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SOCIAL SECURITY REFORM IN BRAZIL: ACHIEVEMENTS AND REMAINING CHALLENGES

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By
Fabio Giambiagi and Luiz de Mello

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ABSTRACT/RÉSUMÉ

Social security reform in Brazil: Achievements and remaining challenges

This paper reviews the main elements of social security reform in Brazil since 1998 and discusses areas where further policy action is yet to be taken to ensure the sustainability of the social-security system over time. Outlays on pensions paid to private-sector workers have risen as a result of population ageing and the increase in the value of the minimum wage in real terms, to which the minimum pension is linked. Some features of existing social protection programmes, including means-tested old-age and disability-related benefits, reduce the incentives facing workers to seek social security coverage. At the same time, an expansion of the base of contributions to social security has been constrained by widespread labour informality. Further reform will therefore need to focus on options for containing the rise in social security spending while tackling labour informality so as to broaden the base of contributions.

This working paper relates to the 2005 and 2006 *Economic Surveys of Brazil* (www.oecd.org/eco/surveys/brazil).

JEL classification: H55, I38, J32
Key words: Brazil, social security reform, social protection

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Réforme du système de retraite au Brésil : Réussites et défis

Ce document analyse les réformes du système de retraite brésilien depuis 1998 et propose des éléments d'une réforme complémentaire qui pourraient être mise en place pour assurer la soutenabilité du système de retraite dans la durée. Les dépenses publiques des pensions accordées aux travailleurs retraités du secteur privé ont augmenté dû au vieillissement de la population et à l'accroissement de la valeur du salaire minimum en termes réels, auquel la pension minimale est indexée. Certains éléments des programmes de protection sociale existants, y compris les transferts de revenu aux personnes âgées et aux invalides, n'incitent pas les travailleurs à être couverts par la sécurité sociale. En même temps, l'informalité très répandue des marchés du travail constitue une contrainte à l'expansion de la recette des cotisations sociales. Par conséquent, des réformes complémentaires devront mettre en oeuvre des dispositifs visant la contention de l'accroissement des dépenses publiques des pensions et à la réduction de l'informalité du travail de façon à augmenter la recette des cotisations sociales.

Ce Document de travail se rapporte aux *Études économiques du Brésil* 2005 et 2006 (www.oecd.org/eco/etudes/bresil).

JEL classification : E30, E50, E60
Mots clés : Brésil, réforme du système de retraite, protection sociale

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Social security reform in Brazil: Achievements and remaining challenges

Fabio Giambiagi and Luiz de Mello[1]

1. Introduction

Brazil's social security system – comprising separate regimes for private-sector workers and civil servants – has undergone a series of reforms since the late 1990s. Parametric changes were introduced in the regime for private-sector workers in 1998 to create incentives for the postponement of retirement on the basis of length of contribution. With regard to the regime for civil servants, a minim120retirement age was introduced in 2003, together with revenue-raising measures, which include the taxation of pension benefits. Notwithstanding these reforms, structural imbalances remain in the social security system: the deficit of the regime for private-sector workers is projected to rise from an estimated 2.2% of GDP in 2006 to about 2.8% of GDP in 2025 (Ministry of Social Security, 2006). Further reform will therefore be needed to ensure the sustainability of the social-security system over the longer term, especially by eliminating the pressures that have arisen due to the ratcheting-up of expenditure on pensions over the years.

The need to ensure financial sustainability is not the only challenge facing the Brazilian social-security system. Despite its much younger population, Brazil already has the same level of public expenditure on pensions (private- and public-sector workers) in relation to GDP as countries with much older populations (OECD, 2005a). This imposes costs on society. For example, employers' social security contributions are high, increasing labour costs and providing incentives for informality. Also, the gradual increase in government outlays on pensions continues to pose a challenge for fiscal adjustment, which has so far been based predominantly on revenue hikes, rather than a reduction in current expenditure. Further pension reform is therefore essential for improving the quality and long-term sustainability of Brazil's ongoing fiscal adjustment. Moreover, the design of some existing social protection programmes, including means-tested income transfers to the elderly and the disabled, as well as severance insurance though FGTS (discussed below), create disincentives for social security coverage. This leads to a persistence of informality in the labour market and, consequently, prevents the expansion of the base of contributions for social security.

This paper's main recommendations for reform are as follows:

- With regard to the social-security regime for private-sector workers, a minimum retirement age should be introduced for retirement on the basis of length of contribution, because the average retirement age remains low. The gap that currently exists between the retirement age of males

1. Fabio Giambiagi is at IPEA, Ministry of Planning, and Luiz de Mello is Head of the Brazil/South America Desk of the Economics Department of the OECD. The authors want to thank, without implicating, Andrew Dean, Peter Jarrett, Val Koromzay, Diego Moccero and Monika Queisser for helpful comments and discussions but remain responsible for any remaining errors and omissions. Special thanks are due to Anne Legendre for research assistance and Mee-Lan Frank for excellent technical assistance.

and females on the basis of old age could be narrowed over time and eventually eliminated.[2] Also, the link between the minimum pension and the minimum wage should be severed, although the purchasing power of the minimum pension could be preserved through the introduction of some type of indexation mechanism, preferably using a price index that best reflects the consumption basket of pensioners (*i.e.* INPC).[3] Moreover, the exemptions and lower contribution rates enjoyed by workers in several sectors (education, health care, social assistance and philanthropic institutions, and sports clubs, among others) should be abolished. Finally, the period of contribution required for old-age pensions paid to male urban workers aged 65 (60 for women) should be increased from its current level of 15 years.

- With regard to the existing social-assistance programmes, the age at which individuals are entitled to old-age income support (granted under LOAS) should be gradually raised. It was lowered in 2003 from 67 years to 65 years, which is the retirement age for old-age pensions in the regime for private-sector workers, discouraging enrolment. This trend runs counter to worldwide pension reform practices.

- Reform of the social-security regime for civil servants, which was legislated in 2003, is yet to be fully implemented. Action should therefore be taken on several fronts. The unification of the pension regimes for federal, state and municipal civil servants would be welcome to promote economies of scale and improve governance. It is also important to ensure that these complementary pension funds be subject to the same prudential regulations and operational rules as those for private-sector workers. Consistent with international trends (Box 1), standardising entitlements between the regimes for private- and public-sector workers would make the overall social-security system more equitable and the labour market more flexible.

This paper is structured as follows. Section 2 presents an overview of the social-security systems for private-sector workers and civil servants, and summarises the main elements of recent reforms. Section 3 discusses trends in the social-security system's financial balance, revenue and expenditures, as well as the main issues calling for further reform. Section 4 proposes policy options for reform.

2. The Brazilian social-security system: An overview

The current system and recent reforms

Brazil's social-security system comprises two main regimes: one for private-sector workers (RGPS) and another for the civil service (RPPS), including separate regimes for - federal government (RJU), the states and the municipalities. Reform has so far focused on streamlining the system's "first pillar" (mandatory, pay-as-you-go, publicly-provided regime) and developing a "third pillar" of voluntary, complementary, personal saving schemes, without nevertheless creating a "second pillar" of mandatory individual saving plans (OECD, 2006). The alternative of introducing a mandatory fully-funded regime to

2. In the OECD area, retirement ages differ for men and women only in Austria and Greece.

3. In pay-as-you-go regimes, the indexation of pensions to past inflation may contribute to improving fiscal sustainability if wages, and therefore contributions, rise faster than the consumer price index. This has been the case of the United Kingdom, where the replacement rate has been declining steadily from 22% in 1981 to less than 17% in 1998. In other OECD countries, such as Finland, Italy, and the Netherlands, pension indexation has also contributed to a reduction in public spending on pensions.

Box 1. **Reforming social-security regimes for civil servants: the experience of OECD countries**[1]

Recent reforms in several OECD countries have aimed at unifying social-security regimes for private- and public-sector workers. In some countries (Finland, Ireland, Japan, Netherlands, Norway, Sweden, Switzerland, and United Kingdom), civil servants are affiliated to a basic regime, from which they receive a basic pension, and contribute to a complementary pension scheme. For example, in the Netherlands, civil servants aged 65 and with 40 years of contribution have received a basic pension from the national regime since 1996, and have contributed on a mandatory basis to a defined-benefit complementary pension fund, which pays pensions equivalent to 70% of the civil servant's last salary. Sweden reformed its pension system in 1997, merging the regimes for public- and private-sector workers and setting up defined-benefit complementary pension funds, to which contributions are mandatory. The benefits paid by these funds are at most 65% of the average salary over the last 5 years of work, the retirement age is 65 years, and 30 years of contribution is required.

In a number of countries, there is a separate regime for civil servants, but entitlements have been standardised in relation to the regime for private-sector workers. In some cases (Greece, Italy, Spain, Mexico, and United States), pensions have been capped and complementary pension schemes have been created. In the United States, the defined-benefit regime for federal civil servants was reformed in 1982, and new entrants have been enrolled in the general regime. In addition, a defined-benefit plan was created, paying a retirement benefit of up to 30% of the civil servant's last 3 years' average salary, with retirement age at 57 years. A defined-contribution plan was also set up, and those civil servants in active service at the time of the reform were given the option of joining the new regime. Because the take-up rate was low, at less than 3%, both systems coexist to date, each one with approximately one-half of the federal government labour force in activity.

In other countries, reforms have lagged behind, but are under way. Separate regimes for civil servants still exist in Austria, Belgium, Canada, France, Germany, Luxembourg, Portugal and Turkey, and entitlements still differ between public- and private-sector workers. In Germany, retirement benefits are paid usually after 65 years of age and are equivalent to up to 75% of the civil servant's average salary over the last two years of service, provided that he/she has at least 40 years of service. Changes since 1998 have focused on trimming benefit entitlements. Recent reform in France has raised the minimum contribution time from 37.5 years to 40 years and changed the benefit formula from 75% of the average salary of the last 5 months to 75% of the average salary of the civil servant's last 25 years of service. These changes, which have unified the rules for public- and private-sector workers, will be implemented gradually until 2008 and the minimum retirement age will be raised from 60 to 62 years.

1. This box draws from OECD (2005a).

replace the current pay-as-you-go system was discussed extensively in the late 1990s, but the transition costs were considered exceedingly high (OECD, 2005a).[4] In contrast, many Latin American countries have instead emulated the Chilean model of privatisation of social security, and/or put in place some form of mandatory, fully-funded social security scheme.[5]

4. These transition costs were estimated by the World Bank, IPEA (Ministry of Planning and Budget) and the Getúlio Vargas Fundation between 1995 and 1997, and by ECLAC in 1999, at between about 190 and 250% of GDP.

5. Chile pioneered the structural reform process in 1981, replacing the pay-as-you-go system by privately-run individual saving accounts (OECD, 2003, 2005b). During the 1990s, Peru (1992-93), Colombia (1993-94), Bolivia (1997), and Mexico (1995-97) implemented comparable reforms. However, the public system was not phased out for those currently in the civil service. Reforms in Argentina (1994) and Uruguay (1995-96) consisted of setting up mixed systems including a reformed pay-as-you-go system and private individual saving accounts.

Since 1998, reform of the regime for private-sector workers (RGPS) has focused on gradually tightening eligibility conditions, reducing replacement rates and increasing the share of population covered by social security. More recently, reform efforts have focused on the social-security regimes for civil servants (all levels of government) by standardising entitlements for entrants and introducing parametric changes for workers currently in active service.

The social-security regime for private-sector workers

Currently, private-sector workers can retire under the RGPS regime on the basis of: *i*) old age (*aposentadoria por idade*) at 65 years for men and 60 years for women, provided that they have contributed to social security for at least 15 years,[6] *ii*) length of contribution (*aposentadoria por tempo de contribuição*), provided that they have contributed to social security for 35 years for men and 30 years for women, in which case there is no minimum retirement age,[7] and *iii*) disability, which is not constrained by length of contribution or age. Pension benefits are capped so as to encourage the development of complementary pension arrangements: contributions to social security are calculated based on earnings up to a ceiling, above which contributions are made on a voluntary basis to a personal saving scheme.

The main parametric change introduced in the RGPS regime in the 1998 reform was the "social security factor" (*fator previdenciário*). Until then, the value of pensions had been calculated as the average of earnings (*salário de contribução*) during the 36 months prior to retirement. Since the reform, pension benefits have been calculated by multiplying the average of the 80% the highest earnings throughout the working life (for current workers the reference period starts in July 1994) by a parameter that depends on age at retirement, length of contribution and life expectancy at retirement.[8] This parametric change in the formula for calculating pension benefits introduced a penalty for early retirement on the basis of length of contribution, because it made the replacement rate an increasing function of the retirement age.

The social-security regime for civil servants

The 1998 reform also introduced parametric changes in the regime for public-sector workers (RPPS). A minimum retirement age was established for both employees in active service (53 for men and 48 for women) and new entrants (60 for men and 55 for women). A lower retirement age, set in the 1988 Constitution, was maintained for primary- and high-school teachers, who can retire 5 years earlier than other civil servants.

A more comprehensive reform was enacted in 2003, setting different rules for public-sector employees in active service and new entrants into the civil service. In the case of the employees in active service, the 2003 reform *i*) unified the employee's contribution requirement at a minimum rate of 11% on

6. In fact, the period of contribution is currently lower than 15 years. A minimum 15-year period of contributions was introduced in 1991 for new entrants into RGPS. However, for those already in the system, the period of contribution was raised by 6 months per year from an initial 5 years. As a result, a worker who was in already contributing to social security in 1991 needs to contribute in 2006 for 12.5 years to be able to retire on the basis of old age. The 15-year rule will be in place in 2011 for those workers already in the system at the time of the 1991 reform.

7. It is actually possible to retire early on the basis of length of contribution. In this case, the pension benefit is calculated on a *pro-rata* basis, provided that the beneficiary has contributed to social security for at least 30 years (25 for women) and has 53 years of age (48 for women).

8. The life expectancy parameter is adjusted annually according to the mortality table published by the Statistics Bureau (IBGE). See Delgado *et al.* (2006) for more information.

earnings exceeding a pre-determined cap for civil servants of all levels of government;[9] *ii*) set a retirement age of 60 years for men and 55 years for women, with a reduction of 5% in the value of pensions for each year of early retirement; *iii*) reduced the portion of survivor's pensions exceeding the cap by 30%;[10] *iv*) exempted from civil servants who postpone retirement the 11% contribution rate; and *v*) applied the 11% employee's contribution rate to the pension benefits of retired civil servants exceeding the cap (from August 2004). In 2004, ancillary legislation introduced a 2-to-1 split in contributions between the employer (government) and the civil servants, and a minimum contribution rate for civil servants in the states and municipalities at a level that is equal to that of the federal government.

For new entrants, the reform was more ambitious and called for: *i*) calculation of pension benefits based on the average salary over the civil servant's entire working life, including contributions under RGPS (on a *pro rata* basis); *ii*) indexation of pension benefits to past inflation, rather than wages; and *iii*) introduction of the RGPS ceiling for pension benefits (mentioned above), pending legislation on the implementation of complementary pension funds for civil servants. The impact of the reform on the regime's actuarial balance will be modest, given its focus on entitlements for new entrants into the civil service. The cumulative savings to the budget over the next 30 years is estimated at 6% of GDP (Zylberstajn *et al.*, 2006).

3. Trends and main issues

There are a number of issues that will need to be taken into account in the design of further social security reform. An analysis of trends in the financial balance of the social-security system suggests that the benefits of reform could be maximised by focusing attention on the regime for private-sector workers, whose deficit is trending upwards.

Financial sustainability: Trends in revenue and expenditure

The RGPS regime, whose deficit has risen steadily over time, despite reforms, is the main source of financial imbalance in the social-security system as a whole (Table 1). By contrast, the deficits of the RGPS regime attributable to the payment of rural pensions – which is a benefit of a predominantly non-contributory nature – and that of RPPS seem to have stabilised, albeit at a still relatively high level in relation to GDP. Another consideration is that, although the deficits of both RGPS and RJU are of comparable magnitudes, the former regime has nearly 23 million beneficiaries, while the latter accounts for only 1 million pensioners. This suggests a sizeable discrepancy in the average value of benefits across these social-security regimes, which reflects not only the considerable, albeit narrowing, earnings differential between the private and the public sectors, but also the more generous retirement provisions currently in place in the civil service.

The surge in government outlays on pensions, which account for about one-third of federal primary expenditure, is the main culprit for the rising deficit of the social-security regime for private-sector workers. Not only has the number of beneficiaries increased as a result of population ageing, but also the value of benefits has risen in real terms, essentially due to the link between the minimum pension and the

9. The option of introducing different exemption thresholds for the federal and regional governments was considered but ruled unconstitutional by the Supreme Court.

10. To reduce resistance to the capping of pension benefits and to raise RGPS revenue in the short run, the option of raising the ceiling under RGPS to match the ceiling under RJU was considered. This measure, if implemented, would reduce the RGPS deficit in the short run, while raising it over the long run. It would also discourage investment in complementary pension funds, which is against international trends aiming at encouraging private saving through the development of the complementary pension industry.

Table 1. **Social security trends and indicators, 1999-2005**

	1999	2000	2001	2002	2003	2004	2005
Social security balance (in % of GDP)	-4.4	-4.6	-4.0	-4.2	-4.7	-4.5	-4.3
Private-sector regime (RGPS)	-1.0	-0.9	-1.1	-1.3	-1.7	-1.8	-1.9
Urban workers[1]	-1.0	-0.9	0.0	-0.2	-0.6	-0.7	-0.7
Rural workers	…	…	-1.1	-1.1	-1.1	-1.1	-1.2
Public-sector regime (RPPS)[2]	-3.4	-3.7	-2.9	-3.0	-3.0	-2.7	-2.4
Federal	-2.0	-1.9	-1.8	-1.7	-1.7	-1.7	-1.5
State governments	-1.4	-1.8	-1.1	-1.3	-1.2	-1.0	-0.9
Memorandum items:							
Revenue (in % of GDP)	5.8	5.7	6.7	6.9	6.6	6.9	7.3
Private-sector regime (RGPS)	5.0	5.1	5.2	5.3	5.2	5.3	5.6
Public-sector regime (RPPS)[2 3]	0.8	0.7	1.5	1.6	1.4	1.6	1.7
Federal	0.3	0.3	0.6	0.7	0.6	0.6	0.7
State governments	0.5	0.3	0.9	0.9	0.8	1.0	1.0
Expenditure (in % of GDP)	10.2	10.4	10.7	11.2	11.2	11.4	11.6
Private-sector regime (RGPS)	6.0	6.0	6.3	6.5	6.9	7.1	7.5
Public-sector regime (RPPS)[2 4]	4.2	4.4	4.4	4.6	4.4	4.3	4.1
Federal	2.4	2.2	2.3	2.4	2.3	2.3	2.2
State governments	1.8	2.2	2.1	2.3	2.0	2.0	1.9
Number of beneficiaries (in millions)	20.1	20.8	21.3	21.7	22.5	23.7	24.4
Private-sector regime (RGPS) pensioners	17.1	17.7	18.1	18.5	19.2	20.1	20.7
Length-of-contribution pensions	3.2	3.3	3.3	3.4	3.5	3.5	3.6
Old-age pensions	5.7	5.9	6.0	5.9	6.2	6.4	6.7
Other	8.3	8.6	8.8	9.2	9.6	10.1	10.4
Social-assistance beneficiaries (RMV, LOAS)	2.1	2.2	2.2	2.2	2.3	2.6	2.8
Public-sector regime[5]	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Average value of benefits (in *reais*)							
Private-sector regime (RGPS) pensions	265.9	288.2	324.3	363.1	436.3	473.3	495.8
Length-of-contribution pensions	569.5	602.6	652.3	717.4	849.1	909.3	925.7
Old-age pensions	163.1	179.2	209.2	232.8	280.7	304.8	332.5
Other	211.9	236.4	272.9	313.7	384.5	424.2	449.2
Social-assistance benefits (RMV, LOAS)	138.0	153.1	182.7	202.5	243.2	262.9	302.7
Average retirement age (in years, RGPS)							
Length-of-contribution pensions	51.7	52.0	52.3	53.1	53.4	53.4	53.3
Old-age pensions	60.2	60.2	60.2	60.2	61.1	61.2	60.7
Complementary pension funds (closed funds)							
Total assets (in % of GDP)	12.9	13.1	14.2	14.0	15.4	15.9	16.6
Share of fixed-income securities in portfolio	36.9	38.3	53.4	54.6	56.0	56.7	57.8

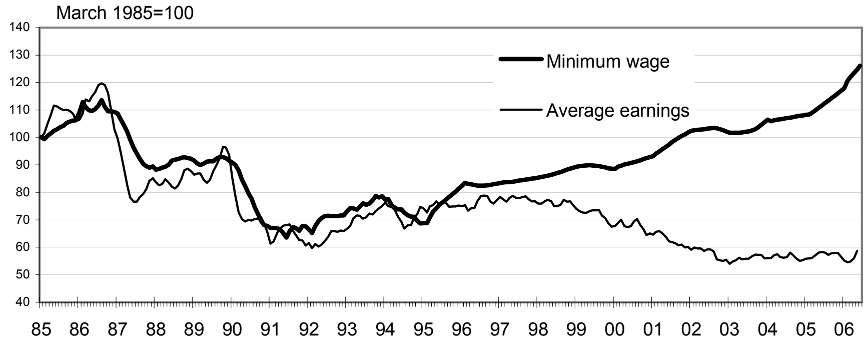
1. Includes rural pensions until 2000.
2. Excludes the municipal civil service.
3. Refers to potential revenue.
4. Refers to expenditure on pension benefits.
5. Refers to the federal government and excludes SOEs, mixed-ownership entities, the central bank and state-level civil servants whose salaries are paid through federal transfers.

Source: Ministry of Social Security and Assistance, Ministry of Planning and National Treasury.

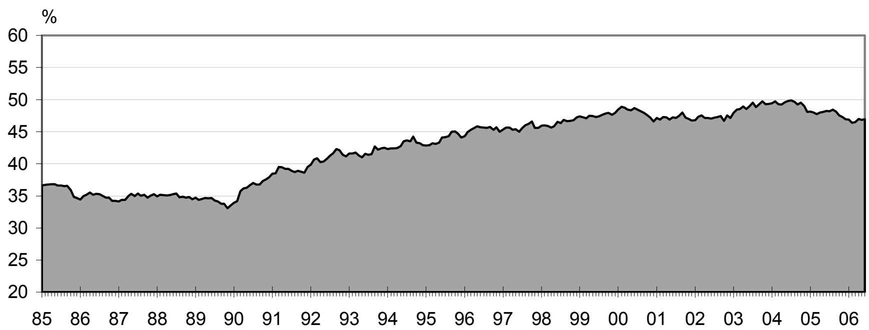
minimum wage (Figure 1). The minimum wage rose from about 14% of average earnings in 1995 to over one-quarter of average earnings in 2005. The government is required to set the minimum wage every year at a level that preserves its purchasing power, but has chosen to increase it in real terms, because there is no cap on increases in the minimum wage/pension above inflation. This, coupled with the downward

Figure 1. **Trends in the minimum wage, earnings and labour informality**

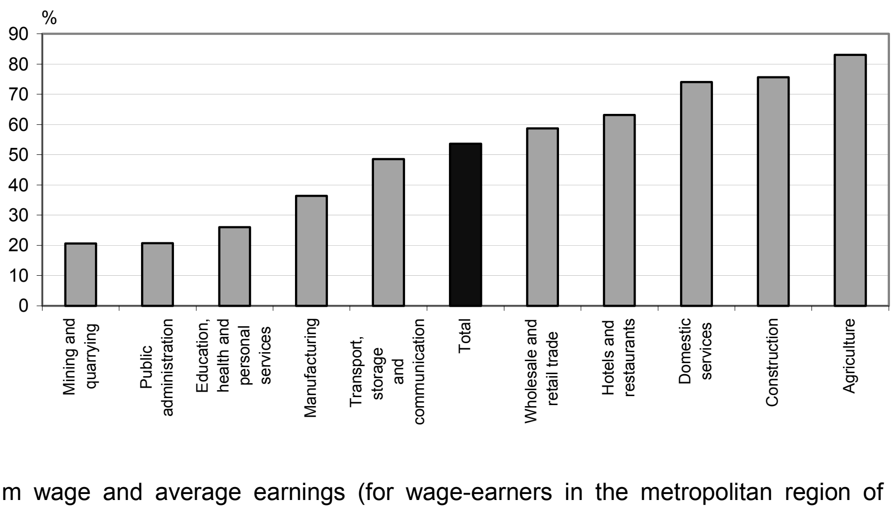
A. Trends in the minimum wage and earnings, 1985-2006[1]



B. Trends in informality, 1985-2006[2]



C. Informality by sector, 2004[3]



1. The minimum wage and average earnings (for wage-earners in the metropolitan region of São Paulo) are defined in real terms as 12-month moving averages.
2. Informality is defined as the ratio of own-account workers and those without social security coverage to the employed population. The series based on the old and new Monthly Employment Survey (IBGE-PME) methodologies (prior to March 2003) were spliced.
3. Based on the 2004 National Household Survey (IBGE-PNAD). Informality is defined as the ratio of own-account workers and those without social security coverage to the employed population, excluding employers and individuals without declared remuneration.

Source: IBGE (Monthly Employment Survey, PME; and National Household Survey, PNAD), IPEA and OECD calculations.

rigidity associated with the requirement to preserve its purchasing power, creates a ratcheting-up effect on outlays on pensions.[11] About two-thirds of pensions paid under the RGPS regime (including rural pensions) are equivalent to the minimum wage. Spending pressures also mounted because the average retirement age is still relatively low in Brazil in comparison with OECD countries OECD (2005a). This is due predominantly to the absence of a minimum age for retirement on the basis of length of contribution, which runs counter to international trends.

At the same time, rising labour informality over the 1990s and stagnant average real earnings, especially in the metropolitan areas, prevented an expansion of the base of contributions to social security in tandem with surging expenditure. An important consideration in this regard is that the design of some existing social assistance programmes creates disincentives for formality in labour relations (below). These distortions will need to be removed to ensure that the base of contributions to social security rises at a faster pace in the years to come, thus reducing the burden that the social-security system currently poses on the budget.

Relationship between social security and assistance: Incentives for coverage

There are two main social assistance (non-contributory) programmes: *i*) means-tested pensions equivalent to a minimum wage paid to the elderly (aged 65 years or above) and the disabled living in a household with per capita income less that one-quarter of the minimum wage (LOAS), and *ii*) pensions equivalent to the minimum wage paid to rural workers aged 60 years or above, regardless of household income. Until LOAS was promulgated in 1993, social protection for the elderly, introduced in 1974, had been conditional on a higher statutory age (70 years) and on social security coverage during the beneficiary's working life.[12]

The social-security system, including the social-assistance programmes, is a powerful instrument to alleviate poverty. Based on the 2001 National Household Survey (PNAD), for each person receiving a pension, it is estimated that 2.5 additional persons (mainly family members) benefit indirectly from the income transfer. Consistently, the incidence of poverty among the elderly in Brazil is lower than that of the average population. It is also among the lowest in Latin America.[13] Rural pensions, which are essentially non-contributory, are considered one of the best-targeted social programmes, and several studies have stressed their role in alleviating poverty (World Bank, 2000; Schwarzer and Querino, 2002). These social-assistance programmes also contribute to the continued decline in poverty in the poorer regions, particularly the North-East and in the North (Morley, 2003; Carvalho, 2001). More recent evidence based on the 2004 PNAD shows that income support for the elderly and disabled under LOAS had a strong impact on the incidence of poverty, whereas the good targeting of social assistance transfers, such as those programmes under the umbrella of *Bolsa Família*, played an important role in improving the distribution of income during 1995-2004 (Soares *et al.*, 2006).

However, despite their impact on poverty, the main social-security programmes currently in place are poor instruments to redistribute income. This is because they are predominantly contribution-financed and reserved for formal-sector workers, who tend to have above-average incomes. Most pension benefits

11. See de Mello and Moccero (2006) for more information and the effect these budgetary rigidities have on the behaviour of fiscal stance over the business cycle.

12. The statutory age was reduced from 67 years to 65 years in 2003. See Camarano (2006) and Medeiros *et al*. (2006) for more information.

13. See Gill, Packard, and Yermo (2004) for more information. Also, according to Barros, Mendonça, and Santos (1999), pensions and social-security benefits account for almost 60% of per capita household income in the case of poor individuals in the over-60 age group, against nearly 47% for the non-poor in the same age group.

are proportional to previous income and can be relatively high: the ceiling on the value of pensions paid under RGPS is more than twice the average wage in the formal sector. Because there is no minimum retirement age under the length-of-contribution rule, high-pension earners, which are also better-off and therefore live longer, end up receiving pensions for a longer period of time, putting a drain on the budget. Spending on the social-security regime for civil servants is even more regressive, because they benefit a better-off population and the regime's deficit is financed out of general taxation. But, to the extent that the on-going reforms contribute to reducing the current deficit under this regime, budget resources can be re-allocated to more progressive programmes, making overall federal social spending more pro-poor (OECD, 2005a).

The design of social-assistance programmes affects the incentives facing workers to obtain social-security coverage. The introduction of a number of income-support programmes since the early 1990s, especially for the elderly and the disabled (LOAS), has served the purpose of strengthening social safety nets, but eligibility is not conditional on formal employment, thus reducing the opportunity cost of labour informality. This is especially the case for minimum-wage earners, who can apply for an old-age assistance pension under LOAS (which is equal to the minimum wage) at age 65, instead of contributing to social security for at least 15 years to retire on the basis of old age, or for 35 years (30 years for females) to obtain an old-age pension on the basis of length of contribution. The age at which an elderly person is eligible for this type of social assistance was reduced from 70 years to 65 years over time, as noted above, which has aggravated the disincentive for formality. Moreover, access to publicly funded health care services is universal, hence unconditional on formal labour market status, which weakens the incentive for formality further, while undoubtedly serving a social objective.

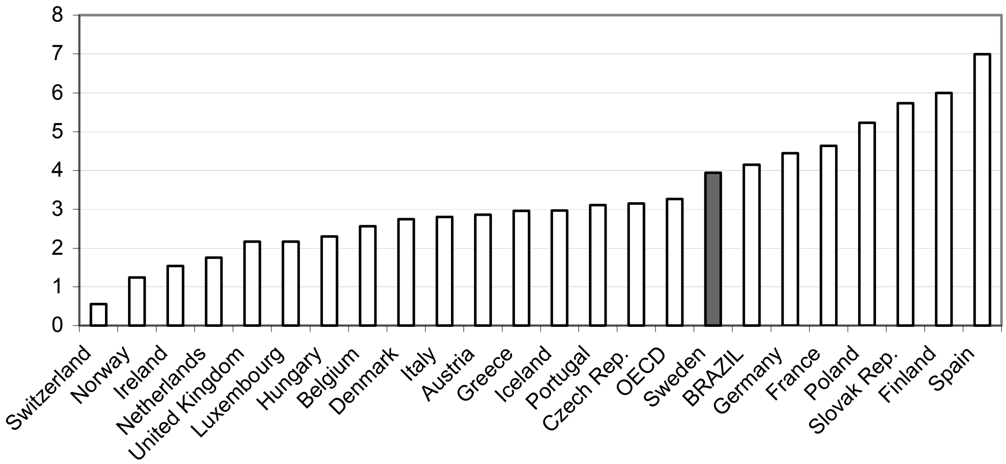
Another consideration is the relative value of social-assistance benefits and their implied withdrawal rate. Because the social-assistance benefit under LOAS has to be equal to the minimum pension, which is in turn equal to the minimum wage, the marginal withdrawal rate is high. A household with four members headed by a minimum-wage earner including an elderly or disabled person is eligible for a social-assistance benefit that doubles household income. However, since the promulgation of the Elderly Citizen's Charter (*Estatuto do Idoso*) in 2003, the value of social assistance benefits received by other elderly members in the household has not been included in household income for the purpose of means-testing under LOAS. These provisions affect LOAS benefit recipients on the base of old age, but not disability, therefore reducing the withdrawal rate.

Other social-security programmes also affect the incentives for formality in the labour market. This is the case of severance insurance under FGTS, which is a privately-run fund of individual accounts for formal-sector workers financed through employers' contributions (8% of employees' monthly earnings, plus a 0.5 percentage-point surcharge introduced in 2001). In the event of unfair dismissal, the balance accumulated during the employment contract is paid in full to the employee, together with an indemnity equal to 50% of his/her accumulated balance (including the 10 percentage-point surcharge introduced in 2001).

Although FGTS insurance is conditional on formal employment, it creates incentives for negotiated separations, because the indemnity due in the case of unfair dismissal is paid directly and in full by the employer to the employee (with the exception of the 10 percentage-point surcharge introduced in 2001), who may therefore negotiate with the employer for a voluntary quit to be declared as an unfair dismissal, while continuing to work informally.[14] Negotiated separations provide the employee with

14. To discourage abuse, a system is now in place to verify whether an individual is re-employed by the same firm within 12 months of a separation.

Figure 2. **Labour turnover:[1] Brazil and OECD countries, 2005**
In per cent



1. Calculated as min (admissions, separations) divided by employment and refers to the second quarter of 2005 for all countries.

Source: Ministry of Employment and Labour (CAGED Database) and European Labour Force Survey.

short-term gains to the detriment of longer-term benefits related to social-security coverage. Although other factors are at play, this incentive for negotiated separations explains at least in part the comparatively high rate of labour turnover in Brazil in relation to the OECD average (Figure 2).[15]

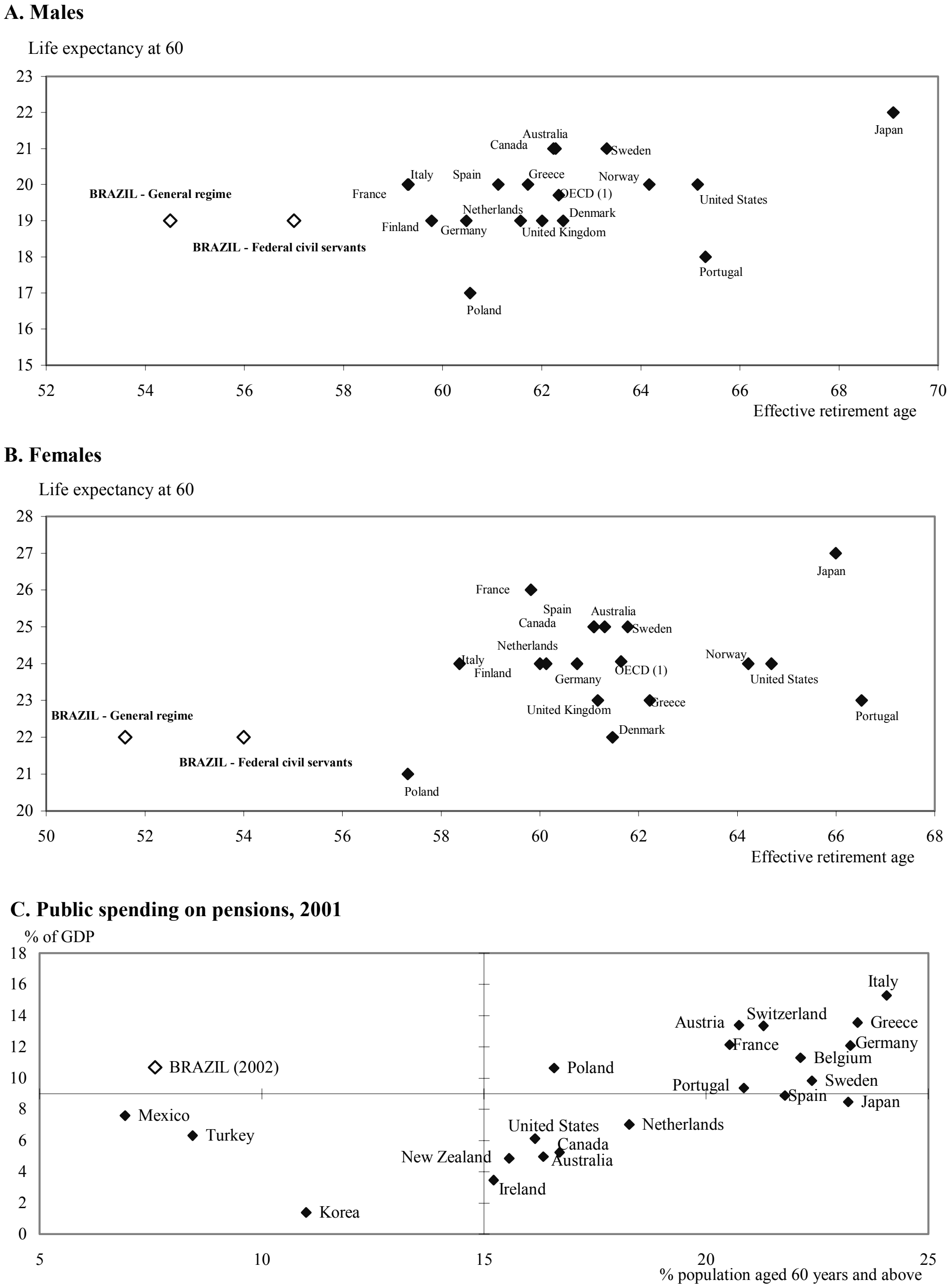
Trends in retirement age and preparedness for population ageing

Despite recent improvements, the average retirement age is still relatively low in Brazil in comparison with OECD countries. This is due predominantly to the absence of a statutory age for retirement on the basis of length of contribution under the RGPS regime. In most OECD countries, the minimum statutory retirement age is 65 years, with the exception of France, South Korea (60 years) and Norway (67 years). In Latin America, a minimum retirement age of 65 years for men (60 years for women) has been adopted in Argentina, Chile, Mexico and Peru. However, many countries allow early retirement. Despite Brazil's lower average retirement age, life expectancy at 60 years of age is comparable to the average of the OECD countries (and higher than the Eastern European Member countries) (Figure 3, Panels A and B). As a result, pension benefits are paid in Brazil for a period of about 25 years, while in the OECD countries retirees receive pensions for around 20 years, putting additional financial strain on the social-security system.

Therefore, Brazil already spends a high proportion of GDP on pensions for a country of its income level and with a relatively young population. It is natural for countries with a large elderly population to spend more on social security (upper right-hand side quadrant of Panel C) than those with a predominantly young population (lower left-hand side quadrant). The countries situated in the lower right-hand side quadrant have a large elderly population but low levels of spending on social security, because they either have reformed their systems or consider, often for cultural reasons, that responsibility

15. Empirical evidence suggests that the increase in 2001 of the severance indemnity paid to employees in the event of unfair dismissal was associated with a reduction in labour turnover (Gonzaga, 2003). See OECD (2006) for more information.

Figure 3. **Life expectancy and effective retirement age**



1. Average of the OECD countries shown in the chart. The data refers to 1993-98 for Germany, Greece, Italy, and Netherlands; 2004, for Brazil and 1994-99, for all other countries.

Source: Scherer (2001), Age of withdrawal from the labour market in OECD countries, Labour Market and Social Policy Occasional Papers, no. 49, Paris, and Ministries of Social Security, Budget and Planning; OECD Social Expenditure database, 2004.

in these matters lies with the individual rather than the State. Brazil is the only country in the upper left-hand side quadrant, which combines a relatively young population with high spending on social security. The country is therefore comparatively ill-prepared to cope with population ageing. This is important because the share in the population of people aged 60 years and above is expected to almost double during 2005-30, to 17% of the population.

Impact on public finances

The authorities estimate that, based on unchanged policies, the RGPS deficit will rise from an estimated 2.2% of GDP in 2006 to about 2.8% of GDP in 2025 (Ministry of Social Security, 2006). These projections assume that the value of pension and social assistance benefits is kept constant in real terms over the planning horizon and that GDP grows on average by 3.5% per year in real terms over the medium term.[16] In the case of social-assistance benefits (LOAS), current projections suggest that total outlays would stabilise over the longer term at around the current level of 0.5% of GDP. These projections assume that income distribution (*i.e.* the ratio of households with per capita income less than one-quarter of the minimum wage to the total) remains unchanged over the projection horizon.

The official projections imply that the ratcheting-up of outlays on pensions and the need to finance the social-security system's deficit will continue to crowd out spending on other government programmes. While federal spending on pensions has trended upwards, outlays on personnel appear to be contained (Figure 4). Expenditure on non-mandatory programmes, including capital outlays, has risen recently, but outlays on public investment have declined over the past 15 to 20 years. These trends underscore the need for improving the quality of the fiscal adjustment that will be required over the medium-to-longer term to put the public debt-to-GDP ratio on a sustained downward trajectory and to break the spend-and-tax cycle that has characterised fiscal adjustment to date.[17] Empirical evidence suggests that about two-thirds of changes in federal primary spending are offset by higher revenue over the longer term (de Mello, 2006).

4. Agenda for further reform

Introduce a minimum retirement age in the regime for private-sector workers

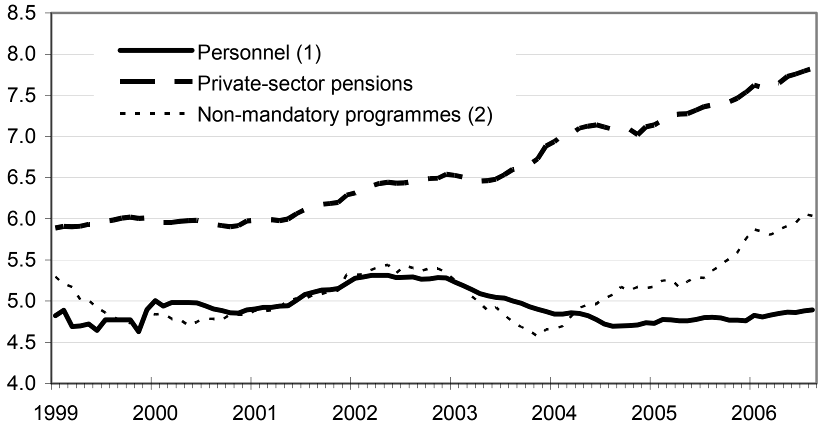
Notwithstanding its positive effect on the actuarial balance of the social-security system, the introduction of the "social security factor" in 1998 has so far been insufficient to close the gap in average age of retirement on the bases of length of contribution and old age. The average retirement age under the length-of-contribution modality rose from nearly 49 years in 1998 to about 53 years in 2005 for those retiring under the new rule, but remains much lower than the 65/60 years required for an old-age pension under the RGPS regime. It would therefore be desirable to introduce a minimum age requirement in the case of length-of-contribution pensions under RGPS similar to the one that is already in place for the new civil servants of 55 for women and 60 for men. The retirement age could subsequently be raised in a phased manner (*i.e.,* an additional year of age per calendar year over a period of five years, for example) to 65 years in 2020, as is currently the case in many countries.

16. These estimates are sensitive to variations in real GDP growth and the real value of pension benefits. To illustrate, based on the sensitivity analysis reported in OECD (2005a), if the economy grew instead by 4% per year over the projection horizon, the RGPS deficit would remain roughly at the current level. If, alternatively, the value of pensions were adjusted in line with GDP growth, rather than being kept constant in real terms, therefore incorporating productivity gains and hence increases in real earnings to pensions, the RGPS deficit would reach 7.5% of GDP by 2050 (with GDP rising by 3.5% per year).

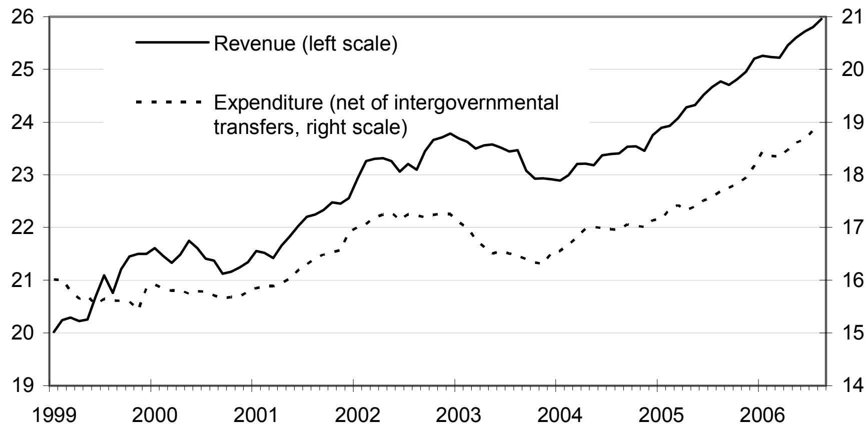
17. See Giambiagi *et al.* (2004) for more discussion.

Figure 4. **Trends in federal spending and revenue, 1999-2005**
Cumulative 12-month flows, in % of GDP

A. Selected spending items



B. Revenue and primary expenditure



1. Includes pensions to retired civil servants.
2. Refers to "Other OCCs" and includes selected mandatory spending on means-tested social assistance transfers to the elderly and the disabled (RMV and LOAS).

Source: National Treasury.

Reduce the retirement age gap between males and females

A lower retirement age for females than for males is often justified as a way of compensating working women for the need to reconcile household chores, child-raising and professional responsibilities. In Brazil, women are allowed to retire five years earlier than men on the basis of both old age (60 as opposed to 65 years) and length of contribution (30 as opposed to 35 years) under RGPS. However, in many countries where this distinction applies, there is no provision for retirement on the basis of length of contribution and the gender gap in statutory retirement age tends to be less than five years. As a result of these generous provisions, the average retirement age for females on the basis of length of contribution was

52 in on average after the introduction of the *fator previdenciário*, against 57 for males (Delgado *et al.*, 2006). Also, the number of men retiring on the basis of length of contribution rose by just under 5% a year since 1994, whereas the increase was nearly 10% in the case of women.

The gender gap in retirement age will become increasingly onerous to the social-security system. Labour force participation is now comparable in Brazil to the OECD average for prime-age males (aged 25-54 years), although it is slightly lower for females. According to the National Household Survey (PNAD), the female participation rate rose to 66% in 2004 from 44% in 1982, while falling marginally for males to 93% in 2004 from 95% in 1982. To the extent that more women join the labour force in the coming years, and because they retire earlier than men while having higher life expectancy at retirement, the increase in female labour force participation will pose an additional burden on the social-security system. A phased reduction of the gender gap to 2 years from the current level of 5 years would go some way in minimising this burden, although the international trend is towards the elimination of this discrepancy in entitlements.

Raise the period of contribution required for old-age pensions

Under RGPS, a minimum contribution period of 15 years is required for retirement on the basis of old age. This requirement could be tightened by gradually raising the contribution period to 30 years, as is the case for retirement on the basis of length of contribution. Once implemented in conjunction with the introduction of a minimum retirement age under the length-of-contribution rule, this reform option would *de facto* amalgamate the two rules. An option for raising the period of contribution would be to maintain the mechanism introduced in 1991 (discussed above), beginning at 15 years in 2001 and increasing it by 6 months each year until attaining 20 years in 2021, and so forth.

Raise the age requirement for old-age income support

The age required for receipt of old-age income support under LOAS could be raised to 70 years, as when the benefit was introduced, thus reducing the incentives for informality that currently exist due to the lowering of the age requirement over time to 65 years. The option of reducing the level of new social assistance benefits under LOAS relative to the minimum pension could be considered.

Sever the link between the minimum pension and the minimum wage

The main problem arising from the indexation of the minimum pension to the minimum wage is that the minimum wage has risen in real terms faster than average earnings over the years. As a result, as noted above, such an indexation requirement drives a wedge between the rate of growth of the social-security system's revenue base, which depends on trends in real earnings for a given level of labour informality, and that of expenditure. Another undesirable feature of the pension indexation rule is that the productivity gains achieved by the working population are transferred to the inactive population. In addition, the indexation requirement is a poor instrument to redistribute income, because a real increase in the minimum pension affects not only the relative income of income-support recipients, which are means-tested, but also of that of much larger pool of pensioners (IPEA, 2006). As a result, the indexation requirement complicates the targeting of the intended beneficiaries of social-assistance programmes.

An option for reform is therefore to sever the link between the minimum pension/social-assistance benefit and the minimum wage. The minimum social insurance benefit could be indexed to inflation so as to preserve its purchasing power. A price index that best reflects the consumption basket of pensioners could be selected for this purpose, such as the INPC.[18] Minimum wage policy could therefore be set according to labour market constraints and policy objectives, rather than social-assistance priorities. Greater discretion should be granted to the setting of the minimum social-assistance benefit, allowing its level to be determined according to the government's social priorities and overall budgetary conditions. Policy flexibility in this area would also allow for the income-related eligibility requirements for social assistance to take into account regional differences in the supply of public services, such as health care, which affects the well-being of the elderly population (Medeiros *et al.*, 2006).

Abolish the remaining special social-security regimes

The 1998 reform abolished several special retirement regimes. However, primary- and lower secondary-school teachers can still retire five years earlier than other workers and, in addition, the 5-year gender gap remains: female teachers can therefore retire after contributing for 25 years, instead of 30 years, as is the case for male teachers. As a result, women who start working in private schools on average at the age of 20, are eligible for a RGPS pension at 45 years of age, even after applying the social security factor. Similarly, rural workers are allowed to retire five years earlier than urban workers. The armed forces also continue to enjoy special rules that differentiate them from civilian public employees. Although more lenient retirement rules can be justified in hazardous occupations, where damage to health or a lower life expectancy can be attributed to working conditions, this is clearly not the case of teachers.

An option for phasing out the special regime for teachers and for the rural workers would be to reduce the gap in retirement age and length of contribution to social security by one year every two years, until the gap is closed in 2020. The impact of reform along these lines on public finances would be relatively light at the federal level, as teachers make up a very small share of federal employees. But this is not the case at the states and local government levels, where compensation for teachers accounts for a significant portion of payroll outlays.

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