97

DISCUSSION PAPER

Originally published by Ipea in December 2000 as
number 775 of the series Texto para Discussão.

THE BRAZILIAN SOCIAL SECURITY SYSTEM

Francisco Eduardo Barreto de Oliveira
Kaizô Iwakami Beltrão

97

DISCUSSION PAPER

Originally published by Ipea in December 2000 as
number 775 of the series Texto para Discussão.

Brasília, January 2015

THE BRAZILIAN SOCIAL SECURITY SYSTEM[1]

Francisco Eduardo Barreto de Oliveira[2]
Kaizô Iwakami Beltrão[3]

1. All the data, opinions and other information contained in this paper are of exclusive responsibility of the authors, not of the institutions to whom they belong or to whom they are consultants.
2. Research at Institute for Applied Economic Research (Ipea).
3. Head of the National School of Statistical Sciences — Ence/IBGE.

DISCUSSION PAPER

A publication to disseminate the findings of research directly or indirectly conducted by the Institute for Applied Economic Research (Ipea). Due to their relevance, they provide information to specialists and encourage contributions.

Discussion paper / Institute for Applied Economic

Research.- Brasília : Rio de Janeiro : Ipea, 1990-

ISSN 1415-4765

1. Brazil. 2. Economic Aspects. 3. Social Aspects. I. Institute for Applied Economic Research.

CDD 330.908

SUMÁRIO

RESUMO

O trabalho oferece uma visão resumida da previdência social no Brasil, tanto em termos do Regime Geral de Previdência Social (RGPS) como dos regimes previdenciários, cuja clientela são os funcionários públicos pertencentes ao Regime Jurídico Único (RJU). Após uma breve análise da sua evolução histórica, esboça-se um diagnóstico e apresenta-se a situação atual. Finalmente, são analisados os impactos econômico-financeiros das várias medidas tomadas para o horizonte 2000-2030. Conclui-se que, embora os déficits experimentem substanciais reduções, futuras reformas serão indispensáveis.

ABSTRACT

This paper presents a summarized picture of the Brazilian Social Insurance System, both in terms of the system that cover workers in private sector — Regime Geral de Previdência Social (RGPS) (General Regime for Social Security) — and in terms of the various systems that cover public servants hired under the civil service unified regime — Regime Jurídico Único (RJU) (Pension Regime for Government Workers). After a brief analysis of its historical evolution, a diagnosis of the current situation will be presented. Finally, the various reforms are evaluated in terms of their economic impact for the 2000-2030 time horizon. The conclusion is that, despite substantial deficit reductions, further reforms are crucial to restore equilibrium.

1 - HISTORICAL DEVELOPMENT

First Law and close decades (1920-1940)

As in most Latin American countries, the first initiatives on social insurance were aimed at covering special groups such as the military and civil public servants. It was only in 1923 that the first law was passed granting some private sector workers (railroad workers) pensions and health benefits. During most of the following decade the system evolved as a very fragmented, company based, low coverage set of isolated programs, operating under a full capitalization regime.

During the 30’s and 40’s these isolated programs were consolidated into sector wide systems. For example, bank employees had their own “institute”, as well as the employees of the industrial, transportation, etc. sectors, including federal level public servants. It should be noted that this movement roughly coincides with the first efforts to industrialize the country. It also coincides with the emergence of the labor movement in Brazil, although most of the unions were under severe control of the State.

Arrangements of the system (1960-1988)

As discussed previously, originally all the Institutes operated under a full capitalization regime with a tripartite costing scheme (employer, employee and State). However, very soon it became clear that the state would never fulfill its commitment; and on the other side, reserves were often mismanaged. Therefore, as a result, by the 60’s the whole system shifted to a pure pay-as-you-go defined benefit scheme.

Only in 1960, after 14 years of debate in Congress, a Social Security Organic Law was approved, unifying benefit and costing schemes among the various institutes. Six years later, a National Social Security Institute (INPS) was created, replacing the old Institutes and incorporating their revenues and expenditures, as well as the assets and liabilities. In theory, most of the urban workers, including the employers and self-employed were covered by the system. In practice, coverage was below 50% for the employees, and no more than 10% for employers and self employed workers.
Contributions were set at 8% both for employer and employee, with a maximum contributory salary equivalent to 10 minimum wages.[1] The Federal Government should transfer revenues from the general taxes in order to cover administrative costs and eventual deficits.

[1] Actually, the law established a fixed nominal value. As a result, numerous adjustments by decree were needed to compensate for inflation erosion.

Retirement benefits were granted according to the following general rules:

a) By age, at 65 for men and 60 for women, given a minimum contributory period of five years.

b) By length of service,[2] 35 years of contributions for men and 30 years for women, without age limits, for full benefit.[3] Proportional retirement could be obtained with five years less.

c) By special conditions, depending on the nature of the job. Divers, underground miners and other hazardous and unhealthy professions could retire as early as 15 years of service.

d) By disability, at any age. If the cause of the disability was work related[4] there was a workmen's compensation program.

Other short duration benefits were also included in the law such as sickness allowance, accident allowance (work injury), family allowance and maternity leave. Most of the benefits had a 95% theoretical replacement rate up to a ceiling that was equivalent to roughly 10 minimum wages. In practice, replacement rates were lower and varied with time, as the benefit formula did not correct the 12 last contribution salaries for inflation. Workmen's compensation benefits were based on the last salary previous to the accident date and would give 100% replacement, subject to the ceiling. Maternity leave would guarantee the full salary up to four months from the child's date of birth.[5]

As for unemployment, the country used to have provisions in its labor laws guaranteeing a worker, stability in the job after 10 years of continuous service. Of course, the provision backfired, as most workers would be fired just prior to the completion of the required period. In the 60's, integrating a set of comprehensive reforms, this system was abolished. In its place, was created a compulsory contribution of 8% of the workers salary[6] to be credited by their employer in an individual capitalized account — FGTS — in the National Housing Bank (BNH). These contributions would earn a 3% real interest rate per year,[7] on top of a full inflation correction of the capitalized asset. In case of involuntary dismissal the worker could draw from this account (lump sum); he could also draw from it for buying/building his house and, in case of death, it is considered as a bequest to his dependants. Since the closing of BNH in the late 80's, the Federal Savings Bank — Caixa Econômica Federal (CEF) — administers the program.

---

[2] Also know a "seniority benefits".
[3] Teachers could retire with full benefits five years earlier.
[4] Later, even accidents occurring on the way to or from the workplace were included.
[5] It was later modified to allow women to choose when to use the four month paid leave period.
[6] No ceiling.
[7] For a while 4%, 5% and 6% depending on how long the job duration had been.

Despite various attempts during the 60's, to include the rural population in the program, only in 1974 an effective coverage was achieved. A flat benefit half of a minimum wage salary was granted to rural workers at the age of 65 or to the disabled at any age, without a waiting period. Medical assistance was also supplied, mostly through contracts with private and philanthropic hospitals. The cost of the program was financed by a special contribution of 2.4% on the urban wage bill, plus a contribution of 2.5% levied on first commercialization of rural products. A specific institution — Funrural — was created to manage the new program.

During the 70's, a means-tested allowance was also created to cover needy persons over the age 70, both urban and rural or disabled, without other sources of income. This social assistance cash benefit was equivalent of half of a minimum wage.

A Social Insurance and Social Assistance Ministry was created in 1974, as a dismemberment of the previous Ministry of Labor.

From 1978 to 1988 the institutional setup was of functional specialization, with the previous institutions (INPS and Funrural) rearranged as follows:

a) (New) INPS, taking care of benefit payments and professional rehabilitation for both urban and rural insured, as well as paying cash social assistance benefits.

b) Inamps, taking care of health services (mostly curative) for urban and rural insured.

c) Iapas, whose function was basically collecting contributions and managing the assets.

d) LBA, Funabem and Dataprev, respectively, social assistance services to the needy, abandoned and criminal juveniles and a data processing supporting agency. Added to the arrangements in the public system, the government also settled some directions to the private system. In fact, after a number of bankruptcies of private pension plans operated by "for profit" institutions, the government finally disciplined this market in 1977 through Law 6,435. Strongly inspired on the American Erisa, this law set the basic guidelines for the development of the private system, dividing the institutions into two basic groups:

a) open institutions, mostly operated by financial and insurance companies, under the supervision of the Ministry of Finance; and

b) closed institutions, sponsored by one or more companies for their employees, under the supervision of MPAS.

These institutions could only operate capitalized plans, either of the defined benefit or defined contribution types. The law also established several rules for portfolio diversification, fiduciary responsibilities, penalties for untrustworthy administrators, etc.

1988 Constitution

After almost 20 years of military rule, the 1988 Constitution was promulgated. This new fundamental law reflected the increasing social concerns. And in terms of social insurance was the most important step towards the systems universalization, both the RGPS and the RJU.

In the first case, tending to defend private sector workers against eventual rights violation, a large number of social insurance provisions were embedded in the Constitution itself.

In general, the basic new provisions for the now called RGPS — General Regime for Social Security — were:

a) introduction of the Social Security concept, as an integrated set of social insurance, health and social assistance;

b) creation of a Unified Social Security Budget, financed by contributions levied on salaries, gross business revenues, business profits, lotteries and by transfers of general tax revenues;

c) health as a universal citizenship right;

d) doubling of all social assistance and rural benefit values;

e) reduction of five years on the age limits for rural benefits;

f) recalculation of all benefit values as to recompose their original value;[8]

g) full inflation indexing of all contribution salaries in the benefit calculation formula at the time of concession;

h) full inflation indexing of all benefit values as to preserve their “real value”; and

i) values of the minimum social insurance and social assistance benefits equaled to the minimum wage.

As it can be seen, they were very generous provisions, based on values of social justice. Unfortunately, they turned out to be very costly over time.

[8] Benefit values have been severely eroded by inflation. The new provision mandated a recalculation of their value which is based on the number of minimum wages at the date of the concession.

In case of public servants, the Constitution adjusted the differences between the two major forms of federal public servant contracts existent in Brazil since 1964. These two major forms of contracts were:

- tenured public servants, that, among other things, were entitled to last salary benefits,[9] with full equivalence between retirement benefit values and active public workers salaries.[10] There wasn't contribution for retirement benefits, the latter were considered as part of the labor contract; only a 6% contribution for survivors benefits was levied on the servant's salary. Furthermore, this type of servant, usually admitted through nationally held exams, could not be fired unless a severe fault was found; and

- Contracted Civil Servants (CLT), with both social security and labor rights equal to all other private sector workers.

The 1988 Constitution mandated that all public servants should belong to a single regime Regime Jurídico Único (RJU), that had the following basic characteristics: *a*) tenured employment, e.g. full stability on the job; *b*) retirement benefits equal to last salary; and *c*) value of benefits linked to active personnel salaries.

It should be noted that, when the constitutional provisions were regulated in 1990, all the contracted civil servants were transferred to RJU. As a consequence, some estimated 400,000 persons that used to contribute to INSS were shifted to the new scheme, being thus entitled to full salary benefits[11] without the previous corresponding contributions.

The situation in state and local governments were even worst in the sense that most of them followed the federal example but with more generous benefit schemes.

1990 decade

In addition to FGTS created during the 60's, another unemployment insurance scheme was implemented in 1990, since most workers would not accumulate substantial amounts in their accounts. As a matter of fact, the high turnover workers — those who by definition need the benefit the most — were the ones that would not accumulate. Considering this fact, the new program would provide an employment benefit of 50% of the average covered earnings during the last three months prior to dismissal — up to three minimum wages payable for up to four months.[12] The program is administered by the Minister of Labor.

---

[9] Actually, they used to have a 20% pay raise at their retirement date.
[10] If a certain category of active public servant got a pay raise, this raise would be extended to all retired servants of that category.
[11] Instead of a 10 minimum wage ceiling benefit.
[12] With a 60 days 5 waiting period.

With regards to the RGPS, the institutional reform of 1990, a single social insurance institution INSS was created, and health activities were transferred to the Ministry of Health. There weren't no major changes until 1995.[13]

2 - DIAGNOSIS

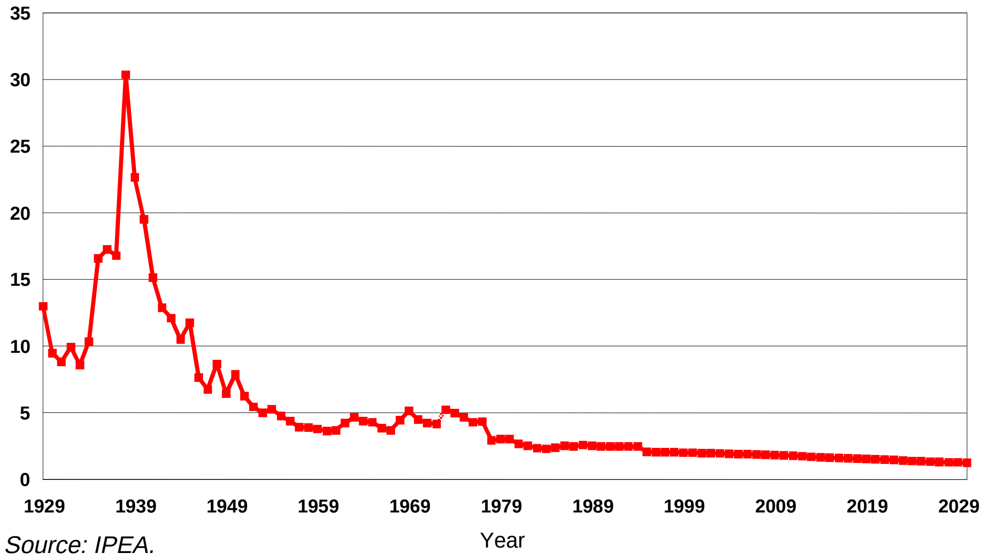
2.1 - RGPS and RJU

Brazilian public pension programmes are in difficulty. In fact the existing pension arrangements will be far too costly, not only now but also in the future.

The standard explanation for the rise in financial liabilities of pension programmes is the ageing of the brazilian population, which can be seen in Graph 1. This graph shows the evolution of the ratio of contributors to beneficiaries from 1929 to date and the projections up to 2030.[14] It shows clearly that, although Brazil has a relatively young population (5.31%[15] of the population age is 65 or over in 2000) the system has an already deteriorated social security dependency relation by 1.7 contributors/beneficiary (1999). Without serious reforms, perspectives will be bleak, with the further deterioration of this relation to something around 1:1 by 2030.

Graph 1

Contributors / Beneficiaries — 1929 - 2030



Source: IPEA.

[13] The beginning of President Fernando Henrique Cardoso's first term.
[14] Without any reforms.
[15] Source: *Como Vai? População Brasileira*, Ano II, n. 1, jan./abr. 1997.

As can be seen by table, both programmes — RJU and RGPS — are in crises facing financing problems. For example, the public servant regimes was even worse, with consolidated financing needs[16] that in 1999 was around three times that of RGPS, or 2.62% of GDP.

Financing Needs

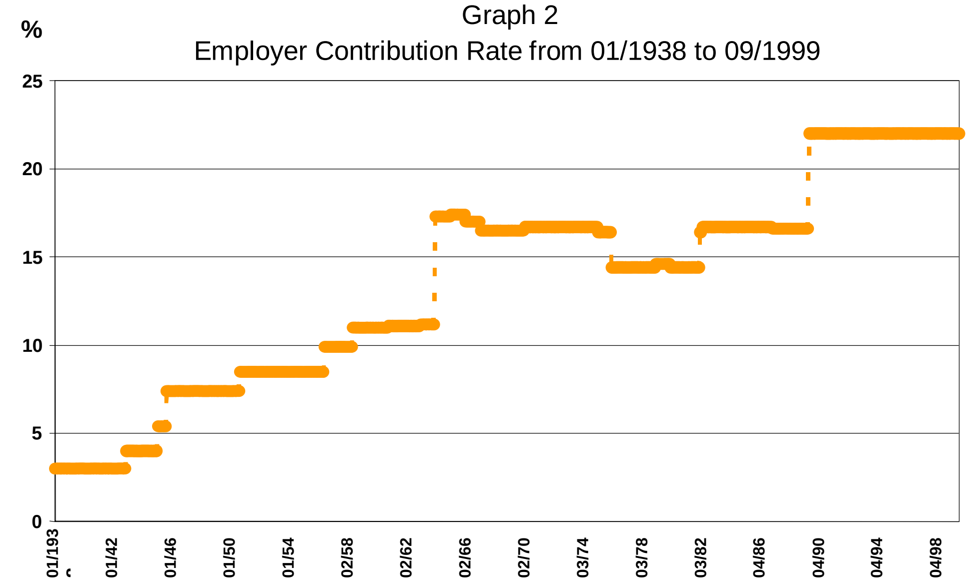
(R$ current billion)

	1995	1996	1997	1998	1999
RGPS	0,01	–0,656	–3,1	–9	–10
Public Employee	–13,35	–14,806	–30,3	–32,3	–30,7
Union[a]	–13,35	–14,806	–15,8	–17,1	–15
States[a]	n.a.	n.a.	–12,2	–12,8	–13,2
Municipales[a]	n.a	n.a.	–2,3	–2,4	–2,5
Total	–13,34	–15,462	–33,4	–41,3	–40,7

Source: MPAS, MPOG, MF.
[a]Boletim Estatístico de Pessoal (MOG/SEAP), April 1999.
n.a. = not available.

As a consequence, in terms of the RGPS, to keep the system afloat, contribution rates have been continually raised, as can be seen by Graphs 2 and 3.

Graph 2
Employer Contribution Rate from 01/1938 to 09/1999

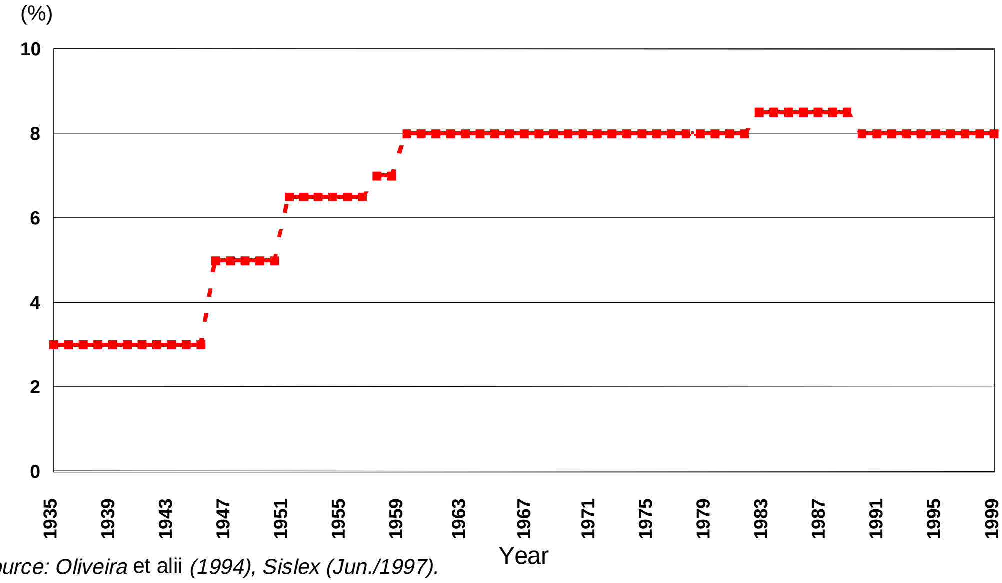


Source: Oliveira *et alii* (1994), Sislex (Jun./1997).

[16] The public sector social insurance results can not be strictly defined as deficits, since the law does not specify a precise funding scheme. The figures showed compare total benefit expenditures to public servant's contributions, without accounting for contributions from the state as employer.

Graph 3

Employee Contribution Rate from One to Three Minimum Wages Bracket — 1935/99



Source: Oliveira et alii *(1994), Sislex (Jun./1997).*

Today, the total contribution for social insurance[17] reaches roughly 30% in the wage bill, broken down as follows:

a) employee: between 8% and 11% (average 10%), depending on the wage value, up to a ceiling equivalent to 10 minimum wages; and

b) employer: 22% on the average,[18] without ceiling.

It should be noted that these figures do not consider contributions for FGTS — that would add another 8% — contributions on profits, and gross revenues and a recently created contribution on financial transactions — Contribuição Provisória sobre Movimentação Financeira (CPMF) —, are being considered.

Even with extremely high taxes the social insurance system has been running on a cash deficit since 1994 which, by the end of 1999, reached a level of 1% of the GDP.

[17] Although, theoretically all social security revenues should converge to a Unified Social Security Budget since 1994 wage levied contributions have been channeled to social insurance, whereas contributions on profits and gross revenues have been directed to health and social assistance.
[18] Includes a variable contribution of 1%, 2% or 3% (dependent on sectorial activity risk) contribution for workmen's compensation program.

There are many causes for the problem. As contributions are very high and enforcement not effective, only half of the active labor force has a formal work relationship. Even within the formal sector of the economy, it is estimated that evasion is on the order of one third of potential social insurance revenues on payroll. From the expenditures standpoint there is ample evidence of fraud and abuse, especially in the area of disability benefits.

As seen before, retirement age for seniority pensions are extremely low; roughly half of the men and over 70% of the women who retired because of length of service are younger than 55 years of age at the date of their retirement. Replacement rates for the majority of the insured is very close to 100%, even for survivor's benefits. One of the possible consequences is that, for the majority, there are no incentives to belong to pension funds.

Benefits were calculated using the last best 36 contributions over a period of 48 months.[19] This made the scheme very costly and also regressive, since the well off are exactly the ones that experiment social mobility over their labor cycle.

Minimum social insurance and social assistance benefits are linked to minimum wage. More than 80% of the beneficiaries earn a minimum wage benefit value but only 14% of contributors pay their contribution on a minimum wage. As a result there is a huge social insurance deficit generated each time the minimum wage is adjusted due to inflation.

2.2 - Private Schemes

The coverage of private pension funds is still low in Brazil. From a total population of over 165 million people, the coverage is limited to an estimated 6.3 million people as follows:[20]

- active participants: 1.61 million;
- dependants: 4.35 million; and
- beneficiaries (assisted): 0.365 million.

There are 362 authorized pension funds in the country (as of February, 2000). Most of the early pension funds were linked to State owned enterprises, but all the new ones have been sponsored by private companies. They are both single-company and multi-company sponsored plans.

Most of the old pension funds are of the defined benefit type, with benefit values calculated as to complement the official system benefits, up to the full before-

[19] Recent legislation has changed this provision. An increasing number of periods will be used for benefit calculation, as much as the contributor's total working years.
[20] Source: Abrapp (2000).

retirement salary. The new plans are predominately of the defined contribution type.

Contributions vary according to each plan, but it is very common that both employer and employee contribute.

Vesting and portability are very limited. If a participant leaves the company prior to retirement, the present law allows just the reimbursement of his own capitalized contributions up to the date, but not the employer’s contributions. There are no schemes of differed payment of accrued benefits.

Actuarial calculations and periodical revisions are required for all plans. The law specifies a minimum actuarial rate of 6% (real). Other criteria, such as salary, increases salaries, indexation of benefits, mortality tables, etc. are usually left to the professional responsability of the actuary.

The Federal Government — through SPC (Complementary Pension Secretary) part of the Ministry of Social Security — regulates and supervises the funds. Investments are also supervised by the Central Bank.

The investment portfolio is strictly regulated in terms of maximum limits allowable for each type of application (stocks, bonds, real estate, etc.). Overseas investment is not allowed.

Funds are in some cases directly administered by the pension fund and in some others by contracted asset managers.

The Brazilian Pension Fund System accumulated assets that are worth R$ 115,1 billion, what is roughly equivalent to U$ 62.2 billion.[21] In terms of GDP percentage this totals about 11.4%.[22]

Pension fund contributions are tax deductible from both the personnal and corporate income taxes. As for the fiscal treatment of pension fund investment there is still some controversy; the pension fund industry argues for a complete tax exemption status whereas the fiscal authorities question this position. As a matter of fact, the question has been submitted to the courts but it has not been solved as yet.

The open pension plans are usually linked to financial institutions, such as banks and insurance companies. The market is highly concentrated with half of the participants and assets belonging to a single fund (Bradesco Previdência). The older defined contribution plans had a minimum actuarial rate of 6% (real).

[21] Source: Abrapp (2000); exchange rate used for calculations is R$ 1.85/U$1.00.
[22] Based on a GDP of R$ 1,010 billion, roughly equivalent to U$ 546 billion. It should be noted, however, that all dollar figures have the problem of incorporating the strong recent devaluation of the national currency — the Real. If an Internal Purchasing Power Index of 0.74 is used for Brazil (World Bank, 1998), the figure would be a GDP of 1,010/0.74 = U$ 738 billion.

The open institutions have now assets that are worth around 1.5%[23] of the GDP, but these have been growing at a very fast pace since the recent creation of Plano Gerador de Benefícios Livres (PGBL), an individual capitalized savings scheme similar to the United States 401(k) Plans. These plans are very flexible and there is no minimum return required.

The open system is supervised by the Ministry of Finance, through the Superintendence of Private Insurance. The Central Bank also monitors the investments of these funds.

The major problems of the closed systems — the majority of them addressed by recent legislation sent by the government to Congress — are:

a) inadequate portability and vesting provisions;

b) lack of flexibility in plan arrangements;

c) undefined fiscal treatment for investment revenues;

d) minimum actuarial real return fixed in 6% per year;

e) inadequate transparency of operations and other governance issues; and

f) high administration costs.

As for the open institutions, the above problem items *c* through *f* apply. As PGBL capitalized funds can be drawn at various conditions in relatively short periods of time, they could be more adequately classified as a savings scheme, rather than pension arrangements.

3 - THE REFORMS

Given the bleak outlook for both RGPS and RJU systems, one of the priorities of President Fernando Henrique was a constitutional reform that could open the way for the necessary adjustments. As a consequence a bill containing a Constitutional Amendment (CA) was sent to Congress in 1995 with the general purpose of taking out of the Constitution most of the detailed provisions regarding the social security system. It had been successful, further ordinary law proposals would be submitted with these more detailed provisions.

Unfortunately the CA proposal experienced a long and turbulent path in Congress and the Constitutional Amendment approved at the end of 1998 was relatively modest as compared to the original government intention. The main adjustments approved were:

[23] Source: Annap (for first semester/2000).

a) For RJU

- An age limit of 60 (men) and 55 (women) for length of service retirement, applicable only to new public servants, e.g., for those admitted after the approval of the CA. For those already in the labor force, a transitional scheme was established: Minimum of 53 (m) and 48 (w), with an additional working time ("toll") of 20% of the time needed for eligibility for full length of service retirement on the date of the approval of the CA.[24]

- The possibility of limiting benefits of new public servants to the same maximum value of RGPS (10 minimum wages) with the full salary guaranteed by a compulsory Pension Fund. In other words, federal, state and local governments can now create their own pension funds. In turn, these pension funds can be capitalized through the use of government owned assets, privatization revenues, etc.

- The elimination of special retirement for university professors.[25]

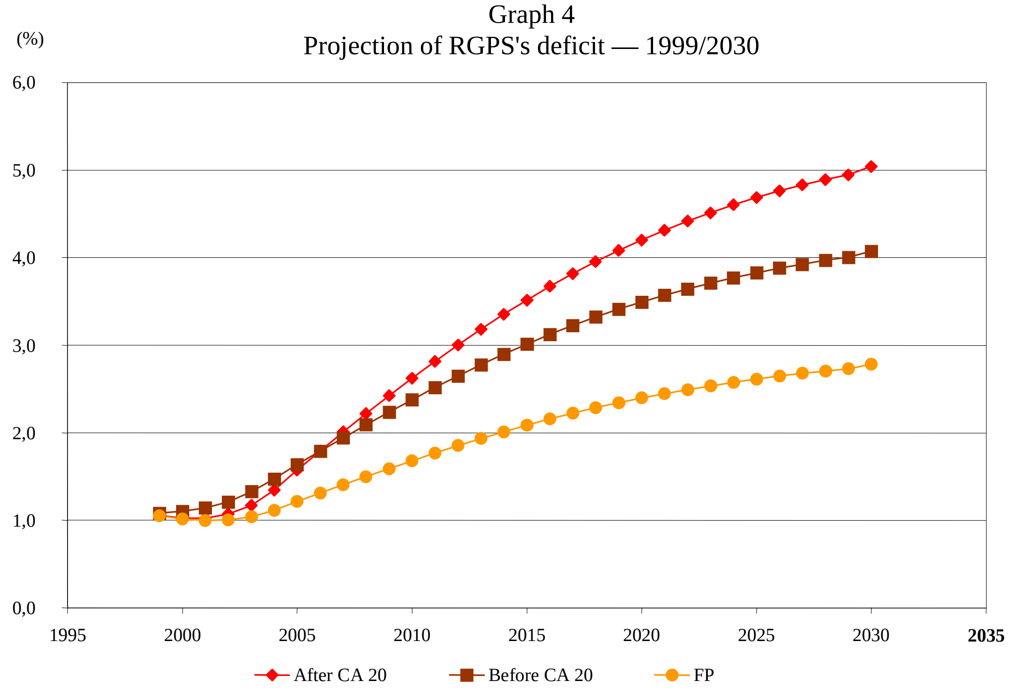
b) For RGPS

Unfortunately, the government failed to get RGPS the same age limits it was able to impose on RJU.[26] The only significant change was the removal of the benefit formula from the constitutional text, allowing thus further changes through ordinary law. Doing away with proportional length of service (and increasing expenses).

Based on the new Constitutional provisions government approved in Congress a new benefit formula that links length of service benefit values to: *a*) number of years of contribution; *b*) age at the date of retirement; and *c*) life expectancy at the date of retirement. This pseudo actuarial formula became known as "fator previdenciário". The next five years will be a transitional phase. Although the initial argument was that this formula would induce people to postpone their retirement, this is not probable given the high rates Brazilians use to discount future values. The most likely result is that most of them will take the loss (instead of postponing retirement date), that are on the average –40%. Graph 4 shows the projections up to 2030 for three options: *a*) before CA; *b*) after CA but without "fator previdenciário"; and *c*) after CA but with the effect of "fator previdenciário".

[24] For full benefits. For proportional benefit, the "toll" is 40%.
[25] Also valid for private sector university professors.
[26] A Constitutional Amendment has a very difficult voting process. To be approved it requires a 2/3 majority in two separate voting sessions in both, the House and the Senate. During one of these sessions, the age limit for RGPS was deleted from the CA.

Graph 4
Projection of RGPS's deficit — 1999/2030



c) For Private Schemes

The CA mandated government to send Congress Complementary Law proposals[27] reformulating the system. In this sense, it is important to note that it was an elevation of "status" from the private schemes in terms of legal hierarchy in Brazil. These proposals are in the final phase of approval by Congress and introduce several very important innovations such as:

- definition of a precise fiscal treatment for pension funds (contributions and investment will be tax free; benefits will be taxed as income when they are withdrawn);

- increased portability and vesting rights, including the possibility of deferred benefit schemes;

- flexibility of plan arrangements, allowing for multi-plan and or multi-sponsored institutions;

- increase in the scope of organizations allowed to create / operate pension funds, to include professional associations, labor unions, etc;

- new transparency, governance and reporting standards.

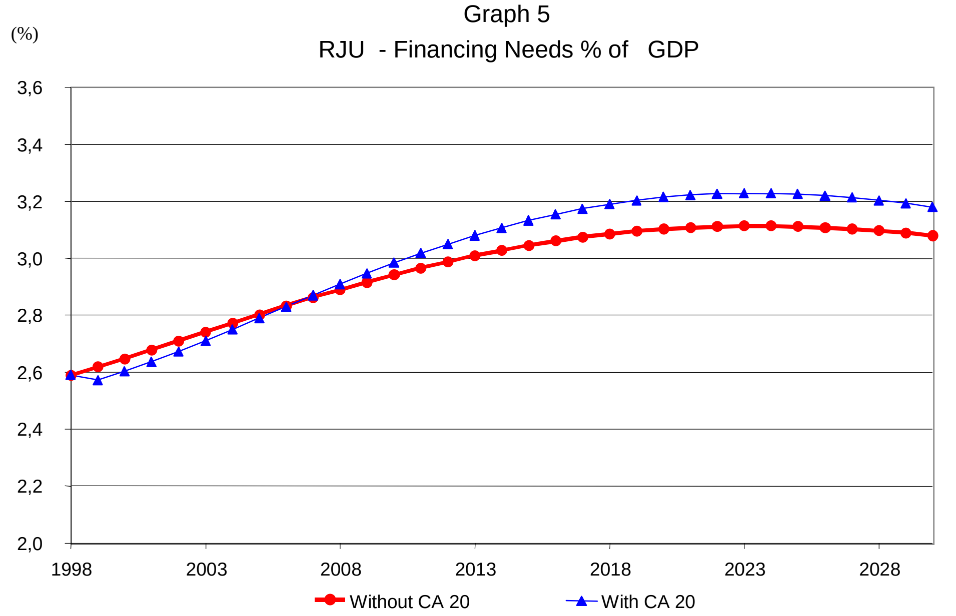
[27] Complementary Law proposals 8, 9 and 10.

These measures are expected to boost the development of the pension system during the following years.

Graph 5 shows the projections considering the reforms in the RJU system.

Graph 5

RJU - Financing Needs % of GDP



The first striking fact that can be observed by Graphs 4 and 5 is that, in the long run, the CA causes a greater expenditure that the one projected if nothing was done. In other words, the small savings attained during the first years will be more than compensated by much larger deficits as time passes. The explanation is straightforward. The CA causing people to delay their benefit by five years eliminated proportional length of service retirement. It should be noted, however, that they will now retire with full benefit value, instead of the previous 70% proportional retirement value,[28] in other words, an increase of more than 42% in the average benefit's value.

The second point to be made is that the social security adjustment process is far from an end, since the reforms were not able to eliminate the deficits to a manageable size. It should be noted, however, that steps taken so far have the unquestionable merit of tackling the problem through the expenditure side — not simply by increasing taxes.

[28] The majority of the people who use length of service retirement used the anticipated proportional retirement.

BIBLIOGRAPHY

ABRAPP. *Consolidado Estatístico*, Fev. 2000.

BELTRÃO, K. I., OLIVEIRA, F. E. B., SOUZA, M. C. *et alii*. *MAPS: uma versão amigável do modelo demográfico-atuarial de projeções e simulações de reformas previdenciárias do IPEA/IBGE*. Rio de Janeiro: IPEA, 2000 (Seminários Dimac, 7).

BELTRÃO, K. I., PASINATO, M. T. M., MENDONÇA, J. L. O. *et alii*. *RJU: modelo de simulação de longo prazo das receitas e despesas do funcionalismo público.* Rio de Janeiro: IPEA, [s.d].

BRASIL. Lei n. 5.694, de 23 de agosto de 1971. Dá nova redação ao item I do parágrafo 4º do art. 64 da lei n. 3.807, de 26 de agosto de 1960, que dispõe sobre a Lei Orgânica da Previdência Social. *Diário Oficial da República Federativa do Brasil*, Brasília, 23 de agosto de 1971.

__________. Lei n. 8.112, de 11 de dezembro de 1990. Dispõe sobre o regime jurídico dos servidores civis da União, das autarquias e das fundações públicas federais, bem como os respectivos diplomas legais que a modificaram. *Diário Oficial da República Federativa do Brasil*, Brasília, 12 de dezembro de 1990.

__________. *Constituição da República Federativa do Brasil.* Brasília: Câmara dos Deputados, 1998.

OLIVEIRA, F. E. B., BELTRÃO, K. I., DAVID, A. C. de A. *Previdência, poupança e crescimento econômico: interações e perspectivas*. Rio de Janeiro: IPEA, 1998 (Texto para Discussão, 607).

OLIVEIRA, F. E. B. de *et alii*. Fontes de financiamento da seguridade social brasileira. Rio de Janeiro: IPEA, 1994 (Texto para Discussão, 342).

SEAP/MOG. *Boletim Estatístico de Pessoal*, Abr. 1999.

WORD BANK. *World Development Indicators*. Washington, D. C., 1998.

Ipea – Institute for Applied Economic Research

PUBLISHING DEPARTMENT

Coordination
Cláudio Passos de Oliveira

Supervision
Everson da Silva Moura
Reginaldo da Silva Domingos

Typesetting
Bernar José Vieira
Cristiano Ferreira de Araújo
Daniella Silva Nogueira
Danilo Leite de Macedo Tavares
Diego André Souza Santos
Jeovah Herculano Szervinsk Junior
Leonardo Hideki Higa

Cover design
Luís Cláudio Cardoso da Silva

Graphic design
Renato Rodrigues Buenos

The manuscripts in languages other than Portuguese published herein have not been proofread.

Ipea Bookstore

SBS – Quadra 1 – Bloco J – Ed. BNDES, Térreo
70076-900 – Brasília – DF
Brazil
Tel.: + 55 (61) 3315 5336
E-mail: livraria@ipea.gov.br

Composed in Adobe Garamond 11/13.2 (text)
Frutiger 47 (headings, graphs and tables)
Brasília – DF – Brazil

Ipea's mission

Enhance public policies that are essential to Brazilian development by producing and disseminating knowledge and by advising the state in its strategic decisions.

ISSN 1415-4765

ipea Institute for Applied Economic Research

Secretariat of Strategic Affairs

BRAZILIAN GOVERNMENT BRASIL