The Brazilian Pension System Under an Equity Lens

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1. INTRODUCTION

Brazil has achieved quasi-universal old-age benefit coverage through a combination of contributory, semi-contributory, and non-contributory pension plans. One of the major goals of social insurance is to prepare households to cope with the loss of labor income in old age. In Brazil, older people are relatively well protected against poverty and are underrepresented among the poor (Paiva and Ansiliero, 2021). Complementary policies also help increase living standards of the elderly, including through income tax exemptions and incentives for continued work and education provided through the Statute of the Elder. A range of smaller pecuniary benefits (e.g. half-price admission to cultural events and free rides on public transportation) and non-pecuniary benefits (e.g. dedicated service counters at many public and private establishments) are also available to enhance wellbeing of the elderly.

However, this rather comprehensive old-age benefit package comes at a high cost. In 2019, the Brazilian pension system consumed 12.7 percent of GDP (7.8 percent attributable to General Social Security Regime (*Regime Geral de Previdência Social,* RGPS*)*, 0.8 percent to the Continuous Cash Benefit (*Benefício de Prestação Continuada*—BPC, of which 0.34 percent is attributable to BPC-old age and 0.45 percent to BPC- disability),[1] and 4.1 percent to federal and subnational civil servant pension plans). [2] [3] Figure 1 shows that very few—and much older—OECD countries spend at similar levels. This high current spending may crowd out investment and draw fiscal resources away from younger population that requires government assistance to develop and preserve their human capital. Moreover, 2.7 percent of GDP

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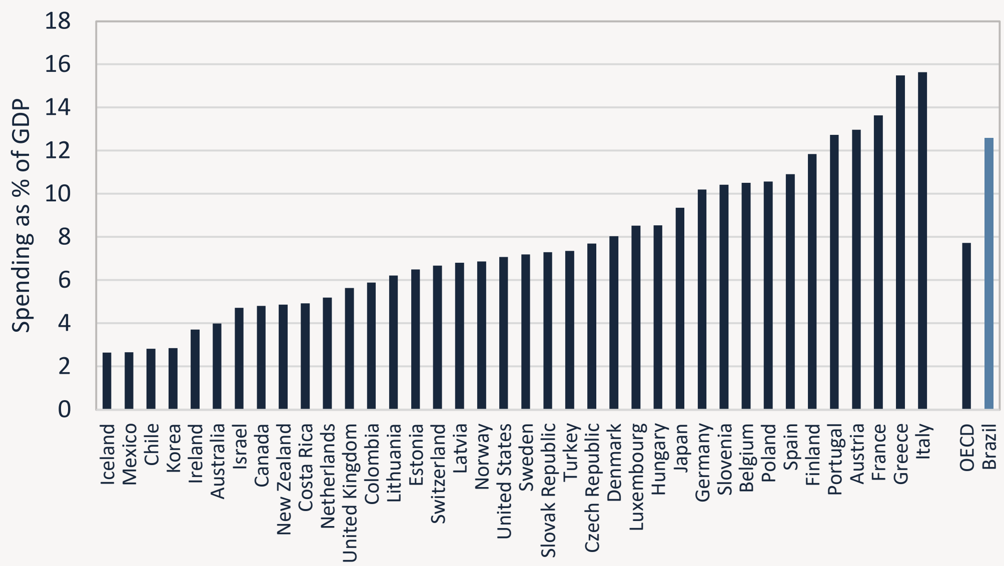
[1] Expenses included in the total are consistent with categories of benefits highlighted in Table 1 and exclude non-pension benefits. BPC and Renda Mensal Vitalícia are accounted together.

[2] https://www.gov.br/previdencia/pt-br/assuntos/previdencia-social/paineis-estatisticos/panorama-da-previdencia/informacoes-financeiras-e-estatisticas-dos-segurados accessed on October 2023. The cost of uniformed personnel pensions is included in the total for civil servant pensions.

[3] Zviniene et al. (2022).

deficit in the contributory RGPS plan involves a large transfer from all citizens to just those covered by contributory social security benefits, introducing additional regressive inequities into the system. To the extent that contributory pension deficits are financed by regressive taxes, such as value added tax (VAT), the overall regressivity of tax-benefit package increases even further.

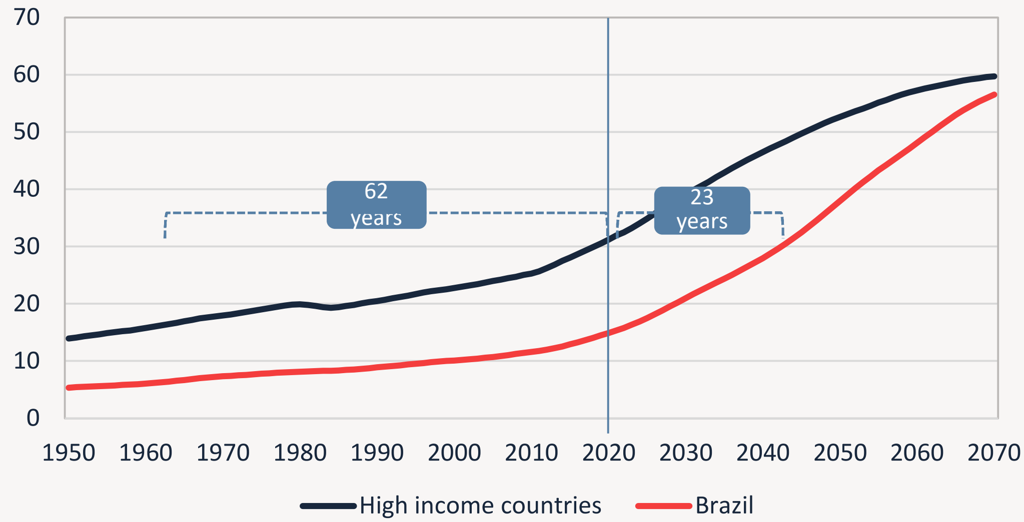
Figure 1. Cash expenditure on old-age and survivors' benefits: public schemes for OECD (2017) and Brazil (2019)



Source: "Public expenditure on old-age and survivors' benefits" in OCDE (2021).

Furthermore, while the ratio of working age and elderly population in Brazil is still favorable, the country is aging extremely fast. Compared to high income countries, which doubled their dependency ratio in the past 62 years, Brazil will only have 23 years to do the same (figure 2). Therefore, Brazil will have to adjust its aging-related policies and benefits faster compared to historic adjustments by now high-income countries. It will also have to do so at a lower income level and, consequently, lower tax revenue base. This will not only put direct fiscal pressure on the government, but will also add to healthcare and long-term care costs, further reducing government budget spending envelope. The long-term care is still a nascent area of public policy in Brazil, but it will surely grow as the numbers of elderly increase and the number of their middle-aged children able to take care of them declines. It is also important to keep in mind that overall population old age dependency rates are not the same as the ratio of contributors to beneficiaries, which is also often called 'system dependency rate'. As shown in annex 1, population aging is most pronounced in the south of Brazil, while 'system dependency rate' is highest in Northeastern Brazil, which is suffering from low participation rate of the young.

Figure 2. Old-age dependency ratio (65+/20-64)[4]:
Brazil and high income country index.



Source: World Population Prospects 2022, United Nations.

Note: The country classification by income level is based on GNI per capita from the World Bank (as accessed on 1 July 2022). Further information is available at https://datahelpdesk.worldbank.org/knowledgebase/articles/906519.

Brazil's pension system also creates inequalities. These arise when more generous rules are applied to some groups of workers (e.g. teachers, health professionals, security personnel, the military), when people are treated differently based on innate characteristics (e.g. gender), and when some retirement benefit packages are subsidized more than others in regressive and incentive-distorting ways. Unequal access to benefit concession process can also add to the mix. Equity, however, has been overshadowed in the pension debate in Brazil as the fiscal side tends to take up much of the attention (BRASIL, 2021).

Equity of a pension system is an important but frequently overlooked measure of success in social policy. In "A Theory of Justice," Rawls explains equity as embedded the principle of social justice, required to determine the division of advantages across the many possible social arrangements, assigning rights and duties and defining "the appropriate distribution of the benefits and burdens of social cooperation" (Rawls, 1999, pp.4). While the common sense defines equality as treating everyone in the same way, equity refers to ensuring that everyone has equal access to opportunities and resources, and that benefits are distributed fairly and proportionately based on

[4] Old-age dependency ratio is defined as a ratio of population aged 65+ as to the population aged 20-64.

individual needs and circumstances. A social protection system can be considered to foster equity if: (i) its programs provide sufficient protection for the poor and (ii) financing is fairly distributed, while pension subsidies—to the extent they are employed—are progressive.

Specific to the pension system context, equity means that pension benefits are distributed fairly based on individuals' contributions and other relevant factors (contributory component), while also protecting the elderly from poverty (non-contributory component). Distributive justice focuses on how benefits and burdens are distributed among members of society, in particular among individuals who participate in the system. Those who contribute more to the system should, all else equal, receive higher benefits. Equity also involves recognizing and addressing vulnerability of certain groups to poverty. By promoting fairness and equity in the pension system, one can ensure that all workers have access to the same opportunities for retirement, security and financial stability in old age.

However, while striving for equity it is important not to overburden the pension system with too many additional goals. Generally, in economic and social policy, 'one problem – one tool' works best. It is always tempting for pension policy makers to offer lower contribution rates, less stringent benefit eligibility criteria, and higher pensions to those who have suffered injustice due to historical and structural inequalities (e.g. gender discrimination, unpaid caregiving, work in unhealthy conditions) or have made important social contributions, usually due to their profession (e.g. teaching, policing). However, these goals are better addressed through separate dedicated policies specifically developed for the given purpose—court systems to address discrimination, fair remuneration laws to ensure proper compensation for work, and labor market policies that ensure opportunities to change occupation when necessitated for health reasons. In that context, a pension system could focus on simple and fair contributory old age income insurance rules and noncontributory poverty prevention plan for the old age.

In addition, Brazil may want to reconsider equity aspects of the current pension system for the following intragenerational equity concerns. First, the social contract, elaborated over three decades ago in the 1988 Federal Constitution, needs to adapt to address issues of financial sustainability stemming from emerging megatrends of demographic transitions and the new world of labor that will shape Brazil in the next few decades (Morgandi et al., 2023). Second, a more equitable rebalancing of social spending across generations appears necessary to ensure justice for the overall society and coming generations of Brazilians. Over 40 percent of Brazilian children are being raised in poverty, while contributory and social pension minimum benefits bring most old-age individuals to the middle of the income distribution. Finally, income alone has proven to be insufficient to provide for all needs of the elderly and their families. Strengthening the delivery of care services is needed to enhance the life quality of elders and enable family members to actively participate in the labor market. Therefore, greater balance between the pension benefits and the care economy needs to be achieved, with implications for the fiscal pension spending envelope within the broader old age benefit spending.

The objective of this note is to provide a comprehensive analysis of the Brazilian pension system through an equity lens. This focus is important, because fairness and equity of the pension system are relevant even beyond their intrinsic societal value: they are also instrumental for economic growth, as it impacts the incentives to participate in the labor market, as well as the productivity of current and future workers. Furthermore, political considerations also require that fairness and equity are taken into account in any future pension reform discussions. Section 2 provides general overview of the pension system and briefly explains the recent pension reforms in Brazil, while Section 3 offers a framework for addressing equity issues in the pension context. It explores how Brazilian pension system provides different levels of protection to distinct groups, creating a mismatch between contributions paid and benefits received, not always in a progressive manner. Section 4 concludes with a summary of the findings and a set of policy recommendations.

2. OVERVIEW OF THE NATIONAL PENSION SYSTEM AND THE IMPACT OF 2019 REFORM

The Brazilian pension system consists of several pension plans. The contributory general social security regime (*Regime Geral de Previdência Social*, RGPS) covers private sector employees, self-employed, and some public sector employees who do not qualify for civil servant pension.[5] It is a pay-as-you-go[6] contributory system that provides old age, disability, and survivor pensions as well as some other benefits to formal workers (see section I of table 1). The system is managed by the National Social Security Institute (*Instituto Nacional do Seguro Social,* INSS), which is affiliated with the Ministry of Social Security. The Continuous Cash Benefit (*Benefício de Prestação Continuada,* BPC) is a social assistance benefit for poor elderly and persons with disability that offers protection for those who do not qualify for RGPS pension (see section II of table 1), and is also administered by INSS. Finally, the civil servant pension plans (*Regimes Próprios de Previdência Social,* RPPSs), which provide benefits to the majority of civil servants in Brazil, are also part of the broader pension system, but are not the focus of this note (see Zviniene et al. (2022) for a dedicated assessment). The diagram in figure 3 highlights the portion of the social security system covered in this note.

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[5] Almost 3500 municipalities in Brazil do not have their own civil servant scheme and cover their workers through RGPS. Temporary workers without civil servant status hired by public entities also contribute to RGPS.

[6] Pay-as-you-go contributory plans use contribution revenue to pay current pension expenditures, as opposed to funded contributory plans, where contribution revenues of individuals are invested until such time that pensions need to paid to those who made the contributions.

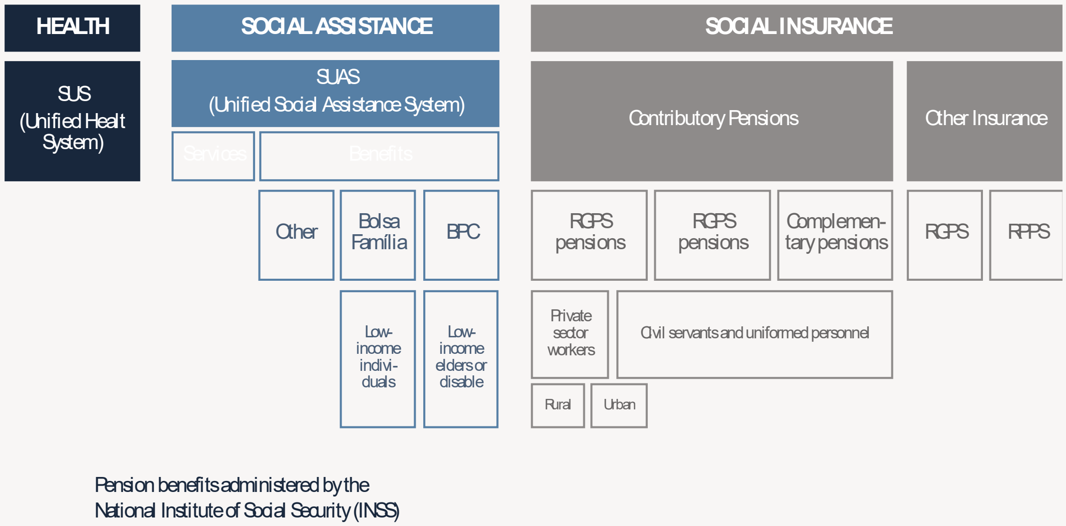
Table 1. Number of RGPS and social assistance benefits paid by INSS in 2021*

Type of benefit	Total	Urban	Rural
TOTAL (I)+(II)+(III)	**36,294,726**	**26,614,055**	**9,680,671**
(I) RGPS benefits (a+b)	**31,453,052**	**21,809,019**	**9,644,033**
a. Social security (i+ii+iii+iv+v)	**30,704,179**	**21,086,394**	**9,617,785**
i. Pensions	21,562,563	14,445,898	7,116,665
By length of contribution	6,674,623	6,650,221	24,402
By age	11,682,785	5,044,508	6,638,277
By permanent disability	3,205,155	2,751,169	453,986
ii. Survivor pensions	8,066,088	5,672,107	2,393,981
iii. Aid	1,017,347	912,068	105,279
Sickness	850,121	770,267	79,854
Incarceration	35,616	33,175	2,441
Accidents	13,161	108,626	22,984
iv. Maternity-salary	58,127	56,267	1,860
v. Others	54	54	-
b. Work Injury (i+ii+iii)	**748,873**	**722,625**	**26,248**
i. Disability	200,436	187,835	12,601
ii. Survivor	100,295	96,863	3,432
iii. Aid (sickness, etc.)	448,142	437,927	10,215
(II) Assistential Benefits (c+d+e)	**4,833,188**	**4,796,550**	**36,638**
c. Social Assistance (BPC)	**4,751,056**	**4,751,056**	**-**
i. Persons with Disability	2,580,833	2,580,833	-
ii. Old Age	2,170,223	2,170,223	-
d. Lifetime Monthly Survivor Benefit	**7,503**	**7,503**	**-**
e. Lifetime Monthly Income (RMV)**	**74,629**	**37,991**	**36,638**
i. Permanent Disability	68,746	35,177	33,569
ii. Old Age	5,883	2,814	3,069
(III) BLE ***	**8,486**	**8,486**	**-**

Source: AEPS 2021, Ministry of Social Insurance.

Notes: *Only highlighted RGPS pension benefits (i and ii of subsection I(a)) and old age and disability assistance benefits (subsection II(a)) are a subject of this paper, together constituting 95 percent of all benefits paid by INSS. ** The assignment of new RMV (Renda Mensal Vitalícia) benefits by age and disability has been discontinued in 1995. The program was replaced by BPC for new beneficiaries. *** The Benefícios de Legislação Específica (BLE) are benefits created by laws which require the Union to pay monthly benefits for certain groups or individuals. Examples of BLE are victims of thalidomide, victims of Cesium 137 accident in the Goiânia municipality, people with leprosy who were compulsorily admitted to sanatoriums, child victims of the Zika virus, among other cases. These are benefits paid by the INSS with resources from the National Treasury.

Figure 3. Overview of the Brazilian social security system



Source: Elaborated by the authors. Note: Other insurance includes sickness, accident and maternity benefits insured through the contributory RGPS and RPPS regimes.

Table 2. Number of RGPS contributors and active beneficiaries, 2020

Number of contributors (2020)		Number of beneficiaries, by number of benefits received*		Number of beneficiaries aged 65+	
Total	**51,539,953**	**Total**	**32,221,869**	65 to 69 years old	5,983,044
Employees	38,161,778	1 benefit	28,767,188	70 to 74	4,809,981
Individual contributor	10,958,575	2 benefits	3,424,423	75 to 79	3,286,694
Domestic worker	1,284,178	3 benefits	29,826	80 to 84	2,265,833
Optional (Facultativo)	1,133,581	4 benefits	432	85 to 89	1,224,536
Special contributor	1,841			90 or more	756,671

Source: Anuário Estatístico da Previdência Social 2021/Ministry of Social Insurance.

Note: (*) Old age, disability and survivor benefits constitute 96 percent of all RGPS benefits paid. The rest include other social security benefits listed in (iii) and (iv) and (v) of subsection I(a) of Table 1.

In 2020, the RGPS had 51.5 million active contributors (table 2). The number of active participants includes those who have made at least one contribution in 2020 and represents 56.4 percent of economically active population in Brazil (coverage rates are much lower in northern and northwestern Brazil, as shown in annex 1). However, this number misses a significant number of dormant records which are likely to get reactivated at later date and may also result in pension benefit claims. Finally, some younger people are likely to be planning for their participation in the plan as they get older, which eventually will also result in pension benefit claims. Therefore, future pension coverage prospects of current worker cohort are significantly higher than the current count of active participants would suggest.

The 32.2 million of RGPS and BPC pension beneficiaries contrast with only 20.7 million Brazilians aged 65 or higher – the most commonly used retirement eligibility age outside of Brazil. This elevated number of beneficiaries, 11 percent of whom receive more than one benefit,[7] has long been one of the main reasons for the high pension spending in Brazil. On the other hand, 88 percent of 65+ Brazilian population receive at least one RPGS or social assistance pension benefit (this number would be even higher if retired civil servants drawing pensions from RPPS pension system were included[8]), indicating that elderly coverage gap in Brazil is rather small. The geographic dimension of the story is also important: based on household survey data, coverage rates of the elderly in Amazonas state is below 60 percent, as shown in annex 1.

The elevated number of beneficiaries and fiscal pressures stemming from it were the main reasons behind the pension reform of 2019 which, among other measures, instituted gradual elimination of some early retirement options, but equity aspects of the system also were part of the discourse. Consequently, the reform has adjusted the value of lifetime benefits mostly for the higher income individuals. The main reforms included a gradual phase-out of early retirement option based on length of contribution, substantially raising the minimum retirement age for mostly higher income individuals. The reform also introduced higher progressivity to contribution rates and tightened survivor pension rules for those who receive multiple benefits. All these measures made the system fairer and more fiscally sustainable, but some important inequities remained.

The 2019 pension reform has met significant opposition, particularly from labor unions and other groups, who argued that the reformed pension system would still negatively impact low-income individuals. Critics pointed out that the last series of reforms did not do enough to address generous privileges among certain insured groups. They also claimed that coverage gap amidst high levels of labor informality might worsen due to reduced benefit generosity and increased contribution period requirement for contributory pension for men (it has been increased from 15 to 20 years).

Despite these reform efforts, the contributory social security parts of the pension system, including the main RGPS plan, continue to generate large deficits. In 2021, the RGPS had a deficit of BRL 261 billion, the result of insufficient contributions from urban workers and a highly subsidized rural sector (figure 4). The pension system collected BRL 462.2 billion in contributions (5.19% of GDP) and paid BRL 709.6 billion

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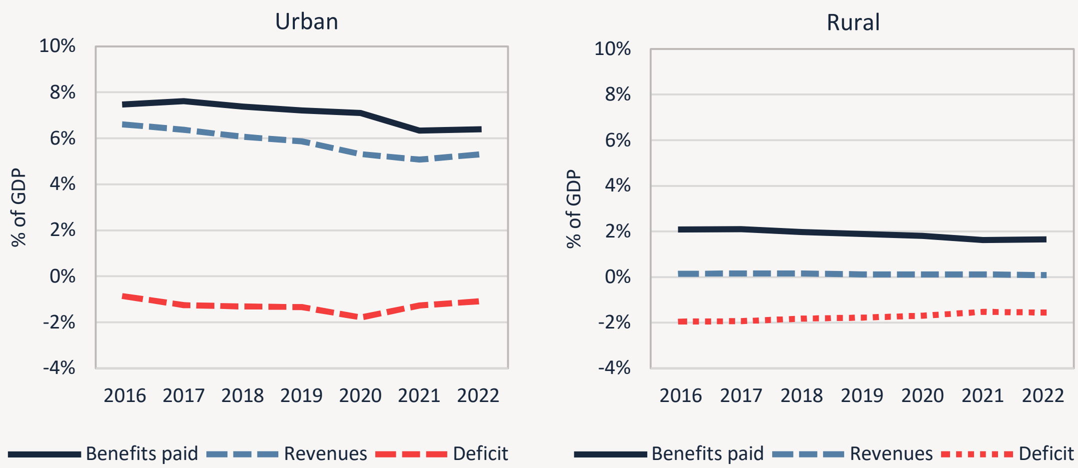
[7] Most cases of multiple benefit receipt include a survivor pension.

[8] Transfer of contribution credit between RGPS and RPPS is possible and instances of receiving old age pension from both systems are rare.

in benefits (7.97% of GDP). The urban and rural RGPS deficits are similar (-1.1% and -1.6% of GDP respectively), with the difference that rural pension sub-scheme collects very little revenue. In fact, a rural pension plan closer resembles social assistance program rather than contributory pension plan, as only 7 percent of the annual benefits paid to rural beneficiaries are covered by earmarked tax on agricultural produce.

Figure 4. Urban (left) versus rural (right) RGPS revenues and benefits (2016-2022), in % of GDP

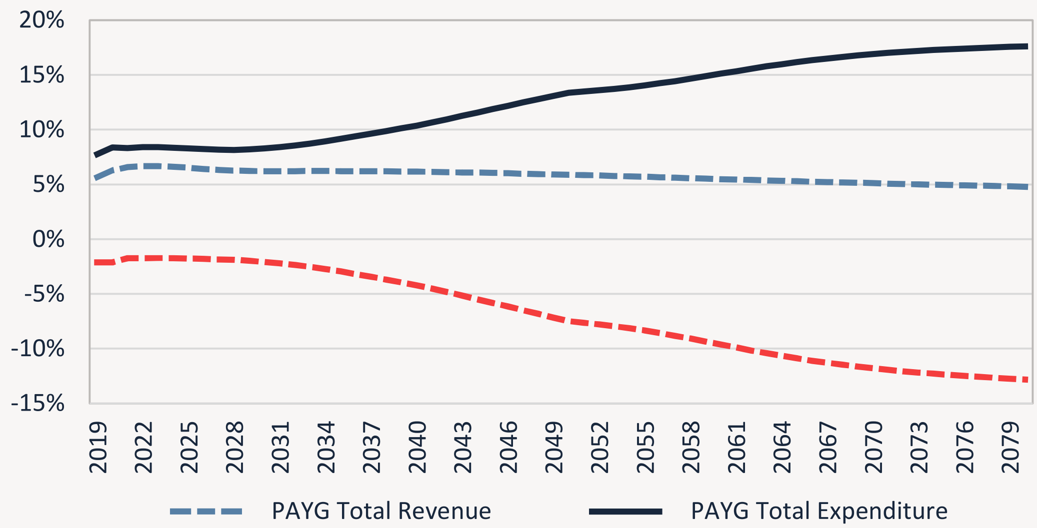


Source: Boletim Estatístico da Previdência Social, 2016-2022, SEPREV/Ministry of Social Security. GDP source: IBGE.

Note: non-pension RGPS benefits are included in expenditures.

Unfortunately, the fiscal savings generated by gradual introduction of 2019 reform measures are expected to be offset by the rising costs of population aging, and projected expenditures are still expected to outpace revenues in medium to long terms. The average duration and generosity of pension benefits will fall only very gradually over the next 30-year transition period: the replacement rates are expected to stabilize at the new level only after 2050. However, these measures are not sufficient to balance revenues and expenditures in the medium term. The growth in pension deficits will resume as soon as currently legislated retirement age increases are fully phased in, circa 2030 (figure 5).

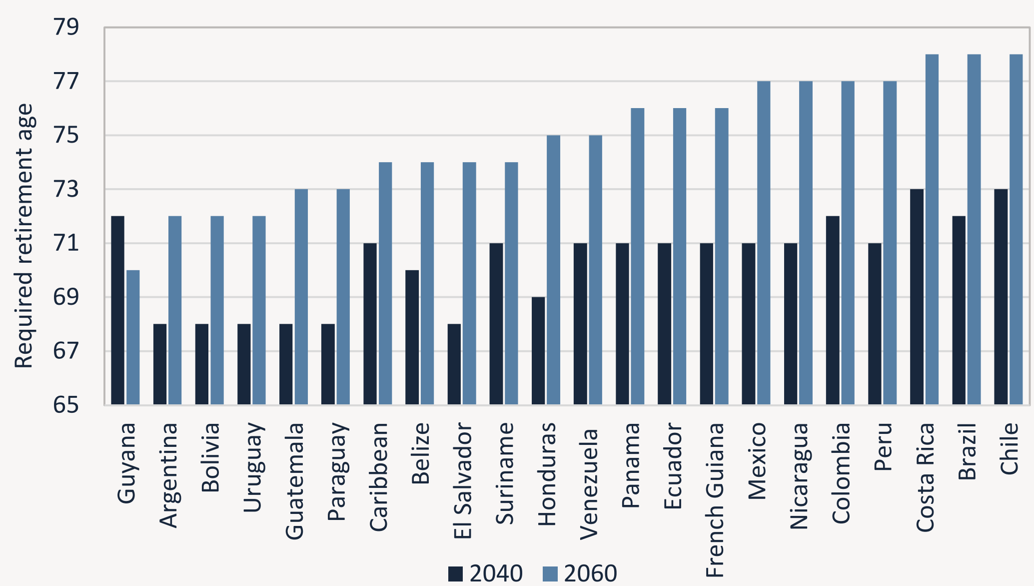
Figure 5. Projected revenues, expenditures, and deficits of RGPS



Source: The World Bank PROST simulations using INSS data.

Note: The projections were elaborated at the time of the pension reform.

Figure 6. 'New 65' retirement age required to keep old age dependency rates constant



Source: Authors' calculations based on United Nations (2019).

It will be impossible to continue offsetting population aging in medium to long term only with retirement age increases and other reforms will be needed. Figure 6 asks by how much the "normal" retirement age of 65 would need to increase to keep the old-age dependency rate constant. Given that Brazil is one of the fastest aging countries in Latin America, this new "normal" would have to move to age 72 by 2040 and 78 by 2060. Obviously, such drastic changes would be hard to contemplate due to the health status of the population and socio-political realities. Therefore, more diverse set of reforms would need to be considered, while keeping progressivity and equity of the pension system in mind. The rest of this note considers which aspects of the RGPS and BPC pension plans could be adjusted to reach these multiple goals.

3. EQUITY IN THE BRAZILIAN NATIONAL PENSION SYSTEM

The pension system administered by INSS contains multiple potential sources of inequity. As visualized in figure 7, they result either from: (i) some workers receiving more generous pension benefits than others after contributing the same amount to the pension system; or (ii) workers receiving equal benefit having contributed different amounts. Moreover, oftentimes the differential treatment does not lead to poverty alleviation. The following four subsections focus on exploring whether there are grounds for differentiated treatment if inequities arise from (1) differences in the duration of benefit receipt, (2) the interaction of minimum pension level with contribution period requirements, (3) contribution rate differences and taxation policies, and (4) judicialization of benefit concession.

Figure 7. Nine elements affecting equity in the pension system

Differences in the duration of the benefit receipt			Interaction of minimum pension level with contribution period requirements			Contribution rate differences and taxation policies		Judicialization of benefit concession
Retirement ages	Life expectancy	Eligibility for survivor benefits	Vesting requirements	Accrual rate per years of contribution	Minimum pension	Contribution rates	Generational and geographical inequities	Arbitrary access to benefits

Source: Elaborated by the authors

Differences in the duration of benefit receipt

1. **Retirement ages:** The RGPS discriminates workers in terms of gender and urban-rural status, allowing them to retire at different retirement ages: under the new rules, women are eligible to retire at age 62, while men could only do so at the age 65; primary and secondary school teachers retire at ages 57 and 60 for women and men respectively; and rural residents at 55 and 60. In addition, workers with hazardous jobs can also retire earlier.

2. **Life expectancy:** Inequities might also arise due to different life expectancies of certain groups of beneficiaries. For example, women tend to live longer than men which translates into the higher expected value of benefits over the lifetime. Similarly, higher income people tend to receive implicit subsidies from the pension plan because statistically they are expected to live longer. Life expectancy is therefore useful in informing the policy of retirement ages and, for example, the evidence does not justify the differences between urban and rural worker retirement ages in Brazil.

3. **Eligibility for survivor benefits:** The 'life of the retirement benefit' depends on the life expectancy of the primary pension beneficiary as well as that of the survivor. About 10 percent of current RGPS beneficiaries receive more than one benefit. In most of these cases, the secondary benefit is a survivor's pension. Some employed individuals also receive a survivor's pension resulting in 'double income'. In both instances there is a possibility that living standards of surviving members of the household increase, which was never an intention of the survivor program mostly designed with one breadwinner per family in mind.

The interaction of minimum pension level with contribution period requirements

1. **Vesting requirements:** The RGPS sets different (reduced) minimum contribution periods for pension eligibility for some groups of workers. For instance, women, disabled workers, primary and secondary teachers, as well as those working under hazardous health conditions can contribute for shorter periods.

2. **Pension accrual rate per year of contribution:** The RGPS pension benefit formula is non-linear, rewarding the first contribution years more generously than later years. Hence, those that reach retirement faster accrue a higher rate of return on their contributions.

3. **Minimum pension:** As two thirds of new pensioners have their pension toped up to the level of minimum pension, the subsidy associated with this provision is expensive for the RGPS and substantially contributes to RGPS deficits. The minimum pension guarantee is also offered at a relatively high level – 8 percent above the minimum wage on the net basis – raising the recipients to the 5th-6th

income decile.[9] [10] To the extent that this transfer is financed from the general budget, it can at worst be regressive, and at best inefficient in reducing poverty and improving income inequality.

Contribution rate differences and taxation policies

1. **Contribution rates:** The RGPS allows certain groups of workers to contribute less to the social security plan based on their employment status, which is not necessarily correlated with contributor's income. For instance, autonomous workers as well as workers of small and medium enterprises and microentrepreneurs are awarded preferential contribution rates, and employer contributions vary significantly. Small 'contributions' of rural workers, which are better described as earmarked sales tax on agricultural produce, do not even involve recording 'contributor' name.

2. **Generational and geographical inequities:** Some inequities result from inter-generational transfers characteristic to pay-as-you-go pension systems. For example, if older workers receive more generous benefits than younger workers it can justifiably create a sense of unfairness. Similarly, most revenues are collected in more urbanized regions of the country which is normally assumed to imply subsidization of poorer parts of the country. However, if highest pensions, also paid to the residents of the most urbanized regions, are subsidized, then the system might be transferring resources to older higher income areas of the country.

Judicialization of benefit concession

1. **Arbitrary access to benefits:** When benefits are denied through regular administrative processes, the better-educated or better-informed individuals are often able to claim benefits in courts. For example, 20% of previously denied BPC applications are eventually reinstated by courts. The judicialization degree of denied disability benefits is even higher.

The rest of this section of the note will examine the main factors in each of the four above groupings in an integrated manner, assessing which factors most contribute to the inequities inherent in the RGPS and BPC pension plans.

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[9] The calculation references income deciles from https://www.statista.com/statistics/1251075/average-monthly-income-percentile-brazil/

[10] While minimum wage workers make 11 percent social security contribution, pensioners receiving minimum pension do not, which introduces the difference in income levels on net basis.

3.1 Differences in the duration of benefit receipt

The pension system administered by INSS allows a few retirement options, and workers self-select into the one that best fits their circumstances. The main options are: (1) retirement by length of contribution (LoC), (2) retirement with permanent disability, (3) urban retirement by age, (4) rural retirement by age; and (5) noncontributory means tested social assistance pension (BPC) (see table 3 for eligibility requirements). Over the last two decades, the most pronounced growth has been in the take-up of urban retirement by age, due to the continued urbanization as well as the expansion of subsidized options for RGPS contributions (see figure 8). The proportion of retirees by LoC has also grown significantly, somewhat replacing disability pensions, given that this benefit was available at relatively early age and that application procedures were much simpler than those for disability benefit.[11]

By setting different retirement ages for different population groups, Brazil has created significant inequities in the pension system. Different retirement ages are offered based on gender, place of residency, profession, and employment conditions. Furthermore, these differences can complement each other. For example, a woman living in a rural area can benefit both from her gender and from her residency location, which would allow her to retire 10 years earlier compared to a man living in a city. The 2019 pension reform has reduced some of these differences but a lot of them continue to remain relevant.

The greatest focus of the 2019 reform has been on reducing the age difference when retiring by length of contribution versus by age. The former option is being eliminated over the next decade, although the effect of decreasing the flow of new retirees is already being felt strongly (figure 9): in the first two years after the reform, the number of new retirees retiring by length of contribution has declined by 37 percent, while the number of retirees by age has remained within the usual range. However, even at reduced flows, in 2020 those retiring by length of contribution have constituted around the same number of retirees as those retiring by age.

[11] The sharp decrease in 2020 disability claims has likely been temporary due to the slowdown of disability certification process related to Covid-19.

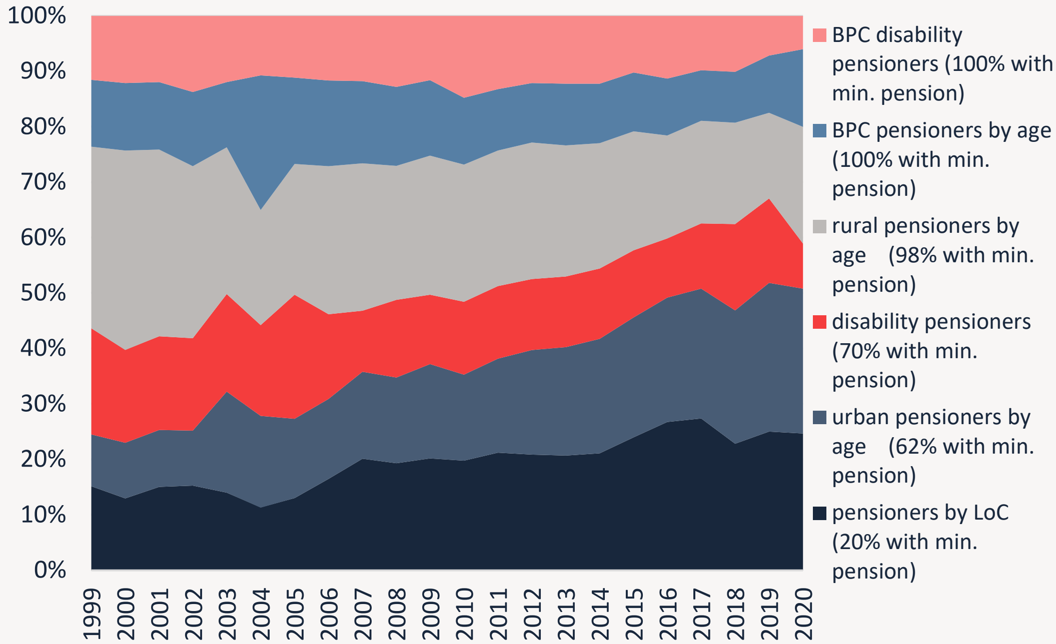
Table 3. RGPS and BPC retirement plans and benefit eligibility requirements (2023)

Retirement option	Minimum Length of Contribution (female/male)	Minimum Age (female/male)	Additional requirements
Length of contribution (LoC, law 42 (regular)) - 3 transition rules*	1) 30/35	1) 58/63	1) min. age rising 6mo per year
	2) 30/35	2) age + LoC equals 90/100	2) age+LoC rising 1 point per year
	3) 32/37	3) 57/60	3) LoC rising 6mo per year
Length of contribution (LoC, law 46 (special))**	(valid for those affiliated before the 2019 reform):	(valid for those affiliated after the 2019 reform):	5,10, or 15 year reduction from transition rule requirements
	-15/15 for high-risk ;	-55/55 for high-risk;	
	-20/20 for medium-risk;	-58/58 for medium-risk;	
	-25/25 for low-risk	-60/60 for low-risk	
Length of contribution (LoC, law 57 (teachers))	25/25 or transition rules	57/60 or transition rules	5 year reduction from regular transition rule requirements
Urban retirement by age	15/20	62/65	–
Rural retirement by age***	15/15 of rural residency	55/60	–
Permanent disability	12 months	Not applied	–
BPC – Old Age	Not applied	65/65	per capita household income below ¼ of minimum wage
BPC – Disability	Not applied	No age requirement	per capita household income below ¼ of minimum wage

Notes: *Eligibility requirements are being gradually made more stringent after 2019 reform following several transition rules; disabled workers retiring under law 42 can do so 5 years earlier. **Special retirement is granted for work under hazardous conditions, e.g. noise and vibrations, chemical agents (dust and gases), or biological agents (bacteria, viruses, and other microorganisms); article 19 of the Emenda Complementar 103/2019 ***Proof of contribution is not required.

Despite the reform, understanding the inequities produced by the length of contribution retirement option continues to be relevant, as a big subset of already retired pensioners will continue to enjoy the subsidy associated with their retirement package for the next two decades. One reason the regressive inequity arises from these pension eligibility differences is that higher-salaried RGPS members with stronger attachment to the formal labor market tend to reach 30/35 contribution year minimum earlier and end up receiving higher pension benefits (74 percent higher on average[12]) compared to those who retire at ages 62/65 with 15/20 years of contribution. In 2021, the medium age of these LoC retirees was close to 55, around 5 years younger than for those retiring by age (figure 10). The figure also demonstrates that this subsidized retirement option was more prevalent among men.

Figure 8. Share of workers retiring with different RGPS and BPC pensions[13]



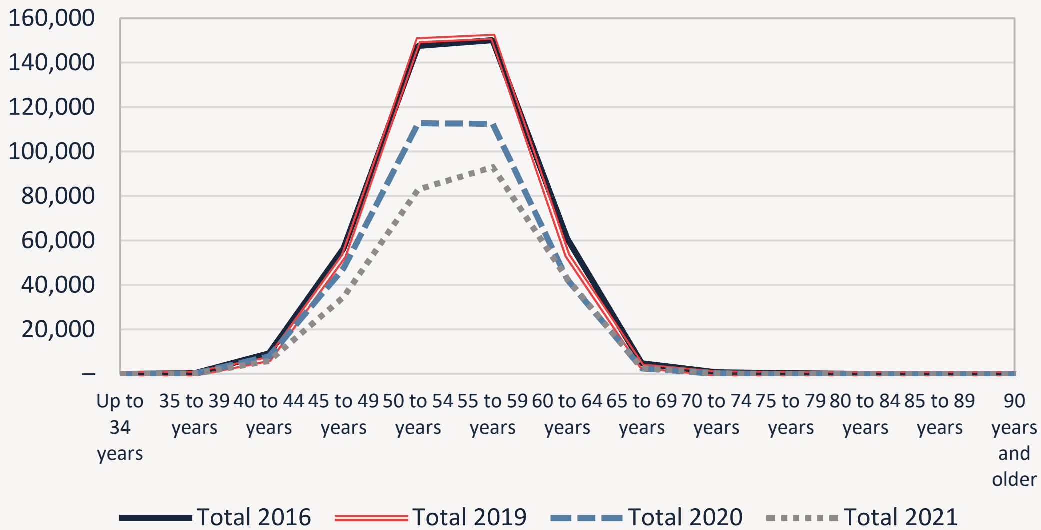
Source: InfoLogo and Anuário Estatístico de Previdência Social 2022/Ministry of Social Insurance.

Note: The category 'pensioners by LoC' include those retiring under the law 42 (90% of all LoC pensioners, including 2% retiring with disability), law 46 (8% of all LoC pensioners, including 4% working under medium and high risk working conditions), and law 57 (2% of all LoC pensioners).

[12] 2021 administrative AEPS data.

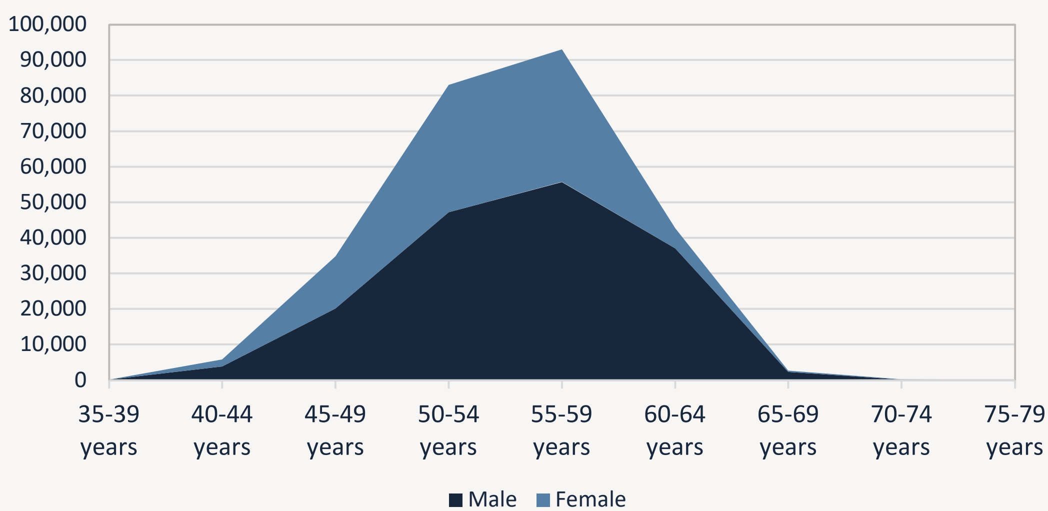
[13] 66 percent of all pensioners retire with minimum pension.

Figure 9. Number of urban pensions by length of contribution granted, by beneficiary's age group



Source: AEPS 2022/Ministry of Social Insurance.

Figure 10. Number of urban pensions by length of contribution granted, by sex of the insured, according to age groups



Source: AEPS 2022/Ministry of Social Insurance.

Note: Pensions by length of contributions discontinued before age 65 are ignored for purposes of fair comparison.

On average, those who retire by age receive benefits for shorter periods than those who retire by length of contribution. While urban benefits associated with retirement by age last on average 15.4 years, those associated with retirement by length of contribution last 20.4 years (table 4). The effect is almost exclusively attributable to men, for whom the difference in average duration of benefit between the two retirement options stood at 8.4 years. While the share of these subsidized pensions will continue to decline among new retirees, their share among existing retirees will be high for the next 2-3 decades.

Table 4. Duration of benefit discontinued in 2019[14] and average value of benefits in 2021

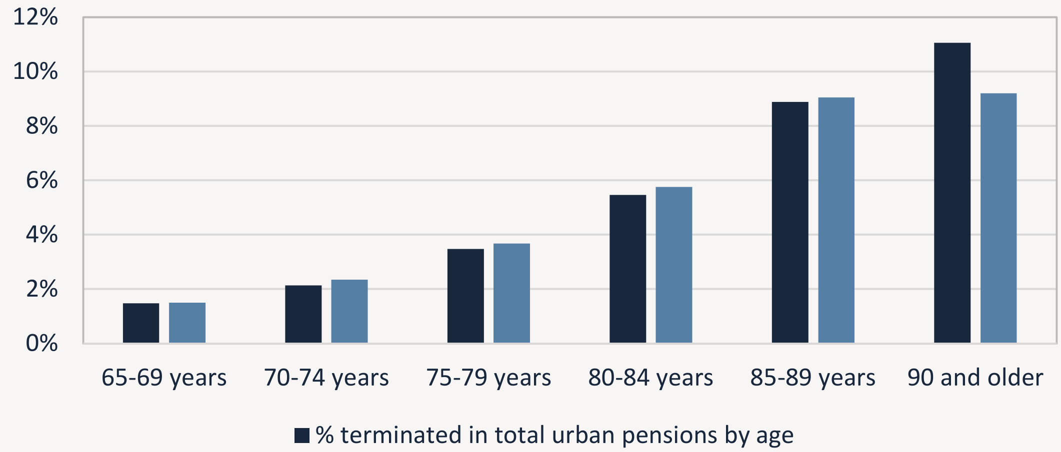
	Duration of the benefit, 2019 (years)	Average value of benefit, 2021 (BRL)
Retirement by LoC	20.4	2532
Retirement by age, urban	15.4	1456
Retirement by age, rural	19.0	1103
Survivior pension, urban	16.5	1704
Survivior pension, rural	16.5	1096

Source: AEPS 2021.

The different pension eligibility ages in rural and urban areas are equally unjustified on mortality grounds. Table 4 shows that average duration of rural pension by age, awarded 5 years younger, lasts 19.0 years, compared to urban pension by age that lasts 15.4. The difference would be even starker if the numbers were adjusted for the rural mortality rates between ages 55 and 65. In fact, the analysis of ages at which rural versus urban pensions by age are discontinued shows that rural pensioners experience very similar mortality rates as their urban counterparts (figure 11). These statistics contradict a popular misconception that rural workers die much younger. They are also not necessarily engaged in more difficult physical work, as lower paid jobs in urban areas can be similarly physically demanding. Finally, the justification of these age differences on the grounds that rural areas are poorer is equally flawed, as average worker pay in urban areas does not apply when considering the pool of urban workers retiring by age. Furthermore, poverty consideration would be better addressed via poverty-elimination rather than pension programs. Therefore, it is hard to find a statistical or theoretical justification for maintaining the age differences in pension eligibility between rural and urban workers.

[14] The year was selected to avoid COVID-19 effects.

Figure 11. Terminated benefits as a share of total pension benefits in 2019 by age group (retirement by age benefits)

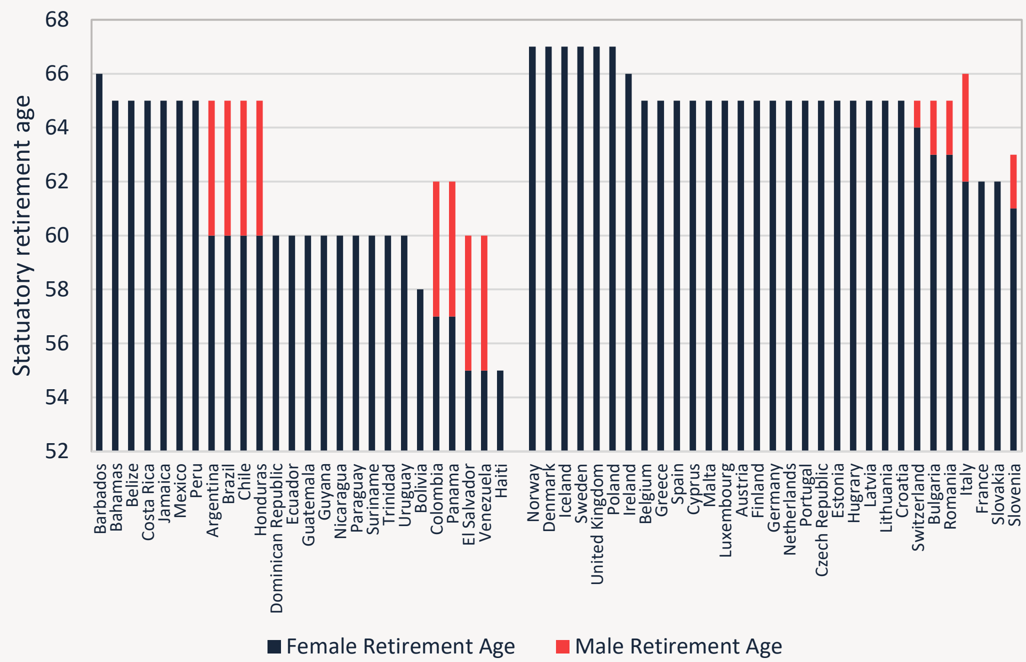


Source: AEPS 2019.

Brazil is gradually reducing the gender gap for the urban workers to 3 years, but still maintains a 5-year difference in rural areas. Longer female life expectancy is a well-established statistical fact across the world. In Brazil, benefit duration analysis suggests that women retiring by age receive the benefit 3.5 years longer than men. Again, the difference would be even higher if the numbers were properly adjusted for female mortality at younger ages, while the men are still not retired. Meanwhile, most of the OECD countries have already equalized retirement ages between genders and they are becoming rarer even in Latin America (figure 12).

Pension age differences due to a particular profession or employment conditions are hard to justify. For example, in Brazil teachers can retire much earlier than other workers. While most representatives of this professions retire through civil servant regime, some are contributing to RGPS. RGPS members working under hazardous conditions have similar early retirement privileges. It is hard to come up with a justification of earlier retirement ages for teachers, but there could be legitimate concerns about working under dangerous conditions for prolonged periods. However, these concerns could be better addressed by (1) creating easier retraining opportunities, (2) reassessing the list of professions where early retirement is justified, and (3) adjusting compensation policies and employer contribution rates, so that hazardous enterprise workers and their employers could build sufficient extra retirement savings to bridge the gap between worker's retirement from current jobs and normal retirement age. Unfortunately, current additional employer contributions are not sufficient: for example, over a 25-year contribution period, 6 percent contribution premium for low-risk occupations results in total extra contributions in the amount of 150 percent of annual wage, while the receipt of pension 5 years earlier for a worker with 100 percent replacement rate is worth 500 percent of annual wage. Therefore, as it stands, the rest of the RGPS contributors are subsidizing labor costs of hazardous jobs which reduces the incentives of employers to improve working conditions and reduce the number of workers exposed to harmful environment.

Figure 12. Statutory retirement ages for females and males in OECD and LAC countries



Source: OECD/IDB/THE World Bank 2014, OECD 2019.

Instead, heterogeneity of life expectancy is a more important factor to consider when setting retirement ages. In this area, income differences could have an outsized importance. For example, in the United States, a 40-year-old man in the 1st quartile of income distribution can expect to live 10 years shorter than a man in the 4th quartile, while the difference for 40-year-old women is 6 years (Chetty et al. 2016). It is also important to distinguish between healthy life span and overall life expectancy. It is hard to insist on higher retirement ages if people were to mostly add unhealthy years to their lives, even in the presence of the overall demographic aging and mounting pension expenses. Therefore, the success of preventive healthcare programs is of crucial importance not only for improved lives of Brazilians, but also for the health of the Brazilian pensions system.

Finally, survivor benefits also need to be adjusted to the demographic transition and changes in the labor market. The number of new survivor benefits assigned each year is close to one third of new primary retirement benefits[15] and the share of survivor program cost in overall RGPS pension spending is similarly high at around one third. This ratio is set to grow further as Brazil ages, and the share of spending on survivor benefits is expected to grow with it. As shown in Table 4, the average survivor benefit lasts on average 16.5 years. Spouses aged over 55 receive 72 percent of all survivor benefits, 92 percent of these spouses being female. Therefore, most survivor pension recipients are widows who no longer have small children to support and who often have their own wage or pension income to support themselves: in 2021, the number of RGPS recipients with multiple benefits stood at 3,454 thousand, while the number of widows/ers over the age 55 constituted 6402 thousand). Historically, RGPS survivor pension was equal to the value of the pension of the deceased, which for most working or retired widows meant that their living standards were increasing after the death of the spouse (it is generally accepted that to maintain the same living standard the surviving spouse needs only around 70 percent of combined previous income of both spouses)

While the reform of 2019 has attempted to reduce survivor pension spending, in practice overall spending has declined only marginally, partly due to the high incidence of minimum pension benefits. The survivor pension was reduced to 60 percent of the pension of the deceased for single survivors and, in the case of the multiple RGPS benefits, the smaller benefit is now being reduced using a progressive scale. However, the fiscal effect of this reform has been limited. If in 2019, before the reform, the average new survivor benefit stood at 102 percent of the average primary pension in payment, in 2021 after the application of the new rules it stood at 98 percent. The limited effect of the measure is highly influenced by minimum pension, which is still applied individually to each benefit rather than the sum of all benefits received by an individual. The progressive reduction of the second RGPS benefit also only starts above the value of minimum pension.

3.2 The interaction of minimum pension level with contribution period requirements

In Brazil, the minimum vesting period for a contributory pension leaves some people unprotected and diminish the fairness of the system. To be eligible for contributory benefits, RGPS rules require 15 years of contributions for women and high-risk activity workers, and 20 years for men (up from 15 years after 2019 reform). However, some workers contribute fewer years, losing all their previous contributions and ending up subsidizing other RGPS members. Those who fail to qualify for contributory pension and also do not pass poverty test associated with BPC benefits

[15] Pension by age, by length of service, or by disability is considered a primary pension.

"fall through the crack" between the two programs and cannot claim any old age income benefit. This more frequently affects lower-middle income workers finding themselves on the edge of formal and informal labor markets, and is especially prevalent among self-employed.

The number of men finding themselves without an old age income benefit is likely to increase in the next few years. The vesting period for men has increased from 15 to 20 years only recently, after 2019 reform, and its effect is not yet fully reflected in the beneficiary data. Even though Brazil is attempting to subsidize the formalization through substantially lower contribution and tax rates, the gains in coverage among lower income workers have been limited, as discussed in Section 3.3.

At a first glance, the rules seem to be relatively fair at least for those covered: while retirement eligibility conditions differ, the formula to calculate monthly benefit (MB) under all contributory retirement options is the same.[16] The benefit is based on the individual's average earnings (average of inflation-indexed contribution salaries – ACS) and the length of their contribution period, calculated as in the equation below. The benefit ceiling, standing at 5.7 minimum wages in year 2023, affects only less than 1 percent of new RGPS and BPC retirees (2 percent for those retiring with an urban contributory pension).

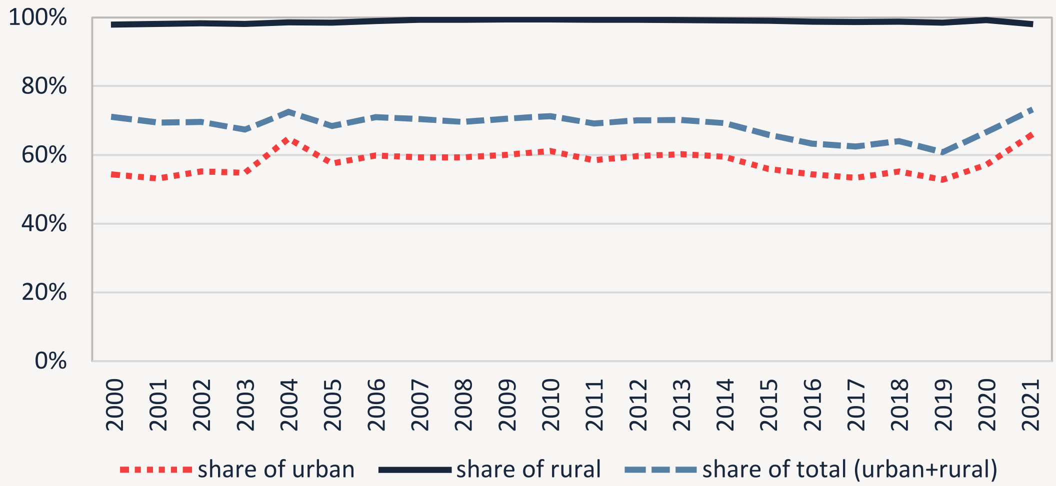
MB = ACS x (60% + 2% for each year exceeding 15/20 years of contribution) (f/m)

MB: Monthly benefit
ACS: Average contribution salary

However, the minimum pension effectively renders the benefit formula obsolete for most people. It is equivalent to one minimum wage and stood at BRL 1320 in 2023. As was shown in previous subsection in figure 8, it applies to 20 percent of new LoC beneficiaries, 62 percent of new urban beneficiaries retiring by age, 70 percent of those retiring by disability, and close to 100 percent of remaining new pension benefits. Overall, out of all RGPS and BPC pension benefits paid by INSS, 66 percent of urban, 98 percent of rural and 73 percent of all pensions are equal to minimum wage (figure 13). Interestingly, from year 2019 to 2021 the share of urban beneficiaries receiving minimum pensions has increased sharply due to a lower share of new higher income pensioners retiring through LoC route after the 2019 reform.

[16] The exception to the rule is granted to those who are retiring under LoC transition rules (3) in Table 3. Those retirees can retire with 100 percent of their average career-long wage.

Figure 13. Share of RGPS and BPC pension benefits granted that are equal to minimum pension



Source: Author's calculations based on Infologo/Ministry of Social Insurance.

Note: Calculations include pension by length of contribution, pension by age, pension by disability, and BPC.

This level of minimum benefit, especially for a noncontributory pension meant to prevent poverty, is comparatively high. Bolsa Familia is a poverty prevention program for the general population, and its benefit eligibility threshold and benefit levels are much lower (table 5). Furthermore, the minimum pension guarantee is currently set at the level of the minimum wage, and is 8 percent higher than minimum wage on the net basis, due to the exemption of minimum pension from social security contributions. A minimum pension that equals the minimum wage is also high by international standards, since it is usually considered appropriate for those who are actively working to be remunerated more than those who collect a pension and can enjoy their leisure. In 2021, 66 percent of new old-age pension recipients (71 percent of women and 57 percent of men) were benefiting from the minimum pension guarantee, which put them in the fifth income decile. This share will likely continue to grow due to the lower replacement rates generated by the new benefit calculation formula that is being gradually phased in after the 2019 reform.

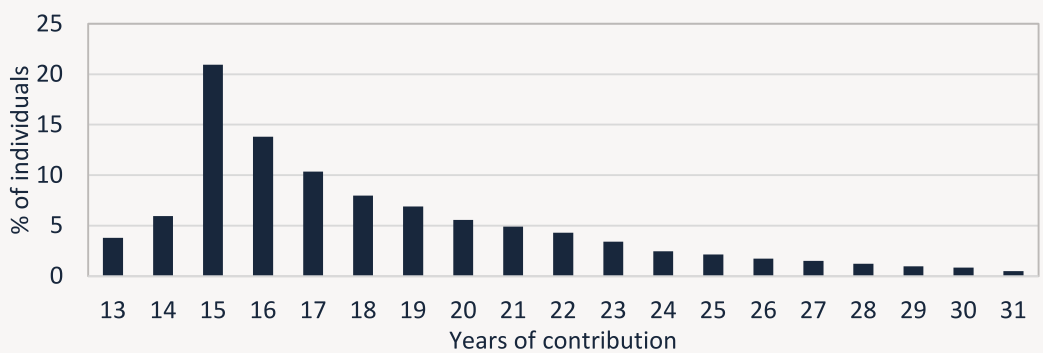
Table 5. Eligibility thresholds and benefit amounts in poverty prevention programs for the elderly (BPC) and general population (Bolsa Familia), 2023

	Elegibility threshold, BRL per capita	Monthly benefit amount
Bolsa Família	218	600 BRL per Family, plus 150 BRL per child under 6, plus 50 BRL per child ages 7–17 and pregnant women
BPC	330	1,320 BRL per person aged over 65

Source: Ministry of Social Development, Family and Fight Against Hunger, as of November 2023.

The arbitrarily set vesting period in combination with the non-linear benefit formula and the relatively high minimum pension level discourage long contribution histories. For those who do not expect to reach a pension exceeding the minimum pension level (66 percent of retirees), all contributions paid after achieving minimum pension eligibility are a pure tax. Unfortunately, formal labor market links for lower income people are weaker, so this segment of the population is most sensitive to the formalization incentives and is most likely to optimize their contribution periods. Therefore, the result shown in figure 14 is predictable: the most frequent length of contribution of those who qualify for a minimum pension is 15 years, with only 9 percent of individuals contributing more than 25 years.

Figure 14. Length of contribution periods of beneficiaries who retired with a minimum pension benefit in 2018



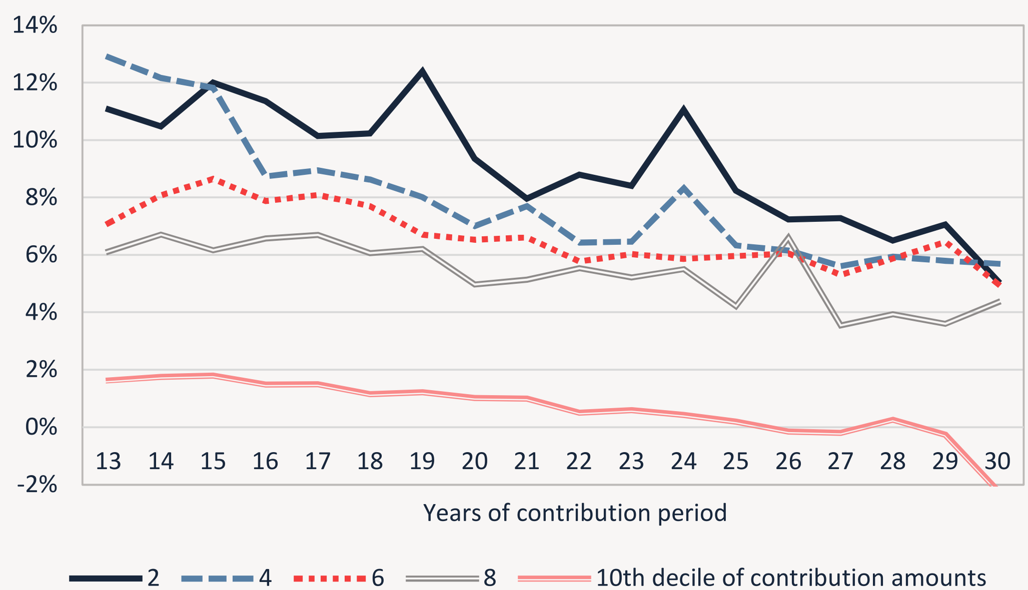
Source: SEPREV/Ministry of Labor.

Note: No information was available on the contribution history of individuals who eventually did not meet the minimum requirements for retirement, which potentially extends the left-hand side of the distribution. With the 2019 reform, the peak of the graph is expected to move closer to 20 years of contribution for men in coming years.

Not surprisingly, the overall internal rate of return (IRR)[17] on contributions made by those who retire with minimum pension is high but sharply declining as contribution history lengthens (see figure 15). Pensioners who are in the lowest deciles of overall lifetime contributions and only contribute for 15 years reach an average of 12 percent real internal rate of return, which implies an unfairly high subsidy. Those who paid most contributions, falling into the 10th decile of contributions made, and contributed over 25 years get 0 percent internal real rate of return. Therefore, the minimum benefit policy generates great inequality even among poorer pensioners receiving the minimum benefit.

Even for those who are counting on a pension above minimum level, the RGPS benefit formula discourages longer contribution periods, once minimum vesting period is achieved. As the formula grants 60 percent of average salary for the first 15/20 years (3-4 percent per year of contribution) and only 2 percent thereafter, the "return" on later contributions goes down.

Figure 15. Internal rate of return by decile of contributions made for urban retirees with a minimum pension benefit in 2018



Source: SEPREV/Ministry of Social Security.

Note: Color lines represent different deciles of the distribution of contribution amounts by pension beneficiaries during their working lives.

[17] IRR is calculated hypothetically assuming that pension contributions are diverted to an interest bearing account, from which a pension equal to that promised by the pay-as-you-go plan is eventually paid for the period equal to the average life expectancy. The IRR is a real interest rate that would fully deplete the hypothetical account upon the last pension payment.

Minimum benefit reform proposal

Considering the major sustainability challenges facing the pension system and inequities implied by minimum pension benefits, the reform of the minimum pension benefit is vital, coupled with compensating measures in the provision of social pensions. The current minimum pension policy also reduces incentives to contribute, lowers the efficiency of poverty prevention[18] to lowest income groups, and blocs the effects of many measures of the 2019 pension reform. Brazil currently provides a "minimum benefit guarantee" for most old age residents through three programs: (i) the guaranteed minimum pension; (ii) the (de facto non-contributory) rural pension; and (iii) the BPC social pension. This mix of programs is fiscally expensive and has several design elements that make it unsustainable and distortive. A following series of design changes to all three benefits would improve their equity and consistency and would increase their efficiency: 1) reforming the guaranteed minimum contributory pension benefit by prorating the generosity of the benefit to the number of years of contributions, and removing the minimum contribution period; 2)revising the level of the BPC benefit to restore incentives to contribute to the pension system; and 3) consolidating the BPC with rural pensions.

Pro-rating of the generosity of the minimum pension to the number of years that individuals have contributed to the system during their working lives would be fairer. The minimum pension amount is currently set as equivalent to the minimum wage, but only those who make at least 15 years of contributions receive any benefit. The proposed reform would remove the 15-year minimum contribution, thus no longer penalizing those with shorter work histories.[19] At the same time, the benefit would no longer have its currently high floor and, instead, the floor would be prorated to years of contributions. A worker with a full contribution history (35 years for men at the moment) would continue to qualify for a full minimum pension, while one with 5 years of contributions would be eligible to 5/35 of that amount. Only this contributory part of the benefit would be extendable to survivors and include a payment of the 13th pension. For those who did not qualify for the full pension, the BPC benefit could be used to complement the income gap, as discussed below.

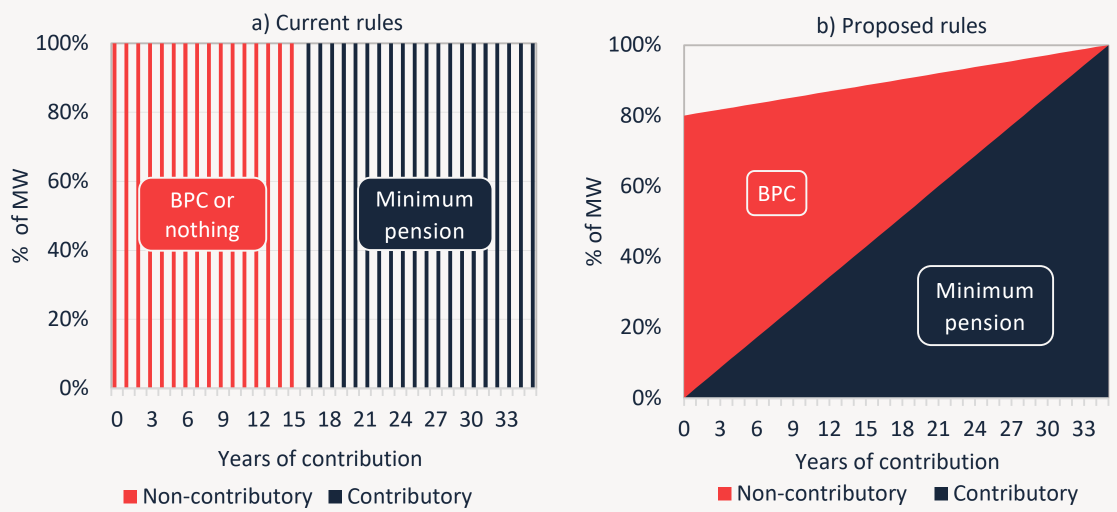
The BPC could then be coordinated with this newly designed contributory pension to ensure that all elderly people remain out of poverty. Consistent with usual practice in most countries, the BPC benefit could be gradually reduced in real terms (keeping its nominal value) to become lower than the minimum contributory pension, incentivizing formality and bringing fairness into the system. In addition, for those elderly people who qualify for only a portion of the contributory pension because of their short contributory history, the BPC would complement their income. For those elderly people with no contributory pension (such as those who have worked

[18] Efficiency of poverty prevention is low, because the same number of people could be lifted from poverty with lower spending per beneficiary.

[19] Without the change in benefit formula, an individual would be accruing 3-4 percent of career-long wage per year of contribution for the first 20/15 years (male/female), and 2 percent thereafter.

in the informal sector all their lives), the BPC would be paid in full (figure 16). This design would *de facto* make the minimum old-age protection universal and eliminate the means test currently applied to BPC. This universal approach would not be overly costly, since most elderly people already receive some benefit now, but would help ease the political challenge of a reform and reduce administrative inefficiencies.

Figure 16. Consolidating the components of old-age pensions (BPC and rural pension) and the prorated minimum contributory pension guarantee



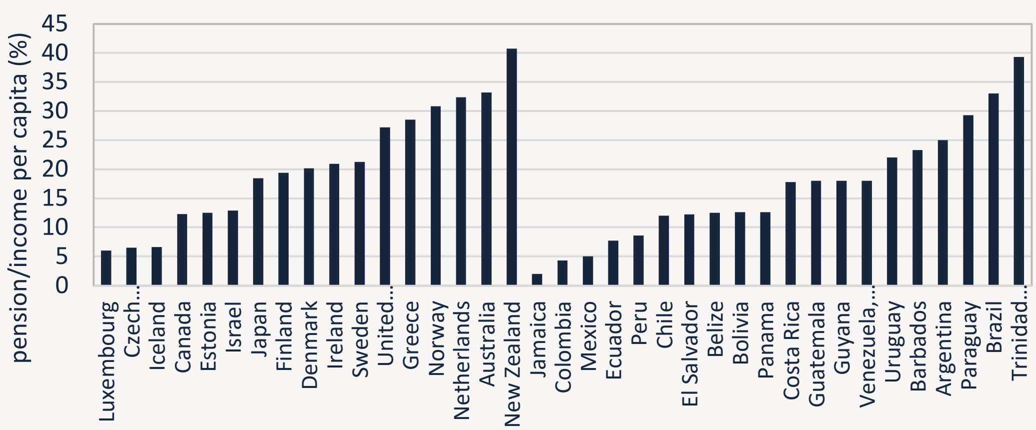
Source: Elaborated by the authors.

The savings generated by this reform would enhance fiscal sustainability of the system without increasing poverty. As the minimum pension accounts for a large share of pension benefits granted annually, the reform would have a sizable fiscal impact. Under our proposal, if the implicit rate of return is held at 4 to 6 percent, not only for those with a complete work career of 35 years but also for those with partial career (by prorating the minimum pension amount), the total savings on current pension spending would be 36 percent. Even accounting for increased expenditure on the BPC, the total savings would still be around 30 percent of all current spending on minimum benefits, or BRL 80 billion per year (0.9 percent of GDP). To put this into perspective, expenditure on the BPC program is currently BRL 76.5 billion per year (BRL 34 billion on BPC-old age and BRL 42.5 billion on BPC-disabilities).

The current BPC level is high by international comparisons (figure 17), so a reduction of the benefit to the vicinity of 80 percent should not be seen as

drastic.[20] The generosity of current noncontributory BPC pension in Brazil is only matched by Trinidad and Tobago. In Australia and New Zealand the non-contributory pension is also high, but this benefit is universal and is not complemented by a pay-as-you-go plan. As currently designed, the BPC creates incentives that are incompatible with the rest of the system. First, with a value equal to the minimum contributory pension, the BPC pension undermines incentives for individuals to contribute throughout their working lives and is not fair to those low-income workers who contributed to the pension system. The application of the poverty test to the BPC benefit is also not fair: a single elderly person with income below 25 percent of minimum wage qualifies for a BPC benefit raising her income to 125 percent of minimum wage, while a person with income just above 25 percent of minimum wage is disqualified for BPC receipt, leaving the latter much poorer than the former.[21] Second, as discussed earlier, the minimum wage is not an adequate measure of need. Eventually, once a desired level of non-contributory benefit is reached, the indexing of this benefit to a minimum consumption basket would be much more appropriate since the goal of the benefit is to protect the recipients from poverty.

Figure 17. Noncontributory pension levels in OECD and LAC countries, in comparison with income per capita



Fonte: Pensions At a Glace (2021)

Thus, the proposed reform would offer multiple advantages. It would improve incentives to contribute, increase fairness, and increase the fiscal sustainability of the pension system. Also, the proposal regarding the consolidated social assistance

[20] The reduction of BPC by 20 percent is chosen for illustrative purposes only. The BPC amount should be viewed as a policy choice to be determined in relation to other poverty reduction programs and living costs of the elderly.

[21] A household of two elderly persons with income below 25 of minimum wage per person would receive two BPC benefits.

benefit would reduce the administrative burden on individuals, the Brazilian Social Security Institute (INSS), and the courts (see subsection 3.4) while also ensuring that all of the elderly population is protected against falling into poverty. As coverage gap and poverty rates among the elderly are most prevalent in the northwestern regions and urban pockets of poverty, the introduction of universal benefits with streamlined concession procedures would likely benefit the disadvantaged elderly living there the most.

3.3 Contribution rate differences and the role of taxation

Brazil offers a few options to declare labor income for taxation purposes, with respective different contribution rates for pensions (table 6)**.** Many governments have different tax regimes that depend on income level or working mode of a taxpayer, but differentiating pension contribution rates is another matter. Tax regime differences are usually justified by difficulty to comply with and enforce tax laws, a need for income progressivity in tax collection, promotion or protection of certain modes of work, etc. The rest of the citizens are then asked to carry a heavier burden of taxation. However, Brazilian approach goes one step further and attempts to engineer implicit cross-subsidies not only between the whole of the society through the tax regime but also within the smaller pool of RGPS members. One way that the pension system attempts to do that is by differentiating individual contribution rates based on income, between 7.5 percent for the minimum wage workers to 14 percent for the highest income bracket. While this is not a very usual approach in other countries, this mechanism is clearly progressive and transparent. However, further differences in contribution rates based on profession are hard to justify, as they blur the line between taxation and contribution, and between non-contributory and contributory benefits, undermining the trust in the system.

Table 6. Tax regime and social insurance coverage

Category	Benefit Plan	Employee Contribution	Employer contribution	If the company opts for SIMPLES
Employees				
Employees CLT[a]	Full plan	7,5 to 14% of salary	20% (not limited to the ceiling of the RGPS) + 1.2 or 3% SAT (can be reduced by up to 50% or increased by up to 100%, due to the Accident Prevention Factor).	Initial tax rates range from 4% to 15.5% on the company's gross revenue.
Casual Workers[a]	Full plan	7,5 to 14% of salary		
Domestic Workers[a]	Full plan	7,5 to 14% of salary	8% + 0,8% SAT	–
Individual contributors				
Autonomous	Full plan	20% of remuneration	–	–
	Full plan[b]	11% of remuneration	20% of remuneration	2,5 to 9,59% of gross revenue
	Simplified plan[c]	11% of remuneration	–	–
Entrepreneurs[d]	Full plan	11% of remuneration	20% of the value of the pro-labore	Initial tax rates range from 4% to 15.5% on the company's gross revenue.
MEI	Simplified plan	5% of minimum wage	–	–
Optional	Full plan	20% of the contribution salary	–	–
	Simplified plan	11% of minimum wage	–	–
	Low income[e,f]	5% of minimum wage	–	–
Segurado especial				
Segurado especial	Simplified plan	1,2% of gross sales value	–	–

Source: SPREV/Ministry of Social Security.

Note:

a) Rates levied progressively on the monthly contribution salary, subject to the maximum contribution limit (ceiling) of the RGPS.
b) If services are provided to the company, the company retains and collects the contribution of the self-employed.
c) Those opting for the Simplified Plan cannot provide services to companies.
d) The company retains and collects the entrepreneur's contribution.
e) A person without own income exclusively dedicated to domestic work within the scope of their residence, as long as they belong to a low-income family.
f) A family with a monthly income of up to 2 minimum wages is considered to be low-income.

For example, the pension plan for rural residents can hardly be considered contributory, although it is classified as such. Small-scale farmers, fishermen, miners, foresters, and indigenous population are eligible to a minimum pension equal to a minimum wage under the 'special contributor' provision. People under this category should contribute at a rate of 1.3 percent on sales of agricultural produce, but in essence the plan works as a noncontributory pension regime: a proof of economic activity in rural area for 15 years satisfies the pension eligibility criteria, but so does an auto-declaration of rural residency. To retire with higher than minimum benefit, a rural resident has an option to contribute 20 percent of a salary above the minimum wage and to retire by length of contribution under the regular RGPS rules. However, 98 percent of rural population retire with minimum pension. The initial 2019 reform proposal attempted to tighten the requirements for rural retirement by requiring some years of formal contribution, but the provision was rejected by the National Congress. Clearly, a popular sentiment that rural areas are poor and should be subsidized prevails, even though living conditions in pockets of urban poverty could be as harsh. This is partially addressed by offering a non-contributory BPC benefit to poor urban residents, but it is offered at older ages and does not include a 13th pension or survivor benefit, raising questions about the logic of different treatment based on residency.

Contributions of microentrepreneurs are also highly subsidized, which is often utilized by high income individuals (figure 17). At a contribution rate much lower than that of other urban workers, the MEI regime offers access to a full package of benefits, including survivor benefits. There is plenty of anecdotal evidence that the lower taxation and contribution rates have created incentives for firms to 'hire' employees as MEI workers, even though their duties mostly resemble an employee-employer relationship. In 2021, close to 10 percent of RGPS contributors declared this contribution regime, bringing in only 1 percent of RGPS revenues. Given the evidence, it would be logical to at least limit the use of this benefit to only low income workers.

Finally, small firm owners (Pessoa Jurídica or PJ) paying taxes under the SIMPLES[22] regime are allowed to set their contribution base themselves, independent from their actual income (prolabore, self-declared base salary). Although the contribution rate is fixed for this group at 11 percent, the arbitrary nature of the selected contribution base also renders the contribution amount to be arbitrary. This would not be a problem if pension benefit level corresponded to the contribution history. However, given that minimum pension is heavily subsidized, the arrangement offers a very attractive implicit rate of return, introducing another source of unequal treatment which benefits more than 20 percent of high-income individuals, as shown in figure 18.

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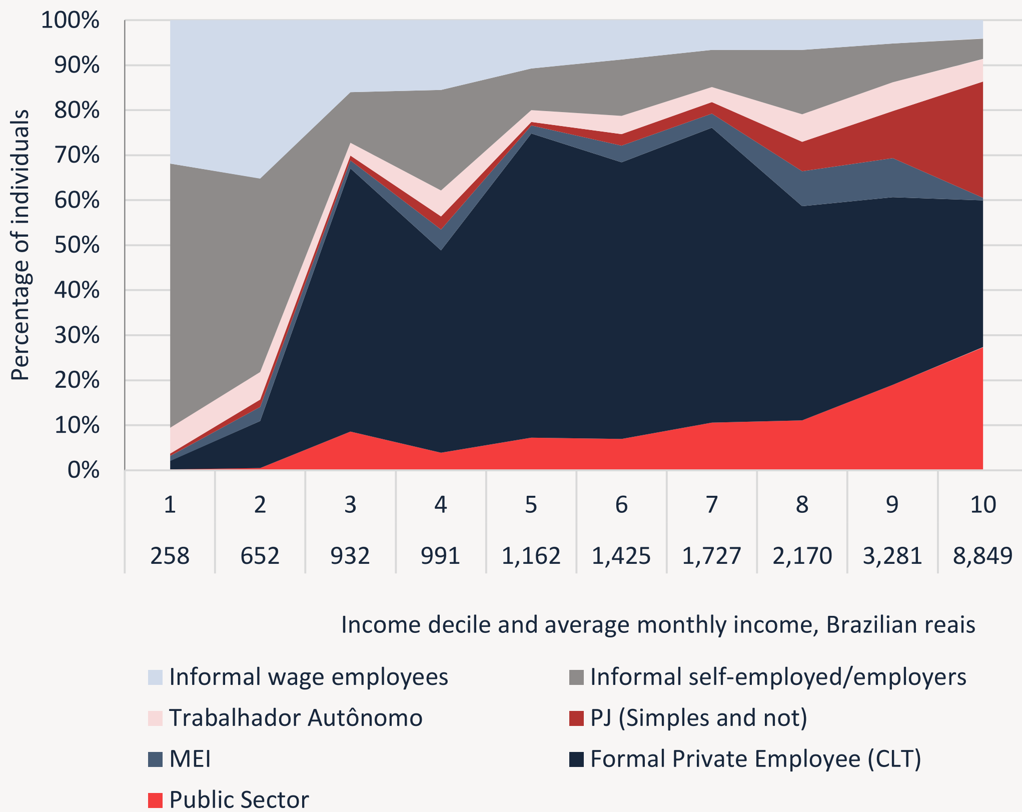
[22] See SIMPLES Nacional tax regime at Lei Complementar nº 123, from December 14, 2006.

Figure 18. Tax regime by income deciles



Source: World Bank BraSim microsimulation tool calculations, based on PNADC 2017 data.

Aligning pension contribution rates for all types of workers would be fairer and could reduce incentives to disguise dependent work as self-employment. Under some circumstances, higher contribution rates would interfere with workers' ability or willingness to contribute. However, in those cases a noncontributory pension option would result, at a lower benefit level, without the survivorship insurance, and without the 13th benefit payment. Fiscally, the BPC benefit at 80 percent of minimum wage would be cheaper than full minimum pension net of lifetime MEI contributions, as will be shown in figure 21 of concluding section. The 3.2 subsection offers a mechanism of implementing this clear separation between contributory and non-contributory pensions in a fair way.

It is also important to take into account generational and regional inequities when considering fair contribution and tax rates. While reduction in the generosity of the pension plans is necessary over time, it might overburden one generation, usually the young. However, the burden of the reform could be spread more widely, bailing in older generations. The most common approach to accomplish this goal is to use progressive taxation of pension income. Most high-income countries tax pension income, and the practice is also spreading to Latin America and the Caribbean (table 7). This would be even more relevant for Brazil, which historically has offered rather generous pension benefits and is facing especially rapid aging. Social security contributions on pension income are another alternative that already has precedent for civil servant pensions in Brazil. Equity considerations also require that all income, including wages and all benefits are added together first before taxation rates and minimum income guarantees are applied. Implementing such measures would also have regional income transfer implications, as most additional revenues would be collected from higher income localities.

Table 7. Treatment of pensions and pensioners under personal income tax and social security contributions

	Extra tax allowance or credit	Full or partial relief for PAYG DB pension income	Social security contributions on pension income
Argentina		X	Low
Bahamas			None
Barbados	X		None
Belize			None
Bolivia		X	Low
Brazil		X	None
Chile	X		Low
Colombia			Low
Costa Rica			None
Dominican Republic		X	None
Ecuador		X	None
El Salvador			Low
Guatemala			None
Guyana		X	None
Haiti			None
Honduras			None
Jamaica	X	X	None
Mexico	X		None
Nicaragua		X	None
Panama		X	Low
Paraguay		X	Low

	Extra tax allowance or credit	Full or partial relief for PAYG DB pension income	Social security contributions on pension income
Peru		X	None
Suriname		X	Low
Trinidad and Tobago			None
Uruguay	X		Low
Venezuela		X	Low

Source: OECD/IDB/The World Bank 2014.

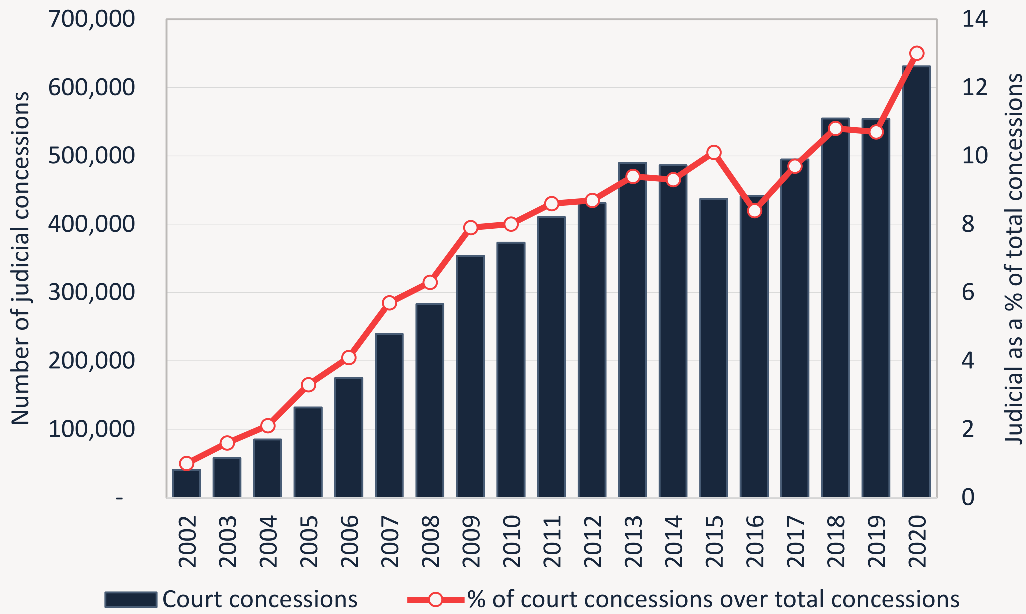
3.4 Judicialization of benefit eligibility

The ability of citizens to challenge administrative decisions of INSS regarding benefit eligibility is a positive feature of the Brazilian system, but it seems to increasingly be abused. Judicialization of social insurance benefits in Brazil has seen a steep rise since 2000s and keeps growing (figure 19). The share of concessions granted through the court system, i.e. the success rate of the judicialization process, has also been on the rise, partially because the overwhelmed INSS system no longer contests many cases in courts. On January 2023, 15.7 percent of INSS benefits were granted this way. Three main mechanisms explain the growth of benefit judicialization in Brazil: (i) lower concession rate of benefits by administrative measures and failure of administrative appeal mechanisms lead individuals to resort to the judiciary; (ii) longer average response time to administrative requests[23] encourage judicialization and greater chance of success for the complainant; (iii) easier access to information on both the procedures and the success rates of judicialization reinforce a growing demand for the judicial path. While digitalization[24] expanded the options for prospective beneficiaries to communicate with INSS, the low digital literacy of many applicants is said to have led to larger number of requests with errors which lead to benefit denials – what per se may have also increased judicialization.

[23] The average benefit concession time increased from the average of 25 days in 2013 to 75 days in 2019 (INSPER, 2020, using data from BEPS several years).

[24] The "Meu INSS" is an online web and cellphone application where applicants can request seven different types of benefits, and a few other services such as pension benefit simulation, personal data updating, and the submission of medical certifications required in benefit applications, among others.

Figure 19. Evolution of benefit assignment by courts



Source: Costanzi et al (2021), elaborated using data from SINTESE/INSS, MTE and DATAPREV.

Judicialization, however, can produce inequalities in several ways. These are: i) not everyone has easy access to courts, often excluding those living in faraway locations outside capital cities; ii) not everyone can navigate the legal terms and steps in order to start and monitor the progress of their complaint, so only the better educated and better informed individuals are able to claim benefits in courts; (iii) case resolution may lead to similar cases being decided differently by different courts and judges, leading to unequal treatment under the law; (iv) legal precedent can influence current decisions based on historical decisions that were biased, embedding inequalities into the system for extended periods of time; (v) differences in funding and resources allocated across the legal system can impact its effectiveness and the equitable delivery of justice; and (vi) overworked court systems can result in significant delays in the resolution of cases, such that those who can afford to wait may have an advantage, while those with urgent legal needs, may experience unequal treatment due to the backlog.

Judicialization of non-programmed benefits (those related to individual's disability) predominate and seem to be associated with disagreements regarding the validity and scope of the medical examination certificate, carried out by the INSS accredited doctor (INSPER 2020). The opinion of the medical expert often results in the administrative denial of the benefit, which is later relaxed by the judiciary, who concedes the benefit. Over 90 percent of administratively denied benefits requested in 2019 concentrate within five categories: sickness, maternity, pension by age, pension by length of contribution, and BPC due to disability (INSPER, 2020). The six most frequent benefits granted through judiciary are: sickness, BPC pension by age, disability pension, pension by length of contribution, BPC by disability, and survivor benefit. Figure 20 offers additional evidence for the rate of expansion of benefit judicialization.

Judicialization is a lengthy and costly process for the government. Annually, around BRL 4.6 billion are spent on the federal state apparatus involved in analyzing INSS benefit related court cases, which includes the mobilization of the administrative procedures (by INSS staff) and the judicial bureaucracy (by magistrates, employees of the Federal Court, the Federal Attorney General's Office, and public defenders of the Union).[25] The waiting time for a medical certification appointment can exceed 365 days in some localities, exposing the shortage of professionals, particularly in areas outside the capital cities.[26] The lack of INSS professionals has been an issue for nearly a decade and now reached a critical point: in 2024 the government is seeking to hire 1500 expert doctors, increasing the current working capacity by 50 percent, and locating them in the countryside. As of October 2023, there are 633 thousand pending requests in the waiting list for a medical certification appointment.[27]

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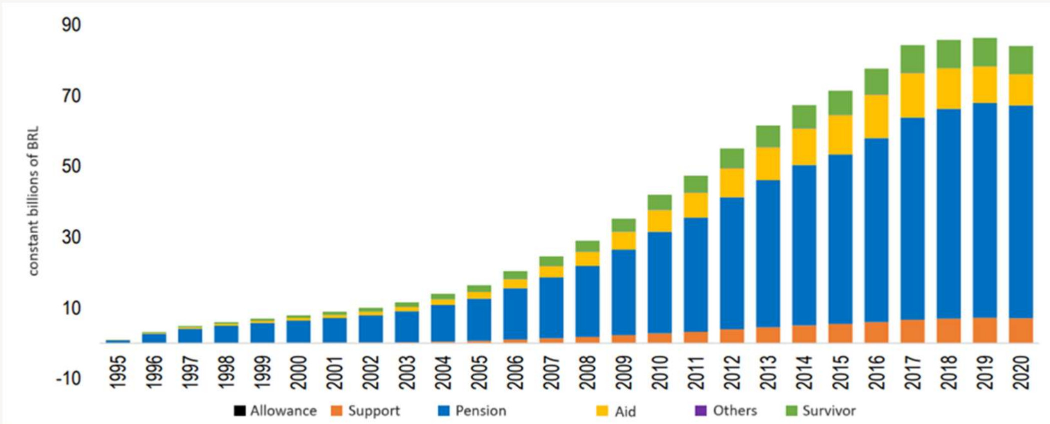
[25] 2018 estimation from TCU, the national controller institution, available at: https://portal.tcu.gov.br/imprensa/noticias/audiencia-publica-no-tcu-trata-da-judicializacao-dos-beneficios-do-inss.htm, accessed on October 26, 2023.

[26] Available at https://www1.folha.uol.com.br/mercado/2023/10/previdencia-tera-concurso-com-1500-vagas-para-medico-perito-em-2024.shtml?pwgt=krji50basgb72pqanqs0l5jsbu4pjsz9ahanqai8louai682&utm_source=whatsapp&utm_medium=social&utm_campaign=compwagift, accessed on October 26, 2023.

[27] Source: Portal da Transparência, https://www.gov.br/inss/pt-br/portal-de-transparencia/portal-de-transparencia/, accessed on November 6th 2023.

Figure 20. Evolution of total value of benefits assigned through courts



Source: Costanzi et al (2021) using data from INSS/Dataprev special extraction.

Note: The extraction does not include the values referring to the 13th salary. The values in the graph include an estimate of the thirteenth: 1/12 of the annual expenditure of all species groups, except assistance supports.

Going forward, simplification of the processes and efficient solutions are urgently needed. The improvements in the efficiency of the administrative concessions can be an avenue for decreasing judicialization, while improvements in the efficiency of the judicial bureaucracy can speed up the concession of benefits and streamline the equal treatment of similar cases. For instance, the intensification of digital documental exchange instead of in-person medical assessments can help.[28] However, long lasting solutions would depend on the simplification of benefit assignment processes. For example, subsection 3.3 offers an integrated solution that involves complete abandonment of poverty tests for BPC benefits and rural residency tests for pension assignment by age, which would go a long way in simplifying INSS processes.

[28] This has been implemented in a lower scale by the federal government through the Atestmed application for temporary incapacity benefits (for work leave up to 180 days) and has the potential to be scaled up to other benefits, hence lowering the constraints on INSS staff's shortage.

4. SUMMARY OF THE FINDINGS

Pension policy needs to take into account multiple goals, including fiscal sustainability, equity, and universal access to income protection at old age. Given the especially rapid aging faced by Brazilian society and elevated pension spending of the country, the fiscal health of RGPS pension plan is of paramount importance and has been a focus of policy discussions and reforms for quite some time. However, the equity aspects of the pension system also matter greatly. Beyond the intrinsic social value of equity and fairness, these aspects affect labor market formalization incentives and economic growth. Therefore, recent trends of increasing share of minimum pension recipients, rising prevalence of subsidized contributory regimes, and growing judicialization of pension benefit awards point to growing importance of monitoring and correcting the equity aspects of the system. The inequities discussed in Section 3 of this note arise from a plethora of contribution and retirement regimes, interactions between various contribution period requirements and minimum pension level, lack of pension income taxation, and unequal and cumbersome access to benefit concession procedures.

The effects of inequities discussed in this note are both large and somewhat unexpected. Some jarring inequalities can be inferred from box 1, which collects some selected statistics discussed throughout the note. A set of stylized examples summarizing the main findings is presented in figure 21 (see assumptions used in table 8). The figure presents the modeling of lifetime contributions and pension income for 10 stylized individuals contributing and retiring under different pension plan rules. Under the assumptions used, all individuals are subsidized by the pension system. Importantly, since the results are presented in terms of individual's pre-retirement wage, lower net present value of pension coverage in terms of individual's wage may still mean higher subsidy in nominal terms. For example, a typical individual retiring under LoC arrangement is likely to benefit more in nominal terms and less in relation to his own pre-retirement income.

BOX 1. SELECTED STATISTICS CHARACTERIZING THE BRAZILIAN PENSION SYSTEM

Spending

- Pension spending at 12.7 percent of GDP (compared to 7.7 percent for an average OECD country)
- RGPS deficit at 2.7 percent of GDP (covered population subsidized by taxpayers)
- Only 7 percent of rural pension spending is covered by contributions from rural sector

Membership

- Only 56.4 percent of the economically active population in Brazil contribute to RGPS
- RGPS and BPC have 32 million pensioners, whereas Brazil has only 20.7 million elders above 65
- 11 percent of the beneficiaries receive more than one benefit from the government
- To keep the same dependency ratio, 'new age 65' would have to rise to 72 by 2040, and 78 by 2060
- Old age dependency ratio will double in just 23 years (it took 62 years for high income countries)

Pension eligibility and duration

- A woman living a rural area in Brazil can retire 10 years earlier than a man in an urban area
- Urban retirees by age live on average 15.4 years, while those by length of contribution live 20.4
- A rural pension by age lasts on average 19 years, while an urban pension by age lasts 15.4
- 10 percent of all pensioners retiring by length of service have reduced eligibility requirements
- Medium age of those retiring by length of contribution is 55 years
- Average urban pension by length of contribution is 74 percent higher than by age
- The average survivor benefit lasts 16.5 years
- Spouses aged over 55 receive 72 percent of all survivor benefits, 92 percent of these being female

Minimum pension

- The minimum pension is effectively 8 percent higher than the take-home minimum wage
- The level of the minimum pension places its beneficiaries between 5th and 6th income deciles
- About two thirds of pensioners retire with minimum pension
- Only 9 percent of urban retirees with minimum pension contributed more than 25 years.
- Among the urban pensioners with minimum benefits, pensioners with lowest lifetime contributions reach 12 percent real internal rate of return on contributions, while those who contributed most for over 25 years get 0 percent.

Judicialization

- 15.7 percent of INSS benefits are granted through courts (from close to 0 percent in 2002)
- The average benefit concession time increased from 25 days in 2013 to 75 days in 2019
- The waiting time for a medical certification appointment can exceed 365 days in some localities

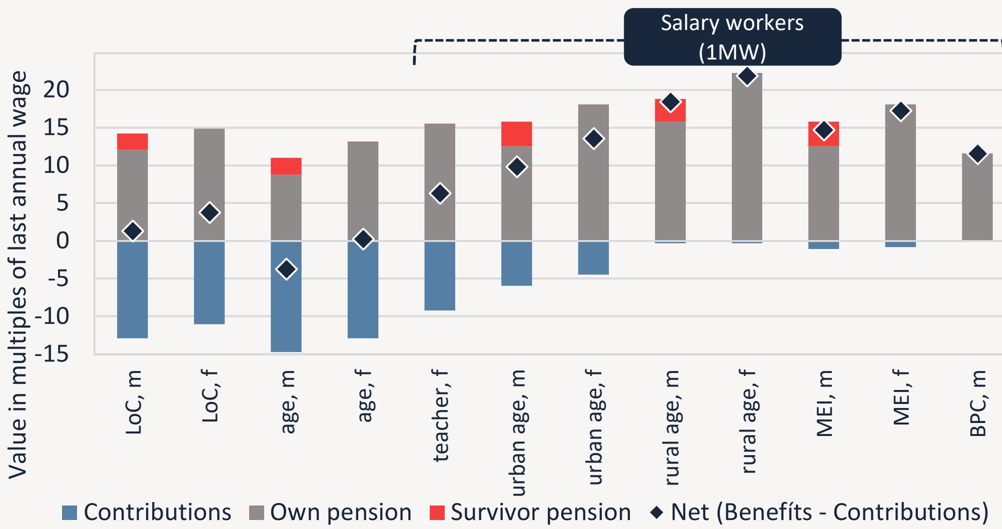
This note suggests a package of reforms which would both increase fiscal sustainability and improve equity of the system. The proposed reforms include reexamination of the basis for retirement age differences, elimination of subsidized contribution regimes, taxation of pension income to improve intergenerational equity, simplification of application procedures for some benefits, and introduction of universal social pension with differentiated levels of contributory and non-contributory benefits. We consider the latter reform especially important, as two thirds of Brazilian retirees are now retiring with minimum pension amount that is not dependent on contributions made, which is having far-reaching implications for equity, fairness, labor markets formalization, tax compliance, economic growth, and fiscal sustainability of the national pension system. Importantly, streamlining of the pension system into fair and simple old age poverty protection and old age saving tool should also be complimented with other programs designed to directly correct for other economic and social ills: discrimination, inequality, low human capital, inefficient labor markets, and uneven regional economic development. Table 8 offers the detailed list of proposed reforms, noting their impact on equity improvement in several dimensions analyzed separately in previous section of the note.

Table 8. Summary of proposed reforms and their impact on equity

	Reduce differences in benefit duration	Reduce benefit subsidies beyond poverty protection	Reduce contribution and taxation subsidies	Equalize access to benefits
Changes in benefit eligibility conditions				
Eliminate gender differences in retirement ages	X	X		X
Eliminate urban/rural distinctions in eligibility	X	X		X
Review the list of professions considered hazardous	X	X		X
Eliminate pension law differences for teachers	X	X		X
Eliminate means- and rural activity tests, prorating universal BPC benefit to proportion of adult life without contributions		X		X
Simplify pension benefit application procedures				X
Contributions and benefits				
Eliminate urban/rural distinctions in contributions and benefits		X	X	X
Increase employer contribution rates for the remaining list of hazardous professions		X	X	X
Delink BPC and minimum contributory pension levels, under-indexing BPC until the desired resting point is reached		X		
Prorate minimum contributory pension to proportion of adult life with contributions		X		X
Equalize contribution rates across professions and employers			X	
Others				
Address non-pension related social and economic goals through direct policies outside of the pension system	X	X	X	
Tax pension income		X	X	

Source: Elaborated by the authors.

Figure 21. Net present value of lifetime contributions and pension benefits for select individual profiles in terms of pre-retirement wage



Source: Elaborated by the authors.

Notes: Pre-retirement wage of BPC recipient is assumed to be equal to minimum wage; the retirement benefit for all profiles is assumed to be 100 percent of the average lifetime wage; modeling assumes 2 percent real wage growth and 2 percent real discount rate; modeling assumes 13 monthly payments of contributory benefits and 12 monthly payments of BPC pension per year. Profiles 1-3 are assumed to pay 14 percent social security contribution (top income bracket).

Table 9. Characteristics of individual profiles used in figure 21

	LOS	Contribution Rate	Duration of benefit (own + survivor pension)
1. Male, regular LoC	35	0.31	22.4 (retires at 55)
2. Female, regular LoC	30	0.31	22.4 (retires at 55)
3. Male, urban by age	20	0.31	17.4 (retires at 65)
4. Female, urban by age	15	0.31	20.4 (retires at 62)
5. Female teacher	25	0.31	25.4 (retires at 57)
6. Male, rural	15	0.02	21.0 (retires at 60)
7. Female, rural	15	0.02	26.0 (retires at 55)
8. Male, MEI	20	0.05	17.4 (retires at 65)
9. Female, MEI	15	0.05	20.4 (retires at 62)
10. Male, BPC	-	-	13.4 (retires at 65, no survivorship)

Notes: Female life expectancy is assumed 2 years higher than average and 4 years higher than for men. Male benefit package is assumed to include 4 years of survivor benefit.

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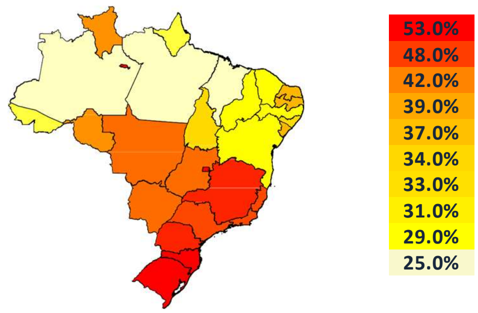
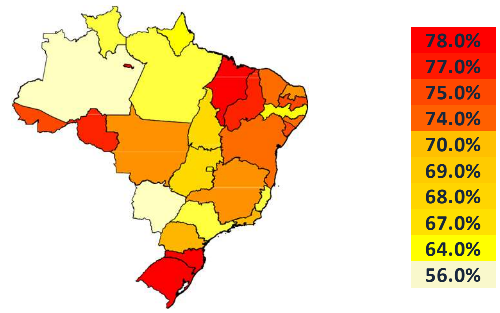
ANNEX

Annex 1. Regional dimensions of aging and pension coverage

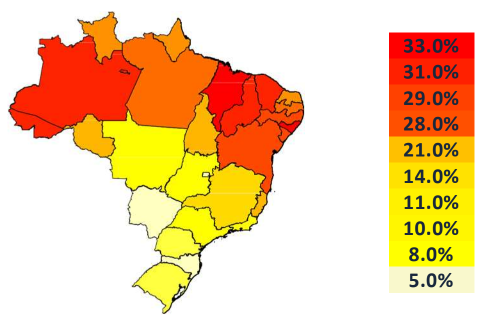
Participation of working age population (20–64)



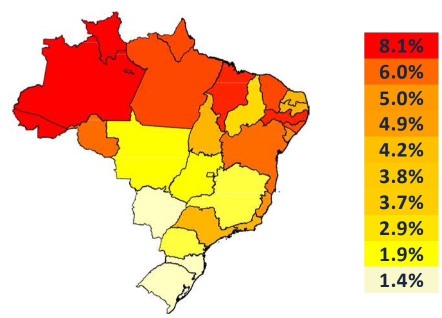
Coverage of elderly (65+)



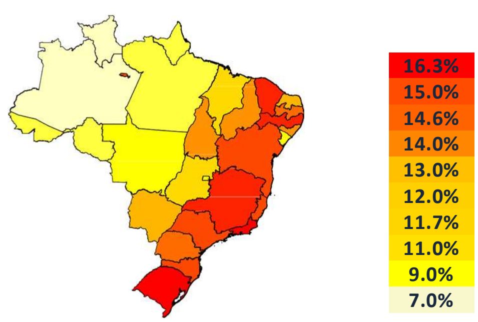
Poverty rate of working age population (20–64)



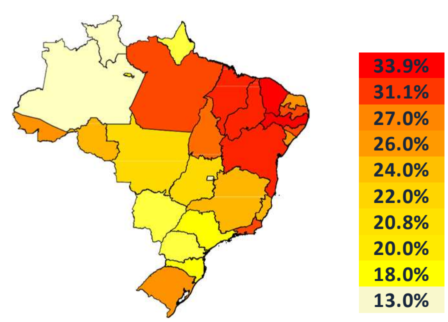
Poverty rate of elderly (65+)



Dependency rate of population



Ratio of covered elderly to contributors



Source: PNAD household survey database, 2012.