https://doi.org/10.7203/IREP.6.1.29166

The real 'bridge to the future': challenges and alternatives for the Brazilian economy between 2024 and 2026

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Recibido: 30-03-2024 **Aceptado:** 03-06-2024

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El verdadero 'puente hacia el futuro': desafíos y alternativas para la economía brasileña entre 2024 y 2026

Resumen. Tras una breve contextualización de la economía brasileña durante las últimas dos décadas, este artículo subraya los problemas estructurales persistentes en la economía después de la crisis de 2014-2016. Sin embargo, la actual reducción de las restricciones de la balanza de pagos, atribuida en gran medida a los altos precios de las materias primas, en particular las exportaciones de petróleo, puede marcar una diferencia importante. Estas perspectivas favorables pueden permitir que el país experimente cambios estructurales sin comprometer su crecimiento. De cara a los desafíos de 2024 a 2026, o la construcción de un camino genuino hacia el "desarrollo sostenible", se vuelve imperativo aumentar la inversión pública en infraestructuras e innovación. Además, las mejoras en los niveles educativos son esenciales, ya que están vinculadas con el aumento de la productividad de la economía, junto con la búsqueda de un régimen fiscal equilibrado y sostenible.

Palabras clave: Economía Brasileña, Problemas Estructurales, Infraestructura, Productividad Total de los Factores (PTF) y Materias Primas.
Clasificación JEL: E6, E61, E62, O11

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Abstract. Following a brief contextualization of the Brazilian economy over the last two decades, this article underscores persistent structural issues in the economy after the 2014-2016 crisis. However, the current reduction of balance of payments restrictions, largely attributed to high commodity prices, particularly oil exports, can be an important difference. This favorable outlook may allow the country to undergo structural changes without compromising its growth. Looking ahead to the challenges from 2024 to 2026, or the construction of a genuine path towards "sustainable development," it becomes imperative to increase public investment in infrastructure and innovation. Additionally, improvements in education levels are essential, as they are linked to enhancing the economy's productivity, alongside the pursuit of a balanced and sustainable fiscal regime.

Keywords: Brazilian Economy, Structural Problems, Infrastructure, Total Factor Productivity (TFP) and Commodities.
JEL codes: E6, E61, E62, O11

1. Introduction

Brazil was one of the most successful countries between 1930 and 1980 in terms of economic growth, but since then, Brazil has struggled to sustain a robust rate of growth – because of some factors, including the deindustrialization process that occurred in the same period (Marquetti; Fonseca, 2024). After a decade of fighting against hyperinflation (the lost decade of 1980) and the decade of price stabilization (1990, with the Real Plan and the inflation target regime), the 2000s seemed to be a resurgent moment for Brazil, as economic growth increased, poverty decreased, and inflation was in control. The pinnacle of this period was in 2010, with a GDP growth of 7.5%. The point is this period of higher growth was short-lived, as Brazil had major structural problems unsolved and became more and more dependent on commodities (Ferreira-Filho; Fraga, 2020; Oreiro; D'Agostini, 2016), which will be further explored in this paper.

After the large decline in commodity prices in 2011 and 2012, Brazil managed to sustain its growth until 2013 with government interventions and incentives. But a combined crisis of structural problems and cyclical/transient ones created a perfect storm. Indeed, the 2014-2016 crisis was one of the most severe in Brazil's history. With the impeachment of the Brazilian President Dilma Rousseff, her vice-president took her place in the presidency. Differently from the previous governments, Michel Temer started a liberal period in 2016 that took place until 2022 with another government – at least in some ways, as an attempt of the incumbents in terms of economy. The new normal of the period 2017-2019 seemed to be of low-interest rates, restrictive fiscal policy, and economic growth of only 1,5% each year. The year 2020 started with a deceleration of growth, pointing to another year of 1-1,5% growth until COVID-19 hit the world's economy.

Despite the idea of being a liberal government in the economy, the pandemic situation forced some interventions. In 2020, Brazil had the lowest primary result of its history (about -10% of GDP), and the emergency benefit for the population was multiple times higher than the well-known "Bolsa Família" in terms of expenditure as a share of GDP. This fiscal impulse and the commodities prices reaching their all-time high in 2020-2022 have helped the country to recover from the pandemic with economic growth of 4.8% and 3% in 2021 and 2022, respectively. This period of 2020-2022 left numerous issues unsolved for the next government, which will be better analyzed in the next sections.

After this brief overview of the recent history of the Brazilian economy, we intend to show more carefully the country's situation in 2023, with some of the highlights of the year in section 2. After that, in section 3, we will discuss the structural problems of Brazil compared to some years ago, adding some important elements to Ferreira-Filho; Fraga's (2020) paper and pointing out apparent differences. In section 4, we will point out some challenges from the foreign side, but also from the internal perspective, proposing possible alternatives to surpass the Brazilian structural problems and prepare the country for a sustainable period of development. In section 5, we will bring some conclusions to our paper. Therefore, in short, our paper has the following objectives: explain the current situation in the Brazilian economy, pointing out the positives and the negatives of 2023; put a light on some of the structural issues of the country that impede a more rapid economic growth sustainably; propose possible solutions to overcome, or at least diminish these problems.

2. 2023, a year of transition

Before discussing the Brazilian economy’s challenges for the period from 2024 to 2026, it is necessary to provide a brief overview of the condition of the economy and the State at the end of 2022 and in 2023. In 2022, the country was just leaving behind the pandemic, with an economic growth of 2.9% and an inflation rate of 5.79%. The interest rates were high at the time (13.75%), as the inflation was above the target (3.5%) and even above the upper limit (5%).

In terms of fiscal sustainability, Brazil presented a small surplus in 2022, but based on some unrealistic circumstances and questionable measures. The country had a restrictive and unsustainable spending ceiling, as the dynamics of mandatory expenses increasingly pressured discretionary expenses – given the possibility of only a 0% real spending limit variation of the total spending.

Table 1. Total and selected expenses, 2017-2022 (% of GDP)

	2017	2018	2019	2020	2021	2022
Total Spending	19,5%	18,8%	19,5%	25,6%	17,9%	17,9%
Extra-ceiling	0,1%	0,2%	0,8%	6,8%	1,4%	1,2%
Extra-ceiling (% Total Spending)	0,4%	0,9%	4,1%	26,8%	7,6%	7,0%
Investment	0,6%	0,6%	0,5%	0,6%	0,4%	0,4%
Personnel	4,3%	4,0%	4,2%	4,2%	3,6%	3,3%
Minha Casa, Minha Vida	0,05%	0,07%	0,06%	0,03%	0,02%	0,01%

Source: National Treasury Secretariat. Authors’ elaboration.

To try to sustain this fiscal rule, investment was at historical lows, with several years of negative net investment, meaning depreciation exceeded investment. Additionally, civil servant salaries were frozen for four to six years, depending on the career. Various public programs were dehydrated (such as “Minha Casa, Minha Vida”, a housing program), and some expenses were postponed (such as precatory payments, payments to international organizations, or even related to the queue for granting social security benefits and joining “Bolsa Família” – at that time renamed as “Auxílio Brasil” –, there was no personnel replacement, etc.).

Furthermore, in 2022, the country benefited from a series of extraordinary revenues resulting from the brief post-pandemic commodities boom, and the privatization of “Eletrobras”, among others. The surprise in revenues was about 300 billion “reais”, that is, there were 3% of GDP additional revenues in 2022 than what was expected in the budget law of 2022 (“Lei de Diretrizes Orçamentárias” de 2022, LDO 2022). Nonetheless, growth was around 3%, with declining unemployment (7,9%), but with the Selic interest rate rising to control inflation. However, the perspective for 2023 was not good, as we could notice in the last market report of 2022 (prepared by the Central Bank of Brazil) projecting an inflation of 5.31%, an economic growth rate of 0.8% and a Selic rate of 12.25% at the end of the year.

Given this challenging scenario, 2023 was outlined as a transition year to clarify the situation, making explicit the fiscal position (with precatory payments, for instance), resuming and reshaping public policies, granting raises to civil servants, restoring health and education minimums, reinstating the Minimum Wage appreciation policy, and increasing long-suppressed public investments (with the Growth Acceleration Program – PAC, in Portuguese – and greater BNDES involvement). It was approved in 2022 a Constitutional Amendment (EC

126/2022) increasing the budget by 145 billion "reais" to allow all these actions to take place. In the same Amendment, it established the suppression of the fiscal rule at the time (the spending ceiling, the so-called "Teto de Gastos") but also the need for a new fiscal regime to be implemented in 2023 to be operational in 2024.

In sum, the new fiscal rule, called "Sustainable Fiscal Regime" (LC 200/2023), has the main following points: (i) the new spending ceiling varies from 0.6% to 2.5% in real terms – 70% of the adjusted net revenues[3] variation, if the primary target of two years later was fulfilled, or 50% if not; (ii) the primary balance target has upper (+0,25 p.p. of GDP) and lower (-0,25 p.p. of GDP) limits related to the central target; (iii) implements the medium-term fiscal framework, with projections for 10 years; (iv) has the objective to stabilize public debt in 10 years; (v) there is a minimum of investment of 0.6% of GDP. So, the objective is to increase the primary balance year after year (0.2-0.3 p.p. GDP each year, considering 2-3% of economic growth) until the debt trajectory remains sustainable and like comparable countries. The idea is that the parameters regarding the new fiscal framework could change if the economic conditions get better or worse, so the regime is permanent, but some of its characteristics could change over time.

Additionally, the most significant tax reform (EC 123/2023) of decades was carried out for simplification purposes. The reform introduced the Value Added Tax (VAT) into the national tax system, so five existing taxes were replaced by two VATs. It also created an excise tax on goods and services considered harmful to health and the environment. There is a transition period until all the modifications are operational in their totality. Also, some compensation funds were created to afford the fiscal incentives that will be eliminated with the reform, but giving time to the companies to prepare themselves; and to incentive some less developed regions – some Brazilian states were having a "fiscal war" ("Guerra Fiscal") trying to attract good companies, but the lost revenues to all of them combined were so high it became harmful for the Brazilian economy as a whole. The reform is seen as fundamental for Brazil, as it is expected to significantly increase the potential GDP in the next 10 to 20 years (see, for example, Domingues; Cardoso, 2020; and Borges, 2020).

The year 2023 finishes in a better way than previously thought, with an inflation of 4.62%, an economic growth rate of 2,9%, and a Selic rate of 11.75%, with the unemployment rate of 7.4%, even less than 2022. But it is also worth investigating the fundamentals of the Brazilian economy at the end of 2023 to foresee possible challenges for the country between 2024 and 2026, as well as options to address these situations.

3. The structural issues of the Brazilian economy

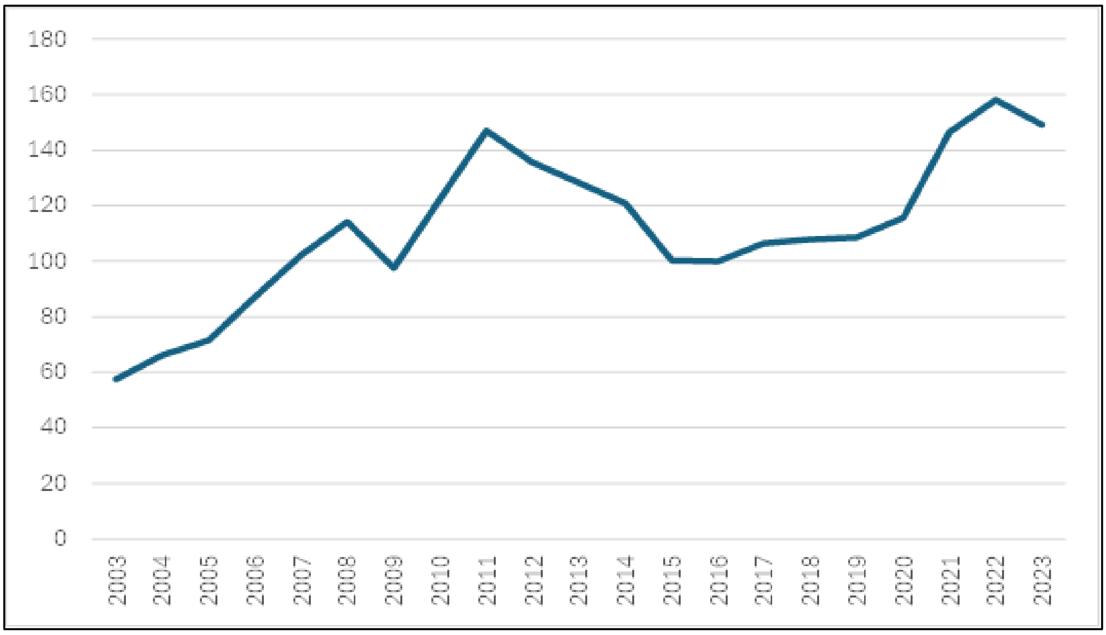
In a paper related to one of the worst crises in Brazil, Ferreira-Filho; Fraga (2020) attempted to explain the reasons behind the 2014-2016 crisis in more structural terms. The dominant view about the crisis stated the interventionist government – exchange rate administration, artificial reduction of Selic, active use of the Brazilian Development Bank (BNDES), interventions in specific sectors, etc. – between 2008 and 2013 had caused the economic downturn. But Ferreira-Filho; Fraga (2020) had a different opinion about the causes of the crisis.

For them, the economic crisis was part of a usual cycle largely known by Latin-American countries, that is, the commodities cycle à la Prebisch (1950, 1959) and ECLAC (CEPAL, in

[3] A concept of revenues which are less volatile and more stable, something near of the structural revenues.

Portuguese), combined with other structural problems and some conjunctural issues also. In the 2000s, mainly because of the rise of the Chinese economy and its entrance into the World Trade Organization (WTO) in 2011, the demand for commodities was growing rapidly, so the prices went in an upward trend until 2011 (except for 2009, because of the global financial crisis).

Figure 1. Commodity Non-Fuel Index (2016 = 100)



Source: International Monetary Fund. Authors' elaboration.

Because of other structural problems in the country, Brazil becomes dependent on the commodities cycle, and only in the upper part of the cycle the Brazilian economy can grow more[4]. If not in the upper part, a growth acceleration would only result in the Balance-of-Payments (BoP) problem, which would interrupt the process of growth sooner or later, another ECLAC's classical idea, which would be further explored also in the literature[5] on BoP constraint. In such a situation, the adjustment could be in income also, rather than in prices only (Thirlwall, 1979).

So, Ferreira-Filho; Fraga (2020) continue to indicate other structural problems that would reduce Brazilian's economic growth eventually, as follows: (i) the economic complexity regression, making the exports less sophisticated[6]; (ii) the unsustainable financial imbalances[7], with the private sector running a deficit for years; (iii) the fiscal uncertainty, because of mandatory expenses growing faster than GDP; (iv) the lack of competitiveness because of the real exchange rate appreciation and unit labor cost.

Additionally, there are problems caused by the "operação lava jato", which forced investment cuts of Petrobras and other companies in the construction sector, and of the government itself. In an adverse scenario, a negative exogenous shock in investment would

[4] It's true the surging credit to GDP and the social programs implemented had a part on it (Souza, 2015), but it was only sustainable because of the commodity boom.
[5] See, for instance, Blecker and Setterfield (2019) for a review on this literature.
[6] Concerning the literature of Economic Complexity, like Hidalgo et al. (2007) and Hidalgo; Hausmann (2011), for instance.
[7] About this literature, see, for instance Koo (2014).

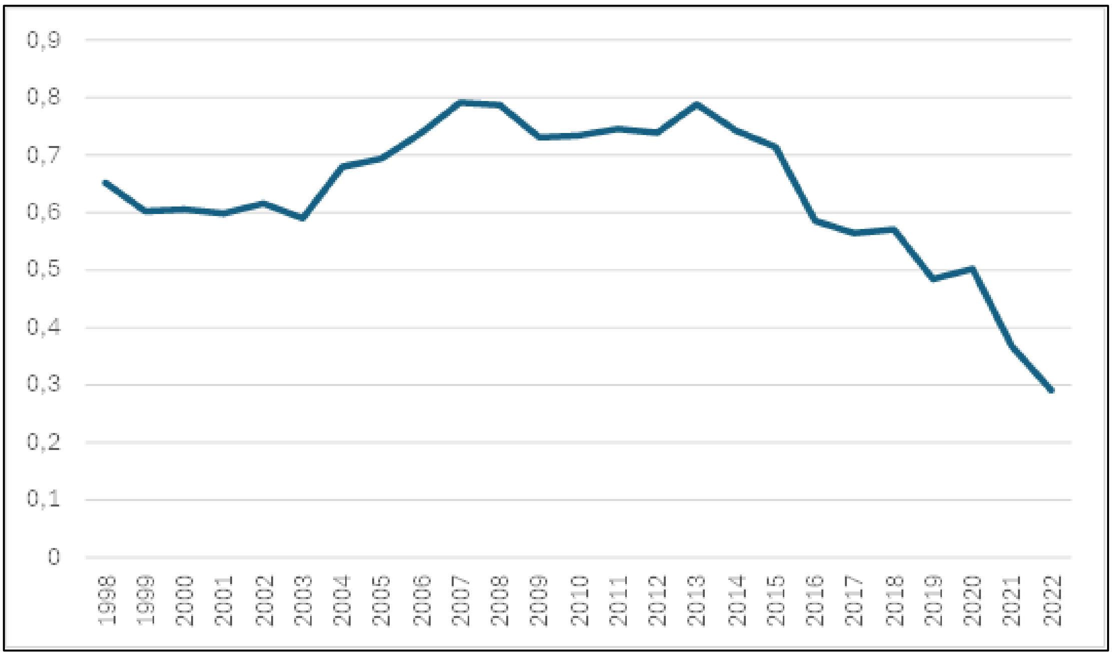
not be helpful. Indeed, as we could have anticipated, the crisis got worse because of public investment cuts together with private investment cuts (Borges, 2016; Barbosa-Filho, 2020).

It's worth emphasizing that anti-corruption reforms, especially when implemented in a discontinuous manner, are not easily achieved and may even lead to unintended consequences, potentially resulting in a sub-optimal balance that is worse than the previous situation. This phenomenon has been observed in instances such as Silvio Berlusconi's emergence in Italy after the Mani Pulite ("Clean Hands") operation and the "Lava Jato" operation in Brazil (Golden; Fisman; 2017).

In this context, Hlatshwayo et al. (2018), in an IMF study, examined the impacts of news "shocks" related to corruption events/scandals, as well as anti-corruption efforts, on financial and macroeconomic variables. Regarding GDP, the authors found, through the estimation of various panel models with different controls, that positive shocks from corruption-related news reduced GDP per capita by approximately 3% over a two-year horizon. These effects were more pronounced in emerging and developing economies. However, it's essential to note that these findings do not mean opposition to fighting against corruption, which should be a persistent objective. Such efforts are crucial for preventing the emergence of scandals of significant proportions that could potentially destabilize the economy and society as a whole.

So, it's important to know what the current situation regarding Brazilian structural problems is, which can be different from that period based on Ferreira-Filho; Fraga (2020). Let's start having a look at the productive structure of the Brazilian economy.

Figure 2. Brazil´s Economic Complexity Index (1998-2022)



Source: The Observatory of Complexity. Authors' elaboration.

In fact, due to some data and methodology updates, the analysis regarding Brazilian economic complexity has changed since some years ago. Our economic complexity index (ECI) got better between 2003 and 2008, before the financial crisis. After that, the ECI stagnated a bit, but after 2014 it deteriorated year after year, which is a sign of deceleration of growth shortly (Hidalgo; Hausmann, 2009). With ECI deterioration, Brazil depends even more on commodities (and their cycles). Our competitiveness levels are insufficient compared to other countries. For instance, our infrastructure stock has been at the lowest levels for decades, which has implications for the Brazilian GDP and its productivity (Calderón; Servén, 2004; Fraga; Resende, 2022; Fraga; Ferreira-Filho, 2023).

Remarkably, the Brazilian economy has undergone continual deterioration in physical infrastructure over the past three decades. A structural shift occurred in infrastructure stock formation following reforms in the early 1990s, which shifted responsibility away from the State, revealing the private sector's incapacity to make such investments. Consequently, the inefficiency of ports, airports, energy, roads, etc., in comparison to international standards, hampers competitiveness and the return on investment. Perception of infrastructure and related service levels remains insufficient. Overall, the country has experienced a reduction in total investment in key economic infrastructure areas for many years.

In terms of financial balances, the stock-flow consistent approach is useful to anticipate possible crises. We have the following situation (Godley; Lavoie, 2012):

$$(S - I) + (T - G) - CA = 0 \qquad (1)$$

Where: *S* = private sector gross saving; *I* = gross investment (fixed, stocks and other goods of value); *T* = tax (except for subsidies and other liquid transfer between governments); *G* = government consumption; *CA* = Current Account result. One can notice the impossibility of three savings surpluses at the same moment – the private (*S* – *I*), the government (*T* – *G*), and the external (– *CA*). (Bernardo; Wildauer, 2016).

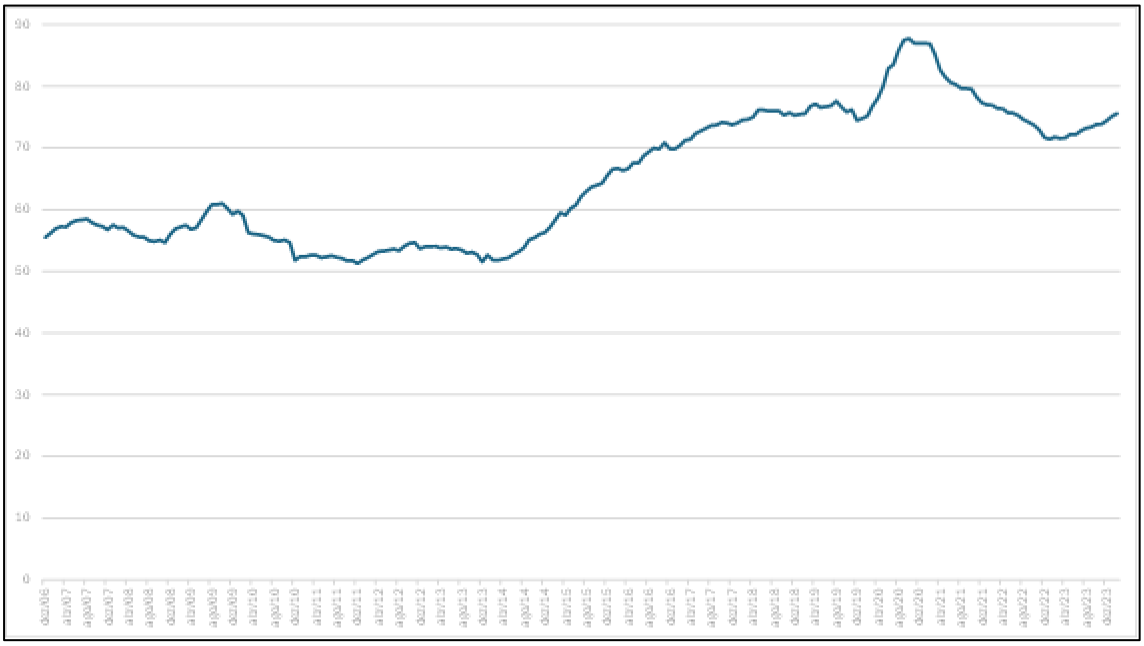
Figure 3. Financial Balances (% of GDP, Nov/2002 – Feb/2024)

Source: Central Bank of Brazil. Authors' elaboration.

As we can see, after some years of negative private sector savings between 2010 and 2014, thanks to the public deficit and a better CA, the private sector is experiencing positive savings. This means the private sector is not in a fragile position. To increase public savings without reducing the private ones, it would be necessary an increase in CA, preferably turning to a surplus.

In terms of fiscal sustainability, Brazil has been facing real challenges since 2014, since "r-g" is not as favorable as in other countries. Since 2014, we have seen an increase in debt to GDP, even beyond the so-called "spending cap" between 2017-2022.

Figure 4. General Government Gross Debt (% of GDP, Dec/2006 – Feb/2024)



Source: Central Bank of Brazil. Authors' elaboration.

In 2023, the fiscal situation was made clear to all economic agents, as some expenditure was postponed until 2022, including some crucial policies and other issues regarding the functioning of the State. So, the General Government Gross Debt (GGGD) as a share of GDP has finished the year at 74.4% of GDP (2.7 p.p. higher than in 2022) and the primary deficit is 2.3% of GDP (it would be about -1% of GDP if not for some non-recurrent payments that were necessary to pay for some postponed spending). This debt level is not comfortable, as it is higher than in other comparable countries (according to the IMF's Fiscal Monitor of 2024, the GGGD average of emerging market and middle-income economies was 68.9% of GDP at the end of 2023) and could put the country in a bad situation with possible sudden capital outflows (Calvo et al., 2014) – and it would be better if the country had a fiscal space to act countercyclically if necessary.

As we have said before, the new fiscal framework is better than the previous one, however, it has its problems. First, as the starting point of the primary deficit is too high, it can be too long until Brazil can reach a primary result that stabilizes debt. Secondly, there are some internal issues with the framework too. One of them is that some expenditures are dependent on the revenues. So, when the government makes some efforts to increase revenues, the expenditures rise as well. This is the case for the parliamentary amendments and the lower bound of health and education levels. Therefore, if the mandatory expenditures variation is above the spending ceiling variation, the discretionary expenditures must be cut. However, here we have two problems: the discretionary expenditures are not at very high levels (part of them is "mandatory", regarding health and education) and they include public investment. Brazil should focus on public investment, as we have mentioned before, because of its crowding in effects, and its higher multipliers too (Deleidi et al., 2020; Orair; Siqueira, 2018; Izquierdo et al., 2013). Sooner or later, it will be necessary to address the minimum wage policy (which affects pension spending and other benefits) and the relation between some expenditures and revenues, but it can be done intelligently.

Therefore, following Ferreira-Filho; Fraga's (2020) diagnostic, we continue to lose ground in terms of the sophistication of our productive structure, reducing our growth possibilities in the medium term. We do not have a balance problem related to private savings, but we continue to have a fiscal fragility.

Turning to other internal factors, Brazil still has a high Selic rate (which impacts the already highly indebted families), but it is declining. And it is worth mentioning the tax reform approved in 2023, which is extremely positive for Brazil. The country will have the opportunity to reduce its bureaucracy levels, which would induce productivity gains and GDP growth. Some of the benefits of the reform: are transparency about the VAT tax; the end of the “fiscal war”; the end of the taxation on investment and exports; etc.

The quality of our education is worrying, especially with losses caused by the COVID-19 shock, causing harm to children and young people's education. And we still lack a better infrastructure quality.

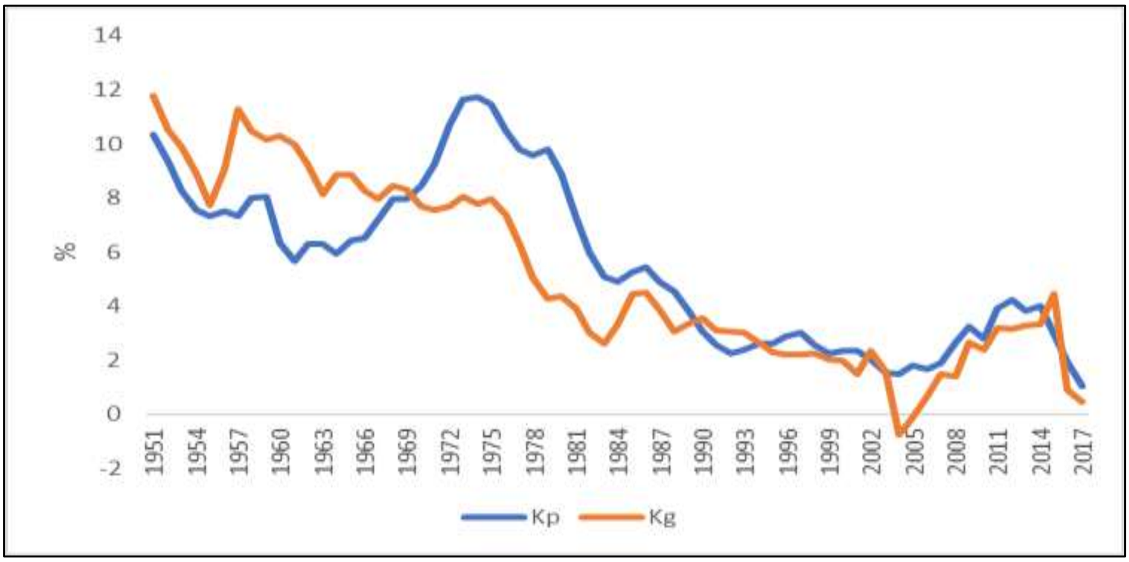
In the matter of infrastructure, Aschauer (1989a,b) demonstrated positive relationships between investment in infrastructure, aggregate investment, productivity, and private sector profitability in the American economy. Additionally, the author found evidence of crowding in between private and public investment. Calderón and Servén (2004) replicated similar findings for Latin American countries. Their research primarily focused on the supply side, examining how infrastructure investments reduce production costs and enhance productivity, thereby stimulating economic growth. Belloc and Vertova (2004) further expanded on this notion, highlighting the complementarity between public investment in infrastructure and private investment. They argued that such complementarity not only affects the supply side (Total Factor Productivity) but also spurs demand by expanding the market and increasing profit expectations.

In a more recent study, Fraga and Resende (2022) conducted an empirical analysis involving 87 countries and found a positive impact of infrastructure on private capital formation. Moreover, they suggested that the physical deterioration of infrastructure assets contributes to declines in private investment elasticities. For Brazil, Musoline and Teles (2010) presented evidence indicating that reductions in infrastructure investment could explain the decline in Total Factor Productivity during the 1970s and 1980s.

Based on the idea of complementarity or congestion in the allocation of public infrastructure capital in Brazil, considering its scarcity, it can be argued that the stock of private capital becomes more productive when there are ample infrastructure services available. Conversely, if there is an insufficient allocation of infrastructure capital, the relationship between infrastructure capital and private capital in the country may be suboptimal.

Figure 5 illustrates the growth of the public capital stock (Kg) and the private capital stock (Kp) between 1950 and 2017. The data utilized for this analysis is based on gross fixed capital formation, encompassing buildings and machinery, and equipment, for both the public and private sectors (Mussolini; Teles, 2010). It is evident that during the 1950s and 1960s, the growth rate of Kg surpassed that of Kp, thereby facilitating greater availability of public capital for private investment. However, this trend reversed in the early 1970s and has persisted since then.

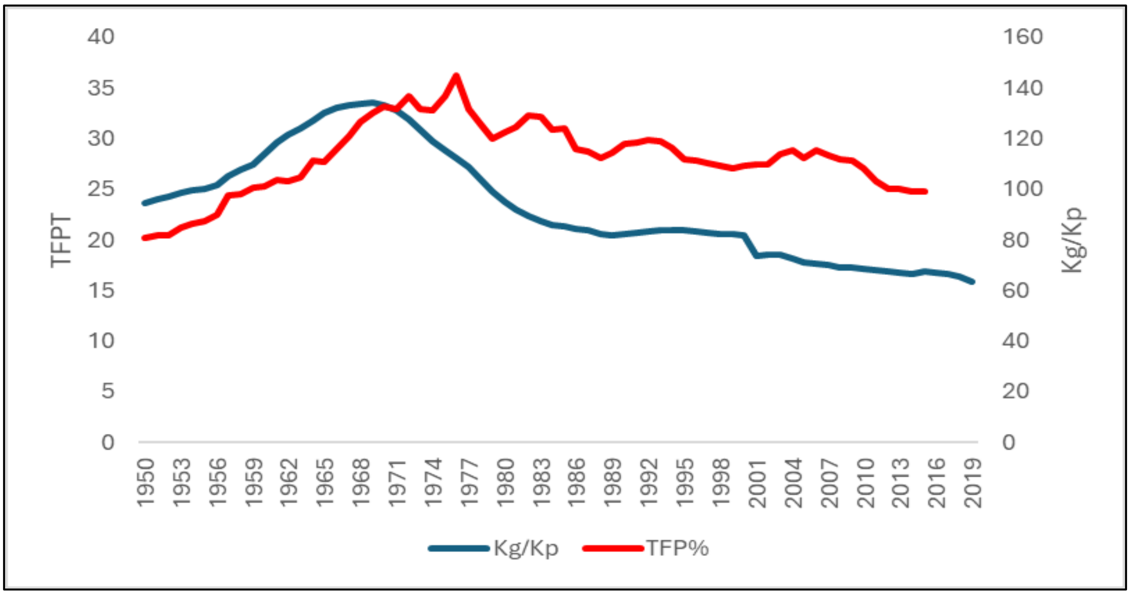
Figure 5. Growth rate of Kg and Kp (1950-2017)



Source: International Monetary Fund. Authors' elaboration.

The public-private capital ratio is depicted in Figure 6, showing that in 1950 it stood at approximately 24%, peaking at 33% in 1969 before embarking on a downward trend. For instance, the average ratio from 2000 to 2019 was 17%, with 2019 recording a ratio of 15%. Interestingly, Total Factor Productivity (TFP) exhibits a very similar trajectory, as identified in the causal relationship outlined by Mussolini and Teles (2010). Notably, the public-private capital relationship seems to precede productivity movements by approximately five years.

Figure 6. Evolution of TFP and Kg/Kp in Brazil (1950-2019)



Source: International Monetary Fund and Penn World Table 10.01. Authors' elaboration.

As a result, the Total Factor Productivity (TFP) continues to decline, a problem since the 1980s. Considering Brazilian demographics, if the country wants to accelerate its growth rate, policies addressed to improve TFP will be extremely necessary. In the next section, we will explore some of the external challenges for Brazil in the coming years, and other internal issues too, but with some propositions of solutions.

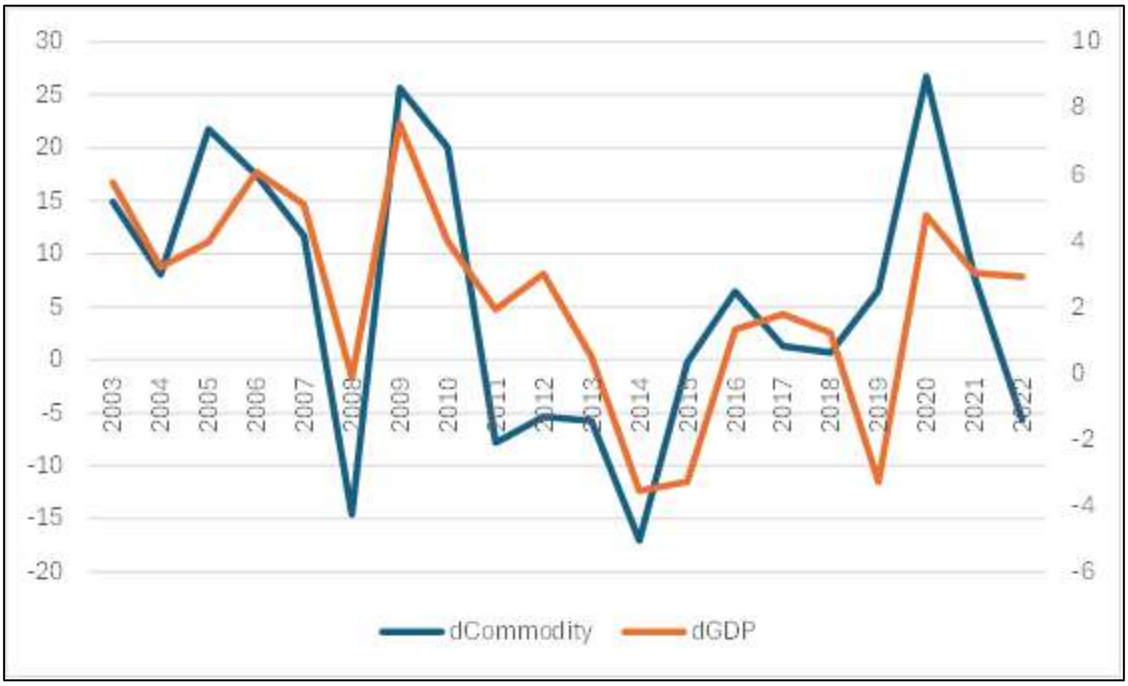
4. External issues, challenges for 2024-2026, and possible solutions

We have focused so far on the internal structural factors related to our sluggish economic growth in the last decades. However, Brazil is not an island and surely is affected by external shocks or adverse conditions in foreign economies. It is important to highlight some of the threats to the Brazilian economy in the coming years. Maybe the most important issue in the first months of 2024 lies in the high United States interest rate. While the most important economy in the world remains at such a rate, almost all other countries, certainly all emerging ones, will face additional difficulty in reducing their interest rates. For instance, if Selic keeps getting closer to the Fed rate, it will cause pressure on the Brazilian Real devaluation, which could cause inflation problems. Higher interest rates will cause a slowing down in economic activity and, thus, in government revenues, impacting the fiscal situation as well. And a world of higher interest rates would be a world of smaller economic growth. It's worth noting that almost every time the US has increased its interest rate, the economy has presented a recession. If this happens, all countries will suffer.

Externally, there are doubts also about the Chinese economy, which could have been entering the middle-income trap (Glawe; Wagner, 2020). If this is the case, Brazil can be affected too, as its exports are very concentrated in China - and the commodity prices are somewhat dependent on Chinese demand. Besides, there are various wars and points of tension underway, affecting the dollar and oil – like the Russia-Ukraine and the Middle East wars.

Taking those issues into consideration, it is important to recall some of the structural factors that could impose challenges to a sustainable period of economic growth for Brazil, and also some other short-term issues. The next figure shows how the Brazilian economy is somewhat impacted by the commodity price cycle.

Figure 7. Non-Fuel Commodity Index (variation, %, lhs) x GDP (variation, %, rhs), 2003 – 2023



Source: International Monetary Fund and Central Bank of Brazil. Authors' elaboration.

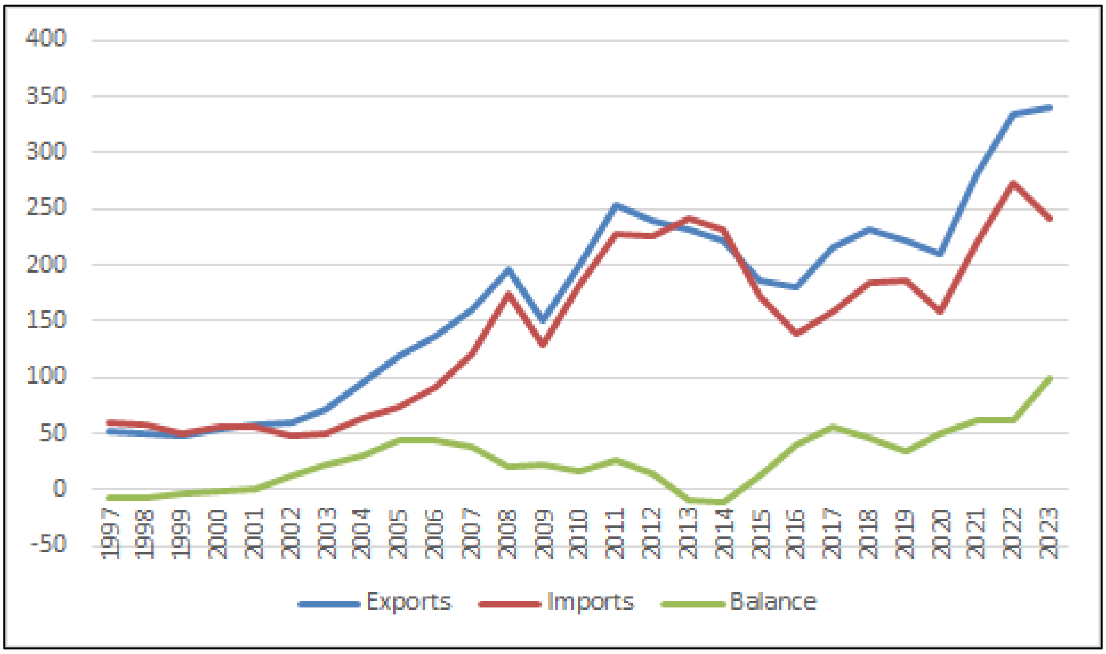
As we have mentioned before, because of Brazilian economic complexity regression, the country lives in ups and downs with the commodity cycle. Indeed, the BoP constraint is relaxed in moments of better terms of trade for Brazil. So, it's important to have a special look at the sophistication of the productive structure. And, of course, the fiscal situation could be a problem but could be part of the solution.

Therefore, what are the perspectives for the coming years of 2024-2026 for the Brazilian economy? In the short term, considering the country's economic sectors, according to Conab (a company of national supply of the primary sector) data, there will be a decrease in the agriculture sector in 2024, after a very strong performance in 2023. The secondary sector has been somewhat stagnant for a long time in Brazil - in line with the problems of regression of the productive structure. The construction sector is in its low part of the cycle, as interest rates (Selic) are still high. The only sector with a better perspective may be the tertiary sector as the unemployment rate has been declining since 2022.

In another perspective, there is a negative fiscal impulse in 2024 if the primary balance target of 0% is met. The last quarters have shown a decrease in fixed capital investment, which can impose some difficulties in maintaining robust economic growth for a longer period. Private consumption, however, has been strong after some records of the national wage bill ("massa salarial").

Can this whole situation be compared to the last cycle of higher growth (the one until 2013)? The answer is yes and no. It's true we have some of the same structural problems before that can eventually constrain faster economic growth rates, as we have mentioned before (economic complexity regression; fiscal problems; low TFP growth; low infrastructure investments; low quality of education; etc.). It is also true the country is again growing based on consumption without the counterpart of more investments – which could help with productivity and competitiveness gains. So, the question is whether the economic results will be the same, that is, when the commodity cycle turns if economic growth will diminish as wages are higher than their productivity levels, with large current account deficits. The answer to that is: maybe not.

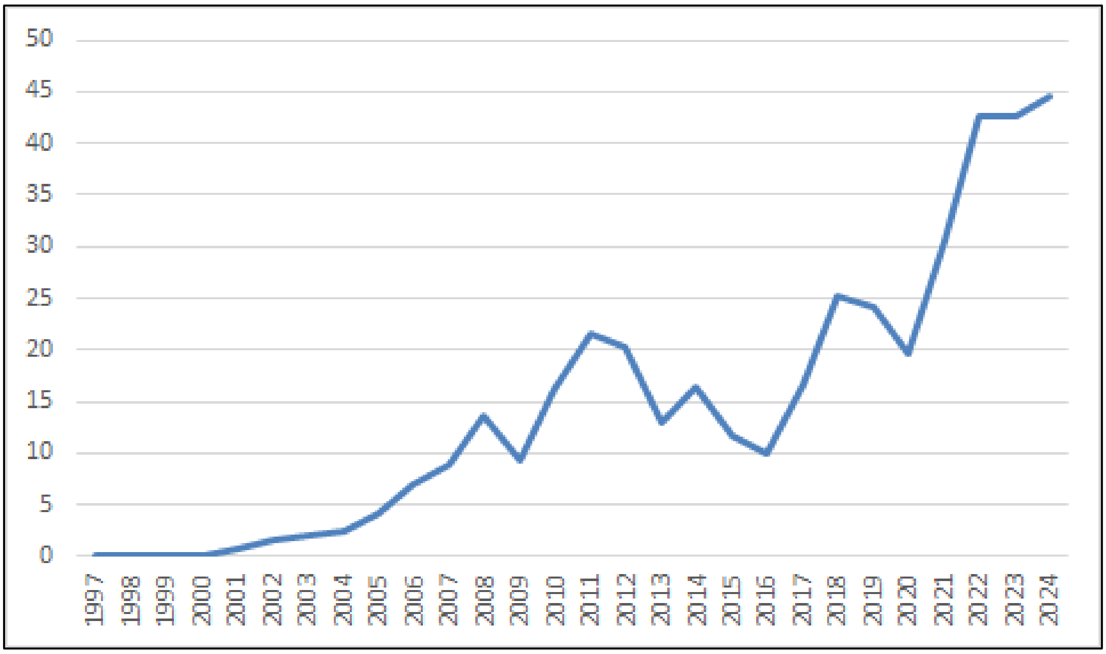
Figure 8. Exports, imports, and balance (U$ dollars, 1997-2023)



Source: Ministry of Development, Industry and Trade of Brazil. Authors' elaboration.

As we can see, since 2020 Brazil has experienced an export boom, resulting in a record trade surplus of more than U$ 100 billion in 2023. One can say it is the same thing that happened years ago in another commodity cycle boom episode. However, this may not be the case.

Figure 9. Exports of Crude Oil (U$ dollars, 1997-2024*)



Note: *2024 based on the first quarter of the year.
Source: Ministry of Development, Industry and Trade of Brazil. Authors' elaboration.

In a very successful case of government intervention, Petrobras has gained more and more competitiveness in exploring oil in the most severe and difficult conditions (pre-salt oil) – a clear case of learning by doing. Now with low lift costs, it is possible to extract larger quantities of oil, resulting in greater export capacity. The result is that Oil exports represented 0,6% of total exports in 2000, 3.5% in 2005, 8.1% in 2010, 6.3% in 2015, and 14.2% in 2024 (so far). This change seems to be a structural change in Brazilian exports, with much more oil exports. Brazil is the 8th in a list of the largest oil producers in the world, according to the Energy Information Agency (EIA) of the United States. Not to mention the primary exports which are also increasing over time (Brazil became the world's largest exporter of soybeans - 57% of world exports, corn - 31%, coffee - 27%, sugar - 44%, orange juice - 76%, beef - 24%, and meat chicken - 33%; and it is the vice-leader in ethanol and cotton). This can help Brazil to reduce its current account deficit, which is at low levels now, even further. If this is indeed a structural change (which seems to be[8]), it could lead to other major changes in crucial economic variables. One of the results would be a reduction in the country's risk perception, as exports can continue to rise, expanding the trade surplus to significant levels. Following that reduction, the neutral interest rate would be minor. Also, there would be more government revenues from the oil sector. These two factors combined (smaller interest rate and more revenues) would reduce fiscal risk, as "r - g" would become less harmful to debt dynamics, and the primary balance, *ceteris paribus*, would be larger. This would create

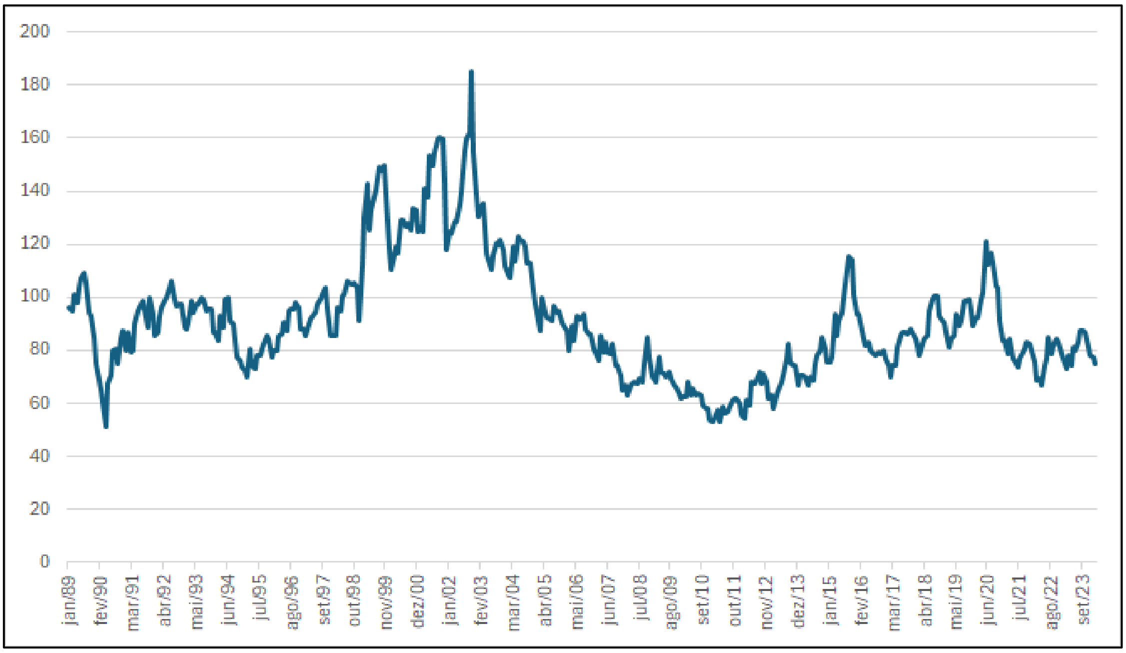
[8] According to the Energy Research Company (EPE, in Portuguese), Brazil will be the 4th largest oil producer of the world in 2029.

pressure for the valuation of Brazilian real too – which would be a point of attention that will be explored more carefully soon.

Hence, growth propelled by exports can underpin a sustainable development process, provided they facilitate the alleviation of the long-term constraints imposed by negative results in the BoP (Felipe et al., 2019). Therefore, Brazil can take advantage of this relaxed external constraint due to this structural change in the trade surplus (resulting from pre-salt oil and primary exports) to take certain measures to overcome the challenges for 2024 to 2026 more definitively: a real bridge to the future.

One of the important aspects is to avoid a large appreciation of the real exchange rate. The exchange rate plays a crucial role in terms of promoting industrialization, productive sophistication, and growth (Levy-Yeyati et al., 2013; Guzman et al., 2018).

Figure 10. Real exchange rate adjusted for productivity index (Jan/1989-fev/2024, Jun/1994 = 100)



Source: Central Bank of Brazil. Authors' elaboration.

As we can see, Brazil experienced a large appreciation process between the end of 2002 and 2010 – due to nominal exchange rate appreciation and lagging productivity. With the sudden stop and the crisis of 2014-2016, the index has shown a considerable depreciation. However, in the last months, the index is near the relation of 2015. If the foreign scenario does not deteriorate, it would be highly recommended to adopt policies to avoid further appreciation, AS capital controls to outflows (Arakelyan et al., 2023), for instance, or increasing dollar reserves. With a more competitive exchange rate, it could be possible to negotiate beneficial trade agreements and increase trade openness, which could be helpful to productivity.

Indeed, this process of exchange rate appreciation didn't help to avoid premature deindustrialization. Bresser-Pereira et al. (2016) note that this case is intricately connected to the concept of Dutch disease[9]. The authors defend that effective exchange rate management

[9] The term "Dutch disease" describes the prolonged overvaluation of a nation's exchange rate, because of abundant natural resources (Palma, 2005).

can mitigate the Dutch disease, presenting advantages for nations implementing such policies. Oreiro et al. (2020) suggest the adoption of an export-led growth regime, encouraging the manufacturing sector which adopt modern production techniques and fosters virtuous structural change throughout the whole economy.

However, only exchange rate management would not be enough, as productivity growth must increase for a sustainable development process. It would be essential to enlarge investments in infrastructure and innovation (which, in turn, depends on making the fiscal framework work in a virtuous way, with more resources being allocated for these items, at least the public investments). Infrastructure investments positively impact productivity and competitiveness, as well as manufacturing demand. Innovation, of course, is what drives firms' competitiveness and makes it possible to gain market share beyond price competition.

So, it is essential to increase public investments in innovation and infrastructure in the expenditure composition. To achieve this, within the fiscal framework, it would be necessary to make some adjustments in other lines of expenditure that grow faster than what the fiscal rule allows (0,6% to 2,5% in real terms, depending on revenues). There would be necessary adjustments on health and education spending minimums and on the minimum wage rule (which could be positive in real terms, but not correlated to GDP of previous periods). This rule is complex because it has strong impacts on various expenses such as social security, pension benefits like BPC, and "Seguro Desemprego", "Abono Salarial", "Seguro-Defeso", etc. It also impacts competitiveness due to internal appreciation, with wages rising always above productivity. Another alternative, if viable, would be to increase the tax burden to accommodate higher spending increases and change the fiscal framework parameters. If these issues are solved correctly, economic growth could accelerate.

Faster economic growth is what will make debt dynamics sustainable, solving another structural problem of the country. Therefore, the country should focus on other reforms, comparable to the tax reform of 2023, to foster economic growth. Other possible reforms include judiciary and legislative reform, military pension reform, new regulatory frameworks, better education spending, and income and wealth taxation reform, among others. Better management in education reform could also raise the country's productivity and is crucial for Brazilian development. Copying the best practices of some states of Brazil and trying to emulate the experience in the whole territory is the challenge.

The most important thing is that all of this could be done without much harm to short-term growth, precisely due to the change in the trade balance with oil (and other primary products too). It is essentially an opportunity that should be seized to try to reverse some trends, such as declining economic complexity – as well as TFP, in part as a consequence –, the low infrastructure stock, the educational gap to other countries, etc. The period between 2024 and 2026 could be the real 'bridge to the future', but it could also be one more lost opportunity.

Finally, it's important to note that this paper has focused on the economic challenges for the next few years. However, Brazil has other major challenges in various areas that are very important too, such as inequality, the need for universalization of basic sanitation, environmental issues, and improvements needed in health, beyond others.

5. Conclusions

This paper has tried to make a brief contextualization of the Brazilian economy in the last two decades, approximately. After that, some of the structural problems of the country were recalled based on a prior paper by Ferreira-Filho; Fraga (2020). At that time, Brazil had lots of problems, but the main ones were the regression of the productive structure sophistication, the problems in the financial balances, and the fiscal fragility - beyond other short-term issues too.

Some years after the crisis of 2014-2016, the country faces similar problems, but with a big difference, that is, with increasing exports of oil (and some primary products too), Brazil may not face one of the biggest challenges for emerging economies, and surely for Latin-American ones: the BoP constraint. Given that circumstance and that the commodity prices are high, Brazil could have an opportunity to solve some of its problems without reducing its growth.

So the next years of 2024 to 2026 could be seen in the future as a period that paved the way to many more years of sustainable development. Increasing public investment in infrastructure and innovation, improving education levels, and correcting some of the fiscal problems to make the new fiscal rule work would be highly recommendable.

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