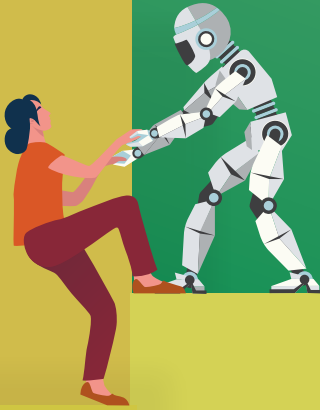




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THE BRAZIL OF THE FUTURE

TOWARDS PRODUCTIVITY, INCLUSION, AND SUSTAINABILITY



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Contents

Introduction: Envisioning Brazil in 2042	2
1. Overcoming the legacy of exclusion and preparing for megatrends	5
Many Brazils: overcoming inequality and benefiting from diversity	5
Preparing for megatrends	7
Embracing technological change	7
Tackling climate change	8
Adapting to demographic change	10
2. Promoting inclusive, sustainable growth	12
Raising productivity to boost sustainable growth	12
Preparing Brazil's education system for closing the gap between skills and jobs	15
Strengthening the relevance and sustainability of social protection systems for future challenges	18
Ensuring adequate access to infrastructure services	20
Reshaping today's limited fiscal policy space in line with long term priorities	21
Fiscal sustainability could also be enhanced by reforming the tax system	24
3. Building an inclusive social contract	26
4. Four alternative futures for Brazil	28
References	35



Introduction: Envisioning Brazil in 2042



In 2022, Brazil celebrated its 200th anniversary. What will Brazil celebrate at its 220th anniversary, in 2042? Following the recent elections there is a window of opportunity for reforms that will shape Brazil's development over the next decades. "The Brazil of the Future: Towards Productivity, Inclusion, and Sustainability" takes a long-term perspective on Brazil's development, exploring how prudent actions today can generate opportunities for a more prosperous, inclusive, and sustainable society over the next 20 years. The report aims to stimulate public debate about a virtuous cycle for 2042, illustrated by four alternative future scenarios.

Brazil has come a long way. The return of Brazilian democracy in the late 1980s allowed for broadening social opportunities. In the 1990s, Brazil started transitioning toward more flexible and inclusive markets through liberalization, while strengthening macroeconomic stability through the Real Plan. In the 2000s, Brazil benefited from the commodity price supercycle. Economic and social progress accelerated—including a buoyant economy, falling wage inequality, further expansions of social protection, and a significant progress in preserving the Amazon rainforest, 60 percent of which is in Brazil. Between 2001 and 2013, nearly 25 million Brazilians escaped poverty and Brazil's formal employment peaked. Brazil became one of the world's 10 largest economies and a major global food supplier. Yet, in the past decade Brazil experienced two recessions, one linked to the end of the commodity boom and one to the Covid-19 pandemic. Gains in poverty reduction were eroding while deforestation was on the rise again.

Brazil's current social contract has come under strain, undermining Brazil's potential. Social contracts are defined as "dynamic agreements between state and society on their mutual roles and responsibilities", and they determine what each group contributes to and receives from the state.¹ When the social contract is strained, the room for reforms is limited as there is

¹ World Bank 2021

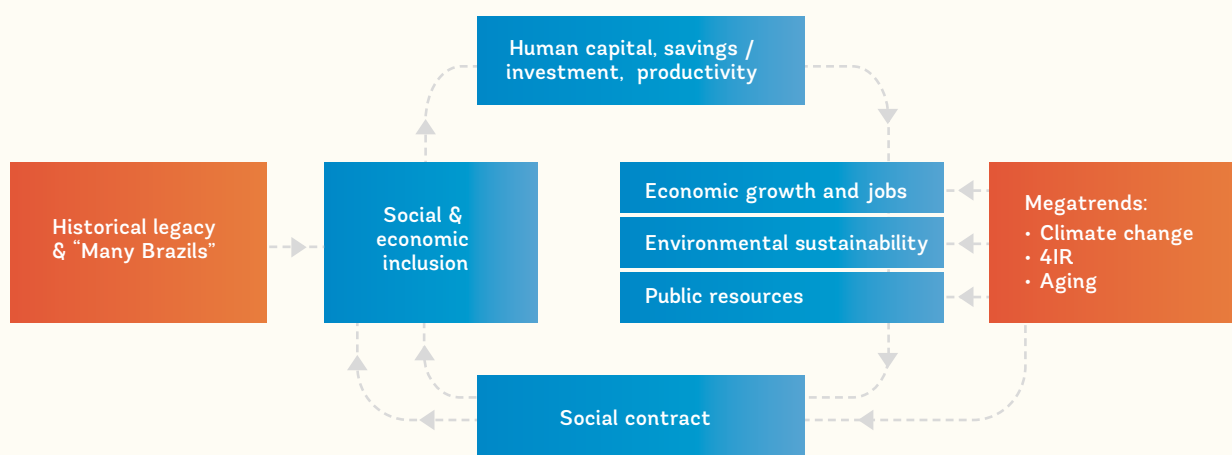
no agreement on what citizens are willing to contribute and what they expect to receive in return. Indicators of social cohesion are low in Brazil, falling significantly from the “golden years” in the 2000s. In recent years political polarization has reached new heights while trust remains very low by global standards. Yet trust is critical for future planning: Those trusting public institutions (the government or the judiciary) have more of a long-term planning horizon.² Overly discounting the future is a poor foundation for investments, both at the individual and broader society level. A strong social contract is critical to build a better future.

For Brazil to succeed in building on the achievement of the past and tackle the challenges of the future, it needs to enter a virtuous cycle of productivity, inclusion, and sustainability. There are still many distortions in Brazil’s economy undermining productivity in many areas, including the closedness to trade, an inefficient tax system, gaps in education, and eroding resource governance. These undermine the country’s economic potential. Unlocking economic potential will generate aspirations, the desire to plan and the propensity to save and to invest to acquire the necessary skills for the future. Better education, especially for the underserved poor, will both promote economic growth while improving access to better jobs. Opening markets will provide new opportunities for smaller firms and lower prices for all. There is a virtuous cycle between productivity and inclusion. And this cycle also includes sustainability. A more productive

economy uses fewer resources. In the case of Brazil this implies less deforestation, the country’s leading contribution to climate change. Less deforestation, in turn, is a critical foundation for Brazil to safeguard its economy which critically depends on the ecosystem services provided by the country’s forests, especially the Amazon rainforest.

Today’s decisions will shape Brazil’s path to 2042- and can help to create this virtuous cycle. Figure 1 depicts the report’s conceptual framework to restore Brazil’s virtuous cycle of productivity, inclusion, and sustainability. Brazil’s recent performance is marked by low growth, high inequality, and environmental degradation. Brazil’s present is shaped by the country’s historic legacy (generating “many Brazils”) and it will be altered by megatrends that will majorly shape the future for Brazilians; these include climate change, technological change, and demographics. To create a virtuous cycle and build a prosperous future, bending the arc of history while turning megatrends into opportunities, Brazilians will need to make proactive choices. With a stronger social contract at the core, society needs to embrace reforms to promote social and economic inclusion, savings, investment, human capital, productivity and sustainability. These areas form part of a mutually reinforcing ecosystem that will promote economic growth and jobs, foster environmental sustainability, and generate the public resources underpinning the role of the state in providing critical public services.

► **Figure 1. A virtuous cycle for a prosperous, inclusive, and sustainable Brazil**



Source: World Bank.

² Vostroknutov, A. 2021.

How to create a virtuous cycle? History and megatrends will determine the future unless Brazilians make deliberate choices to change the path of history and seize opportunities from megatrends while minimizing the risks. Preparing for megatrends implies embracing technological change, tackling climate change, and adapting to demographic change. To further promote inclusive, sustainable growth, there are at least six critical areas for reform: (i) raising productivity in the private sector to boost growth in an environmentally sustainable way; (ii) preparing Brazil's education system for closing the gap between skills and jobs; (iii) strengthening the relevance and sustainability of social protection systems for future challenges; (iv) reshaping today's limited fiscal policy space in line with long term priorities; (v) improving access to infrastructure services; and (vi) building a more equitable and efficient tax system. Reforms can only be undertaken if they are sufficiently supported by Brazilian society. This requires strengthening Brazil's social contract to provide the required trust that the reforms will benefit everyone over the long term.

With the right reforms Brazil can become an economic powerhouse that offers opportunities for

all. A more inclusive social contract can facilitate critical reforms. By reforming public education and providing Brazil's children access to more and better education, the gains of technological change could be shared widely. Social protection reforms could lead to better protection of those in need at much lower fiscal costs. A more efficient and progressive tax system could help raise the needed revenues to invest more in Brazil's future, while reducing inequality. Changing labor taxes could help reduce current incentives for employers to rely on more precarious forms of employment. Natural resources, such as forests, could become a sustainable foundation of prosperity and Brazil could once again become a leader in fighting climate change. All this would sustainably generate economic growth and the revenue needed to finance progress in a fiscally sustainable way. Brazil could become a major exporter of green commodities and manufactured goods, benefiting from the high demand for green production across the world. Its innovative green-energy matrix together with low land-use emissions would make it highly productive and competitive on international markets. And Brazilians would become active players and innovators in international business and global supply chains, opening new possibilities for growth across the economy.



1. Overcoming the legacy of exclusion and preparing for megatrends



Many Brazils: overcoming inequality and benefiting from diversity

Today, many Brazils coexist. At one extreme is an upper class predominantly white, largely formalized, well educated, urban, and Southern or Southeastern. At the other are those in the bottom 30 percent, predominantly of color, informal or in subsistence agriculture, uneducated, poor, rural, and Northern or Northeastern. Brazil also has a substantial urban middle and upper middle class, which is more heterogeneous racially, more often formally employed but seldom highly educated. Children are over-represented among families in poverty and the lower middle class, while the elderly among the richest (Table 1).

Despite progress, Brazil remains among the world's most unequal countries. Currently, the many Brazils are a source of inequality. For example, white Brazilians enjoy much better employment than Brazilians of color (Figure 2). Brazil's Gini coefficient of inequality, and the share of income to the top 1 percent, remained

high throughout the 20th century by global standards. Inequality increased during the military regime, began declining roughly a few years after the democratic transition, yet stalled in recent years (Figure 3). There are two main explanations for Brazil's high historic inequality: first, its institutions were intentionally built in colonial times to extract income and wealth from slaves and the poor, and, notwithstanding considerable improvements, still promote various forms of exclusion.³ Second, political and economic elites were successful in maintaining throughout the century restrictive political participation to preserve extractive institutions, unlike other western democracies after World War II.⁴ Yet diversity need not mean division: it can be an asset that can unlock talents promoting development. And a less divided, more inclusive society will be more successful in shaping a common path benefiting everyone.

Promoting inclusion will be a critical overarching theme for Brazil's path to 2042. This will require social consensus for policy action—including in how Brazil will decide to prepare for the megatrends.

3 Acemoglu and Robinson 2012; Engerman and Sokoloff 2005.

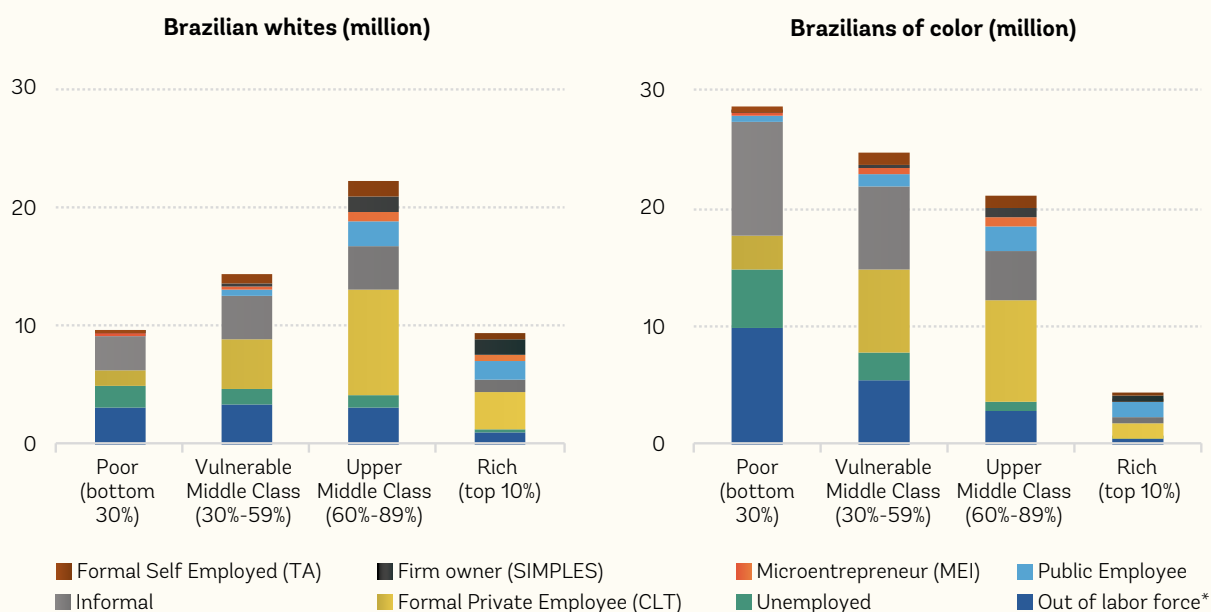
4 Piketty and Saeg 2014; Souza 2016; Scheidel 2017;

► **Table 1. “Many Brazils” at a glance**

	Population	Poor (bottom 30%)	Vulnerable middle class (30%–59%)	Upper middle (60%–89%)	Rich (top 10%)
Race	White (% adults)	24.7	37.3	52	69.8
Family composition	Number of adults 18+	2.39	2.34	2.21	2.02
	Number of children 0–17	1.91	1.07	0.61	0.52
	Number of elderly 65+	0.12	0.29	0.33	0.33
	Dependency ratio	1.01	0.67	0.48	0.44
Location	South/Southeast (%)	36	57	71	73
	North/Northeast (%)	59	35	20	18
Labor market inclusion and social protection	Adults out of labor force (%)	38	25	18	16
	Adults unemployed (%)	27	11	5	3
	Adults working formally (%)	11	35	55	63
	Working informally (%)	70	44	29	22
Human capital	Tertiary education, among age 25+(%)	2	6	18	58
	Secondary education, among age 25+(%)	27	35	40	29
Income	Total household income (per capita BRL)	276	736	1,561	5,848

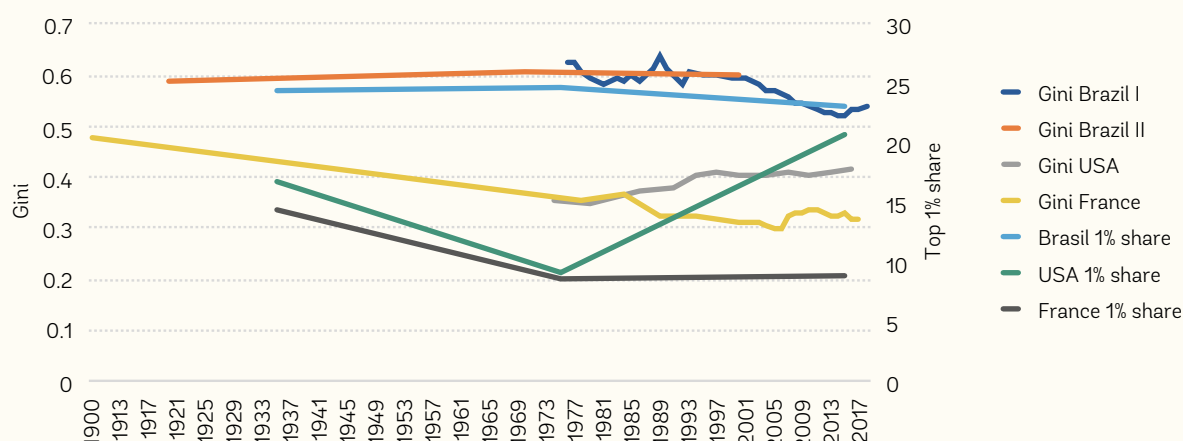
Note: Income percentiles obtained from SEDLAC data. Formal refers to workers with *carteira assinada*, or *4ilitary/servidor estatutario*, or employer/self-employed who report contributing to *previdencia*. Education among individuals 25+.
Source: World Bank staff based on PNAD Continua 2020.

► **Figure 2. Labor status of whites (left) and Brazilians of color (right), according to per capita income deciles in 2019**



Note: Occupational status of adults age 18–64 and not enrolled in school. Brazilians of color identify as “pardos” or “pretos”.
Source: World Bank, based on BraSIM 2019 microsimulation tool.

► **Figure 3. Income Gini for Brazil, France, and the United States, 1900–2018**



Source: Fandiño et al. (2022), using on data from: Gini (left axis): Brazil I (IPEA 2020; World Bank 2020); Brazil II (Bertola et al. 2012); United States (Milanovic 2013; World Bank 2020); France (Morrisson and Snyder 2000; World Bank 2020). Top 1 percent share (right axis): (average share held by the richest 1 percent in 1930–1935, 1970–1975, and 2010–2015) (Souza 2016; WID 2020).

Preparing for megatrends

Megatrends raise the cost of inaction and create opportunities. Technological progress, climate change, and population ageing are among the global and national megatrends, which will also shape Brazil's future. Whether domestic or external, megatrends tend to be inescapable; all societies will need to confront them. Policy reforms will be critical to help individuals, firms and institutions adapt to them and, ideally, thrive because of them.

Embracing technological change

Global technological change has been profound, and the Fourth Industrial Revolution is the latest wave of global technological disruption. The world has gone through three revolutions, starting with the agricultural revolution and followed by the industrial revolution and the digital revolution, each of which fundamentally altered societies and economies.⁵ At the turn of the 21st century, a Fourth Industrial Revolution commenced that is distinguishable from the digital revolution, which by 2000 had reached a point of sophistication and integration that was profoundly affecting society and the economy. Technologies under Industry 4.0 include the intersection of the internet

of things (IoT) and biology, developing autonomous vehicles, 3D printing, advanced robotics, distributed ledger technologies (such as blockchain), new—often more resource-efficient—materials (such as synthetic meat), and artificial intelligence/data science.

The many Brazils are reflected in different rates of technology adoption across households and firms. Only about 0.1 percent of Brazilians have not experienced the second industrial revolution, but 23 percent have yet to experience the third industrial revolution. Adoption of Industry 4.0 technology is generally low in Brazil, at about 4 percent compared with about 20 percent based on international benchmarks.⁶ Recent evidence for the state of Ceará (a poor state) points to a technological divide across companies: in addition to the low adoption of technology for the third and fourth industrial revolutions, there are large gaps across firms, with smaller firms lagging.⁷

Technological change could accelerate welfare gains if digital access becomes universal, and regulations prevents abuse of market power. For consumers, this could result in digital leveling, as there would be many digital substitutes for more expensive real goods and services. However, some recent digital advances bring considerable risks, including mental health issues and

5 Schwab 2017.

6 Albrieu et al. 2019.

7 Cirera et al. 2021.

political control—even threats to democracy itself. For firms, recent technological change increases competition by creating better ways of competing and spurring innovation and productivity. In contrast, when digital firms experience near-zero marginal cost, that can stifle competition, resulting in multinational monopolies or oligopolies with very limited oversight from national authorities. Ensuring that technology benefits society remains the role of governments, so regulation, domestic and transnational, will assume an ever more important role. Brazil has taken initial steps to deal with some of these issues by establishing the Central Data Governance Committee in 2019. Other concerns include market concentration, for instance when incumbents control other firms' access to technologies that directly affect their revenue stream and competitive competencies.⁸

Technological change will also alter the way in which firms source and use labor locally, enhancing opportunities for skilled workers but also carrying significant risks for workers' protection. An increase in the share of tradable service jobs (related to services that can be sold abroad) as a result of new technologies will enable firms to source skills from the rest of the world if they are not locally available. The internet and artificial intelligence are already enabling the outsourcing of an increasing range of tasks required in the service sector, where most new jobs will be created. For Brazilian workers, there will be more opportunities to tap into global trade-in services, but also a greater risk of displacement by technology. Data has shown a steep decline in the number of jobs with routine and manual tasks in Brazil (those most at risk of displacement by technology) and an upward trend in the growth of non-routine analytical type of jobs. Furthermore, it can be anticipated that the number of stable and dependent jobs may continue to decrease, as firms can outsource a greater number of functions via platforms. A rise in self-employment and freelancers as a share of total formal employment has already been occurring in Brazil in the past decade, driven high differentials in labor costs in favor of the self-employed. These changes are challenging the reach of labor regulations and part of social insurance, designed last century for an industrial, salary work-based work economy.

Embracing technological change can be an opportunity. Embracing technology can help Brazil become more affluent—and it can help Brazil prepare for other megatrends, such as tackling climate change (for example, by adopting less resource-intensive technologies) or adapting to demographic change (for example, by supporting elderly care). What is critical is that all Brazilians, poor and rich, firms and individuals, will be prepared to seize these opportunities.

Tackling climate change

Climate change is expected to increase the risk and intensity of water scarcity and drought across Brazil, requiring significant adaptation.⁹ The main exception is the South-Central area, from São Paulo to the South (Brazil's primary agricultural zone), which is expected to experience increased precipitation. This, together with changes in seasonal rainfall patterns (including the greater frequency of intense precipitation events), is expected to translate into higher incidence and intensity of flash flooding. Climate change requires Brazil to take various adaptation measures, from more climate resilient infrastructure to more climate-attuned social protection systems. Given Brazil's infrastructure gap, the additional cost associated with adaptation is relatively small (about 0.8 percent per year between now and 2030).

The impacts from climate change on households' welfare are expected to be broad and inequitable. About 3 out of 10 individuals live in either high socioeconomic vulnerability or high environmental vulnerability.¹⁰ About 19 percent of the population reside in municipalities that are considered to be at high environmental risk exclusively, while about 8 percent of the population are in municipalities considered to be in high socioeconomic vulnerability – though not at high environmental vulnerability. The urban poor, especially residents of informal settlements, are particularly vulnerable to disasters. There is evidence correlating low levels of income (or, broadly speaking, social and economic vulnerability) and occupation of disaster-prone areas (and, in turn, vulnerability to hazards). Informal settlements in Brazil are often located on low-lying, flood-prone land or on steep slopes, and consist of structures that are easily damaged during floods and landslides. These areas oftentimes overlap with those

8 Damm 2022; World Bank 2021.

9 World Bank 2023

10 World Bank 2023.

with high exposure to hazards in coastal zones. A total of 15.4 million people live in coastal zones at less than 10 meters above sea level, of which 86 percent are in urban and quasi-urban areas, including Rio de Janeiro, Salvador, Fortaleza, and Recife. Brazil's well-developed social protection systems are a solid foundation to strengthen household's resilience to climate shocks—but they could be further attuned to more specifically attuned to natural disasters.

Agriculture and power are the sectors most vulnerable to climate change. Hydropower accounts for about 63 percent of the Brazilian power sector. More frequent and intense droughts thus threaten the national power supply, especially since Brazil's hydro stations are relatively old (55 years on average) and maintenance has in some cases been lagging considerably, further increasing the vulnerability to climate change. This vulnerability has been tempting policymakers to invest in additional thermal capacity, which in turn contributes to global warming, even though there are green power alternatives, such as wind and solar. Agriculture, one of Brazil's main drivers of economic growth, is also expected to be hit, though there is considerable variability across Brazil's landmass of continental dimensions. Especially if markets and policy succeed in enabling farmers to adapt to changing conditions, promoting climate-smart agriculture, overall impacts on agricultural production across Brazil may be limited.

The “arc of deforestation” advances deeper into the highly sensitive Amazon biome, risks of tipping points could change precipitation patterns and hurt agricultural producers across Latin America. Effective deforestation control, especially in the Amazon (but also elsewhere, like the Cerrado biome) is critical for Brazil's future. Various policy measures are required for this, including the full implementation of the Forest Code, the designation of vast undesigned areas (often subject to land grabbing), effective law enforcement (much deforestation is illegal), subsidy reform, and sustainable trade. At the same time, Brazil has enormous potential in raising conservation financing in carbon markets, linked to the effective reduction in deforestation. This can generate resources for a growth model anchored in ecosystem preservation and inclusive development.

Except for its high deforestation rates, Brazil is already a very green country, which could become a major boon for its future development. With energy and industry only the third and fourth largest gross emitters in Brazil, its emissions profile differs from that of developed countries, with a significant percentage of renewables, including hydropower: Brazil has one of the world's most decarbonized energy sectors, with renewables accounting for over 45 percent of the Brazilian energy matrix and over 80 percent of its power matrix,¹¹ compared with world averages of approximately 15 percent and 27 percent, respectively.¹² But the penetration of higher carbon-intensity fuels has been increasing. Brazil can, however, consolidate and further advance its decarbonization achievements at low cost while also generating significant opportunities for green exports of wind turbines, electric vehicle batteries, and green hydrogen—and of climate action minerals. That would also lower Brazil's potential costs from global decarbonization efforts. If Brazil manages to reduce deforestation and simultaneously build on its green asset base (including green power and sustainable forest use), it can expect a considerable relative increase in its competitiveness in global trading systems—which can be further enhanced through investments in productivity across all sectors.

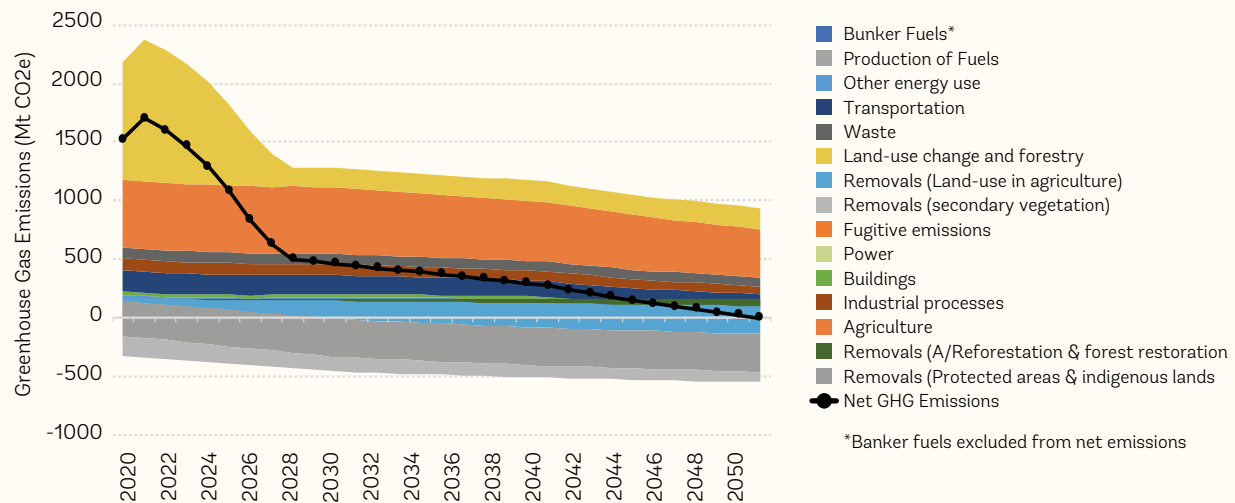
Effective carbon pricing and sectoral interventions could help Brazil to further seize opportunities from global decarbonization.¹³ Legislation to establish a carbon market is currently under review in Congress. An Emissions Trading System or a carbon tax would be a critical pillar to support Brazilian decarbonization and strengthen its edge in green markets. However, the main source of emissions in Brazil is related to land use change (notably deforestation) and agriculture, sectors in which traditional carbon pricing practices are not easily applied. These sectors could be incorporated into a national compliance market through carbon offsets. In addition, sectoral interventions will be needed: especially interventions to curb deforestation, most of which is illegal. This includes effective land and forest governance, a review of agricultural subsidies and the rural land tax, and value chain monitoring. A policy mix including productivity, effective carbon pricing and sectoral interventions, such as effective forest governance would help Brazil reach net zero emissions by 2050 (Figure 4).

¹¹ Ministério de Minas e Energia 2022.

¹² IEA 2021.

¹³ World Bank 2023.

► **Figure 4. A mix of higher productivity, effective carbon pricing, and sectoral interventions could reduce Brazil's net emissions to zero by 2050**



Source: World Bank 2023.

Adapting to demographic change

Brazil is getting old. The share of young people in Brazil is projected to decline rapidly over the next decades, with implications for labor markets, pensions, education, health and inequality. While 52 percent of the Brazilian population was between 0 and 19 years old in 1950, this share fell to 28 percent in 2020 and is expected to reach 22 percent in 2042 (Figure 5). In absolute terms, this will represent a 13 percent decline in the number of young people over the next 20 years.

Brazil is on a path to become old before becoming rich.

An older society faces multiple challenges. Jobs that are typically done by younger workers will be harder to fill and require more immigration or automation. In addition, in countries with growing retired populations, typically savings (and thus investments) tend to fall, with negative impacts on economic growth. Demographic ageing will put pressure on public resources and could further tilt the political economy in favor of policies that support present consumption, slow-down productivity growth and depress savings. The school-age population, in contrast, will decline, though not necessarily the number of students. This demographic change presents important opportunities for expenditure reallocation within the education sector to close critical coverage gaps.

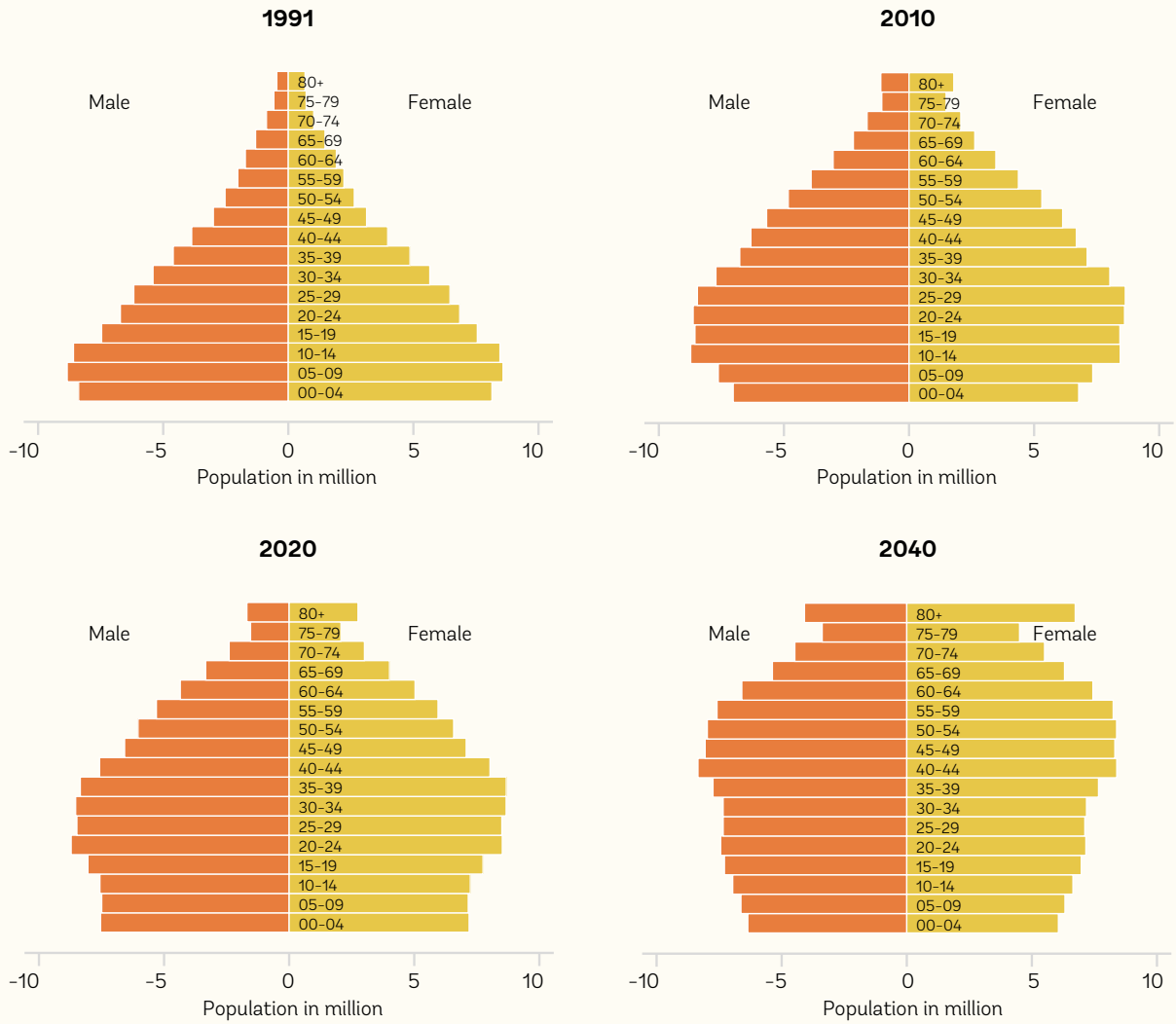
Higher care burdens on working age adults could stifle labor force participation and will sustain internal migration towards Southern states.

Dependency ratios (defined as the ratio of family members not of working age, per working age adult), disproportionately affect Brazil's poor households today who tend to have more children. In the future, the elderly are projected to make up a greater share of dependents. In 2042, the dependency ratio in Brazil is expected to be around 53 percent but could be as high as 69 percent if years of schooling rise. States in the South and Southeast, in line with their development processes and incomes, are expected to experience higher dependency ratios, thus internal migration flows will continue to follow job opportunities.

Brazil will need to adapt to its aging population.

High income economies with ageing populations do not necessarily experience a slowdown in growth, if they increase automation. This requires both an adequately educated workforce and investments. Increasing the supply of early childhood development and lifelong learning programs is already part of the policy agenda, but going forward, the elderly will need more, efficiently designed, social care services. Brazil will need to embrace migration, from the rest of the world and within the country. Reforms require a social contract that can support the required investments and that welcomes newcomers.

► Figure 5. Brazil's population pyramid, 1991–2042



Source: Census and IBGE.

2. Promoting inclusive, sustainable growth



Raising productivity to boost sustainable growth

Brazilian economic growth has been slow and environmentally unsustainable. During the commodity supercycle, poverty and wage inequality declined as the number of jobs and social transfers increased, but income inequality, which also accounts for capital income, seems to have stagnated. Once commodity supercycle came to an end, Brazil became poorer (Figure 14).

There are limits to Brazil's growth model based on factor accumulation. Labor accumulation has been a major source of growth in Brazil (Figure 15).¹⁴ However, the demographic dividends are nearly exhausted, and Brazil is now one of the fastest ageing societies. The accumulation of capital has been hindered by low savings, in addition to high discount rates, which are common in middle-income countries with substantial levels of poverty and exclusion. With limited potential from labor and capital accumulation, Brazil needs to strive for higher productivity, which can increase output from existing factors and multiply the gains from new accumulation. One path to higher aggregate productivity is to reallocate resources from low-productivity to high-productivity sectors. Another requires greater innovation.

A productivity-focused model would be more sustainable. First, productivity becomes increasingly important as countries develop and the gains from accumulating factors—labor, capital, and land—are now small relative to potential gains from productivity. Second, accumulating the factor land is synonymous with frontier expansion in the “Arc of Deforestation”. A productivity-based growth model would also reduce pressure on Brazil's precious natural forests, including the Amazon rainforest.¹⁵ A similar argument applies to other forms of extractive development, including oil and gas, which is particularly relevant in a decarbonizing world. Raising productivity across the economy will result in more economically and environmentally sustainable development.

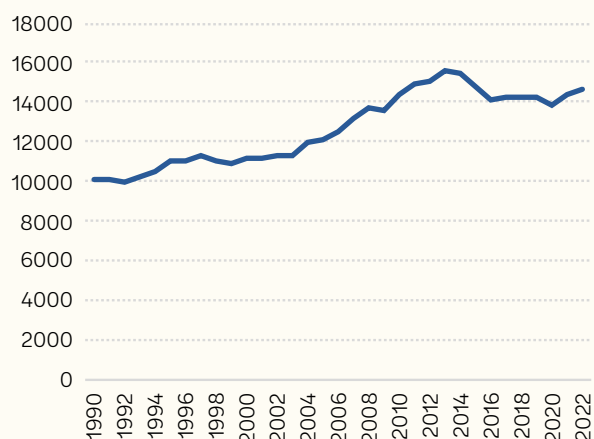
Brazil has much to gain from a more productivity-focused growth model combined with institutions that foster inclusion and sustainability.¹⁶ Achieving a more inclusive society can also improve Brazil's paltry savings and investment rates, helping the economy build its stock of capital. It could also raise labor force participation, a source of both higher and more inclusive growth, as women would benefit. And Brazil's current model of factor accumulation is running out of steam since its ageing population can provide little economic stimulus going forward. For longer-term growth, Brazil needs to shift its focus to productivity,

14 Dutz 2018.

15 World Bank 2022b.

16 World Bank 2022b.

► **Figure 6. Gross national income per capita (1990-2022) – declining with two recent recessions, PPP, 2017 international \$**

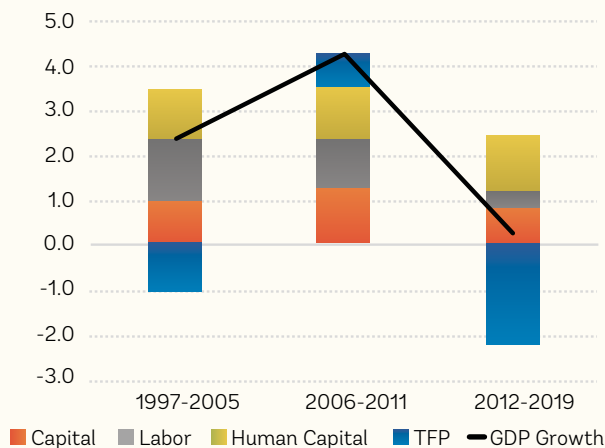


Source: World Bank.

especially in currently lagging non-commodity sectors, to move up the value chain and lower the costs of domestic products and services while gaining global market share. This could make Brazil both greener and more inclusive.

Raising productivity in agriculture and mining will increase income and welfare, but the associated impacts on environmental sustainability are ambiguous. Higher productivity in agriculture and mining, Brazil's current growth sectors, will not necessarily reduce environmental costs. In theory, higher productivity also means more efficiency, so less resource use. This tends to be positive at a global scale. However, this may not be the case Brazil. If demand is elastic, higher productivity means more consumption of the good (the Jevons effect), which may lead to more pressure on natural resources. Since Brazilian mineral markets are international, demand is elastic. For oil exports, higher oil productivity would thus also mean higher oil exports, potentially contributing to higher global damage from greenhouse gas (GHG) emissions (even if the oil is not used in Brazil), depending on whether Brazil takes market share from existing producers or grows the global supply of oil. For similar reasons, the Jevons effect can also arise in agriculture, and the risk is higher in the nine states of the Legal

► **Figure 7. Labor adjusted for education has been a driver of recent economic growth, but productivity stagnates**



Source: World Bank. World Bank 2022.

Note: Figure shows decomposition of GDP growth in selected periods by its factors (human capital, labor, capital, and total factor productivity).

Amazon, the “arc of deforestation” where forest governance is weak¹⁷ Agricultural productivity gains at the national level (especially if also combined with more effective land and forest governance) are less likely to give rise to the Jevons effect and may increase the global food supply without increasing deforestation in Brazil. Taking market share from less competitive commodity producers in other parts of the world could also reduce pressure on global ecosystems.

Raising productivity in urban sectors would boost welfare and reduce many environmental costs, at least on average. Brazil's strong commodities sector makes it more difficult for industrial or traded services sectors to take off, because of “Dutch disease” in the case of minerals and “Brazilian disease” in the case of agriculture.¹⁸ Essentially, high productivity in these sectors appreciates the exchange rate, making it more difficult for industrial sectors to compete in global markets—in addition to myriad domestic constraints linked to Brazil's history with import substitution. Since 1996, labor productivity gains have been highest in agriculture and mining. At various times over that period, manufacturing has either stagnated or contracted. Nontraded services, like finance and real estate, have had modest productivity gains, but they seem to have been unable to provide the economic uplift

¹⁷ Hanusch 2023.

¹⁸ Ferreira Filho and Hanusch 2022.

of traditionally traded sectors like manufacturing. This may be due in part to high distortions in the financial sector, particularly to high rates of earmarked credit, which has had limited impacts on the productivity of the economy.¹⁹ Higher productivity in urban sectors, like manufacturing and many services, should be able to counter Dutch disease and Brazilian disease²⁰ and recalibrate the competitiveness of Brazil's economy, while diversifying it further into urban sectors. Higher gains in manufacturing across Brazil could also reduce GHG emissions in net terms.²¹

There are at least five critical reform areas to enhance productivity. Education and infrastructure are among the first. As discussed earlier, low human capital is perhaps Brazil's biggest constraint, as a source of inequality—it is also a major drag on productivity. Similarly, Brazil's chronic infrastructure underspending undermines inclusion (through poor access to basic services) and productivity (by generating economic costs) simultaneously. Brazil needs to invest more and better.

Greater openness to trade is a third priority. Brazil remains one of the most closed economies in the world. Trade agreements can support the gradual opening of the economy, lowering prices for firms and consumer, plugging gaps and inefficiencies in domestic value chains, and putting competitive pressures on poorly performing firms. Ratifying the EU-Mercosul trade agreement is one immediate possibility for progress on this. The agreement foresees greater access to EU markets for Mercosul countries, including Brazil, especially for agricultural commodities. In exchange, Mercosul countries will reduce selected tariffs and nontariff measures on imports of EU manufactures. Modelling points to large economic gains—which could be further enhanced if Brazil unilaterally lower nontariff measures. The evidence suggests that such reforms can be consistent both with higher productivity-led growth and lower emissions.

Reforming the intricate corporate and indirect tax system is a fourth urgent priority—for productivity reasons in addition to equity reasons. The vast number

of tax regimes, with rates that vary according to region and sector, the proliferation of special regimes and the constant changes in legislation lead firms to spend a lot of time and money on tax planning. The complexity of Brazil's tax system hinders productive allocation of firm's resources and results in high compliance cost. As an illustration, Brazilian taxpayers spend four times as much time to comply with tax obligations as the average of Latin American countries and eight times as much as OECD average.²² Moreover, the system imposes a high amount of judicial uncertainty and conflict on taxpayers and extensive public and private resources are spent in judicial disputes. Current resources under tax litigation may reach one third of Brazil's GDP.²³

The taxation of goods and some services is extremely inefficient in Brazil.²⁴ The majority of indirect taxes is levied on turnover, following a cumulative regime that imposes higher effective rates on firms that are in the final stages of the production chain. Moreover, even taxes that are legally non-cumulative may become cumulative in practice because of weak institutional designs. One of the most important sources of revenue for Brazilian states is the ICMS. The ICMS rules state that only inputs that are physically incorporated into the final products give right to tax credits. Hence, taxes on inputs like telecommunication services or publicity do not generate credit and become cumulative in the tax structure. In addition, many companies face bureaucratic difficulties when claiming for tax credits, which can take years to be reimbursed. In some cases, firms simply give up their credits.²⁵ The cumulative structure creates an artificial incentive for vertical integration and market segmentation, undermining competition and diversification.

Replacing existing indirect taxes with a single though federally shared value added tax would present a vast improvement. The new tax should be non-cumulative, with a broad tax base that includes intangible goods and financial services. Refunds for tax credits should be provided timely and without need for judicial recourse. Moreover, proliferation tax rates should be limited, avoiding exemptions and special

19 Dutz 2018.

20 Ferreira-Filho, J. B. and Hanusch, Marek 2022.

21 Hanusch 2023.

22 World Bank, 2018.

23 Appy, 2017.

24 There are five taxes of such kind: three federal taxes (PIS, Cofins and IPI), one state tax (ICMS) and one municipal tax (ISS). Each of them is subject to different regimes and a variety of tax rates, depending on sector and location.

25 Appy, 2017.

regimes that create distortions and impose compliance costs. Finally, the tax should follow the destination principle, eliminating incentives for tax competition (*guerra fiscal*) between states. This would result in a firmer revenue base for states as well as ending the practice of firms' decisions on allocation of investment and production being driven by tax planning rather than productivity concerns.²⁶ A reform proposal broadly along these lines was approved by the lower house of congress in July 2023, raising hope of tax reform finally becoming a reality after decades of failed attempts.²⁷

A fifth priority is fostering innovation. Brazil needs policies to support equitable and sustainable growth and to boost productivity through innovation. These policies can be placed in categories that complement the levers of innovation: institutions that stimulate competition between firms and lower barriers to technological transfer, efficient allocation of resources to markets, removal of distortions in the financial market, and high skilled workforce and well managed firms. With these levers in order, Brazilian firms will be able to successfully adopt and adapt more advanced technologies and management methods from other countries and produce frontier technology. However, all of these policies are essential, as they reinforce one another. For example, it is unlikely that firms will be well managed if the workforce is not skilled, or that the financial market will be well regulated without institutions that stimulate competition.

Some innovation levers depend on the approval of reforms that still need to be fully developed. Studies have revealed the need for comprehensive tax reform that simplifies and unifies tax rules across jurisdictions and reduces the scope of ineffective special tax regimes.²⁸ For example, the effect of *Simples Nacional* on formalization has been demonstrated to be modest, and its rules for tax exemptions perversely motivate firms to remain small and less productive.²⁹ Such policies inhibit the efficient allocation of resources to markets. Similarly, reforms that lower tariffs for capital and intermediate goods and reduce the costs of trade are necessary to foster technological transfers. New regulations were recently implemented in this direction, including a new foreign trade administration, and an electronic one stop shop solution allows

importers, exporters, and other foreign trade agents to fill out all their forms in one place. But other reforms are still needed to stimulate competition between firms and ease the adoption of technology, such as removing local content requirements. The new bankruptcy law for small and medium-size firms that still awaits implementation could improve the reallocation of capital and thus boost productivity.

Because the innovation levers are influenced by government capabilities, reforms to raise public sector productivity should also be a priority. The agenda of public sector reform should focus on transparency and accountability, as well as revisions to business support policies and the establishment of regular evaluation procedures. The government can also facilitate business innovation. By the end of 2021, it had reduced the backlog of pending patents by 77 percent.³⁰ While this is a notable accomplishment, additional measures are needed to raise innovation levels in private organizations, such as fostering university research (not reducing university funding for discretionary expenditure). Policies are needed to attract and retain foreign direct investment (FDI) in sectors other than agriculture and minerals, particularly in key service sectors that are enablers for the rest of the economy. Reducing restrictions on FDI in modern services can enhance inflows of technology and capital into modern services like ICT, finance, and business services. These services are not only exportable, but are also intermediate inputs into manufacturing and agriculture.

Preparing Brazil's education system for closing the gap between skills and jobs

Education is a key source of equity and inclusion. Educational attainment also saw marked improvements during the last two decades, but gaps in quality, and discrepancies in outcomes by region, sex and race remain glaring. The World Bank Human Capital Index (HCI) is a synthetic indicator to measure the potential productivity of a child when reaching adult age, depending on years of schooling, learning outcomes and health conditions. Brazil's overall HCI improved from 0.53 in 2007 to 0.55 in 2019 (Figure 9), most

26 Gobetti and Orair, 2016.

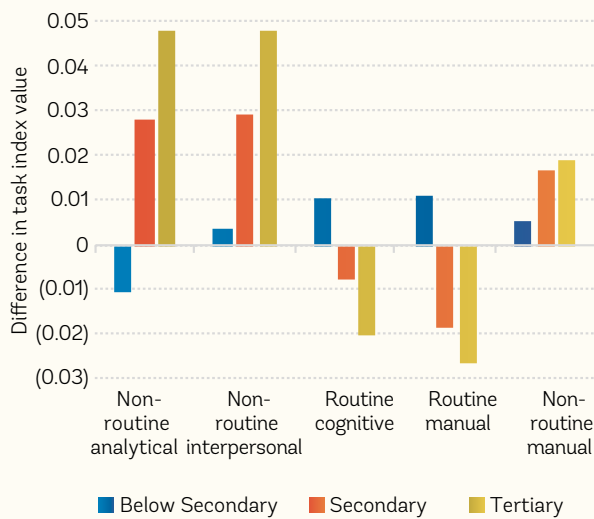
27 The proposal approved by the lower house is PEC 45/2019, which was under consideration in the Senate at time of writing (September 2023).

28 Veloso 2021; World Bank 2018.

29 Firpo and Portella 2021; Piza 2018; Veloso 2021.

30 Foreign Office Presentation 2022.

► **Figure 8. Changes in task content of occupations, 2012–2020, by education**

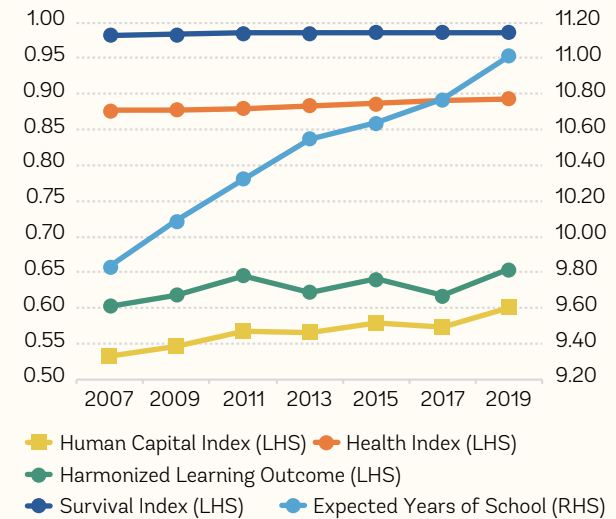


Source: World Bank.

remarkably in total years of schooling.³¹ For instance, between 2000 and 2019, net enrollment rates jumped from 66 percent to 94 percent in preschool (5–6 year-olds) and more than doubled in upper secondary school. However, Brazil's HCI value remains below the average for all upper middle-income countries in Latin America, and disparities around race and region are stark. Boys of color, in particular, fall increasingly behind due to high school dropouts, lower learning, and shorter life expectancy (a reflection of exposure to violence). COVID-19 further reversed HCI gains, by as much as 10 years according to World Bank estimates, especially in the poorer North and Northeast. The quality of education rose more slowly than enrollment, particularly in upper secondary education. For instance, nearly all children in Brazil graduate without proficiency in math. Education remains a key reform area for Brazil.

The destruction of jobs with routine tasks, and the rise in occupations requiring cognitive and interpersonal skills will result in an increasing mismatch between labor demand and supply. Occupations with a higher content of routine and manual tasks have already

► **Figure 9. Brazil Human Capital Index and its constituents, 2007–2019**



Source: World Bank 2021.

been declining over the last decade (Figure 8). While presenting new opportunities for skilled Brazilian workers, technological change underscores the importance of developing the human capital of workers who will be displaced by automation, including adults already out of school. Absent a massive reskilling, the potential for mismatch is high, with resulting growth in inequality and more limited productivity gains from technology itself as needed workers become scarcer.³²

The types of jobs that will soon become more prevalent require multidimensional skills, including cognitive, socioemotional, and technical competencies.

Workers will have to perform increasingly creative or analytical tasks in the services sector and the industrial sector. Problem solving, critical and analytical thinking, use of basic software and media tools are some of the skills these jobs require. The largest skills shortages in Brazil are in services, health, and information and communications technology (ICT) sectors, according to a recent OECD survey.³³ LinkedIn (a job matching platform) data, show that web development, digital marketing, and advertising are among the most requested skills by employers.³⁴

31 The index score ranges from zero to one, and measures the productivity as a future worker of a child born today (relative to the benchmark of full health and complete secondary education). It can be decomposed into three main dimensions: survival, education, and health. World Bank 2022.

32 Acemoglu and Restrepo 2019.

33 OECD 2018.

34 Amaral et al. 2018.

The development of these higher-order cognitive skills depends on workers' possessing foundational cognitive skills, such as literacy and numeracy, and socioemotional competences in order to learn on the job. For many emerging professions in knowledge economies, the ability to acquire, synthesize, and apply new knowledge critically to reach business objectives is key, because many business-relevant skills have to be learned on the job and from others.³⁵ Employers emphasize the importance of basic writing and communication skills across occupations.³⁶ The demand for social skills is also on the rise, for similar reasons.³⁷ Thus how students learn will be as important as what they learn. Early childhood education is critical to enable children to develop the skills required to thrive in this type of education system. This shift implies a pedagogical revolution in schools and teaching approaches.

Technical and vocational education and training remains a little-pursued path in Brazil. Studies show a statistically significant positive wage premium of 9.7 percent on average for students completing technical school at the upper secondary level, compared with students attending traditional high school and then entering the labor market.³⁸ Yet, only 10 percent of upper secondary students are enrolled in technical and Vocational education and training courses, four times less than the average in OECD countries. The low uptake is due to a combination of limited information and, especially, undersupply.

Access to universities is still limited and highly dependent on family income. Currently, of young people ages 18–24, almost 7 in 10 in the top income decile are enrolled in higher education, compared with 1 in 10 in the bottom 30 percent and less than 1 in 5 among the vulnerable middle class.³⁹ Hence, most adults enrolled in formal learning in Brazil are still pursuing an undergraduate or graduate university degree up to their late 40s. Financial restrictions and long requirements to graduate explain such protracted university careers.

The projected decline in the number of children entering basic education, coupled with the current education financing formula, opens a window of opportunity for Brazil to accelerate investments in its future workforce at all levels. Expenditure simulations for the next two decades shows that the current spending formula will allow for a gradual increase in investments per pupil, still relatively low, without reaching higher aggregate spending levels. Resources, however, will need to be reallocated and better invested, to yield results. These include the reform of teaching career paths, a faster expansion of extended school days, which now cover only 11 percent in primary grades, and less than 12 percent in upper secondary. The available resources should be sufficient to close gaps in early childhood education and accommodate higher participation in secondary education, but only provided governments roll out appropriate interventions to increase enrollment. Finally, savings from shrinking children cohorts could be also used to provide financial support for higher education, and post-secondary adult training.

Governance reforms underpin any improvement of much needed cost-efficiency in Brazil's basic education. The Northeastern state of Ceará has become a role model for aligning schooling with learning by leveraging financial incentives to improve learning in both municipal and state schools, using a mix of cooperation and competition.⁴⁰ And the Southeastern state of São Paulo gave school principals management tools and training to apply a problem-driven approach to education's challenges.⁴¹ The capacity building improved school approval ratings and reduced repetition rates, particularly in schools with more low-income students.⁴² Concrete governance reforms include one or more of the following elements:

- Improving the accountability of school systems, teachers, and principals to learning outcomes, and reward schools, principals, and teachers for performance.
- Selecting principals based on technical and ability criteria.

35 World Economic Forum 2021.

36 Markow and Sederberg 2020.

37 Hansen et al. 2021, p. 869.

38 Almeida et al. 2015.

39 Based on PNAD C, 2019.

40 Loureiro et al. 2020; Petterini and Irfi 2013.

41 Andrews, Pritchett and Woolcock 2017.

42 Reis 2021.

- Driving school management to improve learning outcomes.
- Reforming teacher training (pre- and in-service) to make it more practical and evidence-based.

Brazil's upper secondary education reform and the new national core curriculum for basic education are opportunities for incorporating missing cross-cutting skills. In the coming years, it will be key for Brazil to support stages to implement the recently approved new curricula for primary and secondary education. These greatly increased the flexibility for students to pursue more market focused disciplines and offers space for schools to develop innovative programs and courses focused on socioemotional skills, technical skills, and digital skills.

In the case of higher education, both financing and governance reforms are essential to allow the sector to grow while raising quality. Diversifying funding sources, including means testing for tuition fees and scholarships, can make the Brazilian higher education system more equitable and improve quality. While public funding will remain vital, expansion of access and quality will be difficult for universities while relying on government support alone. At the same time, performance-based financing formulas that take into account graduation rates and labor market outcomes could improve efficiency of the system and the value for students. Such financing reforms should occur while granting public universities more autonomy in managing human and financial resources while increasing accountability is key for improving efficiency. Funding based on number of graduates rather than on enrollment is common in financing formulas around the world. Additional mechanisms will be needed to ensure learning quality, so that universities focus on improving teaching methodologies and approaches. Professors' career progression could also be linked to research output and teaching quality, to better align public and private incentives.⁴³

Short-cycle higher education programs are a promising means of improving efficiency and widening access to skills attained postsecondary formal education, especially for time-constrained adults. The main objective of short-cycle higher

education programs is to quickly train workers in order to improve their odds in the labor market,⁴⁴ for example, by easing occupation transitions. In Brazil, participation in formal short training is just 2 percent of working age adults. Such rates will need to increase (in OECD countries, as many as 40 percent of the adults, including 20 percent of low-skilled workers, attend some form of education or training every year).⁴⁵ In the future, as the demand for skill diversifies, such programs will be crucial to filling small skill gaps in the education of workers. Despite their potential, many adult learning programs fail to generate expected results because they are poorly designed and implemented, not least because they fail to accommodate changes in how the brain learns at later stages of life.⁴⁶

Finally, Brazilian youth, especially from more disadvantaged backgrounds, will need education counselling and career guidance, supported by more open education data. More than half of young people in an ad hoc survey in Brazil reported underestimating by half the returns from completing secondary education and, to a smaller degree, higher education.⁴⁷ Schools remain the best place for providing active counselling of students for the next steps in their education, while employment services can develop specific services to support out-of-school youth in vocational decisions. These programs require federal support for methods, capacity building, and readily absorbed information.

Strengthening the relevance and sustainability of social protection systems for future challenges

The social protection system can also further promote inclusion. In the last quarter of the 20th century Brazil created the foundations for today's welfare state, marked by universal access to healthcare and pensions, but also persistent fragmentation. Brazil historically made access to social protection depend on participation in formal employment. The 1988 Constitution partially reversed this and included many "outsiders" through the institution of universal healthcare and social pensions.⁴⁸ Since 2003, the creation of the subnational Social Assistance Network and the Single Registry allowed to roll out large scale

43 World Bank 2006.

44 Ferreyra et al. 2021.

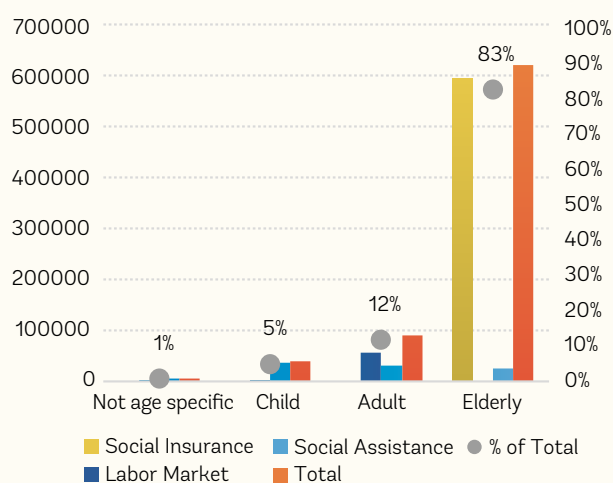
45 OECD 2019.

46 World Bank 2019.

47 Almeida and Packard 2018.

48 Arretche 2018.

► **Figure 10. Social insurance, labor market, and social assistance expenditure throughout the lifecycle in Brazil (2019)**



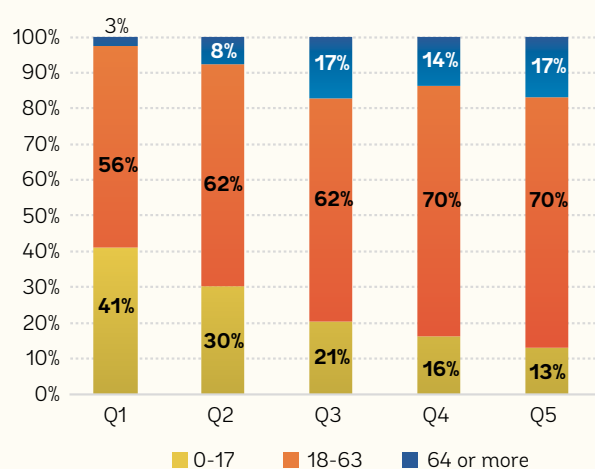
Source: The World Bank using expenditure data from Portal da Transparência, 2019.

Note: Programs are classified according to main target-age groups. *Bolsa Família* is classified as SA-child, SUAS and housing policies are classified as SA-all, *Salário Família* is LM-child.

social assistance, the Bolsa Familia program, and helped reduce poverty. Social protection was also critical for mitigating the economic effects of Covid-19, especially through *Auxílio Emergencial*. In rolling out this program, Brazil developed key innovations to enroll affected individuals and pay benefits quickly and remotely. However, this new layer of noncontributory social entitlements was created alongside legacy programs for formal workers and pensioners, to avoid political confrontation. A similar mechanism was used to create the unified health system, which led to public, free, and universal healthcare, while maintaining previous fiscal arrangements with private insurance plans, thus allowing upper-middle classes to opt-out with a subsidy.⁴⁹ Since inception, the system has faced budget constraints. Brazil has been a pioneer in its social protection system—it can build on this track record for further progress.

Despite their breadth, Brazil's overall social protection expenditures are only mildly redistributive with limited and intergenerational fairness. Four-fifths of the country's social protection expenditures are allocated to programs that mainly target the elderly (Figure 10), as in many OECD countries. In terms

► **Figure 11. Distribution of population, by age groups and income quintiles**



Source: PNADC 2019.

of incidence, the federal conditional cash transfer Bolsa Familia remains the most pro-poor in a constellation of benefits. The past government increased Bolsa Familia's impact in alleviating poverty by raising its value, though its design will need improvement to ensure horizontal equity across families of different size⁵⁰. Formal sector pensions, disproportionately benefit households in upper income quintiles even though they are subsidized to differing degrees (Figure 11). Thus, taken all together, Brazil's tax-benefit system is only mildly redistributive. Moreover, few social protection programs are promoting human capital and opportunity: active labor market programs such as skills development programs and intermediation services receive only a minimal share of spending and largely serve formal workers.

The changing nature of work, demography and climate change further challenges the relevance and effectiveness of current instruments to cope with short-term shocks. The transformation of work relationships due to technology, outsourcing, and distortive taxation is likely increase the share of formal workers who are self-employed; these will be at greater risk of income and earnings volatility, as well as

49 Menicucci 2007.

50 World Bank and UNDP 2023.

displacement by technology or abuse of market power by platforms. New sources of risk unaddressed by current social protection instruments include climate shocks and longevity in poor health. With an eye to the future, Brazil can reconcile its social protection and labor market systems through design features that promote equity, opportunity, and resilience. To meet the challenges of the future, Brazil's social protection and labor system will need to enhance its traditional income support by adding design features that promote economic opportunity for and foster the resilience of Brazilians at all different stages of the lifecycle.

Several reforms could bring the social protection system closer to this vision, without increasing fiscal costs.⁵¹ Brazil already has many of the programs needed to achieve this vision, but rebalancing and reforms are still needed. This chapter as well as the companion report on social protection (World Bank and UNDP 2023), advance a number of detailed, complementary and incremental reform proposals, that could help Brazil improve in equity, resilience and opportunity:

To increase the resilience of the future workforce and households, this report proposes:

- (i) The consolidation of different unemployment programs in a single unemployment insurance that includes an individual saving component and risk pooling insurance component;
- (ii) The introduction of new financial instruments that incentivize savings and can help manage income volatility for workers in the informal sector and the self-employed; and
- (iii) New features and financing mechanism in Bolsa Familia, that can increase its rapid deployment after climate-induced disasters

To increase opportunities for employment and human capital, the social protection system could

- (iv) Develop new labor market policies to support workers in job-to-job transitions or first labor market entrants, including via innovative contracts with private and nonprofit providers and digital providers. Reforms in cash benefits mentioned above would provide the fiscal space to invest in

better services.

- (v) Strengthen integrated policies to deliver early childhood development programs in coordination with social assistance offices

To strengthen the impact of the social protection system in reducing poverty, Brazil could consider:

- (vi) Consolidating transfers for working families (Bolsa Familia and wage subsidies for formal workers), into a universal child benefit combined with an additional means tested allowance for low income households; this would also help reduce exclusion errors without additional leakage; and
- (vii) Building the capacity of the Reference Centers for Social Assistance (CRAS) to deliver quality social services, such as case management, with the aid of digital solutions for routine activities.

To be able to finance these ambitious changes, it will be necessary to increase the efficiency and equity of overall social spending. First, this will

require further parametric reforms to restore pensions' medium-term sustainability, as well as continuing to restructure subnational pensions for civil servants, and unemployment insurance design. Additional reforms to better adapt to the changing nature of work include: (i) coordinating explicitly non-contributory pensions with the design of the contributory minimum pension, so that all types of workers are better incentivized to contribute and every year of contribution counts; (ii) adding technological innovations and consolidate registries in the social protection delivery system, based on lessons learned from the experience of implementing the emergency cash programs during the pandemic. Finally, (iii) reducing differentials in contributions and taxes paid on earnings across different legal forms of working, whether dependent or self-employed.⁵²

Ensuring adequate access to infrastructure services

There are still considerable needs to provide all Brazilians with adequate access to public services.

Over the past years, access to basic services incrementally expanded, but at different pace in different sectors. For instance, by 2019 access to electricity was nearly universal in Brazil (Figure 12): this

51 Fietz et al. 2021.

52 These reforms are discussed in detail a companion report to this publication "Social Protection for the Future Brazil" (World Bank and UNDP 2023).

resulted from years of investments in poorer regions and targeted social tariffs, through the *Luç para Todos* program launched in 2003. In contrast, access to water remains far from universal, and an even greater gap exists in access to sewages, with the resulting health impacts. Policy-specific production and maintenance costs, as well as overlapping competences across government levels, help explain why progress on coverage of basic services varied so widely. Ensuring adequate access to public services for all is an urgent priority.

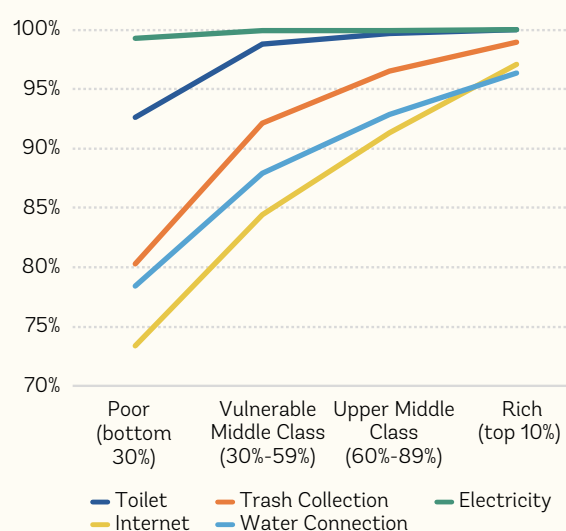
Brazil invests too little in infrastructure, limiting progress in guaranteeing minimum access to basic services and limiting productivity growth.

Infrastructure spending fell dramatically over the years, from about 4.8 percent of GDP in the 1980s, to just over 2 percent in the 2010s, and to only 1.6 percent in 2020. Brazilian public investment is no longer sufficient to replace depreciating capital, let alone expand the infrastructure stock. The gap to meet the Sustainable Development Goals measures about 3.7 percent per year, up to 2030. There is a need of another 0.8 percent up to 2030 (or 1.2 percent up to 2050) for adequate spending on climate mitigation and adaptation.⁵³ The largest needs for investments are in the transport sector. Over the next 20 years Brazil could benefit from reprioritizing its budget to better support infrastructure. A comprehensive infrastructure governance strategy could underlie a stronger emphasis on infrastructure spending, supported both by public and private investment.⁵⁴

Brazil has one of the strongest public-private investment frameworks among Latin American countries that could prove a major boon as Brazil steps up its infrastructure priorities.

Progress was recently made on updating Brazil's public infrastructure management system⁵⁵ but there are still significant gaps especially at the subnational level, with high variance in quality across Brazil's states and municipalities. This will require significant investments in capacity building to support infrastructure planning and implementation at the subnational level.

► **Figure 12. Access to basic services (% families), Brazil, 1978-2019**



Source: Palomo et al (2020). Elaboration based on PNADs data from 1978 to 2013 and PNADC for 2018 and 2019.

Reshaping today's limited fiscal policy space in line with long term priorities

As the social obligations of the Brazilian state increased, public spending grew, but revenues did not keep up and became ever more regressive.

The increase in the size of the public sector over the last three decades is largely due to the growth in the number of local public employees, largely explained by their increasing role as providers of social services. Moreover, several social policies enacted to protect the poor, as well as generous pension entitlements, were not accompanied by sufficient financing strategies, leading to a growing fiscal gap. In fact, taxation became more regressive in the democratic period: and revenue was hollowed out by exemptions and deductions. Horizontal inequality between taxpayers with similar incomes is the norm, benefitting mostly high and medium earning self-employed and capital owners. Brazil will need to create the space to fund its

53 World Bank, 2022b.

54 World Bank, 2022b.

55 A major overhaul of Brazil's infrastructure planning and governance was triggered by Decree 10526/2020 (World Bank 2022a), triggering the institutionalization of the Integrated Long-Term Infrastructure Plan, the updating of federal plans for transport, energy, water resources, urban mobility, and telecommunications. Progress was made on research and development in a more harmonized and transparency way. The new governance model instituted by the Interministerial Infrastructure Planning Committee (CIP-INFRA 2021) promotes the appraisal and prioritization of large-scale projects with upstream levels of planning based on socioeconomic cost-benefit analyses. Significant strides have also been achieved in the dissemination of standardized methods aligned with international best practices for project preparation (Five Case Model Guidance), ex ante appraisals (CBA Guide), and ex post evaluations.

development priorities while making the budget more progressive in order to strengthen its social contract.

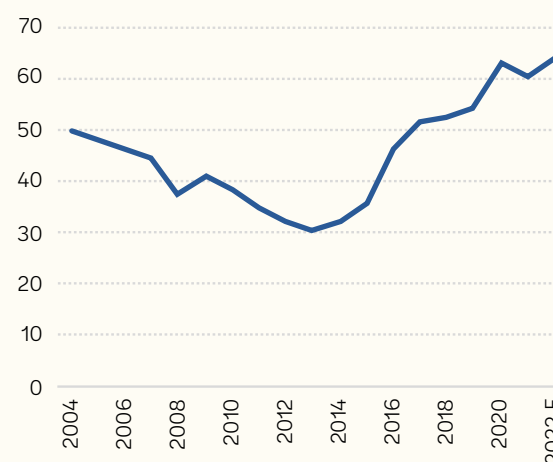
Future governments will need to rebuild the fiscal space to propel Brazil's future. Public debt levels are high (Figure 13) and fiscal space is further constrained by elevated budget rigidities concentrated on pension payments, wage bill, and mandatory minimum constitutional spending on public health and education. Since public debt is higher than in other emerging markets, Brazil is spending a large share of its budget on interest payments. So, only a small fraction of the budget is discretionary, limiting the provision of tangible public services to the poorest Brazilians.

A credible fiscal framework is fundamental to ensure fiscal sustainability. There is no trade-off between fiscal sustainability and other priorities, such as productivity, inclusion, or environmental sustainability. Rather, fiscal sustainability is a necessary condition to meet other priorities. In 2017 Brazil adopted the 'teto de gastos', which limited primary spending growth to inflation. This rule constrained investment spending, which was being crowded out by expanding mandatory current expenditures – especially on payroll and pensions. It was also overly rigid in a world of intensifying shocks, such as the Covid-19 pandemic or climate shocks, and calamity exceptions to respond to shocks increasingly undermined its credibility. A new fiscal rule adopted in 2023 is more flexible and balanced, combining primary balance targets – which can be achieved by raising revenue as well as reducing expenditures – with limits to primary expenditure growth. If implemented appropriately this fiscal rule will provide an anchor to stabilize public debt, while allowing for increased public investment.

Despite the adoption of the new fiscal rules, Brazil's fiscal and budgetary framework remains fragmented. The framework of spending and primary balance rules coexist with a 'golden rule' which, in principle, limits federal borrowing to the equivalent of capital expenses. Furthermore, Brazil has a Fiscal Sustainability Law that lays out general principles of good budgeting. Finally, Brazil has only an incipient Medium-Term Expenditure Framework. Consolidating the fiscal anchor, the golden rule, the Fiscal Sustainability Law, and strengthening the

► **Figure 13. Public debt is high, implying limited fiscal buffers**

(% of GDP, net terms)



Source: World Bank.

Medium-Term Expenditure Framework would generate an overall stronger fiscal framework for Brazil.

A large portion of future spending will be dictated by budget rigidities, which allocate most spending to education, health and pensions. Federal rules constrain subnational borrowing, and states' debt is low in most cases. States and municipalities face structural deficits in their public pension systems and have the main responsibilities to provide public services on health, education, and security. However, the space for structural reforms has been limited by a social contract that tends to favor stability of existing entitlements. Thus, fiscal structural reforms are critical to recreate the fiscal space to implement public programs that are in the public interest and will enable Brazil to shape its future. At the same time, the sectoral reforms discussed in this report are critical to improve the quality of expenditures.

Education expenditures are expected to continue increasing despite declining student numbers.

Following its demographic pattern, the number of students in Brazil, like many other advanced economies⁵⁶, has been falling in the last 15 years, except for early childhood and higher education. Despite these changes, this report projects that spending on education will continue to increase and remain the

⁵⁶ Investment in education is expected to fall from 4.4 to 3.9 percent of GDP in France, 3.5 to 3.1 percent in Italy and 5.5 to 5.1 percent in Belgium (EPC/EC 2021). These computations assumed a fixed age-spending profile for the EU population and projected how aggregate spending will change with population ageing. So, they focused almost exclusively on the demographic effect.

key driver explaining Brazil's expenditure trajectory in the next two decades, due to constitutional minimum rules. Earmarked spending rules – binding mostly for states and municipalities – have helped to increase investment in education⁵⁷; however, revenue earmarks are highly procyclical, forcing governments to increase education spending in times of economic expansion, without planning or a focus on results.⁵⁸ They also imply a strong budget rigidity, hampering any possible downward adjustment in spending, even with demographic changes.⁵⁹ Given these constraints, it will be essential that education expenditures can be allocated strategically across levels, and thus provide the opportunity to close existing gaps at pre-primary and upper secondary levels, and with a focus on improving quality of spending.

For public health spending, fiscal projections indicate a 1 percentage point increase as a share of GDP until 2042. Government spending on health services is expected to grow from 3.9 to 4.9 percent of GDP. As health spending tends to gain space with increases in income, the projected increase in GDP is responsible for more than half of the projected increase in public health expenditure, while changes in population structure explain about one quarter. Brazilian fiscal rules also influence the results, ensuring growing allocations. In real terms, resources directed to public health are projected to grow by expansion of 75 and 56 percent in real per capita terms. Converting by purchasing power parity, projection results show that health spending per capita in Brazil will reach almost \$1,000 by 2042.

Still, health spending is projected to remain insufficient given the profile of healthcare users in 2042, unless the efficiency of spending improves dramatically. Argentina and Chile currently spend more on health per capita than Brazil is projected to 20 years from now. With efficiency gains, Brazil could improve health outcomes by 9 percentage points using the same amount of funding. Alternatively, it could offer the same level of services using 34 percent less resources. If Brazil gradually increased efficiency, reaching the efficiency frontier in 2042, public health spending as a share of GDP would fall approximately 0.6 percentage points, despite population ageing, reaching 3.2 percent at the end of the period. The efficiency gains are so significant that, even assuming

a convergence to 1 percent annual excess cost growth, public health spending as a share of GDP would still fall.

Pension programs remain extremely fragmented in Brazil, and are the primary source of fiscal vulnerability for subnational governments. The pension reform of 2019 was a key step towards a more sustainable pension system. Gradual increases in effective retirement ages mostly affect the higher income population which tends to retire especially early due to their higher contribution frequency. However, teachers, uniformed personnel, rural workers, and some other public sector workers, still retain options to retire earlier (very early by international standards). The pension reform stabilized the deficit until the end of 2030s, however, due to demographic change, further adjustments will be necessary beyond this time (Figure 14 and Figure 15). Of immediate concern is the growing deficits in many subnational civil servants' pension systems, which are expected to worsen in at least ten states and crowd out the use of public revenues for social services, infrastructure and to invest in the younger generations. The complexity of reforming existing entitlements even in a context of very constrained fiscal resources are a good example of the political economy of the "Many Brazils", and the importance of building a shared vision to invest in the country's future.

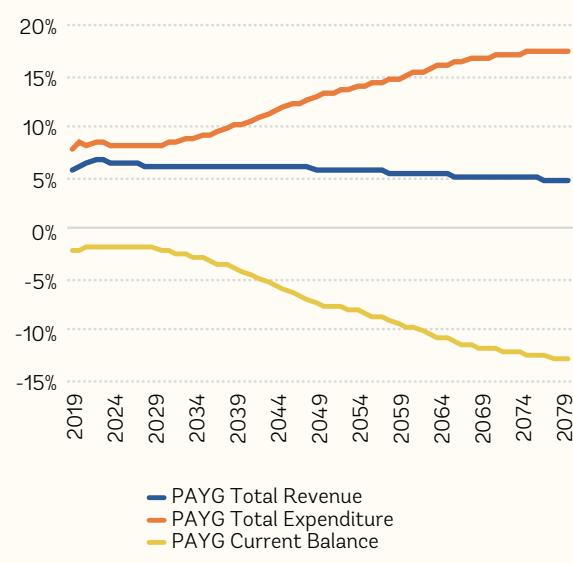
A package of interventions in addition to benefit reforms will be needed for achieving lasting solutions to pension sustainability. At the subnational level, in addition to reducing outstanding privileges for upcoming cohorts, several policies can reduce spending across the more than 2000 subnational pension systems: these include better human resource policies for civil servants, more effective asset management, investing in information systems that tackle errors, overlaps and inefficiencies. In addition, while reforming benefits may be at times politically prohibitive, other measures to claw back unjustified subsidies include increasing levels of contributions, as well as reforms to the personal income tax, which today continues to offer regressive exemptions on pensions incomes. Beyond benefit parameters, in the medium-term pension sustainability depends also on achieving a more regular and substantial density of contributions in the population; thus, the aim of increasing formal

57 The constitution stipulates that states and municipalities spend at least 25 percent of their revenues from taxes and transfers on education, while the federal government was required to spend at least 18 percent.

58 Loureiro et al. 2020.

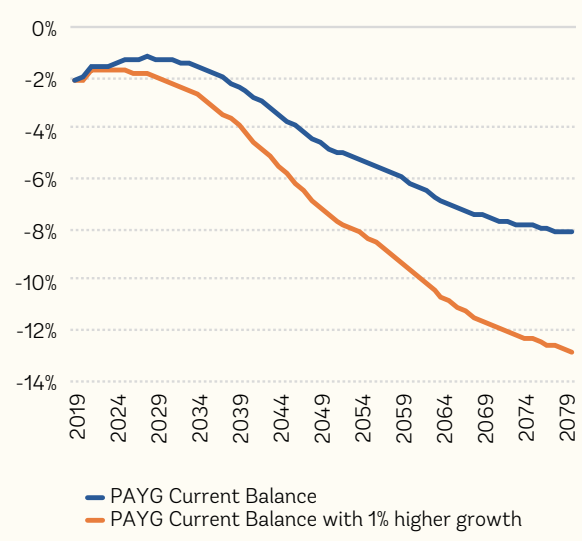
59 The Brazilian constitution also stipulates minimum levels of public spending on healthcare.

► **Figure 14. Projected revenues, expenditures, and deficits of RGPS private sector pension system up to 2080**



Source: World Bank simulations based on the PROST tool, using administrative data from INSS.

► **Figure 15. Simulated deficit of the RGPS private sector pension system up to 2080 according to economic growth scenario**



Source: World Bank. Figure shows two scenarios for the RGPS pension fund deficit, one with baseline growth assumptions and one with 1 additional percentage point of economic growth. Based on PROST simulation tool.

employment in the economy and wage growth in private sector can make an important difference. However, it is necessary that the parameters of contributions and benefits are consistent with pension schemes that balance adequacy and sustainability goals since any new addition of contributors (i.e., formalization of workers) imply future benefits.

Fiscal sustainability could also be enhanced by reforming the tax system

There are many opportunities to enhance the progressivity of Brazil’s revenue collection system. Brazil’s tax structure, overly reliant indirect and payroll taxes, departs from international standards: its revenue is heavily concentrated on taxes on goods and services and on payroll, which respectively account for 43 and 24 percent of the tax burden. Income taxation makes up only 8 percent of total tax revenue, which is relatively low when compared to OECD average, and taxes on property or wealth account for even less.⁶⁰ This regressive structure harms the poor, who spend a higher share of their income on consumption.

Furthermore, focusing on the composition of income taxes, Brazil collects relatively more taxes from corporate income, underperforming when it comes to personal income.

Fiscal sustainability could also be enhanced by reforming the indirect tax system. Especially at the state level, the current *Imposto sobre Circulação de Mercadorias e Serviços* (ICMS) tax lies at the core of tax competition (*guerra fiscal*) among the states, harming their revenues and fiscal balances and increasing the misallocation of production factors. Contrary to international standards, the ICMS tax follows the origin principle, such that tax revenues go to the state where the product was produced, rather than where it is consumed. States being able to set differing effective ICMS rates across activities creates an incentive for them to offer tax discounts in order to attract mobile economic activities. This type of tax competition is an extremely distortive instrument of regional development, as firms will choose their location based on tax benefits instead of allocating production where it will be the most efficient.⁶¹ The basis for this “fiscal war” would disappear if indirect taxes followed the

60 Gobetti and Orair, 2016.
61 Appy, 2015.

destination principle and tax base and rates were harmonized across states, eliminating the possibility for states to give special treatment to some activities. This is achieved with the current tax reform proposal. Such a reform would have the additional benefits of allowing local governments to focus on more productive approaches to regional development, rather than engaging in beggar-thy-neighbor tax competition.

There is also room to make Brazil's personal income tax more progressive. Simply raising personal income tax rates for the richest taxpayers would have little effect on fighting inequality in Brazil, since the main sources of income for the wealthy, such as income accruing to business owners, dividends and earnings from financial applications, are currently tax exempt.⁶² Hence, the country should harmonize income taxation across different tax bases – personal, capital and corporate income – to avoid incoming shifting. Profits should not only be subject to corporate income taxes, but should also be taxed at the personal level, after discounting the taxes paid inside the firm. Moreover, tax differences between labor and capital earnings should be mitigated.⁶³

Finally, the changing nature of work calls for the reform of payroll taxes to incentivize formal and stable labor relationships. Taxes that are not directly related to contributory benefits for the employee should be removed from the payroll and transferred to other tax bases in a revenue neutral way.⁶⁴ Social security contributions could be reduced and compensated by an increase of contributions of favored categories such as autonomous workers and the upper tier of the current beneficiaries of the “microentrepreneurs” special regime, on a revenue-neutral basis. These measures can establish a clear connection between the value of the contributions levied on payroll and the benefits received by formal workers. Without this connection, payroll contributions are only seen as one more tax used to finance government expenses, which disincentivizes work formalization, as workers will see no benefit in being a formal employee.⁶⁵

62 Gobetti and Orair, 2016.

63 For example, Gobetti and Orair (2016) suggest the adoption of a dual model, used in Scandinavia and Chile, where normal capital returns would be taxed at the business level using corporate income taxes, while super-normal returns would be taxed at the individual level using dividend taxes. As a reference to compute normal returns, one could use the SELIC rate together with methods currently used to compute interests on private capital (World Bank, 2018).

64 Gobetti and Orair, 2016, 2019., World Bank 2022b.

65 Appy, 2015.

3. Building an inclusive social contract



A new social contract will both require and enable the participation of all Brazilians. Allowing more Brazilians to contribute to Brazil's economy can make Brazil a more prosperous and inclusive society in the next 20 years. This will require overcoming the historical legacy of exclusion, rooted in its early development model, including a long experience with slavery. However, in recent decades, politicians have tended to focus more on short-term benefits for narrow organized interest groups rather than reforms and investments in public goods that take years to yield benefits to a broader public. The result has too often been policy choices that fail to address or even worsen social, economic, and political inequalities.

Building social trust and civic capacity would increase alignment for reforms associated with a more inclusive social contract. Greater trust makes collective action easier and strengthens the bonds of citizenship (solidarity) that can move people to accept changes and costs (e.g., taxes) that improve the lives of others and serve them well in an uncertain future. Organizations and institutions that facilitate solving collective action dilemmas, that reduce mistrust, and that enhance civic behavior are all important to progressively strengthening Brazil's social capacity to address future challenges. This implies a key role for government agencies but also for nongovernmental organizations and the private sector.

Among several aspects of state-society interaction in Brazil, three appear central to improving the way successive governments respond to citizen demands. First, political promises in recent times have for the most part focused on additional government spending, with less focus on reforming institutional design and implementation mechanisms, including the incentives to increase the quality of policies by implementing stakeholder. Second, politicians often focus on short-term benefits for individuals and well-organized groups, rather than on long-term investments in public goods and complex reforms that take years to mature. Third, politicians have been too reluctant to challenge the power of well-positioned interest groups that can easily capture large chunks of public spending, and often belong to the institutions that require renewal to yield better results. The result is that politicians have only a narrow set of policy choices to respond to pressures from citizens, and they do so in ways that exacerbate social, economic, and political inequalities in Brazilian society.

One of the keys to building trust is creating incentives for trustworthy behavior. First, judicial and public sector reforms can reduce the power asymmetries that reduce trust in the public and private sectors. These reforms should give firms and citizens predictable and rapid judicial and administrative resolutions of their disputes with each other and with government. Second, information asymmetries can be addressed by requiring

public sector agencies to carefully communicate the decisions they make and take responsibility for those decisions and their consequences. Third, governments should integrate concerns about trust, citizenship, and inclusion into their programs by advancing reforms that build trust, such as digital transformation in the administration of fiscal policy, uniform administration of tax and regulatory policies, and multistakeholder or citizen engagement platforms.

Providing states and municipalities with governance and accountability mechanisms is particularly important to support improvements in public services.

As Brazil relies on local governments to deliver key public services—such as primary and secondary education, healthcare, and social work—the quality of local bureaucracies matters for many of the services that constituents care the most about. However, efforts by the federal level are often lost at the local level, as municipal institutions are more vulnerable to capture by political interests and other distortionary interventions.⁶⁶ Compared with peers such as Argentina and Colombia, Brazil is usually regarded as having successfully created a professional cadre of federal bureaucrats capable of implementing complex economic and social policies. However, at state and municipal level, bureaucracies tend to be more politicized and heterogeneous. For instance, political appointment of principals in local schools leads to lower performance than in schools that use meritocratic technical standards. Corruption at municipal level in Brazil can also be curbed by tools that make information more accessible and scrutiny by communities less costly.⁶⁷

Spaces should be opened for civic participation and representation by historically excluded groups, to support reforms that need broad-based coalitions.

This process starts with strengthening bodies and spaces that allows the vulnerable middle class and the poor, those displaying the lowest levels of interpersonal trust in our assessment, to improve their social capital and ability to contribute. Philanthropy and transparent public financing of institutions that provide services to the vulnerable, including grass roots institutions that give them voice, are thus important to rebuild social capital foundations lacerated by historic inequalities. Political engagement of institutions that citizens at the margin of the social contract trust is

particularly important to build a shared narrative and understanding of the benefits of particular reforms. This is particularly needed for alignment towards policies that will benefit future generations.

Strengthening society's understanding of the challenges brought by future megatrends, and their cross-cutting impacts, can enhance the sense of urgency for comprehensive reforms.

The sudden Covid-19 crisis resulted in large parts of Congress acting in unity to finance broad-based support to nearly half of the population, through the temporary safety net *Auxilio Emergencial*. The program included many atypical non-poor beneficiaries, such as middle class self-employed, who never registered in *Cadastro Unico* before. Arguably, the experience had lasting impacts on a highly contested issue: the size of the permanent safety net for the poor. The new Bolsa Familia program will be significantly larger than it was before the Covid crisis—this can support inclusion if it remains fiscally affordable, and this can be achieved through better design of its benefit formula and by consolidating it with other benefits. Similarly, many reforms recommended here, require a broad understanding of facts and risks associated with the future, and of their cross-cutting nature in society, including climate change and the benefits of investing in disaster preparedness.

66 See Colonnelli, Prem, and Teso (2020) and Rougier, Combarrous, and Fauré (2021).

67 Ferraz and Finan 2008, 2011; Brollo and Nannicini 2012; Brollo et al. 2013; Casselli and Michaels 2013;

4. Four alternative futures for Brazil



Four alternative futures for Brazil are conceivable. Without reforms, Brazil is likely to stagnate. Scenario lays out a narrative of how history could play out by 2042 in a reform that makes no progress on inclusion, productivity or sustainability.

► **SCENARIO 1: A low-level equilibrium: limited productivity and inclusion, environmental degradation**

Continuing adherence to the old style of governing and a rejection of fundamental reforms between 2022-2042 produced a dismal outlook for Brazil. Following years of highly uneven service delivery and low job creation in the informal sector, the country is now approaching a new state of crisis. The rich kept getting richer, and with inequality reaching new peaks, there is strong unrest in the society, and the population seems to have lost faith in government and policymakers. The middle class and the poor are fed up with the lack of progress, the diminishing job opportunities, and the rise in inequality, jointly making them much more susceptible to populism and clientelist policies.

Brazil continued specializing in agricultural production. The “arc of deforestation” continued to expand into the Amazon, with ongoing deforestation destroying many natural habitats. After the first tipping point had been reached in the 2030s, droughts affecting agriculture and power supply became much more frequent. Given Brazil’s heavy reliance on hydropower, the consequences have been severe for the entire population. The poor are disproportionately affected and experience frequent blackouts, which further worsens their precarious situation. Job creation is low and tends to be in the informal sector, adding to crime, insecurity, and extreme poverty.

Since the economy remained weak and unproductive for many years, shocks—from global commodity markets, natural disasters, and internal political tensions—have disproportionate effects on the poor. Mass protests became more frequent, leading to violence, destruction of wealth, and spreading fear. The government tries to appease the voters by borrowing on international credit markets, but unreformed pension obligations and rising interest rates nullify these attempts. The debt has reached unsustainable levels, and a shock to any part of the budget could now trigger default.

► SCENARIO 1: continue

The fourth industrial revolution, which advanced in many countries but Brazil, has left Brazil on the outskirts of the developed world. Given the proliferating informal sector and corrupt political elite, the country has become a haven for illegal, unsustainable, and otherwise questionable forms of business, which further depletes its natural resources and makes it unappealing for outside investments in innovation. These trends have weakened Brazil's position on international markets and left it mostly isolated from emerging economic opportunities.

Inclusion is critical for Brazil to become a more equitable society. However, without productivity growth there are limits to progress. This is expressed in a second scenario for 2042, in which reforms focused on critical areas such as better social protection. However, without the demand for workers, there are limits to poverty reduction and the middle class becomes more precarious. Transitioning away from an extractive growth model is more difficult in a stagnant economy and Brazil remains uncompetitive and struggles to integrated into global value chains.

► SCENARIO 2: Progress on inclusion without productivity gains

Following the Brazilian government's far-reaching measures to strengthen inclusion, education, and service delivery, the initial buzz among the population has subsided. Continuous efforts to ensure more equal spending of taxes and to keep debt sustainable strengthened the social contract but were insufficient to stimulate productivity reforms. Brazil's focus on redistribution from the rich to the poor is not enough to operate in a highly technological and productive world without serious upgrades to the economy. The lack of progress on structural reforms and modernization kept the old status quo and old institutional relationships that continue to block far-reaching societal transformation. While some Brazilians have benefited from the new inclusive policies, they are disillusioned about their country's prospects. Combined with geographic inequality, since productivity gains are concentrated mainly in urban regions, social stability is not guaranteed.

Over the two decades, education has improved for most people in the country, but the lack of growth still means that the demand for skilled labor is low. Overall, the labor market paints a mixed picture: domestic skill premia have fallen, jobs have grown modestly, inequality has fallen but overall wage growth remains constrained. Since productivity gains have been limited to a few sectors, many well-educated workers are forced into low-skilled jobs, enhancing the vulnerability of the middle class and increasing frustration.

Low rates of technological innovation and productivity growth did not make Brazil more competitive on international markets, leaving it in the backwaters of international supply chains. Brazil remains a low-tech commodity-exporting economy.

The strong continued focus on commodity exports meant that pressures on the "arc of deforestation" in the Amazon continued. Yet Brazil's more inclusive and trusting society feels a joint responsibility for protecting its public goods, including its exceptional biodiversity, while contributing positively to the global climate change agenda. This has translated into stronger institutions to protect the Amazon and made Brazilians more sustainable consumers, somewhat attenuating deforestation. Yet without the gain in productivity, Brazil does not manage to leverage its opportunities in green value chains, outside of commodities.

► SCENARIO 2: continue

Although tipping points in the Amazon could be avoided, climate shocks remain serious and limited productivity growth constrains government revenue to invest in significant adaptation.

Despite positive moves in inclusivity, education, and taxation, low productivity growth did not produce a dramatic increase in the welfare of the struggling population or promote enough change in the political climate to stimulate structural reforms. Even though the old elite has given up certain privileges and income, which is now used more productively, they are still in control of most initiatives for economic transformation. Given that the population did not gain much financial benefit from the reforms, Brazilians become less excited about the future and less trusting in formal institutions, perpetuating the environment of low reform and leaving Brazil in a state of stagnation.

Productivity is critical to raise overall income and help the economy transition toward a more sustainable growth model. However, productivity alone does not necessarily foster inclusion. In the third scenario the rich disproportionately benefit from economic growth. Rising inequality in an already unequal country can eventually only be sustained through more authoritarian forms of government—or by reversing inclusion.

► SCENARIO 3: Progress on productivity without inclusion and sustainability

Over the two decades leading up to 2042, Brazil successfully implemented a wide variety of measures to increase productivity. The rise of a new digital age raised hopes within the population and as the economy shifted from commodities to urban production, Brazilians proudly saw Amazon deforestation gradually diminish. But this initial economic success came at the expense of slow progress on inclusion, which was neglected by several governments. The result: a deeply divided Brazil with the elites getting richer, the poor becoming ever more desperate, and the vulnerable middle class slipping into poverty—a disjointed construct held together by the remnants of its former national identity. While some Brazilians, especially among the upper middle class, enjoy higher wages due to increased productivity and accessing new opportunities such as the global digital trade in services, the cultural and economic divide between the poor and everyone else separates the population into enclaves that live in parallel realities promoted by widespread digitalization.

The development of the digital economy gave rise to new technologies that are replacing unskilled labor and increasing the already extreme wage inequality. As a result, the digital space, now accessible to everyone, has fragmented into echo chambers of conspiracy theories. The disenchanted poor struggle to find jobs in the new economy, which leads to even more poverty. The elites enjoy the material benefits of the new industries developing in the South and Southeast while remaining numb to the suffering of the rest of the population in the Northern and Northeastern regions.

To suppress rising discontent and maintain the discriminatory status quo, the government became more authoritarian and has been suppressing political voices offline and online—through real and digital disinformation campaigns. Besides the developing Southeast, agricultural regions like Mato Grosso are managing to move up the value chain, but poorer regions are declining, since they are not competitive, resulting in massive outmigration to the urban centers in the Southeast which, having neglected inclusion, is not prepared for the inflow of migrants. The disruption to society and rising inequality create new social tensions.

► SCENARIO 3: continue

While the Brazilian government initially earned the political and financial support of the international community, its negligence of the poor and its authoritarian measures to quiet discontent turned many international partners away. Even though Brazil has been credited for reducing deforestation in the Amazon and has been seizing some opportunities from green manufacturing in a decarbonizing world, the government's authoritarian tendencies have raised concerns among global consumers and investors, limiting the potential from global trade and FDI.

A fourth scenario combines productivity, inclusion, and sustainability. Incomes grow for everyone, especially for the poorer parts of society. Pressures on the environment fall and a less extractive growth model combined with strong institutions to protect society's natural wealth reverse environmental degradation. It is the scenario in which Brazil embraces technology (fostering productivity and countering the impacts of aging, without necessarily increasing inequality), integrates into global value chains, seizes opportunities from global decarbonization, and reduces emissions and turns more resilient to climate change, lowers inequality and celebrates its diversity in a vibrant democracy. It is a scenario worth celebrating on Brazil 220th anniversary.

► SCENARIO 4: A high-level equilibrium: a prosperous, inclusive, and sustainable Brazil

After a once highly unequal Brazil recognized the diversity of its people, heard the voices of the poor, and provided all with improved access to basic infrastructure and credit markets, the divisions between societal groups substantially diminished. As a result, the trust of the population in government institutions and each other has gradually improved and the belief in a bright shared future strengthened. This provided a solid foundation for ambitious reforms in education, the welfare state and private sector governance.

Society's longing for a prosperous and stable country has been fulfilled in recent years. With productivity growth sustained by competition and innovation, and a stronger social contract, the benefits of technological change and improved education were felt by most of the population. Although Brazil has maintained its diversity—socially, economically, and politically—the many Brazils have moved closer together.

The goals of political players have become more aligned and focused on the prosperity of the nation (not just narrow interests) due to the new social norm of promoting inclusion and intergenerational equity. All this improved the business environment and raised public investment in economic and social infrastructure, making the economy more open. A newly acquired sense of stability, belonging, and community among Brazilians strengthened formal institutions through the wide support of the population and increased public support through governmental actions that increase prosperity. Brazilians today invest in themselves and into their society, with optimism about their own prospects and those of their country.

By passing critical reforms that increased the returns to investing in education, introduced a more efficient and progressive tax system, and improved equity and sustainability in social protection, the Brazilian government transformed the social contract into a stable and productive relationship with the population. Critical structural reforms have led to harmonious productivity growth and technological change across the whole of society. Informality has declined significantly as the quality of jobs improved and the tax system raised the benefits of formalization.

► SCENARIO 4: continue

Political, societal, and macroeconomic improvements promoted the cycle of positive changes in many sectors of Brazilian economy. Strong job growth reduced poverty and brought much needed investments to the favelas. Fiscal accounts have improved due to a sustainable budget and stable economic growth, generating space for a range of public investments, from education to social protection to climate change adaptation. Overall, Brazilians are more educated and can apply their skills in a growing economy. They are more engaged politically, enjoy more stable economic conditions and social protection, are healthier and happier than ever.

On the international stage, Brazil is now more integrated into the world economy, and its export base has considerably diversified beyond commodities. It has become an important exporter of green manufacturing goods, benefiting from the high demand for low-carbon production across the world. Brazil's new green-energy matrix together with low land-use emissions have made it highly productive and competitive on international markets. And as a result of increased international cooperation, Brazilians are now active players in international business and global supply chains, opening new frontiers and possibilities for growth across all sectors of the economy.

Brazil once again became a pioneer in fighting climate change. Strong institutions support effective carbon pricing systems, valuing natural forests and promoting economic growth based on productivity rather than resource extraction. This helped to successfully avert a tipping point in the Amazon. Brazil is an integral part of the world's economy and ecosystems.



What does the future hold for Brazil? It remains to be seen. This report will support a dialogue on the multiple challenges that Brazilians have to address to achieve higher, sustained growth with greater productivity, improved inclusion and sustainability. Table 2 provides a set of policy priorities to start preparing for the best possible scenario. The challenges of implementing policies that will support these objectives should not be underestimated. Tackling them effectively demands a strong strategic vision, policy coordination and building state capacities. A key message from this report is that the future is not decided. Brazil has many opportunities, from its diversity (the many Brazils) to its economic capabilities, its ingenuity, and its exceptional natural resources. There is plenty of room for Brazilians to build the future they desire.

► **Table 2: Policies and reforms this report hold as priorities to build a virtuous cycle**

Theme	Goal	Priority
Social & economic inclusion	Increase efficiency and progressivity of social transfers	• Optimizing design and sustainability of pensions
		• Optimizing design of unemployment insurance schemes
		• Consolidating and improving progressivity of social transfers for working families
	More efficient and progressive taxation	• Harmonizing income taxation across different tax bases and removing exemptions for dividends and pension incomes
		• Eliminating regressive and inefficient tax exemptions
Human capital, savings/ investment, productivity	Place learning and skills back on the right track	• Increasing the quality of education through governance reforms, higher teaching quality and a more skill focused curriculum
		• Recovering learning losses that occurred during COVID-19
		• Reducing dropout rates with multisectoral interventions
	Strengthen policies for longer working lives and economic inclusion.	• Support labor market transitions and green transformation through active labor market and economic inclusion programs
		• Improve coverage and reach of lifelong learning systems
		• Improving workers protection through reforms of unemployment insurance and labor benefits
		• Increasing the private sector's contribution to economic inclusion through more robust diversity and inclusion policies in corporate governance structures
Economic growth and jobs	Develop a credible fiscal framework	• Reestablishing a credible fiscal anchor
	Accelerate productivity, growth and job creation	• Advancing regional integration and trade negotiations with the EU and other economies
		• Reducing barriers to trade and investment in services
		• Improving the business climate and promoting innovation and technological adoption
		• Reforming consumption taxation

► **Table 2: continue**

Theme	Goal	Priority
Environmental sustainability	Curb illegal deforestation	• Preventing land-grabbing
		• Strengthening land and forest governance
		• Promoting sustainable forest livelihoods
	Resilient and climate-smart agriculture, industries, and cities	• Scaling-up climate-smart agriculture
		• Decarbonizing the energy sector
		• Greening cities and their transport systems
Economy-wide interventions	• Adopting a national emissions trading system	
	• Considering the introduction of a carbon tax and initiating a phaseout of subsidies to emission-intensive activities	
	• Supporting households in managing the climate transition	
Public resources	Better management of public sector pay and pensions	• Increasing the number of subnational entities that have adopted comprehensive pension reforms
		• Adopting an administrative reform to narrow the wage premium and modernize the public sector's human resource management practices
	Accelerate productivity, growth and job creation	• Revamping underperforming innovation policies
		• Increasing the volume of financing for infrastructure to close the investment gap
		• Modernizing infrastructure and its management
Social contract	Increase people's trust in the state capacity to deliver its promises	• Implement governance mechanisms to improve accountability and transparency
		• Implement mechanisms that reduce incentives for corruption
	Increase people's trust in the state capacity to keep them safe	• Limit access to firearms and ammunition
		• Reduce environmental and individual risk factors for violence
		• Implement cross-section community interventions that enables conflict resolution through negotiation and nonviolent procedures
	Reduce social fragmentation	• Reduce the spread of narratives build upon misinformation and fake news
• Advance reforms that build trust, citizenship and inclusion		

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