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Brazil: Tax Expenditure Rationalization within Broader
Tax Reform

by Maria Coelho

I N T E R N A T I O N A L M O N E T A R Y F U N D

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Brazil: Tax Expenditure Rationalization Within Broader Tax Reform

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Abstract

The excessive complexity and burden of the Brazilian tax system, riddled by cumulative indirect taxes and heavy payroll contributions, have led to an accumulation of fiscal incentives aimed at reducing its burden on taxpayers and productive activities. Federal and subnational tax expenditures currently stand at over 5 percent of GDP. Rationalizing them can only be comprehensively feasible in the context of a broader sequenced tax reform, and could reduce resource misallocation and income inequality, as well as provide new revenues.

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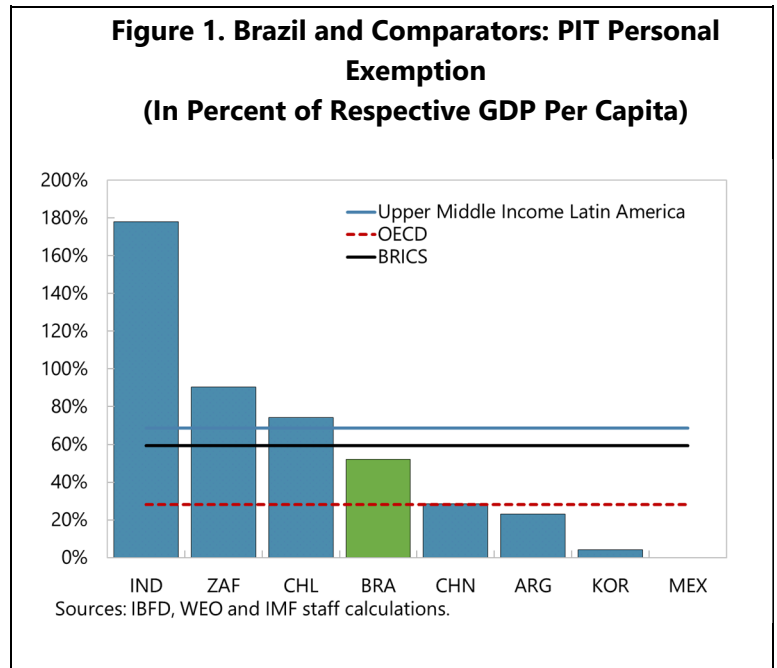
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I. OVERVIEW OF BRAZIL'S TAX SYSTEM

- 1. Historically, the design of the Brazilian tax system has prioritized revenue collection (to the detriment of equity and efficiency), which is reasonably high by international standards.** Despite an increase in the number of and forgone revenue associated with tax expenditures between 2000 and 2015, as well as the elimination of a financial transactions tax (CPMF), overall national (federal plus state and municipal) tax revenue to GDP (excluding social security contributions) remained stable over that period at just under 23 percent on average. Since then, in part on the back of the 2014-2016 recession, tax revenue declined to 20.5 percent of GDP pre-COVID (2019), still above the average comparator ratio in other emerging market economies and Latin America (19 percent), though below that in the OECD (25 percent).
- 2. Brazil's tax system is notorious for its complexity.** Tax collection has come at the expense of heavy compliance costs for taxpayers and administrative burden for the government, with some of the OECD's highest tax litigation magnitudes (Insper, 2020) and according to the World Bank's annual Doing Business (2020) report, Brazilian taxpayers spend the most time by far than any others in the world complying with their tax obligations (at over 1500 hours a year, over half of which for subnational taxes). Cumulative indirect taxes at various levels of government, largely based on origin (rather than destination), have created distortions to allocative efficiency particularly burdening exports, productive investments, and formal employment – and therefore has served as a key hinderance on potential GDP growth. Substantial allocation of taxing authority to subnational governments (states and municipalities) has exacerbated the weakness of the overall tax system by fostering domestic tax competition between states referred to as a "fiscal war", which has limited the potential growth of overall tax revenue collection.
- 3. About half of the general government tax burden (including social security contributions) comes from indirect taxes, which are predominantly regressive.** Zockun and others (2007) show that the regressivity of indirect taxation in the country is in fact sufficient to overcome the redistributive effect of existing direct taxes. In addition, the redistributive capacity of the direct tax system (measured as the relative burden of those earning more than 30 times the minimum wage to that of those earning less than twice the minimum wage) has itself decreased since the mid-1990s, both due to low effective income tax rates paid by the richest families, but also to the low share of direct taxes in the overall tax burden.

4. Personal income is taxed under a dual income tax system, with a progressive schedule applying to labor income, and capital income benefiting from lower average effective rates. Due to bracket creep over non-indexation of thresholds since at least 2015, the burden of personal income tax now falls disproportionately on the middle class relative to comparators, with up to 80 percent of the population exempted (given the extreme skewness of the income distribution to the left).¹ Nonetheless, at 52 percent of GDP per capita, Brazil's personal exemption is still above the OECD average, as shown in Figure 1.



Given the high cost of tax compliance and informality for low-income households in the country, this ratio is adequate, if not on the lower side. Capital income, except dividends, is taxed at rates between 15 and 22.5 percent (compared to a top marginal income rate on labor income of 27.5 percent). Dividend income is currently tax exempt.

5. Corporate income is subject to a high statutory tax rate of 34 percent (45 percent in the financial sector). This is made up of (i) corporate income tax (IRPJ) at 15 percent (on 'actual' or 'presumed' profits); (ii) a 10 percent surcharge on taxable income over BRL 240,000 (USD 48,000); and Social Contribution on Net Income (CSLL) at 9 percent. An increased CSLL rate of 20 percent applies in the financial sector. Effective tax rate estimates under the standard regime are quite high, especially for marginal rates. Mintz and others (2020) estimate a marginal effective tax rate (METR) of 36.9 percent, with non-refundable value-added tax (VAT) on capital inputs the driving factor. The tax base is relatively broad, with firms taxed on a worldwide basis, and deductibility of loss-carry forward limited to 30 percent of profits. This relatively high burden has weakened Brazil's attractiveness as a location for real investment. Notwithstanding, some generous allowances, incentives, and preferential regimes exist, as expanded further in section II below.

6. The tax burden on corporate activity is compounded by the cumulative nature of multiple municipal, state, and federal level taxes levied mostly on production at the origin. Manufactured goods are subject to a creditable federal tax (*Imposto sobre Produtos Industrializados*, IPI), with variable rates by product that go from 0 to 365 percent for some

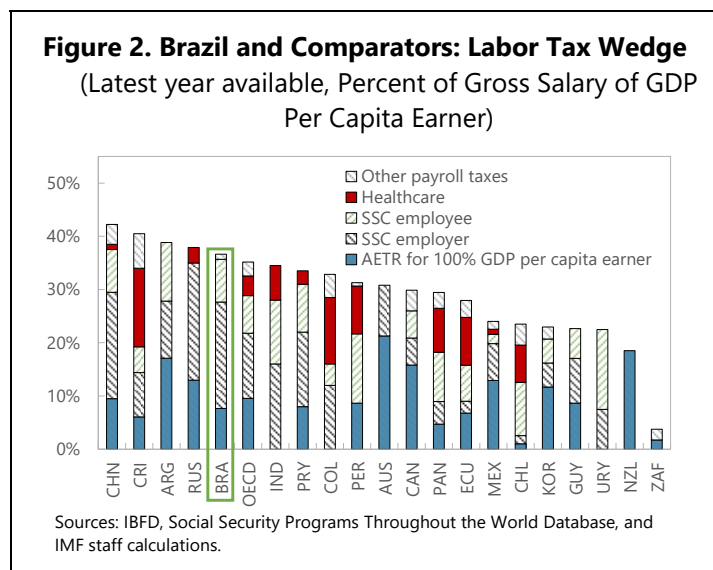
¹ According to household survey data from IBGE, average income of the bottom 80 percent of households in the first quarter of 2021 was R\$1374 per month, well below the current personal exemption of R\$1903.99.

products. IPI is also levied on imports of goods, and higher rates on specific products like tobacco function as a de facto excise tax. In addition, two federal “social contributions” are levied on sales of goods and (a contribution to the social integration program - PIS/PASEP - and a social contribution on billing - COFINS). They have mixed cumulative (1.65 plus 7.6 percent) and non-cumulative rates (0.65 plus 3 percent), depending on whether they are paid by companies in the “presumed profit” simplified regime, or the “real profit” corporate income tax regime, respectively. Higher rates apply on imports of goods, which are further subject to standard import duties, with rates ranging between 10 and 20 percent. Moreover, sales of goods as well as interstate transportation and communication services are subject to a state-specific value-added type tax (*Imposto sobre Circulação de Mercadorias e Prestação de Serviços*, ICMS). While a minimum rate of 12 percent applies in principle, ad-hoc exceptions abound according to the laws of each state. Revenues are shared between origin and destination states, for what is the main tax instrument of States and the Federal District. Finally, an extensive list of services is taxed at the municipal level through a cumulative tax on services (ISS), in the range of 2 to 5 percent.

7. The extent of cumulative taxation creates significant distortions in resource allocation. According to Varsano (2001), cumulateness “promotes the vertical integration of companies, since outsourcing services would be more expensive due to the cumulative effect than providing the service in-house; harms investments, as capital goods, which normally result from long production chains, are strongly burdened by cumulative taxes; and distorts domestic competitiveness, to the extent that when the same products can be prepared by more than one manufacturing technique, some are burdened more by cumulative taxes; and it distorts foreign competitiveness, since imported products and/or competitors on the foreign market do not suffer from the same problem (Varsano, 2001, cited in Afonso and others, 2013: 8).

8. In addition, formal employment is discouraged by heavy payroll taxes (with the labor tax wedge sometimes exceeding 36 percent, as shown in Figure 2). Overall, social security contributions account for about 22 percent of the total tax burden (5.6 percent of GDP for the general government in 2019). Formal workers contributing to the general social security system (RGPS) pay up to 14 percent of their salary (capped) and their employer is liable for another 20 percent. An 8 percent contribution to the employee’s

severance indemnity fund (FGTS) is also charged. Combined with the non-contributory nature of minimum guaranteed public retirement benefits and little severance return for low-wage



workers, the high cost of these contributions for employers create an incentive to hire low-wage workers informally. Moreover, by adding to the cost of labor in Brazil, high payroll taxes play an important role in reducing the global competitiveness of its firms, particularly those in labor-intensive sectors. Various smaller payroll-based taxes include the *salário educação*, as well as sector-specific taxes earmarked for apprenticeship programs and other worker benefits.

9. Multiple other smaller taxes applying to a variety of bases add to the labyrinthian character of the system. The federal government still levies a tax on certain financial operations (IOF), such as loans, foreign exchange operations, insurance, and securities, with detrimental impact on financial intermediation and inclusion. In addition, designated economic activities such as royalty payments abroad or fuel imports are subject to dedicated non-deductible taxes (e.g., CIDE). Further local taxes include the municipal property tax (IPTU), levied annually on the value of property in urban areas at varied rates (e.g., São Paulo, between 1-1.5 percent); a tax on the transfer of immovable property (ITBI); a tax on donations, gifts, and inheritances (ITCMD), which can reach up to 8 percent; and a recurrent tax on auto vehicles (IPVA).

II. CURRENT TAX EXPENDITURES

10. Tax expenditures, giving preferential treatment to certain economic agents or transactions, generally exacerbate the complexity described above and erode revenue collection. Typically defined as forgone government revenue resulting from differential treatment of specific sectors, activities, regions, or agents, tax expenditures (TEs) can take many forms, including allowances (deductions from the base), exemptions (exclusions from the base), rate relief (lower rates), credits (reductions in liability) and tax deferrals (postponing payments). They are not necessarily always bad policy, but more often than not have major consequences for the fairness, complexity, efficiency, effectiveness and transparency of the tax system itself, as well as the wider fiscal system – since they often serve purposes that might be pursued through public spending.

11. Brazil has a long history of basic tax expenditure reporting at the federal level, as well as legislative attempts to regulate their budgetary impact. Notwithstanding practical challenges, the country has a remarkably long track record of attempting to engender public accountability and transparency for tax incentives. The Federal Revenue Authority (RFB) has prepared and published a tax expenditure report annually since 1989, as prescribed by Art. 165 §6 of the Constitution. In accordance with Article 14 of the Fiscal Responsibility Law (FRL),² the government releases an annex to the draft budget guidelines law (PLDO, Annex IV.11) which includes a detailed list of tax expenditures for the next budget year and for two forward years, as well as different aggregates (by geographical area, sector, and tax). Ex-post estimations of the individual impacts of central government tax expenditures are published on the RFB website. Central government budget documents do not cover state tax expenditures—these are covered

² Lei Complementar 101/2000.

in the states' respective budget guidelines law (LDOs).³ The latter lack a uniform methodological approach and the vast majority of subnational governments do not conduct ex-post estimations of actual forgone revenue.

12. The methodology (revenue forgone approach) and definition of tax expenditures are in general in line with international best practice (Kraan, 2004). TEs are defined as indirect expenses by the government through the tax system aiming to achieve certain economic or social goals by creating an exception to the referential tax system, reducing government revenue and increasing taxpayer wealth. Tax deferrals are not considered TEs (Redonda and Neubig, 2018). Each annual tax expenditure report defines and discusses the benchmark used for multiple taxes and includes the expiration date of each tax provision (when determined by law).

13. There are no hard limits on tax expenditures, although they need to follow legal rules. Article 14 of the FRL states that any tax expenditure should fulfill one of the following conditions: either it is proven that it does not affect the targets set in the LDO, or it should be accompanied with a compensatory tax measure. An annex to the PLDO (Annex IV.12) is devoted to reporting the tax measures that were implemented to compensate for the creation of tax expenditures in the previous budget. However, this compensatory system has had only a partial effect in containing the growth of central government tax expenditures, which expanded at the same time that the fiscal deficit deteriorated (IMF FTE, 2017). Since the 2016 approval of the federal spending ceiling by constitutional amendment, tax expenditures have also been sometimes regarded as a loophole to go around this ceiling and continue providing implicit subsidies (thereby weakening the credibility of Brazil's fiscal framework). In practice, the failure of the FRL to adequately contain new TEs is also explained by the fact that the legislative branch can overturn executive veto of proposed new incentives, even if they fail to meet the stipulated criteria (which bind only the executive branch budget proposal).

14. Though there is no systematic monitoring or cost-benefit evaluation of tax incentives, new government bodies were created in 2019 to initiate that process. The recently created Council for Monitoring and Evaluation of Public Policies (CMAP) – coordinated by the Ministry of the Economy's Secretariat of Evaluation, Planning, Energy and Lottery (SECAP) –, and in particular its Committee for Monitoring and Evaluation of the Subsidies of the Union (CMAS) were charged with selecting a handful of tax expenditure programs per year on which to focus detailed cost-benefit analyses, propose policy changes, and publish final reports online. They have thus far successfully published over a dozen such reports. However, their work is constrained by the lack of an established protocol for the exchange of anonymized administrative taxpayer data from the RFB, in addition to financial and human resources needed

³ According to an IDB study (Afonso and others, 2014), only 6 states out of 27 do not provide information on tax expenditures in their LDOs.

to adequately process such data. Moreover, there is currently no clear mechanism to translate their recommendations into actual policy changes.

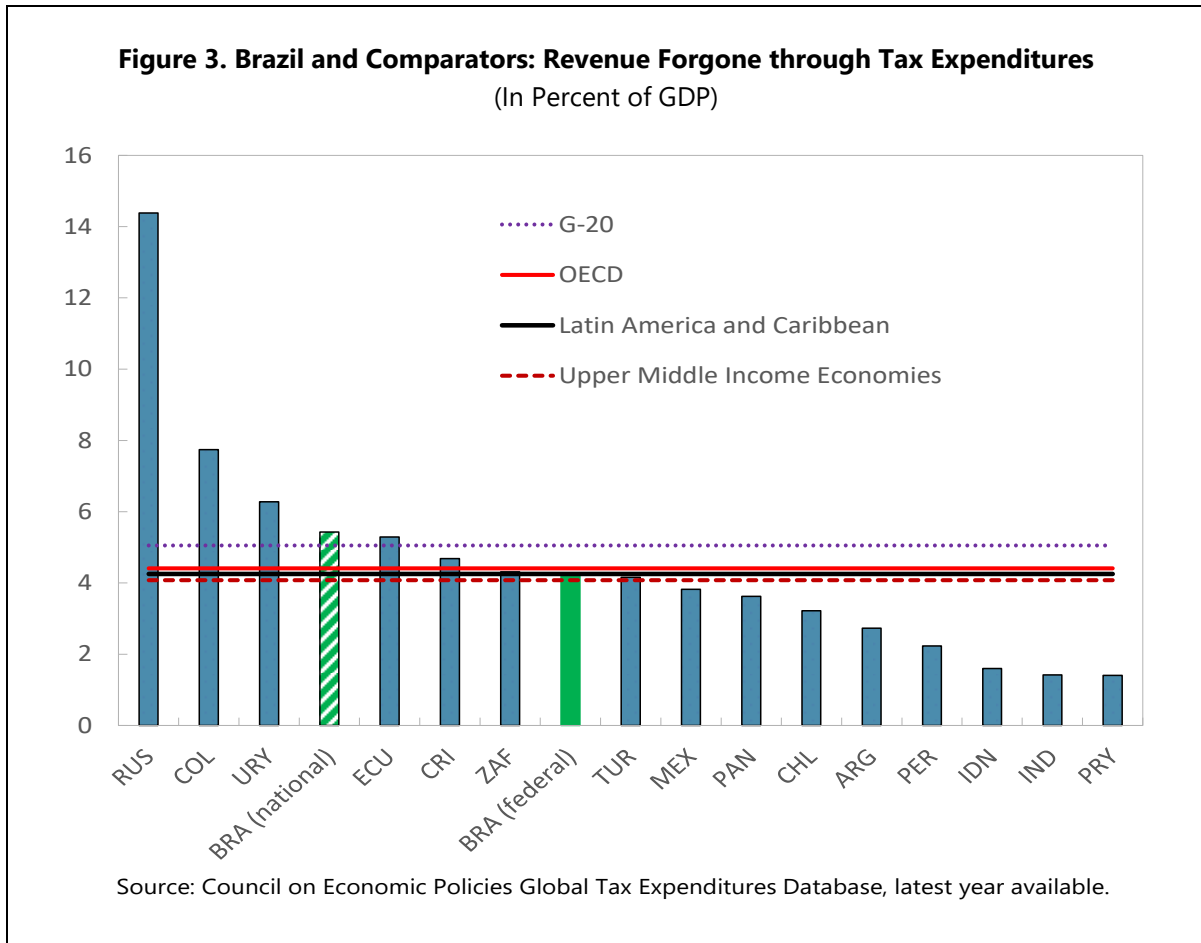
International comparison

15. Brazil's tax expenditures are high relative to G20 peers and other emerging markets. International comparisons are complicated by different methodologies and assessments as to what constitutes a tax expenditure, as well as changes year-to-year in individual countries' methodologies (which could have large impacts on quantified revenue forgone). Nonetheless, the practice is pervasive, even in advanced economies. Although already significant by itself, the 4.2 percent of GDP⁴ reported in Figure 3 for the Brazilian federal government likely underestimates the full dimension of tax expenditures in Brazil. In part, this is due to the lack of systematic quantification of TEs at the subnational level, whose estimates are added in a separate column (adding up to a national total of 5.4 percent of GDP in 2019). In addition, even these likely underestimate the full de facto magnitude of TEs in the country, as many preferential allowances and rates (discussed further below) are not included as deviations from the benchmark tax system, even in federal reporting.

Federal Level

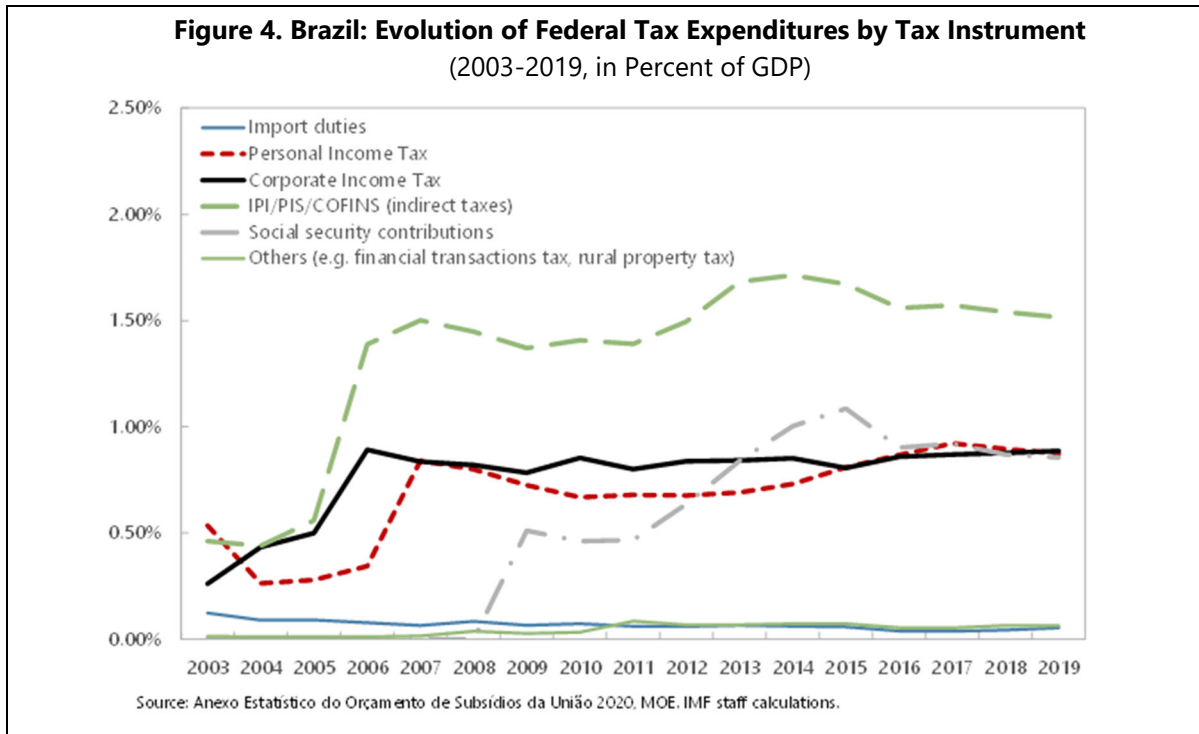
16. Federal tax expenditures have proliferated in Brazil over the past two decades, much in response to the complexity and burden of the standard system. At the federal level alone, there are at least 207 different categories of tax expenditures (DGT PLOA 2021), each sometimes a result of multiple decrees and legislative articles. A non-trivial number are even outlined in the 1988 Constitution and its amendments, much like the cornerstone of the overall Brazilian tax system. Often introduced with objectives to create employment, promote regional development, encourage formalization, and alleviate poverty, in practice these TEs have proliferated in response to a complex and excessively burdensome tax system that is seen as a barrier to said goals.

⁴ In 2019, according to data published by the Federal Revenue Authority (RFB), federal subsidies amounted to 4.8 percent of GDP – including also implicit credit subsidies and explicit financial subsidies. The analysis in this paper concerns solely implicit subsidies through tax expenditures, though they can be used to achieve similar policy objectives to other types of subsidies.

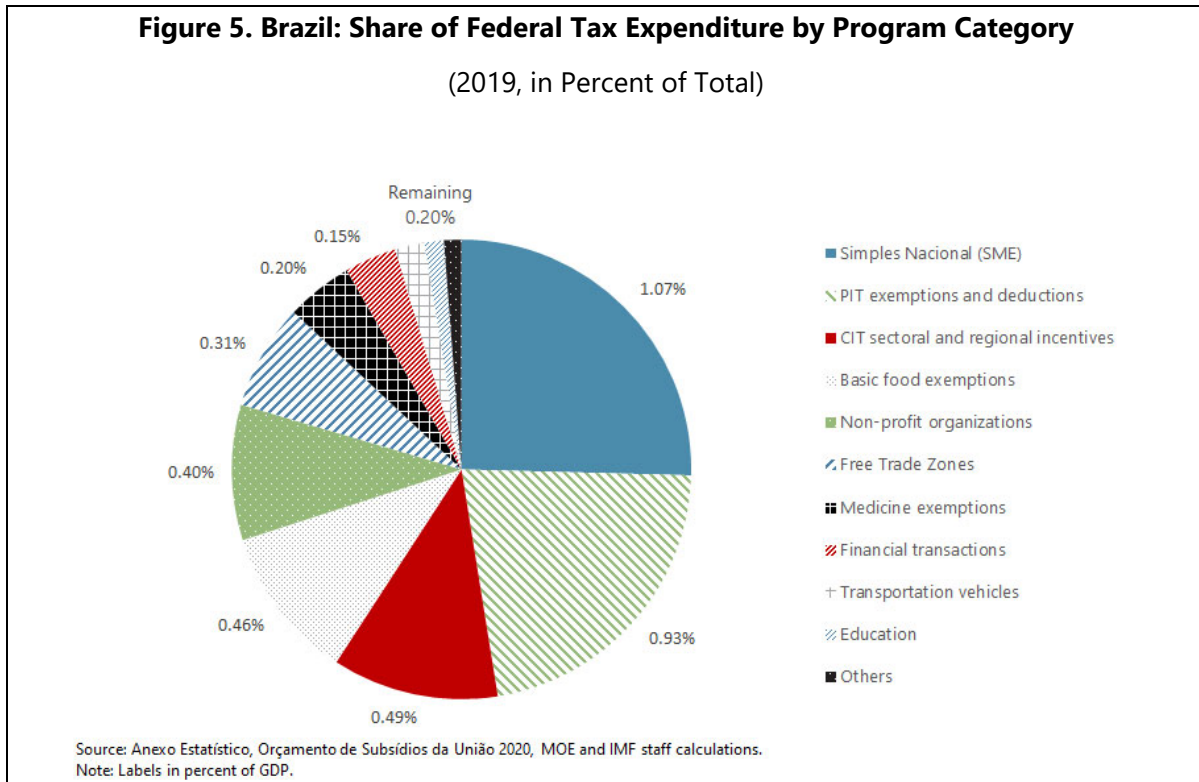


17. Most federal tax expenditures are attributable to indirect tax exemptions, with a couple of special corporate regimes standing out. As shown in Figure 4, exemptions and reductions in liability of IPI/PIS/COFINS constitute the single largest contributor to forgone revenue at the federal level.⁵ Figure 5 shows pre-COVID much of this forgone revenue also overlapped with that attributable to tax incentive provisions under the Simples Nacional (a simplified tax filing regime for smaller firms, described below), which single handedly accounts for about 25 percent of all quantified federal tax expenditures. Significant implicit outlays are also due to regional incentives and free trade zones (such as the Manaus Free Trade Zone), and zero-rating or exemption of basic food items.

⁵ Note tax expenditures related to social security contributions were not zero before 2008, but they were simply not quantified, as the institution responsible for their collection was only integrated with the revenue administration then. The apparent series break in Figure 4 thus reflects simply a methodological issue, rather than policy change.



18. When adding IRPJ (corporate income tax - CIT), payroll tax, and indirect tax expenditures, programs aimed at supporting businesses receive overall the most fiscal resources, but have had little impact on productivity, investment, or employment (World Bank, 2017). The largest programs are a simplified tax regime for smaller companies, payroll tax exemptions, and the Manaus Free Zone. While some of these incentives date as far back to the 1960s, others surfaced as recently as the 2014-2016 recession. They all had in common the intention that granting tax relief to businesses would foster economic development of the country, create jobs, and thereby reduce poverty and inequality. In practice, studies analyzing the effectiveness of most of these programs have shown scant evidence of increases in sustainable investment, cost-effective job creation, or reduction of informality. Instead, they have created new avenues of tax avoidance by more sophisticated (and wealthier) professionals and firms, created a non-level business environment favoring the profitability of less efficient and incumbent firms, and eroded the revenue base.



19. For small and medium-size enterprises, two optional regimes exist in fact, depending on the turnover threshold. While Simples Nacional, the regime applicable to firms with annual turnover of up to BRL 4.8 million (about USD 951,928) is considered a tax expenditure by the RFB, a separate but economically similar presumptive profit regime for companies with higher annual turnover still below BRL 78 million (USD 15 million) is not, therefore underestimating the true revenue forgone associated with simplified regimes for corporate taxpayers. The presumptive profit regime allows taxpayers to calculate taxable profits based on a “presumed” percentage of gross revenue (ranging from 1.6 to 32 percent, depending on the sector of activity), over which the IRPJ and CSLL liability are calculated (implying an effective tax rate on turnover between 0.54 and 10.88 percent, respectively). Liberal professionals and other normally sophisticated service providers can also opt for this regime. Entrepreneurs and firms only have an incentive to opt for this regime if their actual profit margin exceeds that presumed by the alternative regime, which necessarily thus translates into forgone revenue relative to the benchmark CIT regime. However, the presumptive profit regime is not considered by RFB as a TE because at design it was merely intended to lower taxpayer accounting compliance costs, rather than to be explicitly an economic incentive to business activity. In contrast, Simples Nacional’s purposefully envisioned lower average effective tax rates beyond just the administrative and regulatory simplification; it is therefore considered to target a specific policy goal and classified as a tax expenditure by the authorities.

20. The Simples Nacional is an optional taxation regime that aims to encourage the formalization and improve the performance of micro, small and medium-sized firms by

allowing multiple federal, state and municipal taxes to be paid via a single collection form.

All IPRJ, CSLL, PIS, COFINS, IPI, ICMS, ISS and social security contributions⁶ are replaced by a single tax on reported turnover. Firms pay lower effective tax rates according to a progressive schedule depending on turnover size and specific activities performed (ranging from 4 to 33 percent of turnover). Created federally in 1996 and expanded to cover subnational taxes in 2007, the federal fiscal cost of Simples alone amounts to 1.05 percent of GDP (not including exemption of subnational ICMS and ISS taxes), the single largest recognized federal TE, as the threshold for eligibility has increased sharply over time, and with it the number of corporate taxpayers opting into the system (over 5 million registered in 2021, nearly 80 percent of the formal firms in the country) –some, but not all, out of informality (Piza, 2018)). The lower regulatory burden faced by Simples firms increased both the likelihood of firm entry and survival. In some states, it now concentrates almost 90 percent of all companies (Azuara Herrera and others, 2019).

21. Turnover tax regimes akin to Simples are prevalent in developing countries as a simplified form of presumptive taxation, but are typically much less generous. Simplified or single tax regimes for small firms are primarily intended to reduce tax enforcement and compliance costs, which are proportionately larger for small taxpayers. While advanced economies often restrict these regimes to substituting for VAT compliance, many countries bundle CIT liability as well. Rarely does a simplified regime cover social security contributions (SSCs), and when it does, it reflects the added cost in a higher single turnover tax rate due. More broadly, the latter should be designed so on average it entails an equivalent tax liability to that of the general tax system for larger taxpayers. Doing so mitigates incentives for fiscal dwarfism and company splitting for tax purposes, as well as choice of incorporation by liberal professionals and self-employed individuals solely for tax avoidance purposes. For that reason, some countries have higher simplified tax rates applicable to such activities, or even exclude

Table 1. Brazil and Comparators: Simplified Tax Regimes for SMEs

Country	Tax rate over turnover	Maximum participation threshold (turnover, USD)
Argentina	Fixed amount (max 6.55)	600,000
Armenia	5 (trading), 3.5 (production)	122,400
Bolivia	5	36,221
Brazil	4 – 33 (progressive rates)	951,928
China	4	154,567
Colombia	2 - 14.5 (progressive and sector specific)	775,668
Costa Rica	3 - 9	108,369
Ecuador	0.43 - 5.21	60,000
France	1.7 (ind./comm.), 2.2 (non-comm.)	94,400
Indonesia	1	331,200
India	2 (general) 12.5 (professional services)	269,701
Italy	6 (food), 11.7 (professionals)	77,441
Mexico	Graduated tax discount up to 10 years	97,180
Nicaragua	max 5.5	34,358
Peru	0.4 - 0.63 (fixed amount)	24,508
Portugal	3.15 (retail) - 16 (professional services)	238,238
Russia	4 (B2C sales), 6 (B2B sales)	2,061,000
South Africa	max 3	70,250
Uruguay	max 3.5	34,543

⁶ Companies in construction and legal services (annex IV of Simples) still have to pay social security contributions separately, even under this simplified regime.

them from opting into the regime altogether (e.g., Belarus, India, Italy, Portugal). The choice of eligibility threshold is equally important – while a higher threshold lowers administration and compliance costs, it forgoes more revenue and creates inefficiency costs by having a large number of taxpayers competing outside the general tax system. As shown in Table 1, Brazil currently has one of the most generous simplified regime thresholds in the world, nearing USD 1 million (hardly a small firm). As a consequence, TEs targeted to SMEs in other countries normally have much smaller forgone revenue: e.g., Canada (0.2 percent of GDP), Chile, Mexico, South Africa (0.1 percent each), and less than 0.1 percent in India and Argentina.

22. Evaluations of Simples find that it is not cost-efficient at generating employment and that it may in fact be regressive. Studies largely using indirect industrial survey, rather than administrative, data often find its fiscal cost outweighs any benefits obtained in additional wages or employment (World Bank, 2017). Given the discontinuity in average effective tax rates applicable at the threshold for Simples eligibility (about 6 percentage points), firms respond strongly by bunching just below the threshold and reducing their (reported and real) revenue by 10 to 25 percent in order to benefit from Simples, distorting economic activity and curbing corporate growth (Matsumoto, 2021). In addition, since a non-trivial share of Simples beneficiaries are high-income self-employed professionals masking as firms, the incidence of the program may actually be regressive, despite its original intent of benefiting smaller firms, in principle owned by lower income entrepreneurs and employing lower income workers (World Bank, 2017). In order to avoid excessive tax breaks generating imbalances in the social security system and unfair tax advantages to well off owners, over time industries such as finance and real estate have been excluded from the regime, but there is still substantial leakage.

23. The subcomponent of Simples for individual micro-entrepreneurs has expanded social protection benefits to vulnerable populations, but generated suboptimal reallocation of labor. Created in 2008, MEI is a variant of Simples for micro-entrepreneurs with yearly revenues below BRL 81,000 and at most one employee. Owners in this regime pay only a fixed fee equivalent to 5 percent of the minimum wage to cover their social security contributions and ICMS or ISS, and are exempt from paying all other federal taxes, which translates into a much smaller effective tax burden than even regular Simples Nacional taxpayers. While MEI has increased social protection of informal micro-business owners, it has also generated some suboptimal reallocation of labor, counting with nearly 12 million taxpayers in 2021. In particular, there has been documented abuse of the system by using it to disguise formal employment under a much lower social security contribution rate –with over 330,000 formal employees identified as turning entrepreneurs and joining the MEI while working for the same company between 2010 and 2014 alone (Azua Herrera and others, 2019). Akin to Simples, initial formalization is not long-lasting for most taxpayers. Moreover, MEI taxpayers that graduate to Simples have to face a substantially higher tax burden, which once again discourages firm growth (ILO, 2019).

24. More recent payroll tax exemptions under the general CIT regime have proven costly and ineffective at lowering unit labor costs and generating employment. Known as *desoneração da folha de pagamento*, this TE was introduced in 2011 to encourage job creation in light of a very high labor tax wedge in Brazil, especially in international comparison. It gave companies the option to replace the 20 percent payroll tax to be paid by the employer with a 1.5 – 2.5 percent tax on turnover. Originally covering only selected labor-intensive sectors (e.g., clothing, leather, software, call centers), it was gradually expanded to many other sectors and the offsetting turnover tax rate reduced. At its peak in 2015, it covered 56 sectors at a forgone revenue cost of 0.4 percent of GDP, but has since been reduced significantly to 0.13 percent of GDP in 2019, with the removal of most sectors again in 2018. According to Ministério da Fazenda (former MOE; 2018), there is no strong evidence of real positive effects of the payroll tax exemption on aggregate compensation of employees or employment creation, as the TE is given irrespective of whether firms hire more workers or not. In addition, any jobs maintained come at a very high fiscal cost, and could more efficiently be achieved through direct public job intervention.

25. The Manaus Free Zone (ZFM) created to promote economic development in the state of Amazonas, grants firms multiple federal tax exemptions, but there is a lack of evidence about its efficiency relative to alternative regional development policies. One of the oldest tax expenditure regimes in the country, it was created in the 1960s to foster economic development after the decline of the rubber industry in Brazil's less-developed Northern region. In order to compensate firms for the much higher logistical and transportation costs involved in operating there compared to the rest of the country, the main incentives include a near complete exemption of customs duties on manufacturing inputs, as well as exemption of IPI, PIS, COFINS and ICMS on manufactured goods. The overlap of the ZFM with other regional development TEs like SUDAM further grant substantial IRPJ/CSLL exemptions as well. Adding SUDAM and ZFM, this TE cost about 0.45 percent of GDP in 2019 –in line with the cost of special economic zones elsewhere (e.g., South Africa, 0.3 percent; Argentinian SEZ in Tierra del Fuego, 0.5 percent). While special economic zones have had some success historically in fostering industrialization in some countries, there is little analysis of the impact of the ZFM in terms of productivity growth and regional development, investment, and job creation. Anecdotal evidence suggests it is a highly inefficient scheme and Manaus would benefit more from receiving the same expenditure as a cash transfer (Miranda, 2013; World Bank, 2017). However, supporters of the scheme argue the mostly foreign investors currently operating in the area would simply exit the country entirely without the fiscal incentives, and the jobs associated with their operations provide employment for about one fifth of the population of the city of Manaus.

26. With the exception of *Lei do Bem*, tax incentive schemes for local production and R&D investment have had only incipient impact on private investment in innovation. The *Lei da Informática* (Informatics Law) was first created in 1991 to promote increased local content of ICT hardware and electronics assembly, as well as investments in local R&D. Its main advantages entail significant reductions in IPI on capital inputs to ICT production. However,

beneficiaries have not been able to produce internationally competitive ICT products, and the program has survived because it ensures that the Southeast of Brazil remains a domestic hub for ICT and electronics alongside the ZFM (SECAP, 2019b). Similarly, the *Lei do Bem* (the Good Law), established in 2005, sped up and expanded incentives for investments in R&D, authorizing companies that file under the standard IRPJ regime to deduct up to 200 percent of R&D expenses from their taxable income under IRPJ/CSLL. While the program has had a positive impact at a lower fiscal cost than the *Lei de Informática*, its reach has been limited because its design (excluding firms filing under the presumptive profit regime) favors incumbent, older and larger firms, leaving out young start-up firms (SECAP, 2021). Multiple other TEs promote rural exports, as well as local production of medicine, automotive vehicles, and petrochemicals – altogether representing a small fiscal cost.

27. Finally, IRPJ deductions that provide differential tax relief to some firms can mimic characteristics of tax expenditures, though they are not classified as such. Importantly, this includes the current partial allowance on corporate equity (ACE) offered to Brazilian firms – an example of a provision that looks like a tax expenditure but can also be considered a key element of tax design. Concretely, companies can pay out some of their earnings as ‘Interest on Net Equity’ (“juros sobre capital próprio”), which is deductible, unlike standard dividends. The amount is limited to 50 percent of profits or accumulated earnings, multiplied by the ‘long-term interest rate’ (TJLP), which is currently set at 4.61 percent. Interest on Net Equity is deductible for both IRPJ and CSLL purposes and is subject to 15 percent IRRF at the source. By providing a tax deduction for a notional return on equity by companies, this system in theory reduces the cost of equity finance and eases the debt bias inherent in the tax system due to the deductibility of interest payments – encouraging greater neutrality for business investment and financing decisions. In practice, historically the bulk of beneficiary companies have used this allowance to issue fully deductible dividends with an actual return lower than the TJLP (and lower effective tax rate at the individual level). In contrast, a standard ACE (as defined in theory and applied in a handful of other countries) differs from a dividend deduction, since the allowance is given irrespective of whether profit is distributed or retained (Klemm 2006). Immediate expensing for capital machinery purchases is also available for some manufacturing firms with a high number of working shifts, though not considered a TE by the RFB.

28. Personal income tax exemptions and deductions (including capital income received by individuals) account for nearly 1 percent of GDP, primarily due to the treatment of pensions, severance payments, medical expenses, and savings vehicles. Exempt or non-taxable income covers primarily pension income of individuals 65 or older (who are eligible for double the standard personal exemption on IRPF), retirement income due to work accident/disability, and severance pay. Pensions alone account for 10 percent of all federal recorded TEs. Since individuals older than 65 years old constitute the bulk of retirees, and both pension contributions and accumulation of returns are exempt from income tax, this TE effectively treats pension income below twice the standard personal exemption as exempt throughout an individual’s life-cycle (otherwise known as “EEE”), and substantially preferentially

taxed above that threshold.⁷ Other noteworthy exemptions favoring savings vehicles include accrued capital gains in closed-end funds as well as through real estate and agrobusiness credit notes, which are most likely to benefit wealthier individuals with access to sophisticated financial instruments.

29. Most personal education and health expenditures are deductible from IRPF, aiming in principle to encourage human capital development, but in practice weakening the progressivity of the tax system. Deduction of personal health expenditures is uncapped, whereas education spending is limited to a nominal value periodically reviewed. The former benefit is four times as costly (0.23 percent of GDP) and is claimed almost exclusively by the richest quintile of taxpayers. Among them, 86 percent of the forgone revenue accrues to the richest decile (SECAP, 2019a). Similarly, the second benefit, financing primarily private school attendance, reaches only a small sliver of the population and has a regressive character (SECAP, 2020). In addition to the deductibility of education expenses, 0.04 percent of GDP is forgone each year under PROUNI, a program granting exemption of IRPJ, CSLL, PIS and COFINS to private higher education institutions granting scholarships to students previously selected through a designated exam. To date, the number of scholarships granted under this program is already higher than the number of vacancies made available to students in public universities in Brazil, thus representing an important facet of public education spending.

30. A number of key features of the personal income tax system allow for the exemption of certain types of income, though they are not considered tax expenditures. That includes the personal exemption of BRL 1,904 per month (1.8 times the national minimum salary). In addition, of note dividend income has been exempt of withholding or individual income taxes since 1995. Technically, corporate profits distributed to shareholders as dividends are effectively subject to corporate income tax beforehand (since they are not deductible expenses from the firm's perspective), and therefore subject to the 34 percent statutory rate for non-financial corporates. However, the fact that dividend income tends to be skewed towards higher income households and that a variant of dividends could be distributed at a much lower tax rate using the JCP allowance described above, have contributed to calls for policy reform in this front. The most recently submitted income tax reform proposal by the government included a 20 percent dividend tax with a BRL 20,000 per month exemption – a de facto new tax expenditure nullifying both the redistributive and revenue raising capacity of the reform.

31. Tax relief for the consumption of basic food items accounts for at least 0.64 percent of GDP in forgone revenue federally. RFB recognizes the zero-rating of PIS and COFINS over imports or domestic sales of various types of food considered to be of first necessity (known as *desoneração da cesta básica*). First introduced in 2004 covering items such as

⁷ Since all retirees above 65 benefit from the higher personal exemption, the AETR is lowered throughout the income distribution. Note the double personal exemption granted of BRL 3,800 is currently above average GDP per capita.

beans, rice, bread, and dairy, the list was expanded in 2013 and is intended to lower the tax burden on the consumption of basic food items by lower income households. According to SECAP (2019c), like in many other countries with similar measures, in 2018 the richest income decile benefited over 4 times as much from this TE in absolute terms as the poorest decile. Many items that are predominantly consumed by richer households are also included in the *cesta básica*, such as wines, cheeses, and all sorts of meat products (such as *foie gras*, *filet mignon*) and seafood (such as salmon). In addition, zero-rating of IPI on production of most of these items (and many others not considered of first necessity or nutritionally detrimental like sweets (TIPI, 2017)), effectively giving them preferential tax treatment, is not considered a tax expenditure according to the RFB's approach, as the multitude of rates applicable under the IPI is taken to be a core feature of its benchmark design. Moreover, inputs used in the agricultural industry benefit from PIS/COFINS zero-rating themselves, and rural firms exporting agricultural products are exempt from social security contributions. Finally, preferential ICMS rates (and sometimes exemptions (Teixeira and others, 2019) for the sale of such items are likewise not covered. This implies the quantification of federal tax expenditures associated with preferential tax treatment of basic food items likely vastly underestimates the true magnitude of the fiscal cost associated with this policy in Brazil.

32. In turn, tax relief associated with purchases of medicine account for 0.2 percent of GDP and rising. Aiming to increase access of lower income households to needed medicine, a policy was introduced in 2000 to warrant tax credits in the amount of PIS and COFINS tax otherwise due to firms manufacturing or importing certain pharmaceutical products into the country (de facto zero-rating the products). About 65 percent of all medicine sold in Brazil was covered by this TE as of 2017, and the associated fiscal cost has risen in recent years. It is a highly regressive policy, with the richest household quintile benefiting from nearly 44 percent of all revenue forgone. While direct public purchases of medicine for health clinics are also regressive, they tend to more effectively increase access to basic medicine to the lowest income deciles than the equivalent tax expenditure, as often low-income individuals do not even have enough income to make the tax-free purchase (SECAP, 2019d).

33. Other noteworthy federal tax expenditures include those associated with non-profit organizations. Non-profit entities recognized as engaged in social assistance, health or education benefit from full exemption under the Constitution (art. 195 § 7) of social security contributions, IRPJ/CSLL, as well as PIS/COFINS. These tax expenditures account for nearly 0.4 percent of GDP in forgone revenue, but are normally difficult to change (except for social security contributions since the benefit to the individual taxpayer is more clearly linked). In addition, companies can claim tax relief related to worker benefits such as medical, dental, and pharmaceutical assistance, and food provision. Finally, though again not considered a formal tax expenditure, numerous exclusions from the definition of taxable rural property and low valuations de facto imply preferential treatment of rural property owners with respect to the ITR (and hence forgone tax revenue). Though estimates are not available, the magnitude of the gap

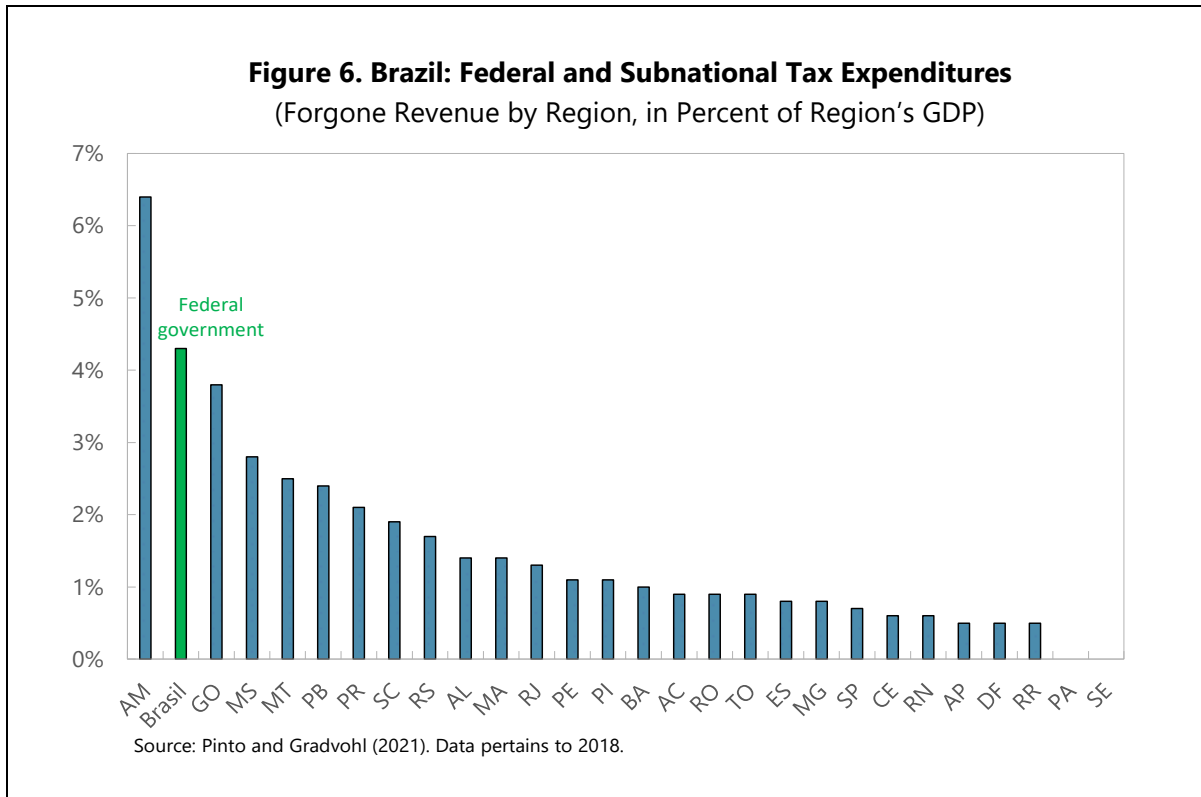
is illustrated by the fact that the amount of urban property tax collected by the city of São Paulo alone annually is larger than the total ITR collection in the whole of Brazil.

Subnational Level

34. Subnational tax expenditures represent at least 1.2 percent of national GDP in forgone revenue (IMF, 2019), compared to total subnational tax revenues in the order of 10 percent of GDP. Though consolidated and systematic estimates of tax expenditures do not currently exist at the subnational level, academic studies and a couple of state Treasury Offices have attempted to compile cross-sectional estimates of ICMS tax expenditures using state level budget guidelines laws (LDOs).⁹ In 2020, this value corresponded to an average of 19 percent of each state's actual tax collection,¹⁰ though there is substantial variation, with the Amazonas, Goiás and Mato Grosso standing out. However, a cross-state comparison should be met with caution, as there is no uniform or consistent methodological approach to the identification of tax expenditures across states, and in some cases higher estimated forgone revenue may just be a reflection of more comprehensive (higher quality) tax expenditure reporting by the respective states' treasuries (Pinto and Gradvohl, 2021). Overall, while the ICMS is the main own-revenue instrument for states and therefore the most important focus of a subnational tax expenditure analysis, these estimates likely underestimate the true aggregate magnitude of subnational revenue forgone for a number of reasons: partial conceptual coverage of ICMS tax expenditures by LDOs in some states; and the lack of information on the magnitude of tax expenditures associated with ISS and other municipal taxes such as the IPTU, ITCMD, and IPVA. According to CONSEFAZ estimates, forgone revenue due to the fiscal war could be as large as 4 percent of national GDP.

⁹ See Afonso and others (2014), Pinto (2019) and SEFAZ-RS (2020)

¹⁰ Note 19 percent is higher than the simple ratio of 1.2 percent to 10 percent subnational revenues, since the latter includes also municipal tax revenues, not included in the tax expenditure estimation.



35. The leading cause of ICMS and ISS tax expenditures is tax competition between Brazilian states and municipalities. The autonomy granted to Federative governments in determining their own taxation has led to a harmful environment for nearly a century where states (and more recently municipalities) compete against each other to attract investment by granting fiscal benefits, in what is known as the “fiscal war”. The National Council of Treasury Policy (*Conselho Nacional de Política Fazendária*, or CONFAZ) – composed by the treasury secretaries of each state — was created in the 1970s to harmonize standards and procedures inherent to state taxation, control disputes between states, and mitigate competitive granting of tax expenditures over the ICMS (which had a uniform rate across the country at inception). However, mechanisms such as “triangular transactions”, where states disguise fiscal benefits to individual firms as financial incentives/long-term loans, have been used to counteract CONFAZ rules. In 1996, the Kandir Law tried to reinforce the legal mechanisms for controlling the fiscal war by bringing the implementation of ICMS closer to the concept of a value-added tax – e.g., adopted the destination principle for exports, and established that tax paid on inputs would become tax credits to the purchaser. However, the changes introducing tax credit mechanisms ended up distorting the ICMS incentive model as well, since the cost of granting tax incentives in a given state can actually be borne by a different state downstream in the production chain (Afonso and others, 2013). Varsano (1997) points out that ultimately the most developed states are the main beneficiaries of the fiscal war, because they have greater financial capacity to be able to afford large incentives, larger consumer markets and better infrastructure. Increasingly, the cross-jurisdiction and digital nature of services is exacerbating many of the pre-existing

conflicts between states and municipalities, and exposing costly legal opaqueness in the creation of subnational tax expenditures (Ozai, 2020).

36. The potpourri of subnational tax expenditures aimed at relieving prices of basic food items from ICMS is illustrative of the challenge, present also in other subnational taxes. Tax relief provisions for the *cesta básica* depend on the state and on the CONFAZ agreement authorizing them. For example, agreement 128/94 authorizes a reduced 7 percent rate on domestic sales of basic food goods; but the same year's agreement 161/94 authorizes six states (GO, PE, MT, TO, AC, MS) to exempt (rather than reduce rates on) such goods for distribution to low-income households. More recent agreements have authorized a further 11 states to exempt sales of basic food items to the general public. On average between 2010 and 2020, there were 177 CONFAZ agreements *per year* recognizing new ICMS tax expenditures for some states and goods. In addition, the fiscal war extends beyond the ICMS to the municipal ISS. Economically underprivileged municipalities grant ISS tax waivers to attract companies in the service sector. However, in practice companies install small offices in the smaller cities, but undertake virtually no activities there, instead operating in larger cities. The company clearly benefits from lower taxes and supervision, but continues to operate in a more dynamic area. But both cities lose: the smaller where the company is officially located does not collect taxes nor spur local development; and the larger because it fails to collect tax on operations taking place in its jurisdiction (Afonso and others, 2013). Moreover, lack of coordination over inheritance (ITCMD) and motor vehicle (IPVA) tax rates across subnational governments incentivizes its own race to the bottom, given mobility of the base by the taxpayer (who can choose where to formally reside or register the vehicle in order to affect inheritance and vehicle taxes). The IPVA has also been criticized for its narrow base excluding aquatic and aerial vehicles completely – much more likely to be owned by richer individuals and hence desirable from an equity perspective. There is also recent controversy regarding fraud over IPVA exemptions for persons with disability in São Paulo—while the number of residents with qualifying disabilities grew only 2 percent since 2016, the number of vehicles benefiting from the exemption grew by nearly 140 percent over the same period, almost all new purchases (UOL, 2021). Although immovable property is inherently inelastic, prolific urban property tax exemptions and rate discounts likewise erode that revenue base.

37. Recent legal reforms have attempted to standardize and curb subnational tax expenditures, but progress has been slow. According to the Complementary Law 24/75, which established CONFAZ, states are only authorized to grant tax incentives by unanimous vote of CONFAZ (via published agreements or *convênios*). The objective was to guarantee reciprocity in ICMS tax credits for interstate transactions. However, as recently as 2017, incentives continued to be granted irregularly, sometimes in open disregard of CONFAZ regulations, with formal clearance (if given) at times ex-post to prevent judicial prosecution of state governors. Technically, subnational governments are also covered by Art. 165 of the Constitution and Art. 14 of the Fiscal Responsibility Law, but in practice they are not binding. There is a lack of transparency in the subnational tax expenditure landscape, with no ex-ante or ex-post cost-

benefit assessment accompanying the introduction of subnational TEs. Pivotal, in 2017 the approval of Complementary Law 160/2017 aimed to regularize ICMS tax expenditures by granting an amnesty for all previously irregular TEs issued by states, and committing to a gradual reduction of fiscal war TEs for commercial and industrial purposes by 2022 and 2032, respectively. Nonetheless, governance of future tax expenditures remains challenging. In particular, the unanimity requirement for CONFAZ's decision council presents a hurdle to any new regulations being approved legally, since for virtually every proposed measure there is at least one state opposing it. More recently, CONFAZ has created a working group to promote studies and norms relating to the concession of fiscal incentives by states. And some progress has been achieved by initiatives of individual states themselves, which have sought to improve the treatment and fiscal accounting of tax expenditures (e.g., *Lei de Qualidade e Responsabilidade Fiscal* LC 231/2020 of Paraná, *Estudo de Benefícios Fiscais* of Rio Grande do Sul).

38. There is scope to increase subnational tax revenue, but a comprehensive reform at the national level would be preferable. Historically states have struggled financially, are overly indebted, and have required federal bailouts as recently as 2014. Local tax expenditures further erode the needed revenue mobilization capacity for these levels of government, exacerbating the federal public finance imbalance. In addition, they can erode any rationalization of tax expenditures done at the federal level, requiring coordination among levels of government as long as multiple indirect taxes co-exist nationally. Furthermore, new tax exemptions approved at the federal level—which are beyond the control of subnational governments—affect subnational government revenue by reducing constitutional transfers (IMF, 2019). Though still untested in practice, according to the latest Constitutional Amendment 109/2021 (Art. 167, X), the federal government may be for the first time empowered to halt the concession or expansion of tax incentives by states or municipalities whose current expenditure to revenue ratio exceeds 95 percent in a 12-month period. A more long-lasting solution would entail a sweeping reform of indirect taxation in the country by integrating the ICMS, ISS, IPI, PIS and COFINS into a single or dual VAT, with any tax relief coordinated nationally, and compensatory transfers to net losing states (e.g. those with smaller consumer markets) phased-out over time.

III. COMPREHENSIVE REFORM OPTIONS

39. IMF staff reports have long recommended broad tax reform in Brazil, focusing on increased ease-of-doing business and progressivity, while maintaining current aggregate revenue levels. Given the general government's already high tax revenue to GDP ratio, one of the world's highest income inequality, and a complex tax system hindering potential GDP growth and foreign investment (often referred to as the "Brazil cost"), the authorities should give high priority to equity and efficiency and not focus only on net revenue mobilization at this juncture. A simplification of indirect taxes, reduction of payroll costs and tax expenditures, and more progressive labor and capital income taxation are needed to improve the business environment, reduce resource misallocation, and tackle income inequality. Within such a reform, rationalizing

tax expenditures can broaden the base—sustaining revenue levels and raising productivity even while reducing statutory rates.

40. In the medium-term, simplifying the complex system of indirect taxes and consolidating it at the federal and state levels could lead to a boost in aggregate productivity and lower disparities. The ideal system would move toward a unified broad-based VAT with full refund for VAT on intermediate goods and zero-rating for exports, to avoid double taxation of consumption at various levels of the supply chain and reduce taxpayer compliance costs. In addition, uncompetitively high statutory corporate income tax rates in Brazil are exacerbated by high payroll taxes and non-refundable cumulative taxes on intermediate capital good purchases, which could yield substantial productivity gains if revamped. Borges (2020) estimates that just a comprehensive indirect tax reform at the national level could result in a 24 percent increase in potential GDP in 15 years, mostly due to increased factor productivity, in addition to higher investment rates. This impact could help alleviate some of the recent increase in the public debt ratio due to the emergency fiscal response to the pandemic. Though shifting from an origin to a destination-based tax would inevitably benefit states with large consumer markets relative to producing states, and increase effective taxation of services relative to manufactured goods, on aggregate productivity and investment growth would benefit the country as a whole and reduce regional disparities in tax collection (Orair and Gobetti, 2019a). Eliminating preferential tax treatment of basic consumption goods along with offsetting transfer mechanisms to low-income households is estimated to revert the regressive character of indirect taxes in the country for the lowest two quintiles of the population (Thiago and Mendes, 2019).

41. At least four different tax reform proposals have been tabled in Congress since 2019, differing in scope and time of transition, with only modest changes likely to be implemented in the short-run. The first is PEC 45/19, a constitutional amendment authored by the Lower House and the *Centro de Cidadania Fiscal* think-tank, and supported by the vast majority of states and municipalities. The second is PEC 110/19, a constitutional amendment sponsored by the Senate. The third is infra-constitutional - ordinary law PL 3887/20 -, proposed by the executive branch and dealing with indirect taxes. The most recent ordinary law proposal by the executive branch (PL 2337/2021) focuses on income taxes.¹¹ The House's proposal includes fewer taxes and establishes a longer transition in terms of both the tax rate and the taxation regime, when compared with the Senate's proposal.¹² The former also determines the allocation of resources among the federal entities. While the first two proposals deal with the merger of several taxes, including state and municipal taxes (ICMS and ISS), and therefore require changes to the Constitution, the government's first phase proposal is restricted to simplifying the federal PIS/COFINS tax into a non-cumulative federal VAT (CBS), and is thus only an ordinary bill,

¹¹ As of June 25th, the proposal had been submitted in draft form to Congress.

¹² The House's proposal envisions a tax system transition of 10 years, with 50 years of gradual replacement of revenue from origin to destination states, whereas the Senate's envisions a transition in 6 years, with revenue replacement over 15 years.

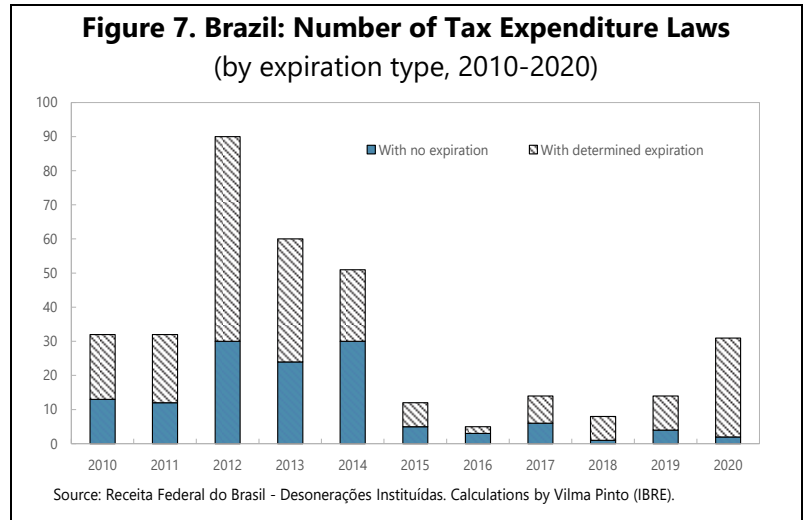
but would have immediate application in 6 months. All proposals target maintaining a constant tax burden in their design. The reform is being analyzed by a special joint committee in the National Congress, to help build consensus between the House and Senate. In spite of abundant input for alternative reform paths, the complexity of federative and private sector interests, as well as the fact that crucial elements of the tax system are entrenched in the Constitution with inordinate detail,¹³ make it especially challenging to quickly approve and implement substantial reform.

42. Constitutional Amendment (EC) 109/2021 targets the reduction of federal tax expenditures to 2 percent of GDP in 8 years.

Recent momentum for tax reform has also aimed at rationalizing tax expenditures. In principle, the FRL has curbed the establishment of new federal tax expenditures for over two decades—including by requiring documentation of their budgetary impact and presentation of revenue offsetting measures. Since 2019, each federal budget guidelines law (LDO) has also required that any novel

tax expenditures authorized have an expiration date of at most 5 years, and be accompanied by preferably quantitative goals, as well as a designated agency responsible for monitoring the achievement of said goals. Effectively, as shown in Figure 7, not only has the number of new tax expenditures declined in recent years (with the exception of 2020 due to the pandemic), but also their proportion without a clear expiration. The more recent constitutional amendment of March 2021 (based on an emergency proposal made in 2019) represents the culmination of those efforts. It mandates the executive branch to present within six months a plan for the gradual reduction of tax incentives toward 2 percent of GDP until September 2029 (to be implemented through future legislation). In the first year, the reduction should be of at least 10 percent nominally.

43. Notably, EC 109/2021 excludes six sizeable programs from the targeted tax expenditure rationalization. These include Simples Nacional; non-profit organizations; regional development programs in the North, Northeast and Center-West; the Manaus Free Trade Zone; basic food items; and programs supporting scholarships for university students (PROUNI). Altogether, these programs already accounted for just over 2 percent of GDP in forgone revenue—implying that an overall reduction of federal TEs to 2 percent of GDP would in practice entail the



¹³ For example, Title VI, Chapter 1, Art. 150 of the Constitution forbids taxation of books and musical recordings produced in Brazil.

near complete elimination of all other tax incentives not covered by the EC exceptions (though initially several government agencies debated internally over the correct interpretation of this provision and have sought clarification from the National Treasury's Attorney General (*Procuradoria Geral*)).

Guiding principles in reform design and implementation

44. Successful tax reforms (including tax expenditure rationalization) entail a clear strategic vision, communication over equity issues, bundling reforms into comprehensive packages, transitional arrangements, and coordination across levels of government. Based on episodes of successful tax expenditure rationalization worldwide (see Box 1 for a summary description of multiple examples), this section reviews several key principles that would help guide Brazil's ongoing tax reform plans. A clear strategic vision of broad, long-term tax reform objectives reduces uncertainty and guides tax reform debates over various alternative proposals. Analysis and transparent communication of the distributional impact of the reform of the system *as a whole*, highlighting the interconnectedness of the tax and benefit systems, is crucial to ensure public support and trust. If possible, attempting to adopt a comprehensive ("bundled") tax reform more or less at once is preferable, as it facilitates addressing distributional issues and garnering political support when many interest groups or institutions have de facto veto power over any single reform. Transitional arrangements phasing out old rules should be clearly time bound and incentives designed to opt into the new system, if feasible. Coordination across levels of government is especially critical to mitigate fiscal spillovers in federal countries, like Brazil, with a large degree of subnational tax autonomy. Finally, proper choice of timing for reforms (i.e., a downturn is more likely to bring public support to radical reform, but it is also when fiscal space may be weakest to compensate any losing parties) and ex-post periodic evaluation and adjustment of existing policies are also important to maximize the probability of enduring reform (OECD, 2010).

45. Integrating tax expenditure rationalization into broader policy reform packages would enable the authorities to tackle efficiency and equity issues simultaneously with revenue considerations. "Bundling" reforms (as the House and Senate proposals have largely done thus far) makes it easier to address distributional issues, since the simultaneous adoption of multiple changes in taxes and/or benefits can mitigate the costs of reform for groups that might otherwise be hard-hit by individual measures. For example, increased tax revenues from VAT base-broadening measures can be used to compensate poorer households through increased direct benefits. Alternatively, the impact of VAT base-broadening could be offset by a reduction in personal income tax (PIT) rates in the lowest brackets or increases in the personal exemption threshold. A statutory CIT rate reduction could be accompanied by an increase in capital income taxes at the personal shareholder level, or a removal of CIT deductions and special tax regimes. And an increase in recurrent property taxes could be used to finance a reduction in employee social security contributions (OECD, 2010). Since by construction the reduction of tax expenditures always entails the loss of tax relief to some group of beneficiaries, their support can

be fostered by measures perceived to be beneficial within the benchmark tax system or public spending composition.

46. Temporary arrangements can help ensure a smooth administrative transition and mitigate sudden revenue losses when tax incentives cannot be lifted immediately but pose some non-compliance risk. When reforming tax incentives, governments should seek a balance between tax stability for incumbents and equal treatment of entrants to the market. Sunset provisions are often provided when incentives are phased out due to policy reform, as many ongoing investment decisions would have been made pricing in after-tax returns of the old system. In addition, legal certainty may impede breach of existing contracts for incentive provision before their expiration. However, such stability provisions create an uneven playing field between old and new investors and can lead to significant distortions, including opportunities for tax evasion when two sets of rules co-exist. Therefore, they should be only temporary. Governments might need to renegotiate existing incentive provisions or provide reasonable, time-bound incentives to new investors (IMF, 2015).

47. Coordination of policy reform across levels of government and legal texts is imperative to ensure a coherent national tax system. There is a trade-off between the possible gain in efficiency from a higher level of tax decentralization, and the need for a coherent and non-distortionary tax distribution across the country. Some discretionary control over tax rates may be provided to subnational governments within tax bands to ensure the overall links between taxes levied at different levels of government are maintained. Appropriate institutional settings that allow for tax reform evaluations across levels of government and regions are also desirable, and mechanisms that allow for inter-regional compensation may be needed if federal tax reforms have a heterogeneous impact on regions. In addition, thorough consideration should be given to the legal hurdles involved in rationalizing tax expenditures – while some may only need to be left to expire (either through contracts or by not extending expiring provisions in ordinary or supplemental law), others may need a legislative repeal, or even constitutional amendment. In order to mitigate judicial disputes challenging any new provisions, it is imperative that changes to the tax system be immediately consistent across all possible legal bases, regardless of whether a gradual or comprehensive reform is introduced.

48. Revenue mobilization and improvements of the fiscal stance are always associated with the elimination of tax expenditures, but other reforms to the benchmark tax system could be just as, if not even more important. Realistically, some tax expenditures are not options for revenue mobilization –either because they are very difficult to eliminate in light of social objectives (e.g., income tax exemptions provided to non-profit organizations) or international agreements (e.g., customs exemptions from Free Trade Agreements), or because behavioral changes of taxpayers may entail a lower level of revenues than those of the TE estimates. On the other hand, several options for revenue mobilization do not fall under the definition of tax expenditures. For instance, a reduction of the threshold of the top PIT rate is usually an option for revenue mobilization (as well as a high-quality redistributive policy) in emerging economies where PIT revenue is low, but it does not constitute a tax expenditure (at

least according to the definition adopted by most reports). As Brazilian authorities prepare their plan for rationalization of tax expenditures, proposed TE elimination measures would be complemented if options for revenue mobilization from non-TE sources were sought as well.

Box 1. Cross-country Tax Expenditure Rationalization Experiences

India

A large federal parliamentary democracy and emerging market economy, India shared many common tax woes with Brazil before 2017—the culmination of a decade-long comprehensive tax reform process.

As part of its industrialization, current and capital account liberalization, and export-oriented development policies in the 1980s and 1990s, India had built up an array of corporate income tax incentives aimed at attracting foreign investment and developing infrastructure. Yet, it retained one of the highest statutory CIT rates in the world at the time, nearing 35 percent. After some partial reform attempts in the late 1990s and early 2000s (which included the introduction of an alternative minimum tax), and increased public awareness of tax expenditures thanks to tax expenditure reports published along with the budget since 2006, the government initiated a proposal for comprehensive tax reform in 2009. It entailed a CIT rate cut to 25 percent, while also removing all tax incentives. Following an extended parliamentary review period and the entry of a new government into power, in 2016 a gradual rate reduction over 4 years was proposed, along with grandfathering of business tax incentives for up to 10 years. To minimize the impact of the revenue loss while both a lower rate and tax expenditures were in place, the following measures were introduced:

- The alternative minimum tax (MAT), based on a modified definition of corporate income, still had to be paid by companies benefiting from tax incentives.
- The CIT rate reduction was phased in by firm size: in the first year, only firms with turnover smaller than INR 1 billion were eligible for the lower rate, then those below INR 5 billion the following year, and finally only those firms who did not avail themselves of tax exemptions by the third year.
- Firms were given the option to benefit from the reduced 25 percent rate earlier if they prescinded of all tax incentives they were previously eligible (and were now grandfathered) for.

In tandem, India replaced a plethora of cascading center, state, inter-state, and local taxes with a single, nationwide, destination-based value-added tax on goods and services (GST). Numerous delays due to regional political sovereignty concerns had impeded successive governments from progressing on this front. Eventually, the central government promised to smoothen any subnational revenue losses as a result of the GST implementation during a five-year transition period. This compensation has however not fully materialized, which has led to strain of subnational public finances. In practice, under the dual GST, both the central government and states have collection authority over intra versus inter-state transactions, and a federal council including finance ministers of every state and chaired by the central finance minister is responsible for approving any changes to the GST with a qualified majority.

The new regime raised significant revenue during the first full year following its introduction, despite still including several non-zero rate tiers and a suboptimal array of exemptions on food items, alcohol, and petroleum. However, state-specific exemptions and preferential rates were eliminated. Late decisions on the GST rate structure and exemptions created uncertainty and confusion among businesses and caused

Box 1. Cross-country Tax Expenditure Rationalization Experiences (continued)

consumers to delay spending. Notwithstanding, as GST implementation issues were addressed and businesses and consumers adjusted to the new system, short-term supply- and demand-side indicators rebounded, and medium-term growth is now expected to improve owing to efficiency gains from the GST that improved intra-Indian trade in goods and services.

United States

The Tax Reform Act of 1986 was a landmark comprehensive reform of the federal income tax aimed at simplifying the tax code, rather than raising or lowering federal revenue. The central strategy was to broaden the base and lower rates. The government lowered the top marginal PIT rate from 50 to 28 percent, in addition to doubling the personal exemption threshold and increasing the standard deduction. The CIT rate was also lowered from 46 to 34 percent. In exchange, over 100 base broadening provisions were included to eliminate loopholes, including:

- Taxation of capital gains as ordinary income for the first time since 1921.
- Elimination of the deduction of interest on consumer loans, rental housing and individual retirement accounts.
- Less generous depreciation allowances for businesses and limited deduction of miscellaneous business expenses.
- Expanded the Alternative Minimum Tax to a truly parallel system for both individuals and corporates and increased the minimum rate to 20 percent for corporates and 21 percent for individuals.

While lower effective taxes on labor increased labor supply, the elimination of investment related allowances and heavier capital taxation led to lower savings and investment rates in the aftermath of the reform, which translated to little aggregate effect on GDP (Auerbach and Slemrod, 1997). Similarly, increased revenue from CIT base broadening was largely offset by losses in PIT revenue, so that in the end it was nearly revenue neutral.

Other country cases

- In 2016 the Canadian government committed to undertake a wide-ranging review of federal tax expenditures. Individuals and businesses had expressed concerns about the efficiency and fairness of Canada's tax system, and how the increasing number of tax expenditures had made the federal tax system more complex. The review's objectives were to eliminate poorly targeted and inefficient tax measures and allow the Government to identify opportunities to reduce tax benefits that unfairly help the wealthiest. Consequently, ineffective and inefficient measures have been gradually eliminated, recouping 0.2 percent of GDP in forgone revenue per year. The review also identified opportunities to crack down on tax evasion and aggressive tax avoidance. (Government of Canada, 2019)

- The 2013 Jamaican Fiscal Incentives Act reduced both tax rates and tax expenditures affecting the tourism industry by repealing several sectoral incentive programs including the Hotel Incentives Act. The CIT rate was reduced from 33 to 25 percent; a non-refundable tax credit totaling the sum of all statutory payroll levies was introduced to encourage employment; discretionary waivers were significantly scaled back; adjustments were made to depreciation allowances and loss carry forwards. In order to encourage transition to the new regime, existing tourism projects had the option to either (i) retain their exemption and pay the

Box 1. Cross-country Tax Expenditure Rationalization Experiences (concluded)

general consumption tax at the standard rate of 16.5 percent (rather than the preferential rate applicable to tourism services until then of 10 percent), as well as giving up access to the employment tax credit, or (ii) moving to the new CIT regime without exemptions, continuing to enjoy a lower general consumption tax rate, and accessing the employment tax credit. (McIntyre, 2017)

- In December 2012, special tax measures in as many as 17 laws and legislative acts were either abolished or consolidated into the General Tax Code in Senegal, significantly improving transparency of the tax system. The comprehensive tax reform, along with tighter administrative measures, streamlined the tax system and represented a significant rollback of tax incentives and exemptions. However, in subsequent years the authorities considered expanding the number of special economic zones and adopted a series of tax incentives aimed at supporting specific lagging regions, partially counteracting the initial reform effort. (IMF, 2015)
- In 2010 Denmark lowered the top marginal PIT rate, combined with the elimination of large mortgage interest deductions. Mechanisms were introduced to attenuate any immediate revenue shortfalls created by a sudden change in policy, including a phased reduction of the top rate over seven years, and a nominally fixed cap on mortgage interest deductions that would automatically fall in real terms over time. (OECD, 2010)

Concrete recommendations for tax expenditure rationalization in Brazil

49. Based on the cross-country experiences summarized above, tax expenditure rationalization should be integrated as much as possible in the design of broader tax reform packages. Rather than eliminating existing tax expenditures one by one, they should be done to the extent possible simultaneously with broader tax reform, prioritizing them sequentially only to the extent that legal constraints dictate so. For example, the fact that many features of the Brazilian tax system and special incentive regimes are specified in the Constitution or its amendments means that opportunities to repeal tax expenditures established solely in ordinary or supplemental law can take some priority if able to be repealed more easily by congress.¹⁴ Notwithstanding, even then some bundling of tax reforms would facilitate building political consensus—since targeting one individual provision at a time will invariably have each individual beneficiary fighting to keep his/her own benefits and protract the process.

50. The government's first phase proposal envisions the unification of PIS and COFINS into a federal VAT (CBS) at a non-cumulative 12 percent rate. Of the total 1.2 percent of GDP in PIS/COFINS tax expenditures, only 0.3 percent would be removed (pertaining to medicines, infrastructure, ships and aircraft, and others). Exemptions, zero rates and tax credits associated with the Simples Nacional, the Manaus Free Zone, the basic food basket, and public transport would remain intact. Rather than exempting margin-based financial activity (as is common in

¹⁴ Draft ordinary laws require only a simple majority of each chamber of Congress to be approved, while supplemental draft laws require absolute majority, and constitutional amendments a qualified majority of three-fifths of Congress.

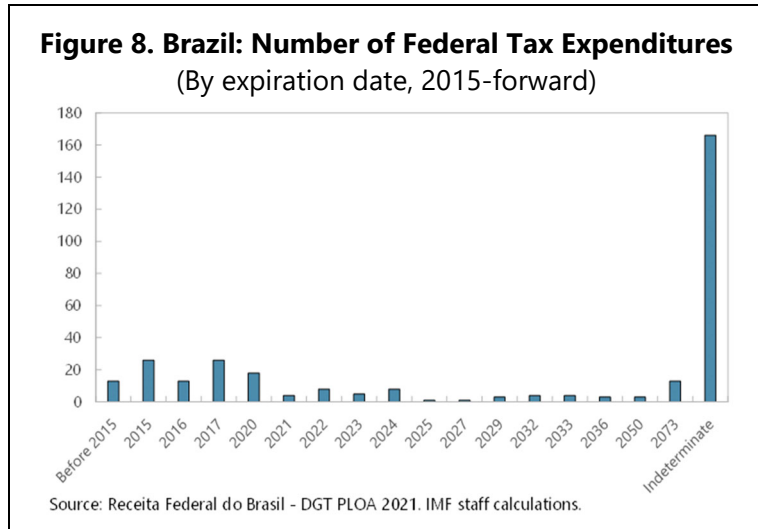
many VAT systems around the world), the financial sector would be taxed on a cumulative basis at a 5.8 percent rate (higher than its current treatment) (Itaú, 2020). IPI reform is delayed until a later stage, due to the more sensitive discussions that would have to be entertained with negatively affected sectors and subnational governments with whom associated revenue is distributed. Eventually, the government aims to turn the IPI into a true excise tax, focusing solely on the production and imports of externality generating goods.

51. The second phase in the executive branch's federally focused tax reform is the recent draft proposal for income tax reform. The first draft as presented by the Congress rapporteur envisaged a gradual reduction of the statutory IRPJ rate from 34 to 21½ percent over two years, and an increase of the personal exemption threshold by 31 percent (along with smaller 13 percent increases for every other bracket threshold in the IRPF schedule). The estimated revenue loss from these measures (tallying just under ½ percent of GDP) would be partially offset (according to RFB estimates) by the reintroduction¹⁵ of dividend taxation at a 20 percent rate, the elimination of the interest on net equity (JCP) deduction from IRPJ, and the taxation of capital gains in closed-end investment funds on an accrual basis. A net revenue loss in the order of 0.36 percent of GDP was still expected to materialize in light of the large CIT rate cut (the original cut proposed by government to only 29 percent would have been fully revenue neutral). Heavy modifications to the draft legislation were still under discussion at the time of writing of this chapter. However, no major changes are foreseen for key tax expenditures associated with PIT deductions, simplified tax regimes for SMEs, or payroll tax contributions.

¹⁵ Dividends had been taxed in Brazil before 1995.

52. Both of these bills can be used to phase out the majority of current federal tax expenditures, in addition to preferential tax treatment currently considered part of the benchmark system. While markedly narrower, since both of these proposals affect only federal taxes and require a simple majority of the both chambers of Congress to pass, they are in practice less likely to face strong opposition than either of the constitutional amendment proposals by the Congress chambers and are most likely to be approved in the short-term.¹⁶

Congress and the government can take the opportunity of reviewing these measures to incorporate more ambitious withdrawal of federal tax expenditures, as it will be much more difficult to do so later on without the carrot of simplifying tax reform to balance out interest groups. In addition, unless all identified federal tax expenditures with the exception of a handful of large special categories identified in EC 109



are removed, the 2 percent of GDP target ceiling in eight years is unlikely to be achieved. A more reasonable alternative would involve the rationalization of both some of the excluded categories (namely Simples, the basic consumption basket, and ZFM/regional development programs) and other tax relief considered part of the benchmark system and hence excluded from the RFB's TE report (e.g., CIT cost of capital deductibility provisions, presumptive profit regime, and IPI preferential rates). Moreover, discussions of an integrated national VAT would not be complete without the implementation of Supplemental Law 160/2017 relating to the gradual elimination of "fiscal war" subnational tax expenditures, which has struggled to take hold. Finally, incorporating tax expenditure rationalization within the current government draft bills would have the advantage of repealing laws granting tax relief that largely have no expiration date today (see Figure 8). Relying heavily on the assumption that expiring legal provisions will simply not be extended is not only challenging politically (given the incentives to continue supporting current beneficiaries) but would also yield only minor potential gains in the order of 0.2 percent of GDP for the next eight years.

53. On the income tax side, converging to a true dual income tax model would be a pragmatic solution enabling both greater horizontal and vertical equity among taxpayers. Aiming at a properly functioning dual income tax system would entail increasing the neutrality of

¹⁶ While the CBS proposal would need a six-month period after approval to be implemented, the income tax reform proposal could in principle enter into force at the beginning of 2022 if it were approved in Congress before then.

tax treatment across different sources of income, while preserving progressivity. In order to do so, asymmetries in tax treatment between sources of capital income and choice of incorporation need to be addressed, as well as exemptions benefiting primarily high-income households that impede the redistributive power of the personal income tax (Orair and Gobetti, 2019b). The authorities' latest draft bill for income tax reform goes in the right direction for some of these issues, namely by proposing a reduction of 5 percent in the statutory CIT rate over two years, and introducing dividend taxation, along with the increase in the personal exemption for PIT. However, a few design features merit reconsideration, and others could add value—if possible, within the review of the current bill.

54. In particular, aligning integrated corporate income tax rates with the personal income tax would help address incentives for incorporation for tax purposes. Under the proposed 20 percent dividend tax, even with a lower statutory CIT rate of 21½-29 percent, firms would be subject to an integrated CIT rate for distributed profits of 37.2-43.2 percent, higher than the OECD average (whereas beforehand firms could distribute profits at a 15 percent rate using the interest on net equity (JCP) deduction). Unlike most other OECD countries, this integrated rate is substantially higher than the top marginal personal income tax rate of 27.5 percent, which the government has not proposed to increase in the latest bill. The CIT rate could tenably be further reduced by at least another 5 percentage points in the medium-term to better align it with PIT rates. In addition, in combination with the proposed elimination of the JCP, which has functioned as a de facto dividend deductibility policy thus far, the high dividend tax rate will likely induce a lock-in effect on dividends, leading firms under the standard CIT regime to instead reinvest retained earnings, or mask distribution of capital returns to their management as inflated labor remuneration, now lower taxed. These behavioral responses could in fact wipe out most of the projected tax base for this tax, eroding its potential revenue yield. Moreover, by increasing the marginal cost of capital for investment out of new equity to Brazilian firms, the measure risks discouraging future aggregate investment as well (including foreign direct investment (FDI))¹⁷, particularly for young firms or high-tech firms with intangible assets where debt capital might be harder to access. Instead, a dividend tax rate below the tax rate applied to interest and other capital income of 15 percent—e.g., 10 percent—would not create similar distortions. This would partially offset the debt bias exacerbated by the removal of the JCP and partially mitigate the asymmetry between corporate and personal income tax rates. Furthermore, the redistributive goal of the dividend tax proposal loses its strength in light of the very generous exemption threshold given (BRL 20,000 per month, nearly six times GDP per capita on an annualized basis).

¹⁷ Note FDI will be particularly affected by the withholding tax rates on dividend payments to non-residents applicable in bilateral double taxation treaties. Most such treaties at present with Brazil foresee up to 15 percent withholding tax at source already, so should be aligned with any domestic dividend tax rate introduced up to that. A higher rate than 15 percent would entail loss of taxation rights for Brazil or a need to renegotiate existing treaties.

55. Simultaneously, more efficient cost of capital deductions and investment allowances could lower the marginal effective tax burden on investment. In order to neutralize the debt bias and render the CIT neutral with respect to marginal investment decisions, while mitigating large revenue costs in the short-run, the authorities may consider introducing an incremental allowance for corporate equity (ACE), along with a limitation to interest deductibility beyond transfer pricing rules (IMF, 2016). Akin to the system currently in place in Belgium, the allowance of a notional rate of return on equity would not require profit distribution to shareholders and would apply to only new equity increases relative to some base year, initially at a fraction of the revenue cost of JCP. The revenue cost of the ACE in the financial sector can also be reduced by providing it only for equity in excess of the minimum regulatory capital requirement. In addition, Brazil currently has no cap on interest deductibility on debt from unrelated domestic parties (i.e., outside of transfer pricing regulations governing thin capitalization for deductibility of debt service costs between related parties as well as between domestic and foreign parties in low-tax jurisdictions). The authorities could thus also consider expanding those regulations to debt service expenses between unrelated domestic and foreign non-low-tax parties. While the most standard practice in the OECD is to cap deductible interest expenses to 30 percent of EBITDA, relatively high credit costs in Brazil may warrant a higher ratio (e.g., 40 percent). Financial institutions would typically be excluded (IBFD, 2018). Mexico’s 2020 tax reform included a similar provision. Finally, targeted accelerated depreciation allowances and a re-design of existing tax incentives for R&D in the IT sector could lower investment costs and contribute to higher productivity. In particular, there could be efficiency gains in eliminating *Lei de Informática* and integrating its fiscal resources into the more effective *Lei do Bem*. Furthermore, the program could be improved by considering provisions for immediate cash refunds for R&D expenditures (i.e., direct subsidies), or allow firms to carry associated losses forward to deduct against future taxes, so as to also benefit younger, but not yet profitable firms.

56. In addition, a reform of the standard CIT regime would be amiss without a reform of the SME tax regimes. The reform of the standard CIT regime (*lucro real*) would be most effective if accompanied by a reform of the asymmetric tax treatment of small businesses, self-employed workers and wage earners. Poorly calibrated simplified SME regimes combined with high payroll taxes have encouraged incorporation of individuals for tax avoidance purposes (*pejotização*). Appy (2017) illustrates this phenomenon: while salaries can be subject to average effective tax rates nearing 50 percent including SSCs, shareholders of companies under special SME regimes are often taxed at lower rates which could go to the single digits, which violates horizontal equity. A number of measures could help mitigate this sizeable distortion. Among them, the threshold of eligibility for the Simples Nacional could be drastically reduced from its current level. According to an optimal SME threshold model (developed by Wen and Wei, 2019)—incorporating tax administration and compliance costs, a CIT rate of 34 percent, a simplified regime turnover tax rate of 4 percent (the lowest currently in Simples), and an average

profit margin of 10 percent,¹⁸ and a “shadow value” of public funds of 1.3—the threshold recommended for Brazil currently would be USD 191,023 (just short of BRL 1 million). This would only affect about 10 percent of all current register Simples taxpayers, but who contribute 63 percent of its total tax collection. In addition, if social security contributions were separated entirely from the unified tax paid by Simples taxpayers, they could be actuarially directly associated to the wage costs of each insured worker. In the medium-term, the minimum tax rate applicable in the regime could also be increased to at least 5-6 percent on turnover, to mitigate incentives for individuals to incorporate for tax avoidance purposes. Given the duplication in objectives between the Simples and the presumptive profit regime for medium-size enterprises, the latter could be eliminated, with only Simples remaining (under a lower threshold) to encourage truly micro and small enterprises to formalize by benefiting from lower accounting and compliance costs. Excluding liberal professionals from both regimes would help mitigate tax avoidance, given their higher level of sophistication enabling them to comply with existing CIT tax provisions and their structurally much higher profit margins than other sectors. Similarly, self-employed individuals could be absorbed by the standard IRPF regime, with compliance costs lowered by administrative initiatives such as the pre-filled tax returns already being rolled out.

57. A temporary alternative minimum tax could mitigate the risk of short-run revenue loss and encourage voluntary transition to the standard CIT and PIT regimes. Considerably curtailing Simples’ generosity and eliminating the presumptive profit regime without any other measures could lead to a short-run revenue loss if firms formerly under the presumptive profit regime engage in heightened tax avoidance or evasion behaviors (e.g., if they manipulate deductions in the real profit regime to lower their taxable profit in such a way that their implied tax liability is lower than or similar to the one under the old presumptive regime). In order to attenuate such a risk, the authorities may want to consider introducing a temporary alternative minimum tax (AMT)¹⁹ as a complementary measure during a period of transition. For example, allowing companies under the presumptive regime to benefit from the lower CIT rate only if transitioning to the standard regime, and subjecting every firm simultaneously to an AMT (even under the presumptive regime) could incentivize firms to switch in order to benefit from the lower statutory rate. The rate applicable to the AMT could be parametrized in order to mimic current average tax collection in the simplified regimes.

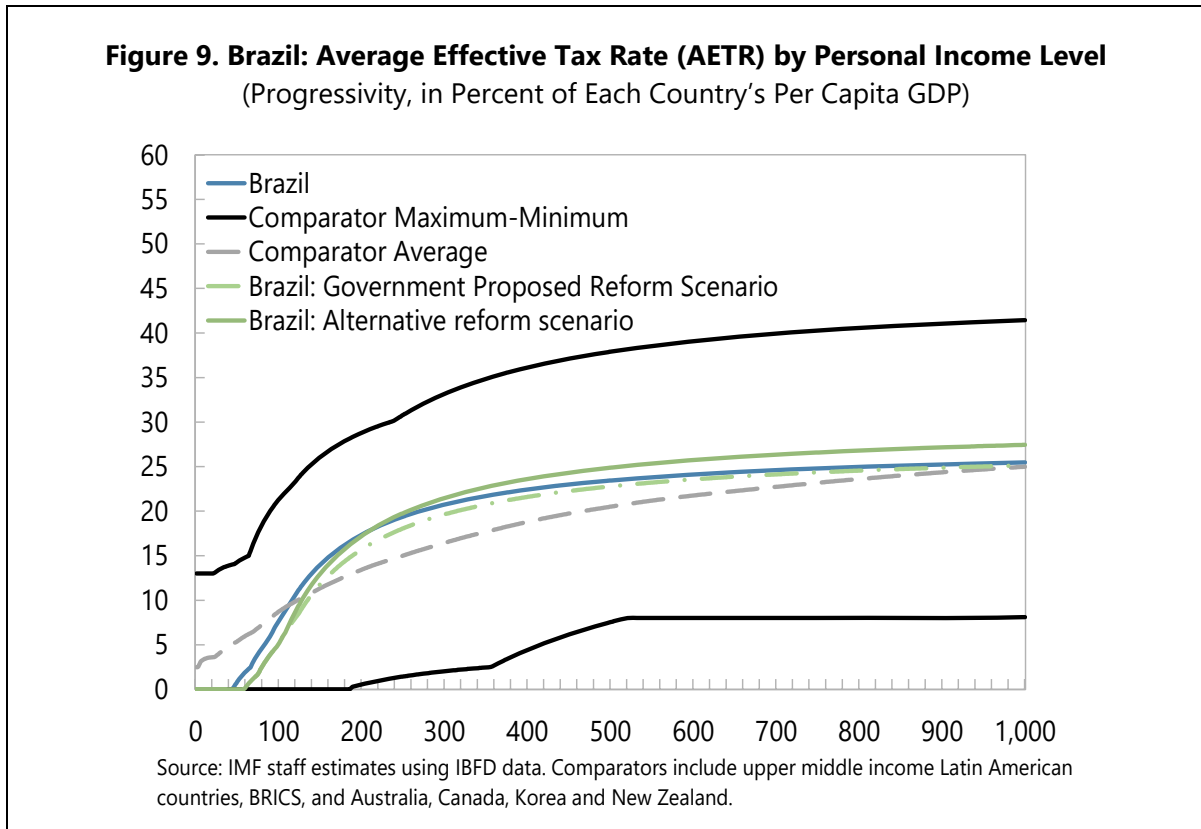
58. Eliminating most IRPF deductions and capital income exemptions would improve the progressivity of the direct tax system. That includes the highly regressive deductions for education and health expenses, as well as preferential treatment of capital returns on investment

¹⁸ Based on the average implied profit margin of firms in the presumptive profit regime, according to aggregated RFB data for 2018. The model further assumes a share of value-added of 15 percent of sales, a hypothetical VAT rate of 25 percent to be equivalent to the combined indirect taxes currently in place, a SSC burden of 36 percent tax on payroll equivalent to 24 percent of turnover (based on RFB aggregate data on salaries for Simples firms in 2018).

¹⁹ Note this type of measure should only be implemented once the pandemic-related crisis abates, to avoid burdening firms making exceptional losses as a result of the pandemic.

vehicles and pension income. The latest reform proposal by the authorities makes some progress in the right direction by taxing accrued capital gains of closed-end investment funds. Notwithstanding, most other deductions and exemptions remain unaltered at this stage.

59. A reduction in the payroll tax burden can be supported by increased progressivity of the personal income tax schedule, rather than distortionary exemptions. The payroll tax exemption still in effect could be allowed to expire at the end of 2021. To offset the associated burden on payroll costs (particularly for sectors currently benefiting from this tax expenditure), the authorities could consider reducing the standard employer's contribution (currently 20 percent), and seeking the corresponding revenues instead from higher income earners under the PIT system. Figure 9 illustrates one such possible alternative marginal PIT rate schedule, in comparison with that implied by the authorities' latest income tax reform draft bill. All of the thresholds for the lower brackets are adjusted by the same amount as the government's proposal (including the increase in the personal exemption to BRL 2,500 per month), with the exception of the top bracket threshold, which is set to remain unaltered in nominal terms to the present IRPF schedule. All lower marginal rates are also assumed to remain unchanged, but the top marginal tax rate is increased from 27.5 to 30 percent. While the government's proposal effectively reduces average tax rates across the entire income distribution relative to the current schedule, the alternative schedule depicted allows a similar relief of the tax burden for individuals earning around 100 percent of GDP per capita, but it is significantly more progressive at the top tail of the distribution. A similar transition option to the one described under the CIT reform could be made to firms in order to avail themselves of the new lower payroll tax rate only if they switch to the standard CIT regime and give up any special incentives they had previously been granted (with the exception of R&D specific ones).



60. Reductions in social security contributions could also be financed by more efficient use of other tax bases. In order to replace the traditional financing of the social security budget with payroll taxes heavily burdening productive activity in the country, the authorities could seek to leverage so far less used tax instruments, which would also shift the burden of contributions to higher income individuals. One possible avenue includes base broadening of property taxes and inheritance taxes, through improved valuation and elimination of exemptions. Though IPTU and ITCMD are under municipal and state purview, the rural property tax is federally collected, and any improvement in subnational own revenues would alleviate fiscal resource pressures at the federal level. In addition, assessing federal capital gains taxes upon asset transfers at death could improve the effectiveness and revenue productivity of inheritance taxation in the country. There have also been calls for the authorities to consider the regulation of a net wealth tax with a high threshold, as it is in fact already stipulated in the Constitution (but never implemented). Paiva and others (2021) estimate a progressive net wealth tax could yield 0.4 percent of GDP based on wealth values already declared in PIT tax returns. However, evasion behavior could easily erode this hypothetical tax base—unless credibly used only once or announced as a temporary measure (such as to support emergency pandemic expenses). Finally, there have been some public discussions of the potential re-introduction of the unpopular and highly distortionary CPMF, a tax on virtually all financial transactions, but pursuing such an option would be ill advised, especially given the already disproportionately high tax burden imposed on the financial sector through the IOF and the higher CSLL surcharge of 20 percent.

61. There are substantial potential welfare gains in simplifying indirect taxes and integrating them nationally into a national VAT and excise regime. Ultimately, integrating all current indirect taxes at various levels of government (PIS, PASEP, COFINS, IPI, IOF, *Salário-Educação*, CIDE-fuel, ICMS and ISS) into a unified destination-based national VAT and an excise tax on selected externality and rent generating goods and services (e.g., fuels, electricity, telecommunications, tobacco, alcohol, motor vehicles), in line with the constitutional amendment proposed by the Lower House, would provide the most substantive efficiency gains. Current sectoral and regional tax incentives would be entirely eliminated. Even if states were allowed to choose their own VAT rates from within a band around a reference rate (e.g., 25 percent), the destination-based nature of the new system would effectively neutralize the current fiscal war between subnational governments. The associated strengthening in subnational finances would in turn improve the robustness of the national fiscal framework. Realistically, a dual VAT akin to the Canadian system looks more probable at this stage, since the unification of federal taxes requires only infra-constitutional changes and could thus be most expediently implemented. While a national reform would be more disruptive of the status quo than a solely federal one, any unification of rates would raise sectoral issues: manufacturing and retail could end up with a reduced burden on revenues and sales, but services and food would bear a heavier toll. To mitigate price passthrough of the reform in those sectors and an inflationary shock, VAT rate uniformization could be phased in gradually and predictably over the course of some years, possibly as suggested by the House. The reform would also redistribute fiscal resources in favor of net importing states, which are the least developed in the country (Varsano, 1997).

62. An expansion of social transfers would be needed to compensate low-income households for the elimination of tax expenditures over basic food items. The new VAT should have a uniform rate applied to all goods and services, removing the vast majority of exemptions and preferential rates, including for food and medicine. As previously described, zero-rating of the basic consumption basket today in Brazil is actually a regressive policy as a share of consumption spending by households, and an ineffective mechanism for redistribution relative to increased direct transfers to the poorest households (Araújo and Paes, 2019), especially when retailers typically absorb declines in VAT rates as added markup, rather than passing through lower prices to final consumers. In addition, poorer households will typically make purchases in informal retailers, which may not even charge VAT, thus mooted the limited redistributive impact of any preferential rates (Bachas and others, 2020). A less ideal but nonetheless common alternative would be to still allow a lower or zero rate apply to a narrower basic consumption basket than even the one in SECAP's proposed partial reform.²⁰ In particular, SECAP (2019c) recommended excluding some goods (e.g., cheese, milk derivatives, certain types of fish and birds, and coffee derivatives). However, a more extensive reduction was not

²⁰ No *exemptions* should be allowed for food sales (as they currently are at the ICMS level for some states) in order to maintain the integrity of the VAT's chain of credits on input purchases—without which consumer prices can actually rise, going counter the very objective of the exemption. VAT exemptions should only be allowed when value added is hard to define, such as in the case of margin-based financial services and insurance services.

considered primarily due to concerns that the additional revenue recouped and redistributed (through individualized tax refunds or increased cash transfers to low-income households) would imply a breach of the constitutional spending ceiling. This is a binding constraint on adequate reform which clearly highlights the importance of coordination between the government revenue and spending policy. In theory, individualized refundable tax credits could be considered, which would not be considered increased spending. However, with less than 30 million individuals filing IRPF each year in a country of over 200 million, and most not being among the poorest households (who do not file), issuing refunds through the income tax system is unlikely to be well targeted. Furthermore, many of the poorest households may not purchase goods in retailers issuing electronic invoices that would enable such credits. Instead, the authorities could leverage the large and well-established *Cadastro Único* network of registered beneficiaries under Bolsa Família (PBF), the country's largest welfare program, to identify the households that need to be compensated and directly augment their transfers. Optimally, the authorities may wish to consider excluding PBF transfers from the spending ceiling, in order to enable direct cash transfers compensating low-income families for the increased tax burden on basic food items.

63. Similar targeted compensation mechanisms are in place in other countries and have functioned better than either generalized tax credits or deductions. In Ecuador and Guatemala, personal expenditures are either deductible from the PIT's taxable income or VAT is creditable, in order to encourage individuals to request formal invoices. Both designs have actually reduced the redistributive capacity of the tax system, benefiting better-off taxpayers the most, and creating tax compliance challenges as individuals began using fake invoices to reflect personal consumption. Some Brazilian states themselves have experimented with this type of mechanism: São Paulo and Rio Grande do Sul included a refund in addition to a lottery in order to nudge ICMS electronic compliance. However, Mattos and others (2013) concluded that the impact of the São Paulo program was very limited primarily due to individual stigma and embarrassment over asking for invoices, and concerns over data cross-checks. Instead, Canada and Portugal, offer targeted and capped refundable sales tax credits to low-income taxpayers only, which have contributed to turning their VAT from proportional to progressive. Finally, of more immediate parallel to Brazil today, Uruguay (since 2006) and Thailand (since 2018) have used smart cards to refund VAT to low-income individuals: monthly amounts are deposited into each card according to household composition up to a limit, effectively working as direct compensatory transfers (Fenochietto and Benitez, 2021). Paiva and others (2021) estimate such a policy shift could be extremely effective at reducing inequality (by as much as 7 points of the Gini coefficient) and virtually eliminating extreme poverty rates in the country.

64. Overall, an effective reduction in tax expenditures by at least 2 percent of GDP in the medium-term will require ambitious special regime reforms along with a broader fiscal reform package. Table 2 summarizes the key rationalization reforms recommended thus far, their estimated potential revenue yield, earliest viable timeline, and possible countermeasures within a broader fiscal reform package that would balance the impact of tax relief elimination on individuals and productive activity. For example, eliminating the double personal exemption for

pension income of those 65 and older could be partially offset by ensuring truly low-income pensions remain below the threshold (such as by merely aligning them with the standard exemption). Human capital development objectives in health and education would be best served by improved and increased public spending on those areas, rather than PIT deductions. Statutory CIT rate reductions could compensate business owners for the reduction of preferential simplified regimes, and so on. The rationalization of the fiscal incentives under the Manaus Free Zone is recommended after 2023, as that is the year when closely associated profit-based regional incentive programs SUDAM and SUDENE are currently set to expire. While the provision maintaining the existence of the Manaus Free Zone along with customs duty and IPI exemptions are entrenched in the Constitution (Art. 40), and extended through 2073 by constitutional amendment EC 83/2014, the details of other tax relief granted (or not) to companies operating under the ZFM are set in either ordinary law or Presidential decree, which could be repealed and/or modified by Congress. Excluding customs and IPI exemptions would cut the projected revenue by half. Thorough cost-benefit assessments of the current incentives offered by the special regime (including the near completed but yet unpublished study by SECAP) would help the authorities consider potentially more effective, sustainable and cost-efficient alternatives to stimulate regional investment and employment—including public spending on infrastructure to reduce logistical and transportation costs in the Amazon region, and human capital development to increase the attractiveness of labor skills available to employers.

65. While as much as 4½ percent of GDP in forgone revenue could be recouped at the national level in the medium-term, introducing balancing packaged measures (as recommended) would neutralize that revenue impact. Potential revenue yield estimates are largely based on the RFB's own estimates of forgone revenue in the annual federal tax expenditure report, taking 2019 as a base. For items not covered by the report, other publicly available tax return aggregates were used. For example, estimates of revenue yield for the ACE, thin capitalization provisions and presumptive profit regime are based on the latest RFB aggregate statistics (e.g., corporate income tax returns aggregates by sector)²¹ and the estimate for IPI assumes a level of tax expenditure proportional to that measured in PIS/COFINS. Clearly, simply allowing current tax expenditure provisions to run their course would not yield much gain. However, a series of concerted discretionary rationalizations of existing tax expenditures along with a comprehensive tax reform package could produce considerable fiscal resources in less than five years, even if only at the federal government level. The exemption of social security contributions by non-profit/social assistance organizations is excluded from the summary table, as it would be more difficult to eliminate politically given the social objectives those entities serve. Together with a similar exemption for rural exporters (at a non-trivial nearly 0.3 percent of GDP), this tax expenditure is further prescribed in the Constitution, which would also make it much harder to repeal legally.

²¹ All source data used can be found at <https://receita.economia.gov.br/dados/receitadata/estudos-e-tributarios-e-aduaneiros/estudos-e-estatisticas>.

Table 2. Brazil: Potential Revenue Yield from Tax Expenditure Rationalization Measures

Tax Expenditure Rationalization Measure	Potential Revenue Yield (% of GDP)	Possible Timeline	Possible Balancing Measure
Elimination of pension income exemption from IRPF	0.31	2022	Ensuring low-income pensions remain under PIT exemption threshold
Elimination of education and health expenditure deductions on IRPF	0.28	2022	Public spending in education and health
Elimination of preferential tax treatment of savings vehicles	0.11	2022	
Elimination of payroll tax exemption	0.13	2022	Lower payroll tax rate on middle class, but increase top marginal PIT. Transition option for firms
Integration of Lei da Informática resources into Lei do Bem	0.08	2022	-
Simples Nacional (SME) Nacional Threshold and Rate Reform	0.77	2023	Statutory CIT rate reduction
Elimination of PIS/COFINS zero-rating on basic food items	0.23	2023	VAT refund for households under Bolsa Familia / increased social transfers to mitigate poverty impact
Elimination of PIS/COFINS tax credit on medicine and pharmaceutical products	0.17	2023	Expanding low-income access to basic medicine directly through government purchases (post-pandemic, to avoid any immediate price passthrough to consumers at this juncture)
Manaus Free Zone and SUDAM/SUDENE Reform	0.45	2024	Cost-based incentives (e.g. accelerated depreciation) and infrastructure/direct public spending in the region
Automatic expiration of other benefits (mainly semiconductors and automotive sectors)	0.13	2029	-
<i>Others (not considered or quantified by FRB as TEs)</i>			
Repeal of existing ACE on distributions	0.23	2022	Dividend taxation + standard ACE on new equity only
Thin capitalization provisions for unrelated parties not in low-tax jurisdictions	0.17	2022	Statutory CIT rate reduction
Elimination of presumptive profit regime along with AMT	0.16	2023	Statutory CIT rate reduction
Harmonization of IPI rates, incl. removal of preferential rates	0.04	2023	VAT refund for households under Bolsa Familia
Elimination of subnational tax expenditures, including for ICMS on basic food items	1.20	2024	VAT refund for households under Bolsa Familia
Total federal without reforming TEs excluded by Constitutional Amendment	1.21		
Total based on federal tax expenditure report	2.66		
Total including subnational and broader tax expenditure definition	4.46		

IV. CONCLUSION

66. Tax expenditures have added to the complexity, opacity and regressivity inherent in Brazil's tax system over multiple decades, but the time is right for their rationalization within comprehensive tax reform. The pandemic crisis could provide a particularly amenable environment to introduce sweeping tax reforms, as public perceptions of the inequities of the current system have been heightened by the acute pandemic impact to employment in the informal sector. Measures targeting horizontal inequity benefiting liberal professionals and vertical inequity benefiting top percentile earners (both on the labor and capital side) could be particularly well received at this juncture. There could even be openness to the introduction of temporary COVID-19 recovery contributions on high income individuals or economic rents of firms in sectors that benefited from the pandemic (e.g., pharmaceuticals, online retailers), as done in some other countries during previous exceptional circumstances (e.g., Australia in 2011, and Japan in 2013; see IMF, 2021). In addition, as recommended in IMF (2020), any new tax expenditures (including tax deferrals) granted to attenuate the exceptional impact of the crisis on households and firms have a clearly well-defined expiration, to prevent them from remaining beyond the duration of the crisis and further incumbering the tax expenditure rationalization effort.

67. A comprehensive tax reform eliminating PIT deductions, consumption tax exemptions, and special CIT regimes could increase productivity and potential output growth, as well as lower overall income and geographic inequality. A national tax reform would minimize the deadweight loss of taxation in Brazil today (the “Brazil cost”)—its complexity, cumulativeness, compliance and judicial costs, the fiscal war, sectoral distortions, and investment and export impairment. In the medium-term, potential output growth would be expected to increase, which could also lead to an improvement in public debt ratios. Fiscal imbalances between subnational governments, income inequality and poverty could all be significantly reduced. Moreover, a modernizing reform of the tax system would better equip the tax administration to deal with growing challenges of the digital economy (such as how to determine tax jurisdiction and what to consider a taxable base). It would also increase its transparency and public trust in the use of tax resources. Within such a broad tax reform plan, the following key tax expenditure rationalization priorities were identified:

- Reducing regressive personal income tax deductions for education and health expenses, as well as exemptions for pension income, savings investment funds, and dividend income. Payroll tax exemptions (including those associated with special CIT regimes for SMEs) could also be eliminated, possibly combined with reduced employer social security contributions, whose financing could be replaced with higher top marginal PIT rates and improved use of other tax instruments, such as property and inheritance taxes.
- There is room for substantial rationalization of special regimes for corporates, including by lowering the eligibility threshold for Simples Nacional, eliminating the presumptive profit regime, and curtailing the ability of liberal professionals to incorporate for tax avoidance purposes. Firms could be partially compensated through a lower statutory CIT rate and improved investment and cost of capital allowances. The authorities could consider introducing arrangements to encourage voluntary transition to the standard regime, including the option to benefit from lower CIT and payroll tax rates only under the standard system and a temporary alternative minimum tax to mitigate any potential short-term revenue losses. Special regimes with a regional development focus merit re-evaluation, with spending policy taking a more significant role.
- Removing preferential rates and exemptions associated with PIS, COFINS and IPI would enhance their efficiency, simplicity and even progressivity; and at a later stage (in tandem with the creation of a national VAT), the same would apply to ICMS and ISS. Expanded social assistance transfers could be considered, leveraging the existing PBF network, to adequately compensate low-income households for increased prices of basic consumption goods and services as a result of rate uniformization.

REFERENCES

- Afonso, J. R.; Silveira, R. F.; Carvalho, C. M. S.; Klintowitz, D.; e Azevedo, F. 2014. "A renúncia Tributária do ICMS no Brasil". Inter-American Development Bank. Discussion Document number 327. February.
- Afonso, J.R., J. Morais Soares, and K. Pacheco Castro, 2013. "Evaluation of the Structure and Performance of the Brazilian Tax System: White Paper on Taxation in Brazil", Discussion paper No. IDB-DP-265. August. Inter-American Development Bank.
- Appy, B., 2017. "Tributação e Produtividade no Brasil." In *Anatomia da produtividade no Brasil*, edited by R. Bonelli, F. Veloso, and A.C. Pinheiro. Rio de Janeiro: Elsevier, FGV/IBRE.
- Araújo, E. M. and N. L. Paes, 2019. "Desoneração da cesta básica ou expansão do Programa Bolsa Família? Uma simulação por equilíbrio geral computável", *Revista de Economia Contemporânea*, 23(1): p. 1-23.
- Auerbach, Alan J., and Joel Slemrod, 1997. "The Economic Effects of the Tax Reform Act of 1986." *Journal of Economic Literature*, vol. 35, no. 2, pp. 589–632.
- Azuara Herrera, Oliver, Rodrigo Azuero, Mariano Bosch, and Jesica Torres, 2019. "Special Tax Regimes in Latin America and the Caribbean: Compliance, Social Protection, and Resource Misallocation," IDB Publications (Working Papers) 9511, Inter-American Development Bank.
- Bachas, Pierre, Lucie Gadenne and Anders Jensen, 2020. "Informality, Consumption Taxes and Redistribution", NBER working paper 27429, June.
- Borges, Bráulio, 2020. "Impactos macroeconômicos estimados da proposta de reforma tributária consubstanciada na PEC 45/2019". Centro de Cidadania Fiscal (CCiF) technical note. February.
- Fenochietto, Ricardo and Juan Carlos Benítez, 2021. "Encouraging Formal Invoicing and Reducing the VAT Impact on Low-Income individuals", IMF Working Paper No. 2021/040.
- Receita Federal do Brasil (RFB), 2020. Demonstrativo de Gastos Tributários - Projeto de Lei Orçamentária Anual.
- _____, 2021. Demonstrativo de Gastos Tributários - Projeto de Lei Orçamentária Anual.
- Government of Canada, 2019. "Annex 5 - Government Tax Expenditure and Spending Reviews" in Budget 2019.

International Bureau of Fiscal Documentation (IBFD), 2018. "Interest Limitation Rules: At a Crossroads between National Sovereignty and Harmonization", *European Taxation*, April.

International Labor Organization (ILO), 2019. "Simples National: Monotax Regime for Own-Account Workers, Micro and Small

Entrepreneurs. Experiences from Brazil", *Enterprise Formalization paper*.

International Monetary Fund (IMF), 2011. "Revenue Mobilization in Developing Countries", *Policy Paper*.

_____, 2015. "Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investment". Report to the G-20 Development Working Group.

_____, 2016. "Tax policy, leverage and macroeconomic stability", *Policy Paper*.

_____, 2017. "Brazil: Fiscal Transparency Evaluation", *Country Report No. 17/104*.

_____, 2019. "Brazil: Technical Assistance Report—Strengthening the Framework for Subnational Borrowing." *Country Report No. 19/302*.

_____, 2020. "Tax and Customs Administration Responses", *Special Series note on COVID-19*.

_____, 2021. "COVID-19 Recovery Contributions", *Special Series note on COVID-19*.

Inspere, 2020. "Contencioso tributário no Brasil, Relatório 2019 - Ano de referência 2018", July.

Keen, Michael and Mario Mansour, 2010, "Revenue Mobilization in Sub-Saharan Africa: Challenges

from Globalization II – Corporate Taxation," *Development Policy Review*, Vol. 28, pp. 573-596.

Klemm, A., 2006. "Allowances for Corporate Equity in Practice", *IMF working paper WP/06/259*.

Kraan, Dirk-Jan, 2004. "Off-budget and Tax Expenditures", *OECD Journal on Budgeting – Volume 4 – No. 1*

Itaú, 2020. "Macro Vision: 10 frequently asked questions about the tax reform", *Macro Research Department report*.

Matsumoto, Maurício Massao Soares, 2021. "Essays in Firm Taxation and Job Loss", Chapter 2. Princeton University, Department of Economics Dissertation. April.

Mattos, E., Rocha, F., and Toporcov, P, 2013. "Programas de Incentivos Fiscais São Eficazes? Evidência a Partir da Avaliação do Impacto do Programa Nota Fiscal Paulista Sobre a

- Arrecadação de ICMS" Revista Brasileira de Economia, Rio de Janeiro v. 67 n. 1 / p. 97–120 Jan-Mar.
- McIntyre, 2017. "Chapter 6. Tax Incentives: To Use or Not To Use?" in *Unleashing Growth and Strengthening Resilience in the Caribbean*. Eds. Otker-Robe, I., Srinivasan, K., Ramakrishnan, U. and Alleyne, T. Washington, DC: International Monetary Fund.
- Ministério da Fazenda, 2018, "Desoneração da Folha de Pagamentos", Boletim Mensal Sobre os Subsídios da União. October.
- Mintz, Jack and Philip Bazel, 2020. "The 2019 Tax Competitiveness Report: Canada's Investment and Growth Challenge," SPP Research Papers, The School of Public Policy, University of Calgary, vol. 13(1), March.
- Miranda, Ricardo Nunes, 2013. "Zona Franca de Manaus: Desafios e Vulnerabilidades". Núcleo de Estudos e Pesquisas do Senado. Consultoria Legislativa, Senado Federal. Texto para discussão N.126.
- Organization for Economic Cooperation and Development (OECD), 2010. "Tax Policy Reform and Economic Growth", OECD Tax Policy Studies, No. 20, OECD Publishing, Paris.
- Orair, R.O. and Gobetti, S.W. 2019a. "Reforma Tributária e Federalismo Fiscal: uma análise das propostas de criação de um novo imposto sobre o valor adicionado para o Brasil". IPEA discussion text 2530. December.
- _____, 2019b. "Tax reform in Brazil: guiding principles and proposals under debate" ZBW and International Policy Centre for Inclusive Growth, working paper number 182.
- Ozai, I., 2020. "Tax Expenditures and Complexity in a VAT System: The Case of Brazil". Council on Economic Policies. Blog post. January.
- Paiva, Luis Henrique, Letícia Bartholo, Pedro H. G. Ferreira de Souza and Rodrigo Octávio Orair, 2021. "A reformulação das transferências de renda no Brasil: simulações e desafios", IPEA preliminary publication.
- Pinto, V. C. 2019. "Os elevados e Descoordenados Benefícios Fiscais do ICMS". Febrafite. Study. May.
- Pinto, V. C. and M. A. B. L. Gradwohl, 2021. "Renúncias fiscais do ICMS em tempos de pandemia" Febrafite technical note. April.
- Piza, C., 2018. "Out of the Shadows? Revisiting the impact of the Brazilian SIMPLES program on firms' formalization rates." Journal of Development Economics, vol. 134, issue C, pp. 125-132.

- Presidency of the Federal Republic of Brazil, 2017. "Tabela de Incidência do Imposto sobre Produtos Industrializados (TIPI)".
- Redonda, A. and T. Neubig, 2008. "Assessing Tax Expenditure Reporting in G20 and OECD Economies", CEP Discussion Note 2018/3.
- SECAP, 2019a. "Deduções do Imposto de Renda Pessoa Física de Despesas Médicas". Boletim Mensal. 9th edition. July.
- _____, 2019b. "Lei de Informática". Boletim Mensal. 6th edition. March.
- _____, 2019c. "Desoneração da Cesta Básica". Boletim Mensal. 11th edition. September.
- _____, 2019d. "Desoneração dos Medicamentos". Boletim Mensal. 14th edition. December.
- _____, 2020. "Dedução de Despesas com Educação do Imposto de Renda Pessoa Física". Boletim Mensal. 18th edition. June.
- _____, 2021. "Lei do Bem: Lei nº 11.196/05". Boletim Mensal. 19th edition. March.
- Secretaria de Estado da Fazenda do Rio Grande do Sul (SEFAZ RS). 2020. "Benefícios Fiscais no Rio Grande do Sul: Uma análise econômica dos incentivos ICMS". Study. June.
- Teixeira, Luciana da Silva, Luciola Calderari da Silveira e Palos, Walter Simões, 2019. "Cesta Básica", Estudo Técnico, Consultoria Legislativa, March.
- Thiago, Marina and Renata Mendes, 2019. "Reforma Tributária e Desigualdade de Arrecadação". Endeavor. November. <https://endeavor.org.br/leis-e-impostos/reforma-tributaria-desigualdade-de-arrecadacao/>
- UOL, 2021. "Carros PCD: saiba como ficaram isenção de IPVA e pedidos de reembolso em SP", online article. <https://www.uol.com.br/carros/noticias/redacao/2021/03/23/carros-pcd-saiba-como-ficaram-isencao-de-ipva-e-pedidos-de-reembolso-em-sp.htm>
- Varsano, R., 1997. "Guerra Fiscal do ICMS: Quem Ganha e Quem Perde". Planejamento e Políticas Públicas n. 15. Rio de Janeiro: IPEA. June 1997, pp. 3-18.
- _____, 2001. "Tributação Cumulativa, Distorção a Erradicar". Boletim de Conjuntura n. 53. Rio de Janeiro: IPEA. April, pp. 57-59.
- Wei, F. and J.F. Wen, 2019. "The Optimal Turnover Threshold and Tax Rate for SMEs", IMF Working Paper No. 19/98.

- World Bank, 2017. "Business Support Policies in Brazil: Large Spending, Little Impact", Background Paper to *Um Ajuste Justo - Análise da eficiência e equidade do gasto público no Brasil*, November.
- World Bank, 2020. "Doing Business 2020: Comparing Business Regulation in 190 Economies". Washington, DC: World Bank.
- Zockun, M. H., 2007. "Simplificando o Brasil: Propostas de Reforma na Relação Econômica do Governo com o Setor Privado". FIPE Discussion Paper No. 3. São Paulo: Fundação Instituto de Pesquisas Econômicas. March: 101.