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Pension Reforms in Russia

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1 Introduction

The purpose of this paper is to investigate the scheme of the pension reform launched in Russia in 2002 and its implementation in subsequent years. Analyses are made from a viewpoint of the political economy and from the demographic and financial perspectives. In Section 2, the background of pension reforms is described. In Section 3, the legislation and implementation processes of the pension reform of 2002 are discussed. In Section 4, statistical analyses are given from demographic and financial perspectives.[2]

2 Background of pension reforms

2-1 Socio-economic situation in the 1990s

Russian pensioners were one of the hardest hit victims of the radical transformation that occurred under President Boris Yeltsin. People were faced with hyperinflation, an unprecedented drop in production and real income, and mass unemployment. In the Soviet era, the Socialist pension system, although containing many shortcomings, served as a stabilizing force for the Soviet society as a whole, and especially for the working masses and elderly people.

The old Soviet pension system, however, was already suffering from a "socialist disease" at the time of Perestroika, and it was almost dead in the mid-1990s. The causes of this fatal disease were threefold: (1) the socialist system, (2) a shock of transitions, (3) the aging of the population.

These were accompanied by a series of symptoms such as delay or non-payment of pensions. We could say that this was due to a breach of state laws by the state itself. The state became insolvent in the process of systemic changes, and as a result the state pension system ceased to function.[3] As shown in Table 2, the average pension in real terms decreased

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[2] As shown in Table 3, although there are several kinds of pensions in Russia as in the other countries of the world, we mostly concentrate ourselves on old-age pensions throughout this paper.

[3] For the details of this process, see Afanasiev (2003), Ohtsu (2002a and 2002b), Kuboniwa and

significantly in the 1990s, and in 1999 it fell to only 31.4 percent of the 1991 value.

Some efforts, however, were made to alleviate the problems. In 1990, before the collapse of the Soviet Union, a new Russian state pension law was put into effect apart from the Soviet law, and based on this, a new institution called "Pension Fund of Russia (PFR)" was set up as an off-budget special fund.

In addition, there were two occasions in the 1990s when the Yeltsin government seriously tried to institute substantial reforms in the pension system. First, in 1995, the Government worked out the "Concepts of the Pension System Reform in the Russian Federation," which included the idea of setting up a three-pillar pension system for the first time in Russia. However, this "Concept" was not realized. Second, in 1998, a new "Pension Reform Program" was publicized. It included a plan of introducing a funded mechanism to finance retirement pensions. This program was relatively well designed and had a very good "road map" to guide it to completion, but it didn't last long enough to be materialized because of the financial crisis that took place in August of that year.

In the meantime, as these systemic reforms were abortive, the only remedy the Government adopted was to increase the amount of pensions, mostly as a political compromise. It was obvious that as the Government continued to pay more based on the old scheme, and accordingly as the tax burden became heavier, the contradictions between the pension system and social welfare grew rapidly. Despite those results, this was the characteristic trait of pension policies in the 1990s under the Yeltsin government.

2-2 Putin's reforms

It was only when President Putin took office in 2000 that a new reform cycle took hold. Based on the advice of Minister of Economy German Grev's strategy of structural reforms, Putin openly declared the start of his pension reforms. In the autumn of 2000, a new and revised "Pension Reform Program in the Russian Federation" was made public, and pension reforms became one of the biggest political agendas for Russian society as a whole. The Government intended to introduce a new retirement pension formula as one of the most important elements of the new program. It consisted of the basic pension, the insured pension, and the funded pension, collectively comprising the three-pillar system. This formula has been one of the core problems in Russian pension reforms.

In the spring of 2001, the creation of the National Council for pension system reforms was called for by the President. This Council was a sort of political device designed by Putin and institutionalized in order to consolidate all social forces and to reconcile opposing opinions to the realization of pension reforms in Russia. This Council was headed by Prime Minister

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Tabata (2002) and Tabata (2002).

Mikhail Kas'ianov, and its members included almost all leaders of parliamentary factions together with heads of a number of social organizations such as independent labor unions. This Council provided one of the major stages of "reform drama" and of open debates for the main pension reform actors.

The first Council, originally scheduled for March 6, started its work on May 19 to discuss a draft of a law on basic pension insurance. The original draft proposed by the PFR was not designed as a final one, but a more or less transitional one. The Ministry of Economic Development and Trade, however, did not share this position and was inclined to construct a new system with a long life, because a transitional plan, they thought, would sooner or later become impracticable due to a shortage of funds. This difference in approaches represented an inherent disagreement between the two parties. According to the program in the autumn of 2000, new pension laws were to be put into effect from the beginning of 2002. Thus, in order to achieve this target, this large disagreement between the parties must be resolved at least by the summer of 2001.

On the stage of pension "reform drama," three people played major roles. The first was Mikhail Dmitriev, Deputy Minister of Economic Development and Trade, who was a protagonist of radical market-oriented reforms. Dmitriev was strongly supported by German Grev, Minister of this Ministry, the chief navigator of structural reform policy of the Putin government. Mikhail Dmitriev had a doctorate in economics specializing in economic cybernetics, and he enjoyed a strong reputation as a top specialist of labor and pension systems.

The second person in the "drama" was Mikhail Zurabov. He was also a noted specialist in the field of pension business, and he represented the vested interests of the PFR, i.e., a huge bureaucratic structure with more than ten thousand personnel working all over Russia. It was quite understandable that Zurabov and his colleagues did not welcome radical reforms.

Lastly was Prime Minister Mikhail Kas'ianov, who, under pressure from President Putin, was eager to finish reforms as quickly as possible. His main job was to urge the Dmitriev and Zurabov to find a compromise to reach a solution. He had a strong adviser, Evgenii Gontmakher, another specialist on social and labor policy, who worked as a regular secretary of the National Council for pension reforms. While Gontmakher was publicly regarded as belonging to the radical reformist school, because of his official position he served more as a moderator for Dmitriev and Zurabov.

Among these three figures, Zurabov was the key person. First, he was the man responsible for proposing a basic text of new laws on pension reforms. Second, he was a militant fighter against radicalism, representing the interests of the Ministry of Labor and

Social Development which had been a nest for the old “labor bureaucrats.” In the course of meetings of the National Council, on many occasions, Mikhail Zurabov’s proposals for a new draft law or his interpretation of them received cool and critical comments from Mikhail Dmitriev, followed by harsh debates which often resulted in a deadlock. This spectacle was repeated quite often, because a deep, specialist knowledge to understand the problems at issue was needed. As a result, many issues were left to the hands of both party specialists to seek compromises behind the scenes.

On April 17, the second Council was convened, and the discussion on the new reform program and corresponding legislation of six laws was launched. During the course of discussions on the proposed draft laws, article by article, it became clear that the criticism by the Ministry of Economic Development and Trade was still very strong against Zurabov’s version. Consequently, the gap between these parties needed to be filled with every effort before the next meeting.

After the April meetings, Gontmakher gave an interview to *Izvestiia*, in which he expressed a grave concern over this “unfilled gap.” He pointed out that the argument made by Dmitriev stressing the necessity of income disclosure, in connection with his proposal to include non-state pension funds and to allow investments in foreign stock markets, was problematic. From Gontmakher’s point of view, Dmitriev’s version would not promote the disclosure and would not exclude the financial crisis like the one in 1998. Generally, the population remained strongly worried about Dmitriev’s version.

The problems of Russian pension reforms discussed in these years could be summarized into the following three areas;

1) Simplification of various existing pension systems.

Under the Soviet regime, various pension systems developed. Apart from labor pensions, there were separate pension systems for the handicapped and/or families in need of social assistance, for ex-soldiers, and there were also special early retirement pensions for those working under hazardous conditions. These pensions were created under different special social economic preconditions, some of which have lost importance or have become sources for special privileges and social unfairness. In this area, such basic concepts as “fairness” or “equality” must be put into question and reconsidered under new circumstances.

2) Financing and calculations.

The so-called “pay-as-you-go (PAYG) system” was not expected to work in the years to come, and instead, a so-called “fully funded system” should be introduced and put into motion. Gradual implementation of this system could be recommended as one of the most desirable solutions. This view was, needless to say, widely accepted, but in order to obtain a sort of optimal solution, so many variables had to be taken into consideration such as macro-economic indicators like growth rates, income growth, and demographical dynamics, changes in the number of economically active population and so on. It was extremely difficult to work out an optimal solution, particularly in a swiftly changing society like Russia.

3) Non-state pension schemes.

A new system of non-state pension schemes, including "cooperate pension funds" and "voluntary pension insurance," was regarded as indispensable. In the advanced market economies, the private sector functions as a main absorber of a huge amount of financial resources from pension funds. In Russia, while similar organizations were already in existence, they were still weak, and financial markets were underdeveloped.

2-3 Scheme of the new pension system[4]

In December 2001, a "package" of three federal laws was adopted. These "troika pension laws" were expected to work as the core or base of the new Russian pension system.[5] In addition, Federal Law No. 198 of December 31, 2001 established tax deductions from unified social taxes as contributions to the mandatory pension insurance.[6]

Let us look at the characteristic feature of the new legislation. In the adopted laws, the new pension system consists of three parts: basic part (basic pension), insured part (earning-related pension) and funded part (fully funded pension) (see Table 4). The basic pension is fixed, and its size is determined by the law. Contributions for the basic part are paid directly to the federal budget. The size of the payment from the insured part depends on the size of contributions of the insurer into the PFR, indexation by inflation, revenues of the PFR and so on. The amount of money for the payment of the insured part is accumulated in the PFR. The funded part is formed in individual accounts and indexed according to the

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4 The outline of the new pension system of Russia was given in Afanasiev (2003), Ivanov and Stroutchenevsky (2003), OECD (2004, pp. 113-120), Ohtsu (2003), Shinoda (2003) and World Bank (2002).

5 Federal Law No. 166 "On Provision of State Pensions in the Russian Federation" dated December 15, 2001 regulated social pensions financed by budget transfers to those who failed to earn the entitlement to a labor pension, pensions to victims of nuclear and man-made disasters, military conscripts and public servants. The second was Federal Law No. 167 "On Mandatory Pension Insurance in the Russian Federation" dated December 15, 2001 which defined the rights and obligations of insurants, insured individuals and insurers, procedure of contributions to the mandatory pension insurance and their rates depending on the insured individual's age and occupation. The third was Federal Law No. 173 "On Labor Pensions in the Russian Federation" dated December 17, 2001 which regulated the terms and standards of entitlement to labor pensions. As it became effective, the previous law "On State Pensions in the Russian Federation", No. 340 of November 20, 1990, lost validity.

6 Federal Law No. 198 "On Amending the Tax Code of the Russian Federation and Certain Legislative Acts of the Russian Federation on Taxes and Duties."

returns from the savings in the PFR. The size of the payment from the funded part depends only on the contributions by the insurer and the rate of returns of the PFR. Only the funded part can be transferred from the PFR to non-state pension funds.

Based on this new legislation, all monetary resources in the PFR seemed to be consolidated. Because the exact procedure for saving the funded part of pension was not specified in the law, the possibility seemed to exist that the income from investments might go indexed to the insured part of the pension, but the funded part might not be protected from high inflation. This kind of contradiction could be removed by the adoption of the law of investment of the funded part of pension.

The size of the payments which go to the insured and funded parts depends on various factors. For those people who were born after 1966 and earn less 100,000 rubles a year, the following relations are applied: starting from 2006, eight percent of wages go to the insured part, and six percent go to the funded part (see Table 4). Because unified social tax is a regressive tax, an amount of payments to these two parts depends on annual wages of the insured. It is possible to participate in the funded part of the pension system for men who were born in 1953 or more recently and for women who were born in 1957 or more recently (cohorts B and C in Table 4). People born in 1967 or more recently (cohort C in Table 4) are fully eligible to participate in the funded system. Transfers of the funded part from the PFR to non-state pension funds were to be permitted after the beginning of 2004.

3. Legislation and implementation process of the pension reform of 2002

3-1 Continued legislation

The year 2002 was the start for the new pension system. Our focus is on what happened in the implementation process in 2002-2003 and on what kinds of problems or tasks remained that were stipulated in the new "Reform program." At the end of 2001, three important laws were not adopted. The first one was "Law on Investments of the Funded Part of Labor Pension," the second was "Law on Amendments to Law on Non-state Pension Funds" and the third was "Mandatory Occupational Pension Law." Legislative works continued, and the first two laws were passed in 2002. The third one, however, has not been completed as of the end of 2004.

3-1-1 Investment of the funded part

The first to be mentioned is the Federal law No. 111 of July 24, 2002, "On Investments of Resources for Financing of the Funded Part of Labor Pension in the Russian Federation." This law established the legal framework of relations for accumulation and investment of pension assets for financing the funded part of labor pensions; defined details of the legal status, rights, liabilities and responsibilities of legal agents and participants in relations for accumulation and investment of pension assets; and established the principles of public control and supervision in this area.

This law was one which was vital for the functioning of the basic law on labor pension. Based on this law, the funded part of the mandatory pension was to be transferred to the PFR. Because there was no legislation to control this money, this law was adopted to fill the vacuum.[7]

3-1-2 Non-state pension funds

While non-state pension funds have been quite eager to obtain opportunities to serve as managers of pension money, there was no legislation to allow this to happen. Although there were some 300 such funds in Russia, the new pension reform program did not include them in the initial stage. Hence, Federal Law No. 14 of January 10, 2003 on Making Amendments and Additions to Federal Law “on Non-state Pension Funds” was issued.[8]

One of the major points in these amendments and additions was a way to include the non-state pension funds in the market-oriented operation of the new working pension law with the introduction of the funded part. In the old law, there was no possibility for them to participate in the business. This federal law regulates legal, economic and social relations arising in the course of the establishment of non-state pension funds, and it regulates their operations in respect to provision of non-state pensions, mandatory pension insurance and occupational pension insurance and in liquidating non-state pension funds. It essentially establishes the main principles of state control over their operations.

Operations of the non-state pension fund as an insurant under the mandatory pension insurance includes accumulation and investment of pension savings, record keeping of pension savings of the insured persons, and assignment and payment of the funded part of the labor pension to the insured persons.

3-1-3 Occupational pensions

The third large and ailing barrier to the completion of pension reforms in the sphere of legislation is the unadopted law of the mandatory occupational pension. The new occupational pension system was conceived mainly by market liberalists in order to remove the heavy burden of the PAYG system on the state budget. For those workers in hazardous and strenuous jobs in various industries and places, special provisions had been set, allowing earlier retirement (five

[7] The Russian government issued a “provisional code” in March 2002 which ordered the PFR to manage the funded part of the labor pension and to keep its value by purchasing the state bonds.

[8] The old law was adopted on May 7, 1998 as Federal Law No. 75.

years or ten years), which were all financed by the state pension system. This was another typical example of the "socialist disease" of the Russian pension system. At the end of the 1990s, one out of seven pensioners was one of those "privileged" persons. The new occupational pension law was expected to envisage the new source for financing. Thus, the employers are obliged to pay, in addition to the normal rate, another six percent of wages (or 16 percent for those employers in especially hazardous and too strenuous situations). According to a rough estimate, it would be two percent of wage funds, and its total would amount to 50 billion rubles in 2003. If employers want to economize the payment, they are to make more efforts to improve the work conditions or raise the technical and safety level of their work places. This was what the proposer of the new law and the Government expected. There was, however, a strong opposition from the employers' side.

It took a long time to finalize the government draft law before it was made public in November 2001. Heated debates at the State Duma lasted more than a year, and it was only in December 2002 when the draft law passed the first reading.[9]

Right after New Year's Day in 2003, "a big trouble for the new pension system" existed, because the payment of pensions to those entitled was stopped and a new law which would guarantee the payment was not implemented. Mass media reported this incidence with a headline of "Especially Hazardous Occupational Pension" (*Izvestiia*, January 14, 2003).

Even in 2004 no progress was observed in this area of pension reform. Such a big delay in legislative movements seems to be deeply connected with the behaviors of non-state pension funds and employers as well, and with ideological and political struggles behind the scene. Why are the concerns so serious and deep over the matter of non-state pension funds or occupational pensions? This shows, in the authors' view, the typically Russian characteristics of pension reform process.

3-2 Obstacles in implementation in 2003

Apart from the legislative process, there were administrative or organizational problems which hindered the normal progress of implementation or institutionalization of the new pension system in Russia. In his Annual Address on May 16, 2003, President Putin proudly announced to the Parliament that the first steps were made to reform the pension system. The average pension, which three years earlier was not more than 70 percent of the pensioner's subsistence minimum, almost reached it in 2002 (see Table 2). But not long after his address, the problem of "letter of happiness" and of selecting asset management companies cast a dark

[9] It is interesting to note that in the last chapter of the draft law, it was written that this law would be effective from July 1, 2002, except some articles which would be effective from January 1, 2003.

shadow on his message.

3-2-1 Letter of happiness

According to Government Decree No. 346 of June 19, 2003 issued in accordance with the law on investment of the funded pension, the PFR was to send notices to individuals on the balance of funded pension accounts until August 1, 2003, and each receiver was to select one of the asset managers until October 15, 2003. This was considered to be an ordinary organizational work and to be carried out easily by the bureaucrats and employees at the PFR which employed more than 100,000 people including central and regional organs throughout the country. But this assumption proved to be wrong. In the summer of 2003, it became known that there were thousands of cases where eligible people did not receive the notice. This notice was commonly called as a “letter of happiness,” because it carried information about how much the insured had accumulated in his/her personal account at the PFR balance. While top people in charge were called to the Duma, it remained unclear with whom the responsibility lay, either the PFR or the post office, both of whom blamed each other.

On September 2, Prime Minister Kas’ianov held a meeting with his deputies and key ministers on the letter of happiness issue. It was decided that the Russian Government would discuss the progress of the pension reform only after the Cabinet of Ministers approved a set of measures to accelerate mailing of these notices. The Government was obliged to make amendments to Article 41 of the law on investments for financing the funded part.[10] By Government Decree No. 606 of October 1, 2003, a new deadline for mailing notices to individuals was to be November 1, 2003, and a deadline for selecting the asset manager was to be December 31, 2003.

3-2-2 Selection of the pension asset manager

One of the serious problems which hindered the realization of the new pension system was the selection of pension asset management companies. Those insurants who luckily received the “letter of happiness” were supposed to inform to the PFR which asset management company they would choose out of 55 companies, licensed by the Ministry of Finance,[11] because they were now the owner of pension assets and could invest them to increase the sum. This was exactly the core of the new funded pension scheme.

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[10] Federal Law No. 135 of November 10, 2003, “On Making Amendments to Article 41 of Federal Law “On Investments of Resources for Financing of the Funded Part of Labor Pensions in the Russian Federation.”

[11] The Ministry of Finance published the results of the tender to select asset managers for investment of pension savings on September 5, 2003. Fifty-five companies out of 59 applicants were declared the best bidders of the tender.

Insurants were expected to inform the PFR about their selection by the end of the year. At the end of November, however, according to the report by an advisor of the head of the PFR, Vladimir Viiunitskii, the total number of replies was 45,000. This was only 0.1 percent of those eligible to receive the letter of happiness (*Novie Izvestiia*, December 1, 2003). Another report stated that by the end of December, the number had risen to 700,000, but the ratio to those eligible still remained at two percent. Why was the number of respondents so small? These reports indicated not the inefficiency of the PFR, but the extremely low level of interests on the side of insurants or total lack of necessary information about asset management companies.

We might draw a tentative conclusion that in Russia people at large do not still know what the pension assets or its management mean and/or do not trust those financial institutions or investment companies at all. Or, they might think that these things do not have any relationship to them. This is a very inconvenient situation for those concerned with setting up the new pension scheme which presupposed quite a contrary picture.

According to a report of an opinion poll center, VTsIOM, three out of four people in Russia do not understand the pension reform (Summary of 2003, December 2, 2003). One day earlier, Viiunitskii officially had admitted that the first stage of pension reforms in Russia was a failure (*Novie Izvestiia*, December 1, 2003).

3.3 Troubles with social reforms and political backlash in 2004

3.3.1 Fate of Dmitriev, Zurabov, and Kas'ianov

In the spring of 2004, a big change took place among leading figures in the pension reform front; and the fates of Dmitriev, Zurabov, and Kas'ianov differed greatly. Prime Minister, Mikhail Kas'ianov was fired in March 2004, and his cabinet was reshuffled accordingly. On the pension reform stage, Mikhail Dmitriev stepped down. Dmitriev had been one of the strongest protagonists of the funded pension scheme and a vigorous opponent to Mikhail Zurabov, the head of the PFR, who was appointed as the Minister for Health Care and Social Development. Here we observe a result of a two-year struggle among these three leaders. The apparent winner was Mikhail Zurabov, and the loser was Mikhail Dmitriev. Both are liberals from Saint Petersburg whose careers began as specialists in mathematics and economic cybernetics. But, the position of winners and losers on the political stage changes quickly as observed everywhere in the world, and within a year this proves to be the case in Russia as well.

3-3-2 Amendments in pension reform legislations

The situation of Putin's pension reform train was like a train which passed through a rough and wild field. And another heavier freight was loaded and the train was driven on to another track. That was the change of direction of whole social security system, not just the pension system. Various policies, all connected with pension reforms (or more exactly, with the failure of reforms), were put forward suddenly or in an abrupt and unplanned way. The most serious and controversial policy options were as follows:

1) Middle age cohorts (those born before 1967; cohorts A and B in Table 4) were excluded from the mandatory funded pension scheme. This was proposed as an amendment of the pension law in April, 2004. These two cohorts were given a chance to take a voluntary accumulation scheme with an additional payment of four percent of wages to this scheme. Parliamentarians were strongly opposed to this amendment on the ground that it would make it more difficult for the population to understand the new pension system and that it would eventually disinterest them (www.rosbalt.ru, June 8, 2004)

2) The proposal to reduce the unified social tax rate by about eight percent (from 28 percent to 20 percent) from the beginning of 2005 caused great concern over the possible decrease in revenues of the PFR. This will negatively affect pension reform as a whole.

3) In the spring of 2004, almost at the same time as the reform of Government administrative structure, a new wave of social reforms backed by the President arrived. A bill was proposed to replace the nation's pervasive social benefits system with monetary compensations, so-called monetization of welfare benefits.

Starting in January 2005, when the bill takes effect, some benefits groups are to get monetary compensation instead of subsidized discounts on transportation, medicine, and other necessities. The bill repealed 41 laws and amended 155 others to end benefits introduced in the Soviet era to millions of retirees, military veterans, the disabled and Chernobyl cleanup workers, among others (www.pensionline.ru, August 3, 2004).

The bill was approved by the Duma in the first reading on July 2, 2004. The new policy triggered anger from socially handicapped and masses of pensioners. The bill was pushed through Parliament so quickly that even some deputies did not know its exact content. Meanwhile, hundreds of protesters opposing the bill clashed with police outside the Duma building. Members of the radical National Bolshevik Party attempted to barricade themselves in the Health Care and Social Development Ministry building where Mikhail Zurabov presided.

3-3-3 "Babushka revolution"

This wave of mass protest continued through the rest of the year, culminating in mass demonstrations with violent street actions like blockading the traffic in January and February of 2005. In many cases, riot police were brought in, and the battlefield spread to almost all of Russia. This "revolution" forced the Government to make concessions, either by raising the basic pensions (see footnote 13) or by softening the reform package for monetization. But, what is important is the mass demand to dismiss the liberalist reformers and eventually the resignation of Putin himself.

The Putin regime has never met with such a strong mass opposition and could not avoid the no-confidence vote for Prime Minister Mikhail Fradkov in the State Duma in February, although he survived. Mikhail Zurabov, a winner in the pension reform drama until the beginning of 2004, became the most unpopular politician in the beginning of 2005.

All this suggests that the social reform policy package put forward by Putin and his men in 2004 substantially weakened his power base and made social reforms further more difficult politically. It is obvious that Putin's pension reform train went widely off track since its inception in 2001.

4 Statistical analyses on pension reforms in Russia

As Table 2 shows, since 2000, the average pension has significantly increased in real terms and in terms of conversion to U.S. dollars.[12] The ratio of average pension to subsistence minimum has risen as well, as pointed out by Putin. Although the average replacement rate has been low since 1999, we have to take into account considerable increases in wages in recent years. It is difficult to say whether there was a significant improvement after the pension reform in 2002. Since 2003, real growth of pension has been around five percent, and the average replacement rate has been under 30 percent.[13] In this section we attempt statistical analyses on pension reforms in Russia from demographic and financial perspectives.

4.1 Demographic perspective

As is known, due to the age structure of the Russian population, the demographic burden on the pension system in Russia will be light in several years to come. But, after that period, the situation will deteriorate much faster even compared with the developed countries where demographic burden on the pension system is already very heavy. This is illustrated in Table 5 which shows the dependency ratio of Russia. In this table, figures until 2003 are actual ones derived from official statistics, and those after 2004 are based on the population forecast and on some assumptions.[14] Both dependency ratio (C) and system dependency ratio (D) decreased in the period 1999-2003. Even after 2004 these ratios will not exceed their high levels

[12] This was partly due to the appreciation of rubles against dollars.

[13] Prime Minister Fradkov announced in the Parliament on February 10, 2005 that the Government intended to double the amount of pensions (as well as wages) within four years. Apparently, this means about 19 percent growth per year in nominal terms. As Table 2 shows, this target does not seem unfeasible, if we take into account forecasted annual inflation rates around ten percent in coming years.

[14] We expect that this population forecast (A and B of the table) published by the Goskomstat in 2002 will be modified soon, based on the result of the population census in 2002.

of the mid-1990s until 2010.[15]

The situation will drastically change around the year 2010. Both dependency ratios will reach an unprecedented level, and there are no factors that will improve this situation after 2015. Sooner or later, it will be necessary to increase the retirement age.

Table 6 shows the PAYG equation in Russia. Although a three-pillar pension system was introduced in Russia in 2002, no payment will be made from the funded part of their contribution until 2021 for women and until 2026 for men. Therefore, we might assume that until that time the Russian pension system will work as the PAYG system as before.

The PAYG equation is:

$\alpha N=\beta M(1-\tau)$.

Where N and M are the number of people employed and of pensioners, respectively.[16] α is average pension contribution rate, β is average replacement rate, and τ is ratio of budgetary transfers to pension expenditures.

As is the case in Table 5, figures until 2003 in Table 6 are actual figures, and those after 2004 are based on the forecast and some assumptions. As we discussed, tariff of unified social taxes was reduced from 28 percent to 20 percent in the beginning of 2005. Hence, we assume that pension contribution rate will be lower in 2005 accordingly. As a result, although system dependency ratio will not be so high in the period until 2010, if we maintain replacement rate at the level of 30 percent, budgetary transfers should be increased significantly. This table shows that transfers from the federal budget should be at least 35 percent of the revenue of the PFR.

In addition, we have to take into consideration that a part of contributions will be designated for the funded part. In the PFR budget laws for 2004 and 2005, contribution for the funded part accounts for 7.7 percent and 6.9 percent of total revenue of the PFR, respectively (Table 8). Therefore, budgetary transfers should be larger than 42-43 percent in the period until 2010.

Already in the forecast made by the Ministry of Economic Development and Trade (Minekonomrazvitiia, 2001, pp. 5-6), additional financing from the federal budget in 2005-2010 was taken for granted. Evidently, Russian planners of pension reforms did not assume from the beginning that the new pension scheme would work self-sufficiently. Changes in the pension scheme made in the beginning of 2005 considerably strengthened the dependence of the PFR on

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[15] We should note that in Table 5 numbers of N and M in the period after 2004 depend on the assumed constant value of E and F and that the trend in the 1990s clearly shows that E=N/A is decreasing and that F=M/B is increasing. Hence, system dependency ratio (M/N) could be higher in the period 2003-2010.

[16] We include not only old-age pensioners, but also all other categories of pensioners when counting M for the sake of simplicity. As Table 3 shows, old-age pensioners account for less than 80 percent of total pensioners.

the federal budget.

4.2 Financial perspective

Table 7 shows the burden of the PFR for the Russian economy. Ratios of both revenue and expenditure of the PFR reached their lowest in 1999-2001. In 2002 and 2003, these ratios largely increased.[17] This trend is also observed in ratios of revenue and expenditure of the state budget, but expenditure of the state budget was not so large in 2002 and 2003 compared with the mid-1990s. If we take into consideration these trends and a recent economic boom, it is safe to say that the burden of the PFR is not so heavy, at least in the period until 2005.

Let us look at the detail of the balance of the PFR (Table 8).[18] It should be noted that after 2002 we have to distinguish the current budget of the PFR and financial resources for the payment of the funded part of the PFR. Contributions for the funded part has not been used, but accumulated as financial resources for the payment of the funded part in the future (Table 9). Because Table 8, official statistics of the PFR, represents a consolidated budget, including current budget and investment budget for the payment of the funded part, special attention should be paid to the following two points. On the one hand, expenditures of the PFR earmarked for the payment of the funded part must be deducted from the expenditure of Table 8. Because with regard to actual figures for 2002 and planned figures for 2003 proper treatment was not given in the official statistics and in the budget law, we recalculate the figures for 2002 and 2003 (planned) in Table 8.[19]

On the other hand, the balance as of the beginning (or end) of year (A or D) must be divided into two parts: the balance of the current budget (A1 or D1) and the balance of the investment fund (A2 or D2), as was done in Table 8. In other words, as a matter of course, the consolidated balance of the PFR (A or D) increases year by year due to the savings of the contribution for the funded part. Needless to say, this does not show soundness of the budget of

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[17] As for the PFR expenditure in 2002, we do not use the figure published in *RSE* (789.6 billion rubles), because as the PFR execution law for 2002 shows, this figure includes idle funds (71.0 billion rubles) and the financial resources reserved for the funded part (34.5 billion rubles). We exclude them in Table 7 and Table 8, as we discuss below. If we use the *RSE* figure, the PFR expenditure amounts to 7.3 percent of GDP, and the balance turns negative (0.8 percent of GDP).

[18] Because detailed data for 2003 and preliminary data for 2004 are not available, in Table 8 we use planned figures for 2003 and 2004, as well as those for 2005.

[19] As for 2002, see footnote 17. Similarly, for planned figure for 2003, from total expenditure (864.9 billion rubles), we exclude the expenditure for investment (52.2 billion rubles) and net financial result transferred to asset management companies (3.5 billion rubles). In spite of these recalculations, there are inconsistencies in the figures shown in Table 8. By definition, A+B=C+D in this table. However, after 2002 this equation holds true only for 2005. For 2002, 2003 (planned) and 2004, there are discrepancies amounting to 13.7 billion rubles, 10.9 billion rubles and 23.8 billion rubles, respectively.

the PFR. We have to analyze the two balances separately.[20]

As for the balance of the current budget (A1 or D1), it decreased every year from 2001 due to deficits of the current budget (E1). It should be emphasized that in official statistics such as *RSE*, these deficits of the PFR were not explicitly shown due to the consolidation with the balance of accumulated funds (E2). It was the huge surplus recorded in 2000 (90.2 billion rubles) that has financed the deficits in the following years. In 2000, the PFR expenditure amounted to only 4.7 percent of GDP, the record lowest since 1992 (see Table 7). Accumulated surpluses decreased year by year, and the balance of the current budget will reach only 14.3 billion rubles by the end of 2005. In this year, according to the PFR budget law, the deficit of the current budget will amount to 82.9 billion rubles, almost the same amount of the increase in financial resources for the funded part (84.1 billion rubles).[21]

We regard that this is the main reason why Article 3 of federal budget law for 2005 specified that if the Stabilization Fund of the federal budget exceeds 500 billion rubles, these rubles would be used for the financing of deficits of the PFR and for the redemption of state debts.[22] Without receiving these funds from the federal budget, the PFR might go into bankruptcy within a year or so, as Table 8 demonstrates.[23]

Let us turn to the investment fund of the PFR (Table 9). Because every year a portion of revenues of unified social taxes is transferred to this balance and expenditures are limited, we observe a stable increase in this balance.[24] Investment incomes amount to about eight percent of total revenue in 2004 and 2005. Investment yields (F1 or F2) have been decreasing, and they are to be three to four percent in 2005.[25] Government Decree No. 652 of August 31, 2002 specified

[20] While in a table of *RSE* (2004, p. 570), balance as of January 1, 2003 amounts to 33,634 million rubles, this was completely an irreconcilable value. It was probably related to the mistreatment of figures in 2002, mentioned above. We do not use this value in Table 8.

[21] Compared with 2005, the PFR expenditure in 2004 was planned to be much smaller, as shown in Table 7.

[22] As of January 1, 2005, the Stabilization Fund amounted to 522.3 billion rubles and received another 218.4 billion rubles of idle funds from the federal budget in January and spent 93.5 billion rubles for the redemption of state debts on January 31. As a result, the Stabilization Fund reached 647.2 billion rubles as of February 1, 2005 (*Rossiiskaia gazeta*, February 11, 2005, p. 5). As specified in Federal Law No. 184 of December 23, 2004, when the oil price is over 20 dollars per barrel, excess tax revenues of export duties on oil and severance taxes (mineral extraction taxes) on oil, calculated as the difference between tax revenues levied when oil price is 20 dollars per barrel and actual revenues, are included in the Stabilization Fund.

[23] We should point out another discrepancy in Table 8. Although A1 should coincide with D1 of the preceding year, every year from 2003 A1 is larger than D1 of the preceding year. The discrepancy reaches almost 30 billion rubles in 2004 and 50 billion rubles in 2005.

[24] From 2004 transfers to non-state pension funds were launched, as specified in the scheme of the pension reform of 2002. The first transfer (1,611 million rubles) was made in March, 2004 (*Rossiiskaia biznes-gazeta*, March 30, 2004, pp. 1, 4).

[25] As of March 12, 2004, the net financial result by the investments of contributions for the funded part received in 2002 (33,684 million rubles) amounted to 13,489 million rubles, 40.0 percent of those contributions, according to the official report of the PFR (*Rossiiskaia gazeta*,

that contributions for the funded part could be invested only in state bonds in rubles, and those in foreign currencies and mortgage securities under state guarantee transacted in an organized securities market. Actually, all of the financial resources for the funded part were invested in various kinds of state bonds.[26] The Government issued a new type of state bond, called "state savings bonds (gosudarstvennye sberegatel'nye obligatsii, GSO), which are to be purchased exclusively by the PFR and other non-state pension funds.[27] The reason why such state bonds were ordered to be issued in spite of the surplus of the federal budget in these years is explained by the present situation of Russian financial markets, where no other reliable objects of investments of the pension funds are available.[28]

As was explained above, the actual payment from the funded part will begin in 2022 for women and in 2027 for men. A rough calculation (assuming annual investment yield of four percent) suggests that financial resources for the payment of the funded part will exceed the annual revenue of the PFR by 2011 and will become 3.5 times larger than the annual revenue of the PFR in 2022.[29] This will be more than 20 percent of the GDP, a huge amount of money that should be invested more productively.

5 Concluding remarks

Although it is difficult to evaluate ongoing reforms, it is safe to draw the following two conclusions. First, we could say that the concept of the pension reform of 2002 has several deficiencies. Among others, the introduction of a three-pillar system was premature, if we take into account underdevelopment of financial markets in Russia and the difficulty of paying pensions, caused by the savings of some part of the contribution for the payment of the funded part. On the other hand, there were no improvements in the PAYG or non-funded part of the pension. The retirement age was not increased. All of the contributions were to be paid by employers; workers were expected to pay nothing, as before. The contribution rate was not

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March 31, 2004, p. 9). This report was published in accordance with Government Decree No. 73 of February 12, 2004.

[26] It was reported that 65 percent of resources were invested in state bonds in rubles and 35 percent in foreign currencies, mostly in Eurobonds (*Rossiiskaia biznes-gazeta*, February 25, 2004, p. 2).

[27] These new bonds were issued in 2004 in the amount of 30 billion rubles by Government Order No. 122 of January 23, 2004 and in the amount of 60 billion rubles in 2005 (*Rossiiskaia biznes-gazeta*, February 3, 2004, pp. 1-2; January 18, 2005, pp. 1, 5). They were reported to be profitable for investors who wanted to invest money over a long term (*Ekonomika i zhizn'*, 2005, No. 3, p. 4).

[28] In Federal Law No. 111 of July 24, 2002, which determined the scheme of investments for the funded part, nine objects of investments were listed, including bonds of regional governments, stocks and so on.

[29] This simulation was based on rough estimates of the age structure of labor, i.e., about 40 percent of total labor belong to cohort A & B and about 60 percent to cohort C in the definition of Table 4. Contribution rates shown in Table 4 were also taken into account.

increased, but decreased in 2005. The Putin administration seems to have heavily leaned on the personal popularity of Putin himself, an economic boom sustained by a high oil price, and a temporal easement of demographic burden in the 2000s.

Second, it should be regarded as a natural result of these deficiencies, significant modifications in pension laws were introduced already in 2005. Roughly, one fourth of workers were excluded from the funded scheme. The payment from the funded part will start not in 2011, as was originally specified, but in 2022. In addition, a decision on the reduction in unified social tax rates will inevitably aggravate the financial situation surrounding the PFR. Now we hesitate to say that in Russia a three-pillar pension system was introduced.

Then, what do we expect in the Russian pension system in the future? The situation surrounding the budget of the PFR will not be good. It will be sustained by the federal budget or by oil money, at least, in the near future. The replacement rate will not increase above 30 percent. A great number of benefits and privileges which covered the low level of the replacement rate in the past were abolished in the beginning of this year. The prospect is not bright. It seems that other reforms that are feasible and sustainable in the long run are inevitable.

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Table 1. Chronology of Pension Reforms in Russia

1956		State pension law of the USSR
1990	June	The Pension Fund of Russia (PFR) was set up.
	November	State pension law of the Russian Federation
1995		Concepts of the Pension System Reform in the Russian Federation
1998		Pension Reform Program
1998	May	Law on non-state pension funds
2000	March	Russian association of non-state pension funds
2001	January	Introduction of unified social tax
	May	The first National Council for pension system reform was convened.
	December	"Troika laws" on the new pension system in Russia
2002	July	Law on Investments of the Funded Part of Labor Pension
2004	March	Restructuring of administrative structure
2005	January	Amendments of laws on pension laws, monetization policy
		"Babushka revolution" threats Putin's administration.

Table 2. Average Pension in Russia

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
A	Average monthly pension in new rubles	0.1	0.2	1.6	19.9	78.5	188.1	302.2	328.1	399.0	449.0	694.3	1,023.5	1,378.5	1,637.0	1,915.0
B	in dollars, converted at official rate	174.5	318.6	8.3	20.1	35.8	41.3	59.0	56.7	41.1	18.2	24.7	35.1	44.0	53.3	66.5
C	in dollars, converted at PPP	…	…	67.5	86.1	85.1	125.7	136.8	129.5	141.0	83.0	95.0	122.1	145.1	…	…
D	Ratio of average pension to subsistence minimum (%)	237.0	170.0	119.3	138.1	128.6	101.0	116.0	113.2	114.7	70.2	76.4	89.5	100.0	102.0	…
E	Average replacement rate (%)	…	…	26.0	33.9	35.6	39.8	38.2	34.0	37.9	29.5	31.2	31.6	31.6	29.8	28.0
F	Nominal increase of average pension (%)	…	181.4	864.9	1,243.8	394.5	239.6	160.7	108.6	121.6	112.5	154.6	147.4	134.7	118.8	117.0
G	Real increase of average pension (%)	113.0	97.0	51.9	130.7	96.8	80.5	108.7	94.6	95.2	60.6	128.0	121.4	116.3	104.5	105.5
H	1991=100	…	100.0	51.9	67.8	65.7	52.9	57.5	54.4	51.7	31.4	40.1	48.7	56.7	59.2	62.5

Sources:

A: Includes compensation. For 1990-1991: *Sotsial'noe* , 1997, p. 9; 1992-2000: *RSE* , 2001, p. 197; 1992, 1995-2003: *RSE* , 2004, p. 187; 2004: *SEP* , 2004, No. 12.

B: Calculated from A and official exchange rates (For 1990-1992: WB, 1995, p. 433; 1993-2001: *IFS* , 2002, pp. 858-859; 2002-2003: *IFS* , July 2004, p. 832; 2004: simple calculations from monthly averages in *SEP* , 2004, No. 12).

C: Calculated from A and Purchasing Power Parity (For 1992: *Natsional'nye* , 1995, p. 50; 1993-1994: *Natsional'nye* , 1998, p. 111; 1995-1997: *Natsional'nye* , 2001, p. 180; 1998: *RSE* , 2001, p. 637; 1999-2002: *RSE* , 2004 p. 690).

D: For 1990-1991: *Sotsial'naia* , 1996, p. 6; 1992-2000: *RSE* , 2001, p. 197; 1992, 1995-2003: *RSE* , 2004, p. 187.

E: For 1992-2000: *RSE* , 2001, p. 197; 1992, 1995-2003: *RSE* , 2004, p. 187: *SEP* , 2004, No. 12.

F: Calculated from A.

G: For 1990-1991: *Sotsial'noe* , 1997, p. 9; 1992-2000: *RSE* , 2001, p. 197; 1992, 1995-2003: *RSE* , 2004, p. 187: *SEP* , 2004, No. 12.

H: Calculated from G.

Table 3. Number of Pensioners and Average Pension by Pension Category in Russia

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Number of registered pensioners at the end of year (in thousands)															
Total	32,848	34,044	35,273	36,100	36,623	37,083	37,827	38,184	38,410	38,381	38,411	38,630	38,432	38,164	
Old-age pension	25,659	27,131	28,390	29,021	29,095	29,011	29,081	28,993	29,023	28,932	28,813	28,989	29,705	29,272	
Disability pension	3,514	3,385	3,363	3,562	3,910	4,270	4,542	4,813	4,816	4,816	4,822	4,848	4,551	4,487	
Survivors' pension	2,792	2,574	2,473	2,420	2,423	2,482	2,464	2,532	2,601	2,622	2,116	2,640	2,547	2,749	
Pension for long service	82	84	91	107	135	197	544	577	631	657	674	674	…	…	
Social pension	470	870	956	990	1,060	1,123	1,196	1,269	1,339	1,354	1,986	1,479	1,613	1,636	
Old-age (or disability) pension and pension for long service to civil servants	…	…	…	…	…	…	…	…	…	…	…	…	16	20	
(in percent of total)															
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Old-age pension	78.1	79.7	80.5	80.4	79.4	78.2	76.9	75.9	75.6	75.4	75.0	75.0	77.3	76.7	
Disability pension	10.7	9.9	9.5	9.9	10.7	11.5	12.0	12.6	12.5	12.5	12.6	12.5	11.8	11.8	
Survivors' pension	8.5	7.6	7.0	6.7	6.6	6.7	6.5	6.6	6.8	6.8	5.5	6.8	6.6	7.2	
Pension for long service	0.2	0.2	0.3	0.3	0.4	0.5	1.4	1.5	1.6	1.7	1.8	1.7	…	…	
Social pension	1.4	2.6	2.7	2.7	2.9	3.0	3.2	3.3	3.5	3.5	5.2	3.8	4.2	4.3	
Old-age (or disability) pension and pension for long service to civil servants	…	…	…	…	…	…	…	…	…	…	…	…	0.0	0.1	
Amount of monthly pension in new rubles, including															
Average	0.113	0.419	3.5	43.1	120.1	242.6	320.1	366.4	402.9	521.5	823.4	1,138.0	1,462.3	1,747.4	
Old-age pension	0.121	0.438	3.7	45.4	128.3	258.5	333.5	385.1	430.7	549.2	894.0	1,246.3	1,589.0	1,906.0	
Disability pension	0.101	0.405	3.2	37.3	104.5	218.0	299.6	333.7	352.3	466.9	698.5	940.4	1,157.1	1,363.4	
Survivors' pension	0.064	0.280	2.2	27.8	64.0	132.8	241.0	256.5	257.1	389.7	501.5	668.9	792.7	1,010.1	
Pension for long service	0.118	0.335	4.5	53.0	143.1	277.0	337.0	388.0	390.4	488.0	673.7	846.5	…	…	
Social pension	0.068	0.314	2.1	32.2	77.4	160.1	245.7	271.6	271.6	395.3	496.7	631.7	1,032.0	1,179.8	
Old-age (or disability) pension and pension for long service to civil servants	…	…	…	…	…	…	…	…	…	…	…	…	3,036.3	3,368.5	
(in percent of the average)															
Average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Old-age pension	107.1	104.5	105.7	105.3	106.8	106.6	104.2	105.1	106.9	105.3	108.6	109.5	108.7	109.1	
Disability pension	89.4	96.7	91.4	86.5	87.0	89.9	93.6	91.1	87.4	89.5	84.8	82.6	79.1	78.0	
Survivors' pension	56.6	66.8	62.9	64.5	53.3	54.7	75.3	70.0	63.8	74.7	60.9	58.8	54.2	57.8	
Pension for long service	104.4	80.0	128.6	123.0	119.2	114.2	105.3	105.9	96.9	93.6	81.8	74.4	…	…	
Social pension	60.2	74.9	60.0	74.7	64.4	66.0	76.8	74.1	67.4	75.8	60.3	55.5	70.6	67.5	
Old-age (or disability) pension and pension for long service to civil servants	…	…	…	…	…	…	…	…	…	…	…	…	207.6	192.8	

Source:
For 1990-2000: *RSE* , 2001, p. 197; 1990, 1995-2003: *RSE* , 2004, p. 188.

Table 4. The New Pension System of Russia

The scheme introduced in 2002

	PAYG/ funded	mandatory/ voluntary	classification	benefit	cohort[1]	contribution rates[2]	
						2002-2005	2006-
Pillar 1	PAYG	mandatory	basic part	fixed amount	A, B, C	14%	14%
			insured part	notionally defined	A	14%	14%
					B	12%	12%
					C	9-11%	8%
Pillar 2	funded	mandatory	funded part	investment yield	A	0%	0%
					B	2%	2%
					C	3-5%	6%
Pillar 3	funded	voluntary	non-state pension funds	investment yield	-	-	-

The scheme introduced in 2005

	PAYG/ funded	mandatory/ voluntary	classification	benefit	cohort[1]	contribution rates[3]	
						2005-2007	2008-
Pillar 1	PAYG	mandatory	basic part	fixed amount	A, B, C	6%	6%
			insured part	notionally defined	A & B	14%	14%
					C	10%	8%
Pillar 2	funded	mandatory	funded part	investment yield	A & B	0%	0%
					C	4%	6%
Pillar 3	funded	voluntary	non-state pension funds	investment yield	-	-	-

Notes:

1 Cohort A includes men born in 1952 and earlier women born in 1956 and earlier, destined to retire until 2012 for men and until 2011 for women; cohort B includes men born in 1953-1966 and women born in 1957-1966; and cohort C includes both men and women born after 1967. Cohort C will retire after 2022 for women and after 2027 for men.

2 As the unified social tax is a regressive tax, these rates are applied for the low-income bracket whose salary is no more than 100,000 rubles per year. But the proportion of contribution rate of pillar 1 and its two parts to that of pillar 2 is almost the same for other three higher-income brackets whose salaries are 100,000-300,000 rubles, 300,000-600,000 rubles and more than 600,000 rubles, respectively. The contribution rate for pillar 2 for cohort C is to be 3% in 2002-2003, 4% in 2004, and 5% in 2005. The contribution rate for the insured part of pillar 1 is the difference between 14% and the contribution rate for pillar 2.

3 As the unified social tax is a regressive tax, these rates are applied for the low-income bracket whose salary is no more than 280,000 rubles per year. But the proportion of contribution rate of pillar 1 and its two parts to that of pillar 2 is almost the same for other two higher-income brackets whose salaries are 280,000-600,000 rubles and more than 600,000 rubles, respectively.

Sources:

Compiled by the authors, based upon Russian laws and Ivanov and Stroutchenevski, 2003, pp. 3-5

Table 5. Dependency Ratio of Russia

(in thousands people, at the end of year)

	A	B	N	M	C	D	E	F
	Working age population	Old age population	Workers	Pensioners	Dependency ratio (B/A, %)	System dependency ratio (M/N, %)	N/A (%)	M/B (%)
1990	83,976	28,195	…	32,848	33.6	…	…	116.5
1991	83,892	28,714	…	34,044	34.2	…	…	118.6
1992	83,748	29,348	71,068	35,273	35.0	49.6	84.9	120.2
1993	83,767	29,696	68,642	36,100	35.5	52.6	81.9	121.6
1994	84,059	29,931	64,785	36,623	35.6	56.5	77.1	122.4
1995	84,209	30,197	64,149	37,083	35.9	57.8	76.2	122.8
1996	84,337	30,500	62,928	37,827	36.2	60.1	74.6	124.0
1997	84,786	30,587	60,021	38,184	36.1	63.6	70.8	124.8
1998	85,548	30,445	58,437	38,410	35.6	65.7	68.3	126.2
1999	86,332	30,175	63,082	38,381	35.0	60.8	73.1	127.2
2000	87,054	29,885	64,465	38,411	34.3	59.6	74.1	128.5
2001	87,329	29,860	64,664	38,630	34.2	59.7	74.0	129.4
2002	89,206	29,643	65,858	38,432	33.2	58.4	73.8	129.6
2003	89,896	29,258	66,606	38,164	32.5	57.3	74.1	130.4
2004	88,950	29,171	65,905	38,051	32.8	57.7	74.1	130.4
2005	89,098	29,101	66,015	37,959	32.7	57.5	74.1	130.4
2006	88,800	29,286	65,794	38,201	33.0	58.1	74.1	130.4
2007	88,226	29,556	65,369	38,553	33.5	59.0	74.1	130.4
2008	87,457	29,813	64,799	38,888	34.1	60.0	74.1	130.4
2009	86,289	30,255	63,933	39,464	35.1	61.7	74.1	130.4
2010	85,194	30,649	63,122	39,978	36.0	63.3	74.1	130.4
2011	84,028	31,046	62,258	40,496	36.9	65.0	74.1	130.4
2012	82,764	31,480	61,322	41,062	38.0	67.0	74.1	130.4
2013	81,462	31,909	60,357	41,622	39.2	69.0	74.1	130.4
2014	80,142	32,379	59,379	42,235	40.4	71.1	74.1	130.4
2015	78,757	32,843	58,353	42,840	41.7	73.4	74.1	130.4

Notes:

A: men at 16-59, women at 16-54.

B: men at 60 or older, women at 55 or older.

N: Based on a sample survey of employment conducted, mostly, at the end of October or November.

Sources:

Until 2003:

A & B: For 1990, 1994-2001: *RSE* , 2002, p. 81: 1991-2000, *RSE* , 2001, p. 81; 2002-2003: *RSE* , 2004, p. 77.

N: For 1992-2000: *RSE* , 2001, p. 133; 1992, 1995-2003: *RSE* , 2004, p. 133.

M: For 1992-2000: *RSE* , 2001, p. 197; 1992, 1995-2003: *RSE* , 2004, p. 187.

After 2004:

A & B: *Predpolozhitel'naia* , 2002, p. 55.

N & M: Calculated from A & B and the assumed values of E & F

E & F: Assumed to be equal to the value in 2003.

Table 6. The PAYG Equation in Russia

	M/N	α	β	τ
	System dependency ratio (%)	Average pension contribution rate (%)	Average replacement rate (%)	Ratio of budgetary transfers to pension expenditure (%)
1992	49.5	12.2	26.0	5.6
1993	51.5	16.7	33.9	4.3
1994	54.3	18.3	35.6	5.6
1995	55.6	18.5	39.8	16.5
1996	56.8	19.0	38.2	12.6
1997	58.8	16.9	34.0	15.3
1998	60.2	19.4	36.0	10.6
1999	59.9	16.0	29.5	9.4
2000	59.5	16.3	31.2	12.1
2001	59.5	17.5	31.6	7.0
2002	58.8	17.1	31.6	8.2
2003	58.5	15.9	29.8	8.6
2004	57.5	15.9	30.9	10.5
2005	57.6	11.4	30.4	35.0
2006	57.8	11.4	30.3	35.0
2007	58.5	11.4	29.9	35.0
2008	59.5	11.4	29.4	35.0
2009	60.9	11.4	28.8	35.0
2010	62.5	11.4	28.0	35.0
2011	64.2	11.4	27.3	35.0
2012	66.0	11.4	26.5	35.0
2013	68.0	11.4	25.8	35.0
2014	70.0	11.4	25.0	35.0
2015	72.3	11.4	24.2	35.0

Sources:
Until 2003:

M/N: Calculated from N/M (For 1992-2000: *RSE* 2001, p. 197; 1992, 1995-2003: *RSE* , 2004, p. 187).

α: Calculated from the formula, $\alpha=\beta(M/N)(1-\tau)$.

β: E of Table 2.

τ: The percentage of revenues of the PFR other than contribution and obtained from Table 8.

After 2004:

M/N: The yearly simple average calculated from D of Table 5.

α: For 2004 assumed to be equal to the value in 2003; 2005-2015: assumed to be equal to the value in 2003 multiplied

β: Calculated from the formula, $\beta=\alpha(N/M)/(1-\tau)$.

τ: For 2004 planned figure; 2005: planned figure, excluding expenditure on payments to veterans, invalids and others; 2006-2015: arbitrary.

Table 7. Budgets of the State and the Pension Fund of Russia

(in billion new rubles)

		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
State budget	Revenue	5.3	49.7	172.4	437.0	558.8	711.6	686.8	1,213.6	2,097.7	2,683.7	3,519.2	4,138.7	…	…
	Expenditure	6.0	57.7	230.4	486.1	652.7	839.5	842.1	1,258.0	1,960.1	2,419.4	3,422.3	3,964.9	…	…
	Balance	0.6	7.9	65.5	-49.1	-94.2	-127.9	-155.3	-44.4	137.6	264.3	97.0	173.8	…	…
PFR	Revenue	1.3	10.6	38.3	88.3	131.7	178.3	166.7	276.5	431.3	532.1	699.9	843.1	1,000.3	1,177.4
	Expenditure	0.9	10.4	37.3	88.7	129.6	176.6	167.0	271.4	341.1	514.8	684.1	804.1	946.6	1,176.1
	Balance	0.4	0.2	1.0	-0.4	2.1	1.7	-0.3	5.1	90.2	17.3	15.7	39.1	53.7	1.2
GDP		19.0	171.5	610.7	1,428.5	2,007.8	2,342.5	2,629.6	4,823.2	7,305.6	8,943.6	10,817.5	13,201.1	16,778.8	18,720.0
(in percent of GDP)															
State budget	Revenue	27.9	29.0	28.2	30.6	27.8	30.4	26.1	25.2	28.7	30.0	32.5	31.4	…	…
	Expenditure	31.6	33.6	37.7	34.0	32.5	35.8	32.0	26.1	26.8	27.1	31.6	30.0	…	…
	Balance	3.4	4.6	10.7	-3.4	-4.7	-5.5	-5.9	-0.9	1.9	3.0	0.9	1.3	…	…
PFR	Revenue	6.7	6.2	6.3	6.2	6.6	7.6	6.3	5.7	5.9	5.9	6.5	6.4	6.0	6.3
	Expenditure	4.8	6.1	6.1	6.2	6.5	7.5	6.4	5.6	4.7	5.8	6.3	6.1	5.6	6.3
	Balance	1.9	0.1	0.2	0.0	0.1	0.1	0.0	0.1	1.2	0.2	0.1	0.3	0.3	0.0

Sources:

State budget: For 1992-2003, *RSE* , 2004, pp. 563-564.

PFR: For 1992-2000, *RSE* , 2001, p. 533; 1992, 1995-2001, 2003: *RSE* , 2004, p. 570; 2002: Table 8; 2004-2005: planned figures in the PFR budget law.

Balance of the PFR is calculated as revenue minus expenditure.

GDP: For 1992-1994, *Natsional'nye* , 2000, p. 27; 1995-2004: Rosstat's site; 2005: planned figure in the federal budget law.

Table 8. Balance of the Pension Fund of Russia

(in million rubles)

		1999	2000	2001	2002	2003		2004	2005
		actual	actual	actual	actual	planned	actual	planned	planned
A	Balance as of January 1, total	3,000	8,097	98,322	115,605	154,051	…	179,203	260,786
A1	Current budget	3,000	8,097	98,322	115,605	114,100	…	90,310	97,140
A2	Financial resources for the funded part	…	…	…	0	39,951	…	88,893	163,646
B	Revenue	276,519	431,281	532,120	699,871	822,841	843,141	1,000,317	1,177,375
B1	Contribution	250,436	379,259	494,906	642,328	742,350	770,457	895,616	986,132
B11	Unified social taxes transferred from federal budget	…	…	…	331,603	365,640	…	438,210	341,170
B12	Insured part	…	…	…	261,002	327,240	…	380,374	561,440
B13	Funded part	…	…	…	37,865	49,470	…	76,887	81,670
B14	Other	…	…	…	11,858	0	…	145	1,852
B2	From federal budget other than unified social taxes	17,700	26,800	34,039	49,492	50,322	50,979	59,499	64,999
B3	Other	8,383	25,222	3,175	8,051	30,169	21,705	45,202	126,244
C	Expenditure	271,422	341,056	514,837	684,136	809,196	804,076	946,640	1,176,131
C1	Pension payment	254,710	331,257	491,123	661,730	779,896	776,446	901,230	1,125,311
C11	Basic part	…	…	…	…	268,187	…	301,335	340,997
C12	Insured part	…	…	…	…	460,473	…	540,032	617,589
C13	Payments to veterans, invalids and others	…	…	…	…	…	…	…	99,764
C14	Other	…	…	…	…	51,236	…	59,863	66,961
C2	Other	16,712	9,799	23,714	22,406	29,300	27,630	45,410	50,820
C21	Funded part	…	…	…	442	818	…	10,242	4,810
C22	Maintenance of the PFR	…	…	…	16,429	22,832	…	26,228	33,861
C23	Other	…	…	…	5,535	5,650	…	8,940	12,149
D	Balance as of December 31, total	8,097	98,322	115,605	145,014	156,795	…	209,076	262,029
D1	Current budget	8,097	98,322	115,605	106,041	61,143	…	46,758	14,284
D2	Financial resources for the funded part	…	…	…	38,973	95,652	…	162,318	247,745
E	Revenue minus expenditure	5,097	90,225	17,283	15,735	13,645	39,065	53,677	1,244
E1	Excluding those related to the funded part	…	…	…	-23,238	-42,056	…	-19,748	-82,855
E2	Those related to the funded part	…	…	…	38,973	55,701	…	73,425	84,099
	(in percent of total)								
B	Revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
B1	Contribution	90.6	87.9	93.0	91.8	90.2	91.4	89.5	83.8
B11	Unified social taxes transferred from federal budget	…	…	…	47.4	44.4	…	43.8	29.0
B12	Insured part	…	…	…	37.3	39.8	…	38.0	47.7
B13	Funded part	…	…	…	5.4	6.0	…	7.7	6.9
B14	Other	…	…	…	1.7	0.0	…	0.0	0.2
B2	From federal budget other than unified social taxes	6.4	6.2	6.4	7.1	6.1	6.0	5.9	5.5
B3	Other	3.0	5.8	0.6	1.2	3.7	2.6	4.5	10.7
C	Expenditure	98.2	79.1	96.8	97.8	98.3	95.4	94.6	99.9
C1	Pension payment	92.1	76.8	92.3	94.6	94.8	92.1	90.1	95.6
C11	Basic part	…	…	…	…	32.6	…	30.1	29.0
C12	Insured part	…	…	…	…	56.0	…	54.0	52.5
C13	Payments to veterans, invalids and others	…	…	…	…	…	…	…	8.5
C14	Other	…	…	…	…	6.2	…	6.0	5.7
C2	Other	6.0	2.3	4.5	3.2	3.6	3.3	4.5	4.3
C21	Funded part	…	…	…	0.1	0.1	…	1.0	0.4
C22	Maintenance of the PFR	…	…	…	2.3	2.8	…	2.6	2.9
C23	Other	…	…	…	0.8	0.7	…	0.9	1.0

Sources:

A (A1), B, B1, B2, C, C1, D(D1): For 1999-2001, *RSE* , 2004, p. 570.

A=A1+A2 for 2002, 2003(planned), 2004-2005.

A1, B, B1, B11, B12, B13, B2, C, C1, C11, C12, C13, C21, C22, D1: For planned figures (2003-2005), PFR budget laws.

A1, B, B1, B11, B12, B13, B2, C, C21, C22, D1: For 2002, PFR budget execution law.

A1, B, B1, B2, C, C1: For 2003(actual), *RSE* , 2004, p. 570.

A2: A of Table 9.

B14, B3, C14, C2, C23: Calculated as residual.

C1: For 2002, *RSE* , 2004, p. 570.

D=D1+D2 for 2002, 2003(planned), 2004-2005.

D2: D of Table 9.

E=B-C

E1=E-E2

E2: E of Table 9.

Table 9. Balance of Financial Resources for the Payment of the Funded Part of the Pension Fund of Russia

(in million rubles)

		2002	2003	2004	2005
		actual	planned	planned	planned
A	Balance as of January 1	0	39,951	88,893	163,646
B	Revenue	39,415	56,520	83,667	88,910
B1	Contribution	37,865	49,470	76,887	81,670
B2	Investment income	1,524	7,050	6,780	7,044
B3	Other	26	0	0	196
C	Expenditure	442	819	10,242	4,811
C1	Transfer to non-state pension funds	0	0	9,062	3,335
C2	Other	442	819	1,180	1,476
D	Balance as of December 31	38,973	95,652	162,318	247,745
E	Annual increase in balance	38,973	55,701	73,425	84,099
F1	Investment yield (%) B2/A	...	17.6	7.6	4.3
F2	Investment yield (%) B2/D	3.9	7.4	4.2	2.8
	(in percent of total)				
B	Revenue	100.0	100.0	100.0	100.0
B1	Contribution	96.1	87.5	91.9	91.9
B2	Investment income	3.9	12.5	8.1	7.9
B3	Other	0.1	0.0	0.0	0.2
C	Expenditure	100.0	100.0	100.0	100.0
C1	Transfer to non-state pension funds	0.0	0.0	88.5	69.3
C2	Other	100.0	100.0	11.5	30.7

Notes:

Because figures for 2003-2005 are planned ones, A and previous year's D do not coincide.

Sources:

A, B, B1, B2, C1, D: For 2002, PFR budget execution law; 2003-2004: PFR budget laws.

B3=B-B1-B2
C=A+B-D
C2=C-C1
E=D-A=B-C
F2=B2/D*100
F1=B2/A*100