India and China (BRIC) have taken advantage of the painful financial developments in old capitalist countries to accumulate foreign exchange reserves. Brazil and Russia used for this purpose the commodity price spread, while India and China put to use their export advantages. The BRICs developed the conviction that their finances can and should be socially useful activities. This paper provides an overview of ideas about the development of responsible finance and about sovereign accumulation and investments, disseminated by European and American ecologist organisations and by Islamic financial institutions.

This paper contributes to the discussion of macroeconomic and financial theoretical problems like sovereign asset liability management, and is based on case studies of Brazil, Russia, India and China. It also tries to determine the configuration of institutions able to solve the problems of global public goods.

Historically institutional investors of Brazil are pension funds. Some of them, like the biggest, PREVI, took on responsibilities to invest ethically, but they have to manage risks of inflation and demographic long term risks, while meeting pension liabilities. China and Russia set up Sovereign Wealth Funds wanting to consider optimally their sovereign assets and liabilities together with macroeconomic reconstruction and global socially responsible investments. India has to determine whether it should or not establish a Sovereign Wealth Fund.

Some SWFs of BRIC countries were established just before the financial and economic crisis of 2008-2010. Since this crisis erupted, Russian sovereign funds have been used for the most part to sustain the federal budget and household consumption. They had to support banks also, because the government wished to preserve the savings of Russian citizens. Such usage may be evaluated on a scale of responsible management of a sovereign fund, rather than on a scale of responsible investment. And the Russian case shows that a SWF, as the National Wealth Fund, can stay alive longer during downturn periods of crisis, and even provoke contra-cyclical movement. After a contraction in 2009, the Russian economy grew around 4.5 percent of the GDP in 2010. Inflation has fallen rapidly, the current and capital accounts have both rebounded, and the rouble has strengthened. On the contrary, the Chinese sovereign fund, the China Investment Corporation, was used to modify swiftly the investment policy in the country by substituting investments in foreign financial institutions for industrial projects, both domestic, Asian, Brazilian and Russian. This case highlights the fact that a SWF may steadily reallocate its portfolio, avoiding the price effects of transactions.

Even on the basis of this limited set of cases we can conclude that uniform responsible investment policy cannot work. The comparative study of sovereign utilisation of public funds in the context of global economic dynamics should be prolonged, as well as the analysis of its influence on financial mechanisms to implement socially responsible investment decisions.

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