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Challenges of the Mandatory Funded Pension System in the Russian Federation

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Abstract

The overwhelming number of contributors that have been allocated into the default option is one of the main characteristics of the Russian second pillar. This finding confirms that the level of financial literacy for most of the participants is not sufficient to make informed portfolio selections. The authors argue that the current system is perfectly consistent with a solid second pillar, but the authorities should focus their attention in the strategic asset allocation of pension funds. Since in the short and medium term it is unlikely to see improvements in financial literacy of individuals that may overcome the complexity of these decisions, the authorities can play an important role in designing default investment portfolios that can be aligned with expected replacement rates for the contributors. The current investment regulation of the default option induces investment in inefficient portfolios that are unlikely to bring returns above inflation, and probably will result in very low replacement rates for contributors. Further liberalization of the investments of the pension portfolio; improvements in the governance and supervision of the pension system; and greater certainty about the ownership of the funds are necessary steps to complete the pension reform launched in 2002.

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1. **Introduction**[1]

The purpose of this paper is to contribute to the discussion in the Russian Federation about improvements necessary in the second pillar pension system. Our conclusions are derived from a long process of learning from different experiences; the reaction of pension funds in the events of the recent financial crisis being particularly important. Although certain general principles are similar, the authors do not believe that one pension model should fit all countries.

The Russian second pillar pension system combines elements of the Swedish system with the traditional DC occupational pension funds. The Swedish second pillar operates a blind account system, with a default option run by a public entity and multiple portfolio managers. Alternatively, companies or conglomerates can create DC pension funds for their employees, and manage the individual accounts on a decentralized basis.

While there is room for improving the second pillar pension system in Russia, we do not see major problems in its structure, in particular in the number of individuals allocated into the default option. While in most of the other countries individuals have been forced to select a pension fund, individuals in the Russian Federation are given the option of being assigned to the default option. Not surprisingly, the majority of individuals has not taken an active option and has been allocated into the default option. Our interpretation is that individuals trust the state to provide good pensions, and therefore, it is the role of the state to define an investment policy that would maximize their future pensions. Conservative investment strategies for the default options are likely to end up in the future with very low replacement rates for contributors, and eventually in the payment of guarantees by the state. We argue that moving towards long term efficient portfolio allocations will serve to improve the pensions at low cost for the state.

In addition, we identify the need of making progress in the definition of the payout phase for the second pillar. This is a relatively complex topic with growing experience and literature. Many countries have made the mistake of leaving this discussion to the moment in which individuals start retiring. This has resulted in suboptimal pensions for the first generation of retirees and has affected the credibility of the funded system. Prompt definitions in this area will be needed in the short term.

The paper is organized as follows: Chapter 2 provides some broad overview of the challenges to the pension system, Chapters 3, 4 and 5 discuss the default option managed by VEB, the asset managers and the Non Governmental Pension Funds respectively. Chapter 6 analyzes the regulatory and supervisory framework and describes the main challenges in this area. Chapter 7 analyzes the performance of pension funds in terms of returns and asset allocation. Chapter 8 analyzes the policy options for the payout phase, and Chapter 9 concludes.

[1] The authors are grateful to Tony Randle, John Pollner, Anita Schwarz, Pedro Alba, Zeljko Bogetic, Sophie Sirtaine, Marsha Olive, Sylvie Bossoutrot, Sue Rutledge (all World Bank), Mikhail Dmitriev, the Ministry of Health and Social Development, the Ministry of Finance, the FFMS, the National Association of Private Pension Funds and the participants at the conference organized by the World Bank and Center for Strategic Research in Moscow on May 27, 2010 for useful comments.

2. Challenges of the Russian Second Pillar

In 2002, as a way of improving the sustainability of future pensions for individuals, the Russian Federation introduced a mandatory defined contribution (DC) pension system. Although at the beginning, it was open to all members, since 2005 it has been available only for workers born after 1967.[2] As of December 2009, approximately 50 million individuals were enrolled in the second pillar and the accumulated assets amounted to RUB 570 billion.

The Russian second pillar is based on defined contribution pensions and follows the Swedish model of blind accounts managed by asset managers and a default option managed by the state, but in addition allows the possibility of moving accounts and portfolio management to non-state pension funds. The collection of contributions is undertaken by the Pension Fund of Russia (PFR),[3] which in turn is responsible for the administration of the state pension system, including the first and second pillars. Individuals have three options to manage the funded part of their pension savings:

1. To keep the account balance at the PFR, and invest it in the default investment fund managed by *Vnecheconombank* (PFR-VEB), a state financial institution.
2. To keep the account balance with the PFR, but invest the resources with asset managers (PFR-AM).
3. To transfer the account balance to a non-state pension fund (NPF).

Unless the money is transferred to NPFs, the individual accounts are managed by the PFR. The asset managers do not have information about the identity of the contributors in their funds. As of December 2009, approximately 85 percent of the contributors had their accounts with VEB, approximately 10 percent with asset managers and 5 percent with non-state pension funds. In terms of assets, 84 percent, 3 percent, and 13 percent are managed by VEB, asset managers and NPFs respectively.

Despite the relatively large number of asset managers and pension funds, competition is limited. NPFs are mostly occupational funds and segregated by companies, holdings, industrial associations or regions. The market of private providers of pension products for the mandatory pension system includes 53 private asset management companies that offer pension services through the PFR and 110 NPFs that offer services directly to their contributors. Asset managers offer 61 portfolios to participants. The retail market, which serves individual clients directly, as for example in the cases of Poland and Hungary, is practically non-existent in the Russian Federation. The presence of large conglomerates, such as *Gazprom* and *Blagosostoyanie,* creates a high level of concentration in the NPF industry. As shown in Table 1, out of the 110 NPFs in the market, the largest ten pension funds have 68 percent of the members and 70 percent of the assets.

[2] Individuals born before 1967 who opted for the second pillar were switched back to the first pillar.
[3] Until February 2010, contributions were collected by the Tax Authority and then transferred to the PFR.

Table 1 Concentration in the NPFs Industry

	Second pillar (110 funds)		Third pillar (160 funds)	
	Members	Assets	Members	Assets
largest five	50%	52%	41%	77%
largest ten	68%	70%	56%	86%

Source FFMS

The NPF market is dominated by occupational pension funds. Only two foreign financial institutions offer pension products to Russian companies. The rest of the NPFs are funds created by Russia's largest companies or conglomerates. The market for Western pension funds has been mostly restricted to employees of multinational companies that operate in the Russian Federation. While the largest occupational pension fund has approximately 1.2 million contributors (*Blagosostoyanie*), the largest pension fund managed by a Western company has only 17,000 contributors (Aviva). Since most of the corporations with sufficient scale to create a pension fund have already done it, there is limited room for new occupational NPFs. The largest occupational pension funds are expanding their services to smaller companies that do not have the critical mass to manage their own pension fund, but this market remains relatively small.

Foreign companies with limited knowledge of the domestic market have a relative disadvantage compared with local ones in dealing with ambiguities in the Law. Multiple interpretations of the Law and the lack of courts specialized in dealing with financial issues is likely to create adverse selection among pension fund companies. Only companies that are less risk averse will want to remain in the market. For example, the lack of clarity in the interpretation about the presence of guarantees in the pension system (see Section 5.1) has been a deterrent in bringing pension funds with international expertise into the local market. Other companies, such as ING, have left the market after compensating the pension funds for the losses incurred during the crisis.[4]

While the large participation of contributors in the default option is seen by some analysts as one of the failures of the system, we see it as a source of strength. It is difficult to expect active participation of contributors having regard to deficiencies in the financial literacy of individuals, limited dissemination of savings alternatives and a strong presence of a captured market for occupational pension funds. This situation is no different than that in Sweden, where despite the possibility of selecting from more than 700 pension portfolios offered by asset managers, more than 90 percent of the new entrants to the pension system do not make an active selection of a portfolio and therefore are allocated into the default option managed by the state (PPT). The overwhelming participation of individuals in the default option is an indication that individuals are unable to make a selection and therefore expect that somebody else does it for them. Therefore, the authorities need to make sure that the portfolio decisions taken in the default options are aligned with the long-term interests of the contributors.

[4] In 2009, ING sold its Russian pension management operations to Aviva and had to cover the losses in the value of the fund incurred in 2008 due to the effects of the financial crisis. The government has not provided a clear interpretation of the scope of the guarantees.

Forcing individuals to select a pension fund does not necessarily have better effects on the welfare of individuals compared with creating a default option for those who do not make an active selection. In DC pension systems around the world, the lack of a default portfolio for pension funds has resulted in high administration costs and consequently high fees for contributors. Studies in different countries find a high inelasticity of the demand for pension funds to returns and that the movement of individuals between funds is highly correlated with the visit of sales agents (Berstein and Cabrita (2006), Marinovic and Valdes (2005)). This explains the overemphasis in creating large sales forces in pension fund management companies at the commencement of mandatory funded pension systems. In many CEE countries, sales agents receive a fee of up to EUR 120 for each new client who they bring to a particular pension fund. These high costs are transferred to clients by way of higher future fees. In 2010, Chile abandoned the strategy of forcing new entrants to opt for a pension fund management company. Instead, through a bidding process conducted by the Pensions Supervisory Authority, new entrants are allocated to the pension fund that offers the lowest cost to contributors. This change in the Chilean regulation highlights the view that it is too costly to run a pension system that grants freedom of choice to individuals who do not know how to use it. The presence of a default portfolio, which fulfills the role of automatic choice for those who would or could not select otherwise, is a valid option as it allows the system to operate at low cost, but it requires extra effort in designing investment portfolios consistent with the long term interests of contributors.

The presence of a default option is an important part of the Russian second pillar, but current governance and portfolio design is insufficient to bring all its benefits to contributors. While the focus of attention of the default option has been in having a stable (but low) pattern of returns over time, this focus should be shifted to offering a good replacement rate at retirement age. The portfolio strategies are better structured when portfolios follow life cycles, implying greater participation in equities for younger individuals and more long-term fixed income instruments when individuals are closer to retirement age (Rudolph, et al (2010)). Diversification into international instruments is highly needed in a country like Russia. The current governance structure for the default option is subject to risk of political interference in the portfolio allocation of pension funds, which may result in low pensions in the future.

Under the current legislation, the funds deposited at the Pension fund of Russia, either managed by VEB or private asset managers, belong to the Russian Federation and not to contributors. This is an important impediment for designing investment strategies more aligned with the long-term interests of the contributors, and for creating more active support from individuals. The funds accumulated in the pension accounts cannot be inherited when the contributor dies. Institutional or legal changes aimed at shifting the ownership of the funds to contributors are a necessary condition for other regulatory changes suggested in this document.

3. The State Pension Fund

Since 2003, VEB has acted as the pension fund management company for the workers who do not exercise their right to choose a private asset manager (AM), a nongovernmental pension fund (NPF), or who have explicitly selected VEB as their pension management company. VEB is a state development bank that provides financing to diverse areas of the economy, including manufacturing, infrastructure and housing sectors. VEB acts as the agent for the government in the management of pension savings of the second pillar and the country's external and internal debt. The Trust Management Department of VEB is the unit of the bank in charge of managing the pension assets.

VEB has been unsuccessful in providing adequate returns to contributors and with this pattern contributors are likely to receive very low pensions in the future. The real return since inception of VEB pension fund has been -3.9 percent. As shown in Table 2, the negative real returns are not a consequence of a sharp deterioration during the financial crisis, but have shown a regular trend since the inception of the system in 2004. The low returns are explained by the narrow investment alternatives from which VEB is permitted to select. Between 2003 and October 2009, the pension fund managed by VEB was allowed to invest basically in Russian government securities. At the end of 2008, 96 percent of the portfolio was invested in federal and state bonds and the rest in cash and bank deposits. The investment regulations of the pension fund have been set in the Law.

Table 2 Real and Nominal Returns of the pension fund managed by VEB 2004-1009

	Nominal return	Inflation	Real return
2009	9.5%	8.8%	0.6%
2008	-0.3%	13.3%	-12.0%
2007	5.6%	11.9%	-5.7%
2006	5.5%	9.0%	-3.2%
2005	12.2%	10.9%	1.2%
2004	7.3%	11.7%	-3.9%

Source: VEB

Investment Portfolio

While in most countries, investments in government securities are enough to provide positive real returns, the structural issues in the Russian economy make government instruments scarcely attractive to domestic investors. Sound fiscal accounts and the limited borrowing needs of the government typically lead to an excess demand for government securities, which results in negative real rates of return for investors. However, the still relatively high yields of Russian government securities make them highly attractive for international banks and other foreign investors looking at benefiting from the carry trade. Capital inflows from these investors looking for opportunities of arbitrage put additional pressure on the yields, resulting in even lower returns for domestic investors. The aftermath of the financial crisis has worsened the situation, as interest rates in developed economies have moved to a low level equilibrium, and is likely to remain like that in the coming future (IMF (2010)). Other large emerging economies, including Brazil, are looking for alternative mechanisms to lead with the carry trade.

Some of the practices of government bond issuance are not aligned with international best practices, and have a direct impact on VEB's portfolio. The portfolio of government bonds includes both traded securities as well as securities issued as private placements of debt (OFZs). The government of the Russian Federation issues OFZ in the private markets and these securities are largely bought by VEB at a price determined by the Ministry of Finance. Debt issued in the form of private placements does not contribute to the transparency of the market, nor help to build a sustainable yield curve for government securities. In addition, it does not provide the right signal about the independence of VEB in the portfolio decisions.[5]

In 2009 the government enacted a new regulation that allow VEB to invest in an "enhanced portfolio," which includes government securities, Russian corporate bonds, state regional bonds, mortgage bonds, bonds issued by international financial organizations, but listed in Russia and domestic bank deposits. Although individuals had the option of remaining in the old conservative portfolio, only approximately 60,000 individuals opted to stay with it. The new enhanced portfolio, which became the new default option, continues the previous arrangement under which investments were mostly restricted to domestic and state-linked securities (Table 3), it does not allow international investments or the possibility of investing in equities, which are the most important sources of long term value in a portfolio.

Table 3 Investment Regulation of VEB Portfolio

Old ("Conservative") Portfolio (until October 2009)	New ("Enhanced") Portfolio (from November 2009)
• Government securities	• Government securities
	• Russian corporate bonds
	• Regional bonds
	• Mortgage bonds
	• Bonds of global banks[1]
	• Russian bank deposits

[1]Bonds issued by international financial institutions, but listed in the Russian Federation

Although recent amendments to the investment regulation of the default portfolio move in the right direction, it is unlikely to be sufficient to ensure adequate replacement rates to contributors in the

[5] In addition, these instruments are typically valued at book value, which creates inequality with the rest of the fixed income securities that need to be valued on a mark to market basis. The amount of losses in the pension fund managed by VEB in 2008 was limited by the fact that 55 percent of the portfolio was invested in OFZs, the values of which were not affected by the crisis.

future. In the best case, the enhanced portfolio will allow VEB to offer returns close to the inflation rate (zero real return).[6] The objective of merely preserving the real value of the accumulated contributions is extremely unusual and modest for a funded pension pillar and significantly disadvantageous for contributors. Countries tend to introduce mixed pension systems with a funded element with the purpose of achieving at least 4 to 6 percent real return in the long run. The difference based on a 40-year contribution horizon between accruing a 0 percent and a 4 percent real return means a 2 to 2.5-fold difference in final pensions and the difference between 0 and 6 percent leads to a 3 to 4-fold difference (depending on assumptions about long term real wage growth).

A zero real return will be able to provide a replacement rate for individuals of only approximately 6 to 7 percent.[7] Assuming a 40-year accumulation and 20-year payout period and 3.5 percent annual real wage growth, a zero real return will be totally insufficient to boost the total pensions of individuals. Second pillars should be able to offer much higher returns. A long-term average real return of 4 percent will be needed to reach a 13 to 14 percent replacement rate from the second pillar, while a 6 percent real average performance will be needed to reach a 20 percent replacement rate.

Besides the problem of returns of the enhanced portfolio, the concentration of the portfolio in state linked securities does not help in reducing pension risk. For a typical contributor, the risk of receiving a pension from the PAYG system is linked to the country's demographics and the solvency of the government finances. Individuals who contribute to the second pillar reduce the risk of not receiving a future pension by investing in securities other than government instruments. If investments in the first and second pillars are predominantly government securities, future pensioners will be excessively dependent on the solvency of public finances. Contributors are better off by investing in diversified portfolios, which should include instruments with returns that are not significantly correlated with domestic public finances. By investing in globally diversified portfolios, contributors in the second pillar will be better secured against possible future episodes of restructuring of government debt and parametric changes in the first pillar.

The investment regulation of the default option should not be different than the one applicable to asset managers and NPFs. The asset allocation of the default option should be defined in the best interests of the contributors, and the board of directors should be the party designing the portfolio strategy of default option, given the same restrictions applicable to asset managers and NPF. The default portfolio should serve as a benchmark for private asset managers and pension funds. The benchmark should be set with a high level of transparency.

Pension Portfolios and International Diversification

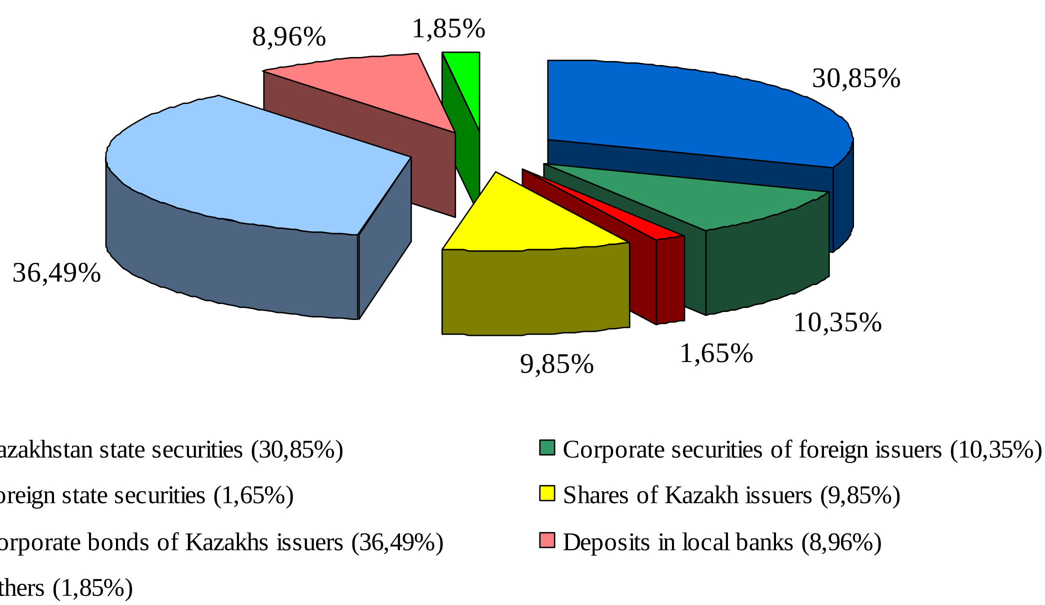
International portfolio diversification is even more relevant for countries with an economic structure similar to Russia's. Oomes and Kalcheva (2007), World Bank (2005), and other studies have

[6] Given the structure of the corporate sector, most of the instruments will be priced close to the sovereign risk.
[7] Replacement rate is defined as the pension as a percentage of the last wage of the individual.

highlighted the Russian exposure to the so called Dutch disease[8] - high dependence on commodities, rapid growth in wages and a slowdown in many manufacturing industries. Under such circumstances, portfolio managers that expect to provide better returns should diversify into international investments.

The lessons learned from the experience of Kazakhstan are important to consider. While the Kazakh government offers a guarantee on the real value of the contributions at retirement, the pension funds of the second pillar have provided negative rates of return on a systematic basis since inception in 1998. Pension funds are starting to pay pensions and government guarantees are being invoked. The Kazakh government has started making payments to pensioners to meet the difference between the real value of the pensions and the accumulated value of the contributions. Although on a different scale, Kazakhstan's economy shares with Russia some common elements of Dutch disease symptoms. Kazakh pension funds have focused their investment strategy domestically (see Figure 1), which have not been able to offer positive returns. International portfolio diversification would benefit the contributors. Although international diversification is not likely to bring short term benefits in terms of rates of return, it reduces the pressure on the exchange rate and provides a more stable source of retirement for future generations.

Figure 1 Asset Allocation of Pension Funds in Kazakhstan, January 2009
(as a percentage of Assets)



Source: AFN

Countries with a dependence on natural resources need to define their investment strategy in a way consistent with the macroeconomic challenges of the country. In the case of Norway, with the explicit objective of (1) fighting against Dutch disease; (2) enhancing the long term value of the assets; and (3)

[8] Dutch disease is related to the fact that windfall revenues from natural resources give rise to real exchange rate appreciation, which in turn reduces the competitiveness of the manufacturing sector.

ensuring that oil revenues preserve resources for future generations, the Government Pension Fund of Norway, one of the largest pension funds in the world, is totally invested abroad (Kjaer (2004)). Russia would need to explore the portfolio that maximizes the pensions of future contributors from a strategic perspective.

Governance of the PFR-VEB

The governance structure of VEB follows the pattern of traditional state owned companies. The structure of VEB consists of the Supervisory Board, the Board, and the Chairman of VEB. The Chairman of the Supervisory Board is the Prime Minister of the Russian Federation and the members of the supervisory board include three Deputy Chairmen of the Russian Federation, the Minister of Transport, the Minister of Economic Development, the Minister of Economic and Trade and the Chairman of VEB. The Board consists of eight members, appointed by the Supervisory Board on the nomination of VEB's Chairman. The Chairman of VEB, who also chairs the board, is appointed by the President of the Russian Federation on the nomination of the Prime Minister.

However, VEB's governance structure might not be suitable for the management of the default pension fund. The direct dependence by the management on the highest authorities of the country may create an agency problem. As discussed, in the past the government has used PFR-VEB pension fund as a source of government financing. In addition, the governance structure of VEB opens room for using pension funds for investments in government sponsored social development projects that are not marketable or attractive for private institutional investors, for example in the areas of infrastructure and housing. Potential conflicts between the government's social objectives and the need to earn reasonable returns in the pension system may lead to detriment for future pensioners. For example, in December 2009 the government announced that the VEB pension fund would invest a large portion of its assets in 2010 (corresponding to almost a third of assets under management) into low return mortgage bonds to help homeowners to finance their houses.

The governance arrangement for the manager of the assets of the default option should ensure technical expertise and independence from the government. The ability to enforce high standards of fund governance is crucial to the success of public pension fund management. Vittas, Impavido and O'Connor (2008) stress that public pension funds should be independent from government and should be insulated from political interference. Funds should be required to operate with a very high level of public transparency and should be subject to full public accountability to Parliament and their main stakeholders. VEB's current governance structure does not ensure that investment decisions are taken to serve the long term interests of the contributors.

The governance structure should follow the same principles that are applicable to public pension funds and sovereign wealth funds. The International Working Group of Sovereign Wealth Funds, which includes 23 countries with sovereign funds (including the Russian Federation), agreed on 24 principles and practices (Santiago Principles), which should be also applicable to the asset manager of the default option of the second pillar.[9] These principles are aligned with the good practices for managing public pension funds identified by Vittas, Impavido and O'Connor (2008).

The government may consider different options for improving the governance of the second pillar funds managed by VEB. Under the three alternatives presented below, the PFR may decide to outsource the management of the assets partially to a number of private asset managers, with a clear mandate and well defined benchmark. This would provide feedback to VEB or the independent asset manager. This is a usual practice by central banks that manage international reserves and helps to put pressure on efficient portfolio allocation.

The first option is to improve the governance structure of VEB in a way that may ensure technical expertise and independence from the government. A new board of directors would have the responsibility for setting up the long term investment strategy of the pension funds. Since the pension business is only a part of VEB's business, this alternative might be difficult to implement.

A second option is to change the asset manager of these funds from VEB to an institution with technical capacity and with political independence. This institution would be managed by an independent board and would set the investment strategy in terms of the long term objectives of the contributors. The board should justify publicly the decisions about selection of the benchmark portfolio. This institution would require a sufficient number of directors with adequate expertise and experience in financial matters, investment policies and portfolio management. To ensure the appointment of high-caliber professionals, a nominating committee should be created to identify a short list of candidates from which the government can make director appointments. To promote continuity, director appointments should be staggered, so that only a portion of the incumbent directors retire at any point. Appointments should be for a fixed term and could be renewed for a stated number of terms (2 or 3), while removals should only be permitted for just cause. The process of director removal should be clearly stipulated in the relevant Act. The Board of Directors should establish clear guidelines on corporate governance, including rules on conflicts of interest and ethical conduct by directors and senior managers of the fund. It should also establish clear policies on its role in promoting practices of good corporate governance in investee companies. These should emphasize transparency and public disclosure and full respect for shareholder rights.

A third option is to continue using VEB for managing the default option, but improving the standards of the investment strategy. The investment regulation is one of the main challenges of the second pillar pension system. Under this option, the investment regulation would be decided by a group of experts with adequate expertise in financial matters, investment policies and portfolio management. This objective can be achieved through the creation of a high level commission appointed by the President or the Prime Minister. This high level commission would decide on benchmark portfolios for the pension fund, and VEB would be required to follow the investment policies decided by the commission.

[9] See IWG (2008)

The public pension fund should have a clear and unequivocal commercial mandate. The mandate of the high level commission or the board should be to seek to maximize long-term investment returns, subject to a prudent level of risk and after taking fully into account the expected replacement rates for the contributors and the length of the investment horizon. The benchmark portfolios created by this high level commission should serve as the focal point for measuring the performance of private asset managers.

4. Asset Managers

Asset managers are an essential component of the second pillar model, as they provide alternative pension portfolios to contributors at low cost. Asset managers should be able to provide alternative investment strategies to the contributors. The system of asset managers replicates the system in Sweden and Latvia, where the information of the individual account remains at the PFR, and is probably one of the most efficient designs for a private pension system. This is the so called "blind account" system, which has advantages in terms of costs and in the use of scale economies. In the blind account system, the asset managers do not have information on the individuals who are investing in a particular pension fund and therefore there are no incentives for marketing through direct sales. All the marketing of funds is done through mass channels, which are less expensive, but also less effective in attracting new contributors. On the other hand, informed contributors may select asset managers according to their preferred attributes, including asset allocation and fees.

The low levels of financial literacy combined with the multiple choices presented to individuals in a non standardized format result in a limited number of contributors selecting asset managers. Although more can be done in terms of standardizing investment options or, in the medium term, improving the financial literacy of individuals, the apathy of contributors in selecting pension portfolios is a problem that is difficult to address. Sweden faces a similar issue, evidenced by the fact that more than 90 percent of new entrants have their investments in the second pillar invested in the default option. In the case of the Russian Federation, less than 5 percent of the individuals selected private asset managers for managing their mandatory pension funds.

Although financial advisors may help in the portfolio selection, this alternative is typically expensive and difficult to monitor. In order for the use of financial advisors to be effective, financial advisors need to be licensed and to be able to demonstrate proper knowledge of the pension system and investment markets. In addition, financial advisors need to be monitored in order to ensure proper behavior and to avoid abuses and manipulation. This is an expensive task and the effectiveness of financial advisors is still unproven.

A more intensive use of the asset managers as key participants in the pension system should be accompanied by further standardization of pension products and eventually by massive educational campaigns. Despite being an efficient mechanism for the provision of pension services, it is difficult for contributors to make an educated selection of the multiple alternatives presented by asset managers. Although it is still too early to evaluate the impact of educational campaigns on pension issues (OECD

[2010]), more standardization of pension products may help contributors to make a selection of a pension fund according to well defined criteria. **Benchmarking pension portfolio is a useful tool to standardize multiple portfolio options**. In order to allow comparability, the supervisory agency can make further efforts to measure performance of different pension funds against benchmark portfolios defined by the default option. Benchmark portfolios are constructed to maximize the long term interests of contributors, meaning the value of the pension fund at retirement age. In this model, contributors in the default option invest their resources in the benchmark portfolio and asset managers measure their performance against that benchmark. The presence of asset managers provides the "market test" of the efficiency of the default portfolio and provides useful feedback to the managers of the public pension fund. If necessary, a certain portion of the public pension fund assets can be outsourced to private asset managers as well. This can be done through a transparent tender process based on performance records, soundness of investment process and fees. Then the selected managers would manage a portion of the total volume, and the composite return would be credited to each member's account. Recent literature, including Basak and Makarov (2008) and Castaneda and Rudolph (20101), have shown that competition alone is insufficient to bring pension portfolios to the optimal long-term equilibrium, given management focus on short-term returns.

5. The Non Governmental Pension Funds

NPFs have typically captive clients who belong to certain constituencies and mobility is limited. Since most of the NPFs are related to companies and corporate groups, contributors are typically workers of those institutions. In the presence of companies with strong unions, the pension fund of the company or group is *de facto* default option for the workers. Although some large pension funds are open to bring workers from other companies, competition and mobility is limited.

In the presence of a central provider that manages the accounts and multiple asset managers, the benefit that NPFs can provide to the pension system is still unclear. Transferring the account management from an operating centralized system to individual NPFs is an inefficient way of managing pension resources. While there is still a debate about the presence of scale economies in the portfolio management of resources, the debate about the scale economies in the account management has already been settled and it was agreed that there are benefits in centralizing it. Since the marginal cost of managing an additional account is decreasing, pension reforms since the late 1990s have centralized the management of accounts. Since the Russian Federation already has a centralized system of account management at the Pension Fund of Russia, it is socially inefficient and expensive to have multiple institutions managing the individual accounts. The figure of *administrators,* typically used by NPFs, does not provide a clear value and duplicates the costs of the system. In addition, since fees are charged both by the NPFs and its asset manager, the model is more expensive than simple asset managers that provide services to the PFR. The fact that both the NPF and the asset manager hired by the asset manager charge fees creates an additional source of unnecessary expenses.

Since the main functions of NPFs are outsourced, the value added of NPFs sometimes can be minimal. Since NPFs are required to outsource the asset management of the fund and most of them outsource the account administration services, in some cases the NPFs are simply Special Purpose Vehicles (SPVs), which are legal entities but without staff or expertise. In many cases, the portfolio management is outsourced to some of the asset managers that provide services to the PFR. Under the current legislation the main advantage of using NPFs over asset managers is that the funds in the individual accounts in the first case belong to contributors, while in the second case belong to the Russian Federation. Once the issue of the ownership of the funds is solved, the presence of NPFs, as currently exist, would need to be reconsidered in line with a lower cost structure.

The non-profit nature of the NPFs does not encourage transparency. NPFs are allowed to charge up to 15 percent of the investment returns, which is a sizeable amount for a non-profit institution. Since they are unable to distribute dividends, the transfer pricing for some transactions tends to be artificially high, reflecting the interests of the sponsor company in capturing those profits in a less transparent way. Transfer prices tend to be high in the areas of remuneration of executives, or payments for services supplied by different parties related to the sponsor.

The regulation of investment does not protect contributors from abusive practices such as transactions with related parties. Since the regulations regarding transactions with related parties are narrowly defined, sponsor institutions have the incentive to use fund members' assets for the benefit of the company, but not necessarily for members. Related parties are defined in the law only in terms of direct ownership, which can be easily circumvented by the creation of SPVs. The disclosure of investments is very limited, but it is common knowledge that some pension funds have investments in businesses related to the sponsoring company.[10] Self dealing is prohibited in most of the countries of the world, as the incentives of the managers are to benefit the company or conglomerate, not necessarily the contributors or pensioners. Further tightening of the investment regulation, improvement of the definition of the concept of related parties and enhanced levels of transparency will be needed in order to align the interests of the pension fund managers with those of the contributors and pensioners.

Although occupational pension funds are a valid vehicle for providing pensions, their role in the second pillar should be limited to portfolio management. There are ample scale economies in the account management of pension fund, and centralization of these services reduces the average cost of managing pension funds. This has been the logic behind the centralized account management in countries like Russia and Estonia. Centralization of account management facilitates the mobility of the labor force across sectors and regions. If the quality of services offered by PFR is the justification for transferring account management to NPFs, the policy response should be to improve the quality of service of PFR. In order to reduce concerns in this matter, it would be useful to ensure that the PFR has all the information on individual accounts and proper accounting systems for the contributions of individuals. Some analysts have proposed allowing NPFs to collect contributions directly.[11] From our perspective, this would be a retrograde step in the modernization of the second pillar, since in the medium term it would increase costs for contributors and would lead to inefficiencies. The second pillar can reach higher levels of efficiency by centralizing the collection of contributions and facilitating the electronic payment of contributions.

[10] Our understanding is that many of these operations are done within the framework of the Law.

[11] The National Association of Private Pension Funds proposes that the collection of contributions of NPFs be done by a single specialist body

Many other countries, including Slovakia, Poland and the Baltic countries, have been able to reduce significantly the cost of account management by centralizing and establishing procedures for reconciliation of data and fund flows.

6. Regulatory and Supervisory Framework

6.1 Guarantees

Despite the fact that second pillar pension funds are defined contribution funds, the regulatory framework introduces some high capital requirements, the purpose of which seems to be related to the presence of guarantees concerning the value of contributions.

The provision of guarantees by the pension fund management companies is subject to multiple interpretations. According to some interpretations of the Law, second pillar pension fund management companies need to guarantee the value of the contributions. However, the provision fails to identify whether the guarantee applies at the retirement age or at any period in time. It does not clarify whether this provision is in nominal or real terms, or whether the value of the contributions should also include returns earned in the past. Since the Law does not grant the authority to the Federal Financial Market Services of Russia (FFMS) to perform the role as interpreter of the Law, the interpretation function is given to the different local courts around the country. It is likely that different courts in different jurisdictions may have different opinions about this matter. During the financial crisis, the FFMS remained silent about this issue and the Ministry of Finance issued a (not legally binding) letter addressing the issue.[12]

Ambiguities in the interpretation of the Law create a problem of adverse selection. The incentives are given to move towards pension funds that believe that the guarantee is applicable at the retirement age only, or those that have capacity to litigate against adverse resolutions from courts. In order to offset these resolutions, pension funds are more likely to engage in aggressive investment strategies. This may result in suboptimal strategies.

Assuming that guaranteeing the value of the contributions at retirement age is a reasonable expectation, the cost of the guarantee should be borne by the government and not by the pension fund or the contributors. Pension fund management companies have two strategies that are not mutually exclusive for managing the guarantees in case they are required to bear the risk. The first one is to pass the cost of the guarantee to the contributors—through higher fees—to offset the eventual cost of triggering the guarantee. The second strategy is to invest in strategies that may ensure stable returns, such as government bonds and term deposits. While the first strategy is unfair, because the cost of taking risks is being paid by those who have less capacity to bear those risks (contributors), the second strategy is inefficient as individuals are likely to receive low replacement rates. In addition, prefunding of guarantees creates an excessive burden on the generation currently in the labor force. Consequently, the government

[12] The Ministry of Finance has no authority to provide interpretation of the Law regarding private pension plans.

is the only party with the capacity to absorb these risks, but needs to have greater control over investment regulation.

The use of guarantees is a matter of debate in most of the countries with DC funded systems. Most of Central European and Latin American countries with mandatory funded systems offer a guarantee that is calculated as a percentage of the average return of the pension fund industry in a certain period of time. Since the guarantee is offered by the pension fund management company, this measure has not been exempt of problems, in particular it has been associated with short term incentives for investments and a tendency to copy portfolios among different pension funds. In other countries like Hungary and Kazakhstan, the government also provides a guarantee on the real value (inflation indexed) of the contributions. Since the pension funds in Kazakhstan have been unable to get returns above inflation, the government has been honoring these guarantees, but amounts are likely to increase in the future. In the case of Romania, the law establishes that the pension fund management companies have to guarantee the value of the contributions. Similar to the case of Russia, the Romanian regulation does not provide a clear interpretation on whether the guarantee is applicable at each moment of time or at retirement age. As a way of protecting their capital exposure, Romanian pension fund management companies have adopted a conservative investment approach, mainly short term government bonds and bank deposits, which are likely to result in very low pensions for contributors.

The guarantee should only be granted to pension funds that invest in a prudent manner and according to a clear benchmark, and that charge reasonably low fees to contributors. In the proposal presented in this report, the government should offer the guarantee on the value of contributions only to pension funds the investment strategies of which are aligned with the long term performance of pension funds. Pension funds opting for the guarantees will have to measure their performance against the benchmark portfolio defined by the authority, or a high level commission. Since the benchmark portfolios are built under optimality criteria, the cost for the government of providing this guarantee is expected to be close to zero. The longer term strategy and risk neutrality of the government makes it the best provider of guarantees concerning the value of contributions.

The provision of stable returns for pension funds is not consistent with the provision of high replacement rates. In most of the cases, providing stable returns and a good replacement rate are contradictory, unless the countries are able to have high contribution rates. Providing stable and positive returns in the accumulation phase implies investing in government instruments and term deposits, which is likely to result in low replacement rates for contributors. Pension funds can improve returns by investing in a diversified portfolio of instruments and using lifecycle strategies to maximize the value of the pension fund at retirement.[13].

Once the characteristics of the guarantee have been clarified, the regulation will need to address the capital requirement for pension funds. Pension fund management companies that manage defined contribution pension funds should have a minimum amount of capital to ensure the solvency of the asset manager and its capacity to address any cases of fraud that may eventuate. In addition, some capital can

[13] Rudolph et al (2010) provide an overview of these issues.

be required to align the interests of the pension fund managers with those of the contributors (reserve requirement), but no capital should be expected to guarantee future payments.

6.2 Transparency and Disclosure

The Pension Fund of Russia operates with higher levels of transparency than NPFs. While data about returns, fees and portfolio composition is widely available for the funded pension fund managed by the PFR-VEB and PFR-AM, the information is relatively scarce in the case of NPFs. As a single provider of information, the PFR has provided quarterly information since 2004 about returns, fees and portfolio composition of pension funds. The information is much scarcer in the case of NPFs. FFMS presents data in different formats over time and with long lags, which makes comparability difficult. The data presented by the NPFs on their web pages is not always meaningful, and in most of the cases the information is not available after 2007. [14] Some funds present the data on returns in a time weighted manner or combined with the returns of the third pillar pension funds.

The official data presents some logical inconsistencies, which raises doubts about its quality. For example, the fact that some aggregate assets under management in individual pension funds have remained totally unchanged for two to three quarters raises questions about the valuation procedures used in relation to the pension fund. Since pension funds also manage voluntary pension funds, in many cases is not easy to identify whether the information presented is related to the mandatory, voluntary, or a combination of the two pension funds. Even for a population with a high level of literacy, the information presented would not be enough to make an informed portfolio selection. Since the quality of the information is insufficient to ensure a competitive market, it is not surprising that the large majority of the population has not made an active portfolio selection.

6.3 Delays

Due to delays in reconciliation, individuals were able to receive contributions in their individual accounts only after a lapse of time that varies between 15 and 18 months. Until February 2010, contributions were collected by the Tax Authority and the money subsequently transferred to PFR. Since the tax loop operates on an annual basis, it was difficult to make reconciliations in shorter periods of time. In 2010, PFR began collecting contributions on a monthly basis, and resources are expected to be transferred to the asset managers or NPS within six months after the end of the quarter. This new procedure is expected to reduce the lag time to six to nine months. This period of time is still relatively long compared with other countries with centralized collection, including Poland (two weeks), Hungary (three months), Slovakia (two weeks), Estonia (one week) and Lithuania (three months).

It is necessary to clarify the ownership of the funds that are managed by the PFR-VEB and PFR-AM. The authorities argue that the time lag is based on the concept that the funds that stay at the PFR belong to the Russian Federation and not to the individuals. The lack of clarity on the ownership of the

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[14] As of March 2010, the latest returns published by FFMS go back to 2007.

funds is an important impediment for the development of the funded pension system in the Russian Federation. Since public sector law is applicable to these funds, the transfers to individual accounts can only be made once the full reconciliation process is completed. The government is aware of these restrictions and has analyzed the possibility of clarifying the Law, so these operations become subject to civil code. While it is common in other CEE countries to allow for adjustments in the months following the transfers, it does not seem to be the case in Russia.

The long delays in crediting the accounts reduce the accountability in the system. Individuals are unlikely to track the payments of their contributions when transfers take place on an irregular schedule. As shown in Table 4, the amounts transferred by PFR to the different intermediaries do not follow a consistent pattern over the years or among different groups. While contributors in NPFs received transfers in 2008, contributors whose pension assets are managed by PFR-VEB did not receive any transfers. Contributions in 2009 returned to trend levels, but there was no clear recovery from 2008 missing contributions to VEB and PFR-AMs.

Table 4 Transfers from PFR to Intermediaries
(RUR billion)

	2006	2007	2008	2009
VEB	83,5	90,5	0,1	111.5
AM	3,0	3,4	1,4	3.3
NPFs	7,1	15,8	16,6	29.4
TOTAL	93,6	109,7	18,0	144.2

Source: FFMS, PFR

In order to minimize the distortions of the legal framework, the funds that are in the transition period should be deposited at the PFR-VEB and transferred to the PFR-AM and NPF with the interest earned during that period included. Since the problem of long delays requires a change in the Law and probably some additional discussion before being resolved it should be ensured that the funds that remain in transit before being deposited into the individual accounts should at least receive the returns of the investments in the default portfolio. Although these provisions are stipulated in the law (Government Resolution 652), the long delays and erratic amount of transfers (see Table 4) make difficult to track this information.

6.4 Supervision

The compliance based approach followed by FFMS does not allow the detection of the risks of the funded system. FFMS is the supervisor of the second pillar pension system. Despite the large number of pension funds and asset managers of the second pillar, the human resources of FFMS are relatively limited. Supervision is mostly compliance based and relies on the criteria of the custodians. As pension funds invest in companies belonging to the sponsor's conglomerate, it is very likely that problems of valuation may appear. Fortunately all the 2nd pillar funds are DC, and therefore there is no discussion about discount rates and the funding ratios after the crisis, but this can be an important issue in voluntary pension funds from the third pillar. In addition, the investment limits of the regulation are not able to preclude NPFs from taking excessive risks, and therefore a better approach to supervision is needed.

FFMS should consider moving towards a supervision approach that is risk based. A risk based supervision approach (i.e., focusing on the vulnerability of the future pensions of individuals) will allow FFMS to understand the risks of the pension system and to focus its attention on ensuring that pension funds are serving the long term interests of the pensioners. By giving clear responsibility on sponsors and pension funds, a risk based supervision approach will be able to increase the flexibility of investments.

6.5 Fees

The Law authorizes pension fund asset managers to charge fees of up to 10 percent of gross returns. In addition, NPF may charge a fee of up to 15 percent of the net returns, excluding the fees paid to the asset manager. For example, the asset manager may receive fees with a cap (10 percent of gross returns). Then, in a second step, the NPF may deduct a fee capped at (15% of net returns from what is left. For an investment income of RUB10,000, the AM may receive 1,000, and the NPF may receive 1,350 (15%*9,000). That is, the two together may receive a fee of 23.5 percent.

Despite not adding much value compared with the asset managers, NPFs are allowed to receive a sizeable compensation. As discussed in Section 4, in most of the cases the value added of the administration of account is nil, once this service is provided by the PFR. Therefore NPFs should only be allowed to operate as occupational pension funds, with the same fee limit applicable to asset managers.

By international standards NPFs are relatively expensive, and can generate high fees with minimum effort. Despite the low cost design of the second pillar, supported by a default option and the presence of blind accounts, the fee structure may result in high fees being charged to contributors. In an economy with 8-10 percent annual inflation, NPFs are able to collect almost 2 percent on the assets simply by investing in instruments that hedge inflation risk, such as bank deposits.

A fee structure based on success fees or as a proportion of the investment income may create short term incentives for portfolio managers. Maximization of short term returns is not necessarily the best way of achieving high replacement rates at retirement. The asset allocation explains more than 90 percent of the returns of the pension funds.[15] Success fees exacerbate the incentives to time the market or to select short term strategies, which are not necessarily aligned with the long term interests of the contributors. Recent literature (Campbell and Viceira (2002), Blake (2008), Rudolph et al (2010)) maintain that life cycle strategies provide a much better framework to address the accumulation of pensions. In addition, success fees are not consistent with the nonprofit nature of the pension funds nor with the fact that despite multiple years of losses, some pension fund continue receiving fees for their ”success.”

The international experience with systems based on success fees is relatively unsuccessful. Apart from the Russian Federation, only three other countries with DC mandatory system apply exclusively success fees: Kazakhstan, Costa Rica and the Dominican Republic. Costa Rica has been trying for years to reform the law in order to move to upfront or asset management fees, but it has not been politically feasible. The high level of nominal interest rates in the Dominican Republic has left the pension fund

[15] Walker and Iglesias (2010)

management companies in a comfortable situation and most of the funds are invested in highly secured instruments, with minimum effort by the pension fund managers. Although it is hard to justify a pension system exclusively invested in short-term deposits and Treasury bills, it is even harder to justify a success fee for such asset allocation. Individuals are able to do that at no cost. As discussed before, in the case of Kazakhstan the pension funds have been unable to offer returns systematically above the inflation rate.

The government may consider adopting a fee structure, including asset management fees and upfront fees, which may motivate the pension fund managers to focus on the asset allocation of pension funds, and not in the short term returns. As shown in Table 5, most countries with funded second pillars have fee structures that depend more on the asset management and the contributions. Pension fund management should be seen as a fee business, where portfolio managers receive a certain remuneration that allows them to hire asset managers that focus their attention on the long-run. In principle, the remuneration of the fund manager should be aligned to the cost structure of the mangers. Typically the bulk of the fund manager should come from asset management fees, and the presence of fixed cost justifies the presence of fees on contributions. In the first years after the implementation of the second pillars, and considering that the funds managed at the beginning are relatively small, many countries, including Poland, have relied more intensively on contribution fees, but as the assets grow the main source of revenue for the companies become the asset management fees. All Central European countries with similar pension systems impose upper limits on the fees charged by pension fund management companies. Reliance on success fees creates an erratic source of revenue income for pension fund management companies that may create incentives for risk taking. Although success fees might be considered among other fees, they should be only a marginal incentive in the total structure of income of the asset manager.[16]

[16] In the case of Poland, the success fee represents less than 5 percent of the total income of the pension fund management companies.

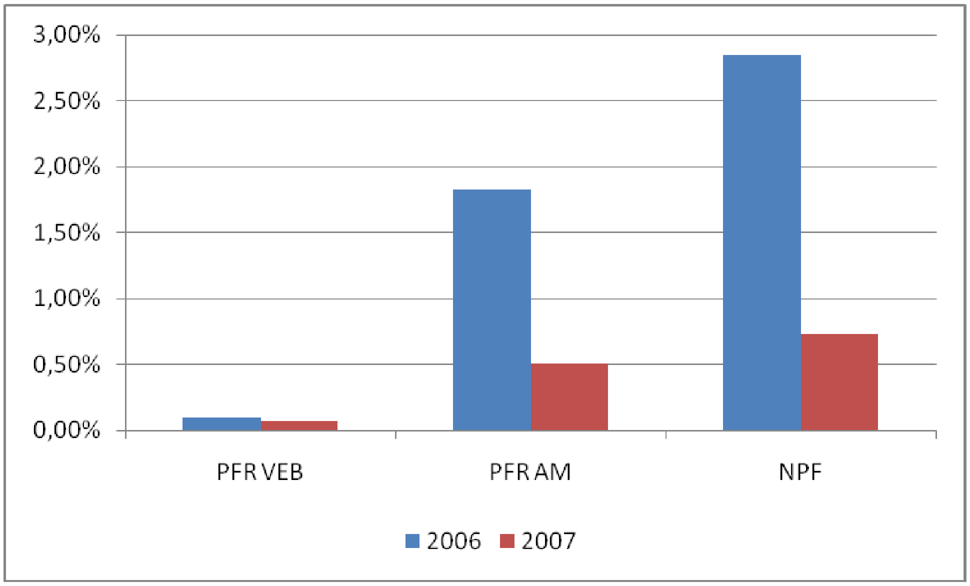
Table 5. Fee Structure in Selected Countries

	Fixed commission	Fees on contributions	Fees on assets	Fees on return	Limits on fees
Bolivia		x	x		x
Columbia		x			x
Chile		x			
Costa Rica			x	x	
El Salvador		x			x
Mexico			x		
Peru		x			
Uruguay	x	x			
Bulgaria		x	x		x
Estonia			x		x
Hungary		x	x		x
Kazakhstan			x	x	x
Latvia		x	x		
Poland		x	x	x	x
Slovakia		x	x		x
Australia	x	x	x		
Sweden			x		x

Source: OECD, World Bank

As shown in Figure 2, a comparison among the fees charged by the different pension funds shows that at least for the years 2006 and 2007 the fees charged by the PFR-VEB are considerably lower than the fees charged by the NPFs. There is no correlation between the fees charged and the size of the funds.

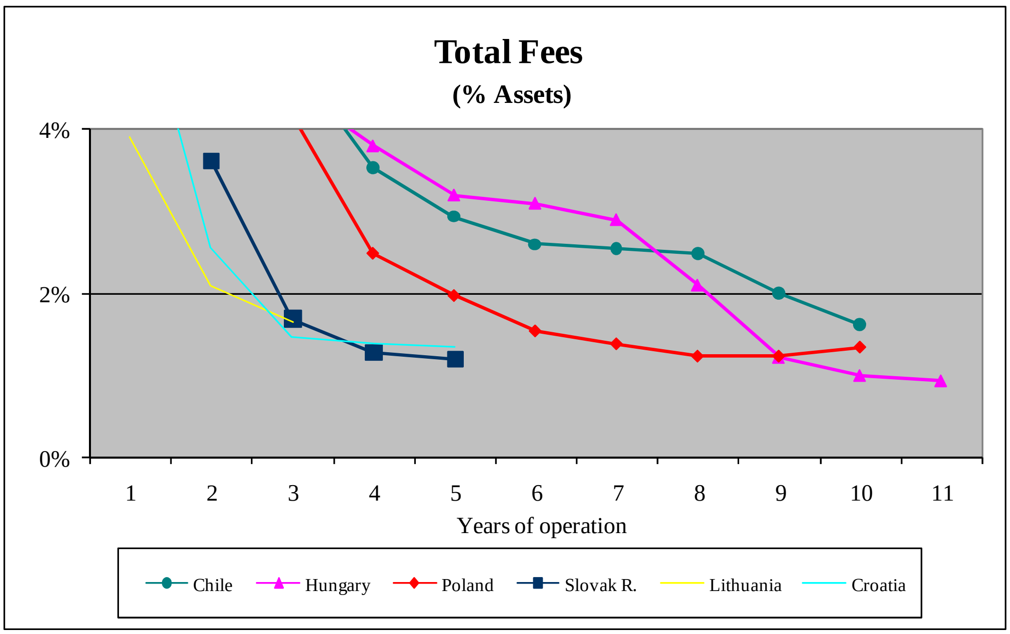
Figure 2 Fees charged by second pillar pension funds
(% Assets)



Source FFMS

The fees charged in the good years seem relatively high compared with other countries with similar pension systems. Assuming a real rate of return of 5 percent and an inflation rate of 8 percent, pension funds will be able to charge a fee of approximately 2 percent of the assets on a permanent basis. While most countries are trying to find the equilibrium fee in the range between 0.5 and 1.0 percent of the assets, targeting fees in the range of 2 percent seems excessive. As shown in Figure 3, most of the CEE countries plus Chile are far below the barrier of the 2 percent. Although it took nine years for Chile to go down to this threshold, the technology available in the 1980s was less sophisticated than the one available right now. The structural design of the Russian pension pillar should be able to operate at lower costs than Latin American and Central European countries, and closer to the 50 basis points (or less) of the system in Sweden.

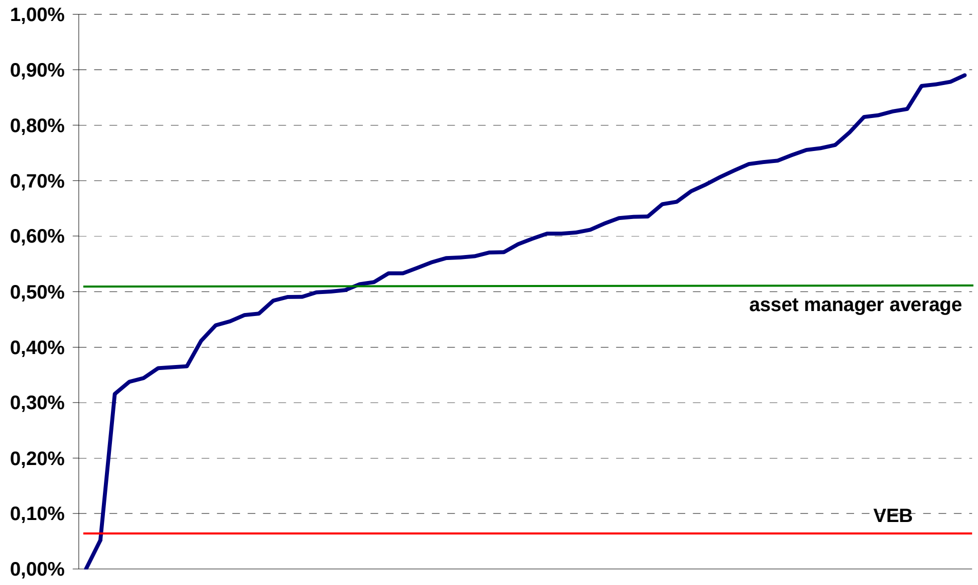
Figure 3 Total Fees in Selected Countries
(as a percentage of the Assets)



Source: The World Bank

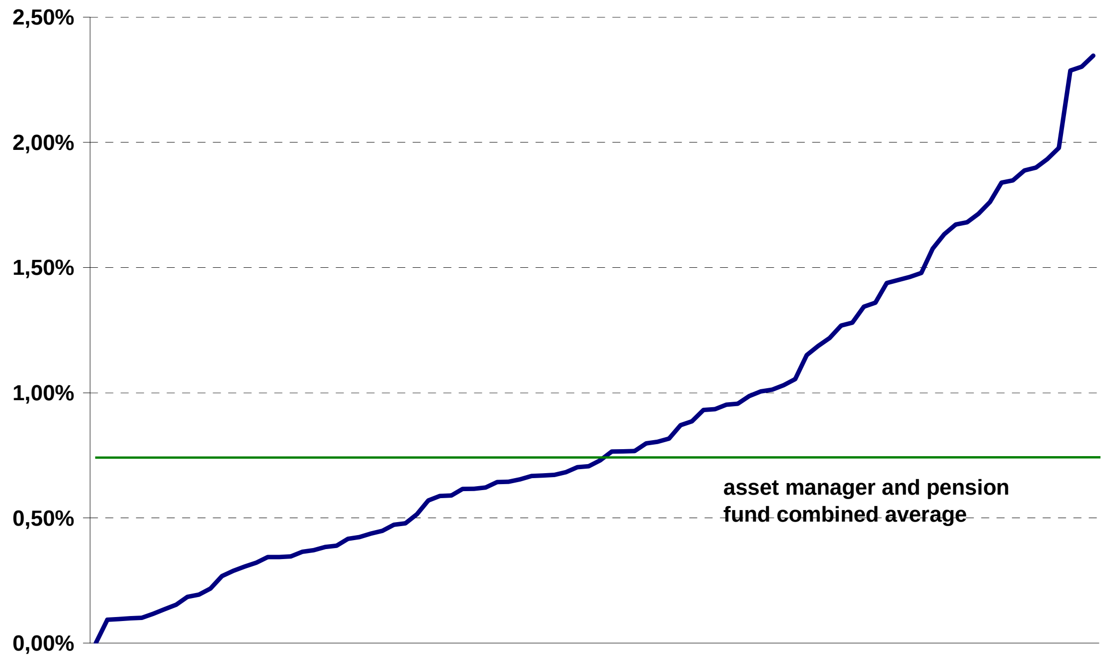
It is interesting to note that in 2007 the asset managers did not charge the maximum fee allowed in the Law. Figure 4 shows the fees charged by different asset managers of pension funds. As seen in Figure 4, the distribution of fees goes from 0 to 0.9 percent among different asset managers, VEB being one of the least expensive.

Figure 4 Distribution of fees charged by VEB and private asset managers, 2007
(as a percentage of the Assets)



As shown in Figure 5, in the case of the NPFs, the distribution of fees is also linear and there is no correlation between the size of the pension fund and the fees charged by them. Figure 5 shows the fees charged by different NPFs.

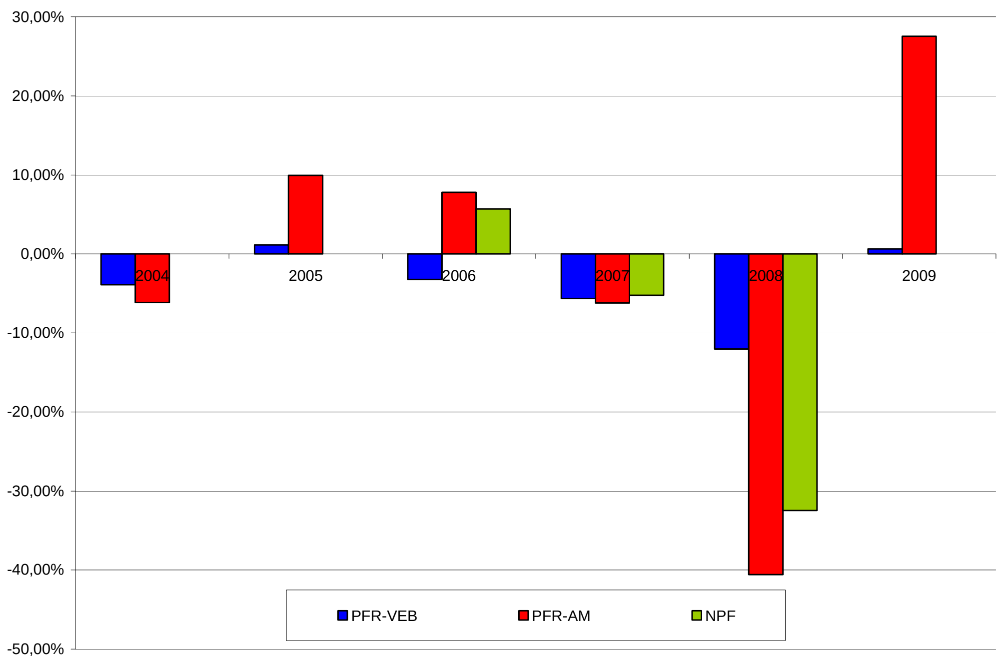
Figure 5 Distribution of fees charged by NPFs, 2007
(as a percentage of the Assets)



7. Performance of Pension Funds

Due to the conservative investment policy imposed on PFR-VEB, the return on the default option has been disappointing, but the returns of the NPFs and asset managers have not been satisfactory either. Although NPFs' information at the time of this report was only available for the period 2006-2008, at least for the years 2007-2008 the returns of the asset managers and NPF have not been significantly better than the fund managed by PFR-VEB (Figure 6). However, important differences in the returns of pension funds are expected in 2009. While in 2009 the real return of PFR-VEB was only 0.6 percent, the average real return of PFR-AM was 27.5 percent. These differences are related to the asset allocation, and reaffirm the argument about the need to improve the asset allocation of PFR-VEB.

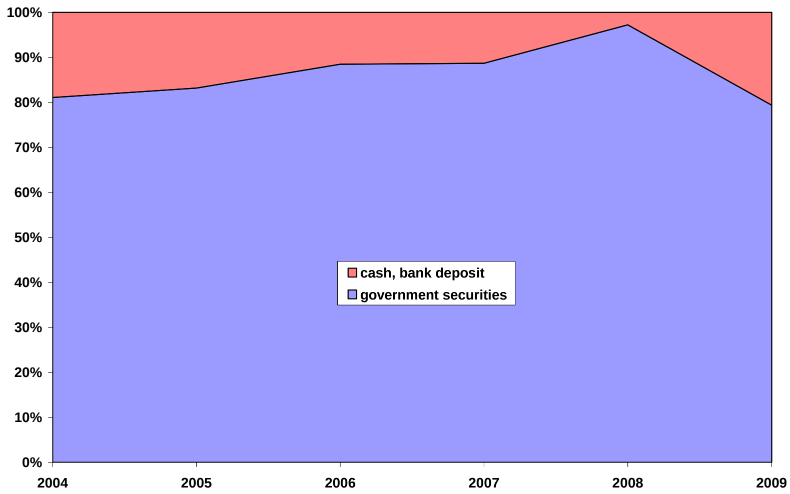
Figure 6 Real Annual Returns of Pension Funds (2004-2009)
(%)



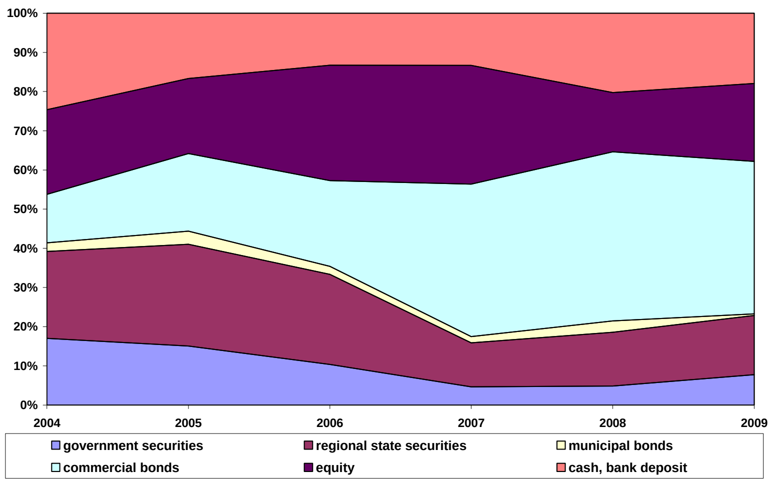
Source: FFMS

Differences in the asset allocation, in particular the exposure to equity, explain the different performance of pension funds. As shown in Figure 7, the PFR-VEB increased its participation in government securities from 80% in 2005 to 97 percent in 2008, but it was subsequently reduced to 80 percent as a consequence of the introduction of the enhanced portfolio. In the case of PFR-AM and NPFs, the asset allocation is more diversified and includes government securities, regional state securities, municipal securities, commercial bonds, equity and cash. In both cases, there is broad diversification among instruments. Although there are no major differences among the portfolio composition of PFR-AM and NPFS, the liquidity needs in the case of PFR-AM in terms of cash seem to be higher than in the case of NPFs. The minor differences among PFR-AM and NPFs are not surprising, since the asset managers of PFR-AM are typically the same as the asset managers of NPFs. In the past few years, PFR-AMs have increased their exposure to commercial bonds and NPFs have been more consistent in increasing their exposure to equity.

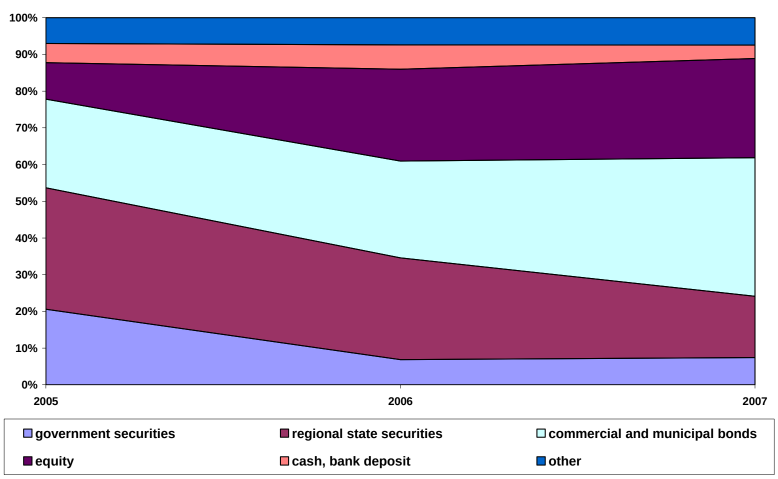
Figure 7 Portfolio Allocation of PFR-VEB (2004-2009)



Portfolio Allocation of PFR-AM



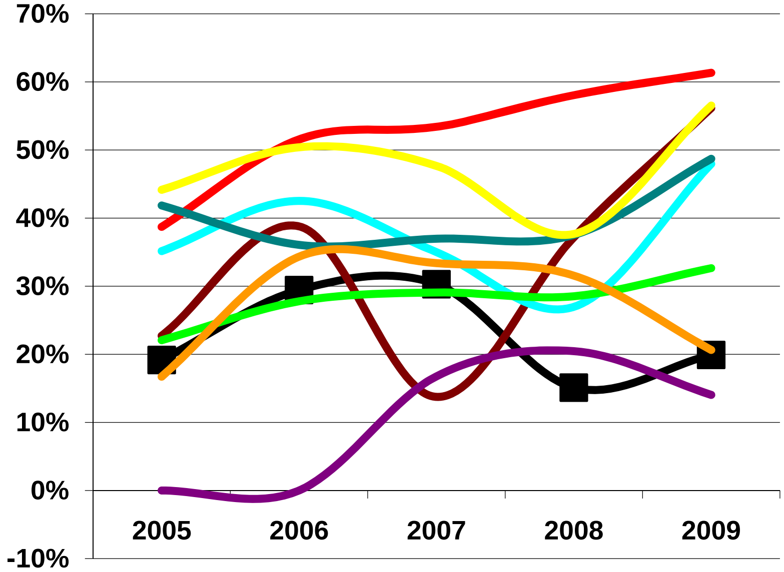
Portfolio Allocation of PFR-NPFs



Source FFMS

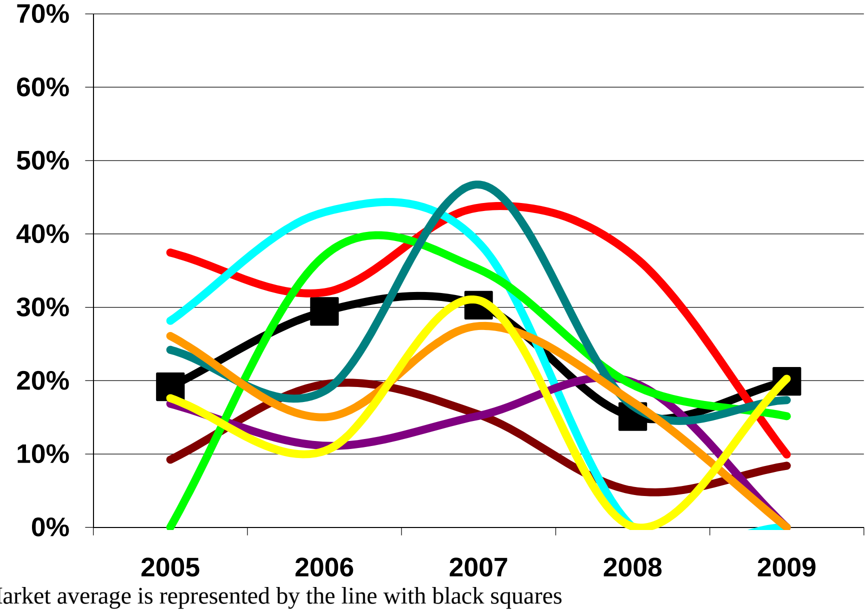
While the asset managers with the highest average returns have consistently had an equity component higher than the average of pension funds (Figure 8), those with the lowest returns have random strategies regarding equity allocation over time (Figure 9). These are probably funds that have tried to time the market or have deficient risk management skills.

Figure 8 Equity Holdings of PFR-AM Best Performers (2005-2009)
(as a percentage of the Assets)



Market average is represented by the line with black squares
Source FFMS

Figure 9 Equity Holdings of PFR-AM Worst Performers (2005-2009)
(as a percentage of the Assets)



Market average is represented by the line with black squares
Source:FFMS

8. The Payout Phase

The design of the payout phase is one of the most important challenges for the Russian second pillar. Further design of the menu of options for retirement, the level of annuitization, marketing rules, the institutional structure, solvency regulation and risk management requirements are necessary. Retirement products are constrained by a general regulation that determines the life expectancy that life insurance companies need to use for building reserves (19 years in steady state).[17] Countries with strong social security systems are expected to offer a greater variety of retirement products, while countries without social protection or small first pillars should offer a more restricted menu of options to retirees. There is consensus in the literature (Vittas, Rudolph, and Pollner (2010)) that the use of lump sums should be restricted, as the probability of overspending in the months after retirement and subsequent poverty is quite high.

Although nominal annuities are a common product in Western European countries and the United States, the Russian Federation may require a different approach as the inflationary risk is relatively high. The authorities should consider alternatives such as real (inflation indexed) lifetime annuities, escalating annuities and variable annuities. Rocha and Vittas (2010) explore the pros and cons of the different retirement products. Although real annuities are an attractive instrument for pensioners, they require a more developed market of inflation index bonds, both private and public. Chile is one of the few cases around the world that has been able to develop inflation index bonds in the corporate sector (Rocha and Rudolph (2010)). The experience of variable annuities in competitive markets is relatively scarce and limited to the cases of Sweden and Denmark. The strength of the system relies on the competence of the labor unions in protecting the interests of the pensioners. In the absence of the Nordic style of unions, the main challenge is to create a regulatory framework that can protect the interests of the pensioners.

Annuities can be provided with a number of features, including unisex mortality tables, joint annuities for married couples, guaranteed annuities, which all require some consideration. The regulation should also take into consideration eventual cross subsidies among different sectors of the economy, including gender and income groups. For example, by imposing unisex mortality tables or a common conversion factor, there is an implicit cross subsidy from males to females. EU countries operate under this approach. It is also well known that, on average, people with high incomes tend to live longer than poorer people. Not allowing different retirement options and forcing annuitization is a direct subsidy from the low income individuals to the high income ones.[18]

Some additional discussion is necessary on which institutions should provide annuities. While the Russian regulation suggests that pension funds can do it, this is not the traditional model for DC systems. Annuities should be provided by annuity companies or life insurance companies, which are institutions

[17] The regulation defines a calendar of life expectancy for the transition period 2007-2013 that goes from 14.5 to 19 years.
[18] The idea of a single retirement option for contributors of the second pillar was adopted in Poland latest reform to the pension system in 2008. Although the bill was approved by the Parliament, it was subsequently vetoed by the President.

with a different regulatory framework than DC pension funds that participate in the accumulation phase. One important discussion is whether these institutions should be regulated as insurance companies and therefore be subject to Solvency 2 type of regulation, or whether they should be subject to a different sort of regulation.

The model of a single entity managing the accumulation and payout phase is only applicable to pension systems with DB schemes, where there is a direct responsibility of the pension fund and the sponsor in the payment of the pre-committed pension benefits. Although, DB sponsored pension funds in the Russian Federation (in a largely unregulated framework) have been paying benefits for many years,[19] this experience is not directly transferable to DC schemes that require a completely different regulatory and supervisory framework for the accumulation and payout phase.[20] While the liabilities of an annuity can be clearly stated, the liabilities of a DC system at the accumulation phase are contingent to the returns of the pension fund, with the sole exception of eventual guarantees that may come from the pension fund or the sponsor.

Marketing rules is another component that requires further analysis. Pensioners should be able to receive different proposals and not be captured by the pension fund that participated in the accumulation phase. Competition at the time of buying a retirement product is likely to improve the value of the pensions. The model of an electronic quotation system implemented in Chile in 2004 should be analyzed carefully, as it opens the possibility to future pensioners of receiving firm quotations from annuity providers in the market (Rocha and Rudolph (2010)).

Two other topics require further discussion. The first is the possibility of further centralization of the mortality risk in a governmental agency and the second is the necessity of providing some sort of government guarantees on the value of the pensions. The conversion factor is one of the most dynamic variables in the calculation of annuities and consequently more freedom in its calculation should be promoted. However, it is possible to think in terms of a model that centralizes the mortality risk and gives the investment risks to the annuity providers. Since annuities are long term contracts, the value of the annuities should receive some sort of guarantees with an upper limit in order to limit the downside risk for the pensioner in the case of a bankruptcy of an annuity provider.

9. Conclusions

1. A strong default option is a valid option for the second pillar. The emphasis of the discussion should be focused on improving the governance structure and asset allocation of the PFR-VEB. Although the efforts to improve financial literacy should continue, the benefits of these strategies are more likely to occur in the medium and long term. Further consideration should be given to the development of a benchmark for measuring the performance of the pension funds. The benchmark should follow a lifecycle approach, with internationally well diversified portfolios, and younger individuals investing relatively more equity than the older ones.

[19] The analysis of the voluntary funded system in occupational pension funds is beyond the scope of this note.
[20] Except in the case of phased withdrawals, which require a softer regulatory framework.

2. Ensuring that the funds accumulated in the individual accounts belong to the contributors, and not to the Russian Federation, should be considered as one of the priorities in terms of policy design.
3. Partial or total conversion of PFR-VEB into the PAYG system is likely to worsen the fiscal position of the government in the medium term.
4. The second pillar should operate with higher levels of transparency and disclosure.
5. An audit of the operational systems of PFR might be advisable to ensure that the account management functions are working properly.
6. NPFs should be restricted to operating as asset managers and not as account managers and the fee structure should rely more on asset management fees and contribution fees. The authorities should put further attention on the level of fees charged by NPFs.
7. The supervisory framework should migrate from compliance based supervision to risk based supervision. Further attention should be given to the asset allocation of pension funds. In the areas of technical competence, FFMS should have the power to provide binding interpretation of the Law.
8. The authorities should clarify the payout phase of the second pillar. A number of elements remain unsolved regarding the design of the payout phase, including the menu of retirement products, institutions that provide these products, regulatory framework, marketing, risk management and regulation. Uncertainty about these variables affects the investments in the accumulation phase.

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