

Pro- and anti-productivity policies in Brazil: resource allocation and business dynamism

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Abstract

Productivity in Brazil has not shown sustained growth since the 1980s, when the country began to fall behind other emerging and developed countries. In this paper, we map Brazilian productivity policies (both pro- and anti-) according to the typology proposed by Van Ark, de Vries and Pilat (2023, 2024). We show that policies aimed at factor accumulation and technological and structural change did boost labour productivity between the 1950s and the 1970s. However, they also created long-term liabilities that undermined the country's economic performance in the 1980s. Reforms implemented from the 1990s onward, focusing on market efficiency, resource allocation and internationalisation, contributed to some productivity gains. Nevertheless, the persistent challenges to the ease of doing business and the high degree of rent-seeking hindered creative destruction, led to resource misallocation, and reduced business dynamism. We argue that local institutions shape the policies as either pro- or anti-productivity. In a context of "crony capitalism", poorly targeted policies aimed at the accumulation of factors and technological and structural change may result in lower-than-expected productivity gains. Additionally, we discuss the obstacles to the adoption of more efficient pro-productivity policies in Brazil and highlight future challenges.

1 Introduction

Productivity in Brazil has not shown sustained growth since the 1980s, when the country began to fall behind other emerging and developed countries. On average, between 1981 and 2024, the average annual rate of growth of labour productivity calculated as the gross domestic product (GDP) per hour worked reached only 0.61%. Regarding total factor productivity (TFP), despite the accelerated growth from the early 1950s to the late 1970s, the data show a steady decline from the 1980s onward. The explanations for Brazil's low productivity growth are numerous: they include low levels of capital accumulation (Bonelli, 2005; Bacha & Bonelli, 2005), the quality of the labour force (Bonelli, 2005), the low levels of innovation (De Negri & Cavalcante, 2014; 2015) and infrastructure deficiencies (Schettini & Azzoni, 2015), for example. Some additional features like protectionism, challenges to the ease of doing business and the high degree of rent-seeking are also identified as obstacles to productivity growth (Dutz, 2018, p. 31; De Mello, Duarte & Dutz, 2018).

The lack of integration with international markets, coupled with a bureaucratic business environment and a high degree of rent-seeking, created barriers to entry of new firms and obstacles to competition. That seems to have led to resource misallocation and reduced business dynamism within the Brazilian economy. Those aspects are considered key mechanisms for increasing aggregate productivity. In fact, recent studies point to low business dynamism in the Brazilian economy (for example, Gomes & Ribeiro, 2015, and Vasconcelos, 2017).

Misallocation and low business dynamism, however, do not occur in a vacuum. They are the result of bad incentives which, in turn, are the consequence of bad institutions. The literature has repeatedly highlighted the key role of institutions — understood as the “rules of the game” that organize and limit political, social, and economic behaviour — in economic development (Acemoglu & Robinson, 2012). Discussing the book “Why nations fail”, Acemoglu once stated that:

[...] as an economist, we can analyse policy better, and there is good policy and bad policy, but what we tried to articulate in the book is that when you look at the policies and the choices that are most consequential for economic development, they don't get it wrong by mistake, they get it wrong by design. It is not that people don't know what is good or what is bad [...].¹

All these elements are critical to analyse Brazil's low productivity growth. However, the evidence seems dispersed, as some papers focus on specific factors or features, or on specific periods. This limits the possibilities of viewing which policy is more suitable for a given context, as in some cases, similar policies may yield different outcomes depending on the specific circumstances.

Van Ark, de Vries and Pilat (2023; 2024) analysed productivity trends, drivers of productivity growth and pro-productivity policies across G-20 economies since 1970. They segment these policies into five categories involving both direct and indirect drivers of productivity: *i)*

¹ “Daron Acemoglu on Why Nations Fail” (Econtalk podcast available at <https://www.econtalk.org/acemoglu-on-why-nations-fail/>).

accumulation of factors of production; *ii*) technological and structural change; *iii*) markets and resource allocation; *iv*) internationalisation; and *v*) institutions and frameworks.²

In this paper, we analyse the productivity indicators and of the pro- and anti-productivity policies in Brazil during the last decades, using the framework proposed by Van Ark, de Vries and Pilat (2023; 2024). The idea is to provide a more detailed view of one of the most iconic cases of “muddling through” countries analysed in their papers. Furthermore, our analysis intends to go beyond the policies themselves and explore the reasons why some policies are or are not implemented.

Following this introduction, this paper is structured in five additional sections. In section 2, we discuss the evolution of Brazilian GDP and aggregate labour productivity. In section 3, we deepen the analysis of Brazilian productivity policies (both pro- and anti-) according to the typology proposed by Van Ark, de Vries and Pilat (2023; 2024). Given the results obtained in section 3, sections 4 and 5 focus on markets and resource allocation policies and on the obstacles to the adoption of more efficient pro-productivity policies. Final remarks and future challenges are the subject of section 6.

2 Evolution of Brazilian GDP and aggregate labour productivity

In this section, we discuss the evolution of Brazilian GDP and aggregate labour productivity over the last decades. In particular, we analyse the sources of labour productivity growth in the country. The general picture is one of accelerated GDP and labour productivity growth up to the late 1970s and an abrupt slowdown from the 1980s onward. We show that the low GDP growth rates are particularly related to the low labour productivity growth rates, which in turn are underpinned by low investment levels (i.e., low capital deepening) and declines in TFP.

GDP growth can be easily decomposed into labour input (L) growth and labour productivity ($y = \text{GDP} / L$) growth as follows:

$$\Delta \ln(\text{GDP}) = \Delta \ln\left(\frac{\text{GDP}}{L}\right) + \Delta \ln(L) = \Delta \ln(y) + \Delta \ln(L) \quad (1)$$

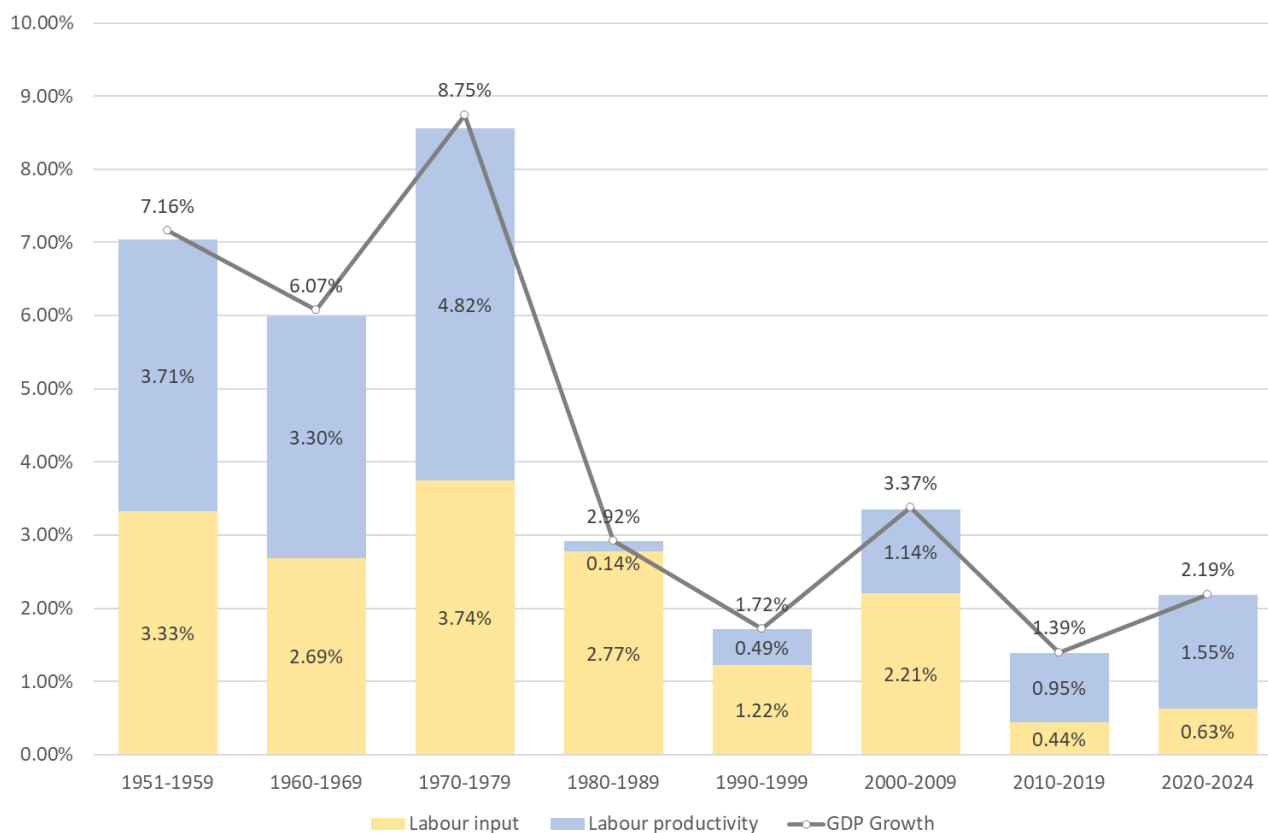
Where $\Delta \ln(X)$ indicates the growth rate (measured in log changes) of any variable X (GDP, GDP / L or L) and L is a measurement of employment quantity (persons employed or hours worked, for example).

Based on equation 1, figure 1 shows the decomposition of the Brazilian GDP growth into the contributions of labour input (measured as hours worked) and labour productivity growth (measured as GDP per hour worked) in the period between 1950 and 2024 segmented by decades.

² In line with Van Ark, de Vries and Pilat (2023), we use a sixth category (inclusion) in the Brazilian case.

Figure 1

Decomposition of GDP growth into the contributions of labour input and labour productivity growth, average annual growth rates in each decade, Brazil, 1950 – 2024 (percentage points)



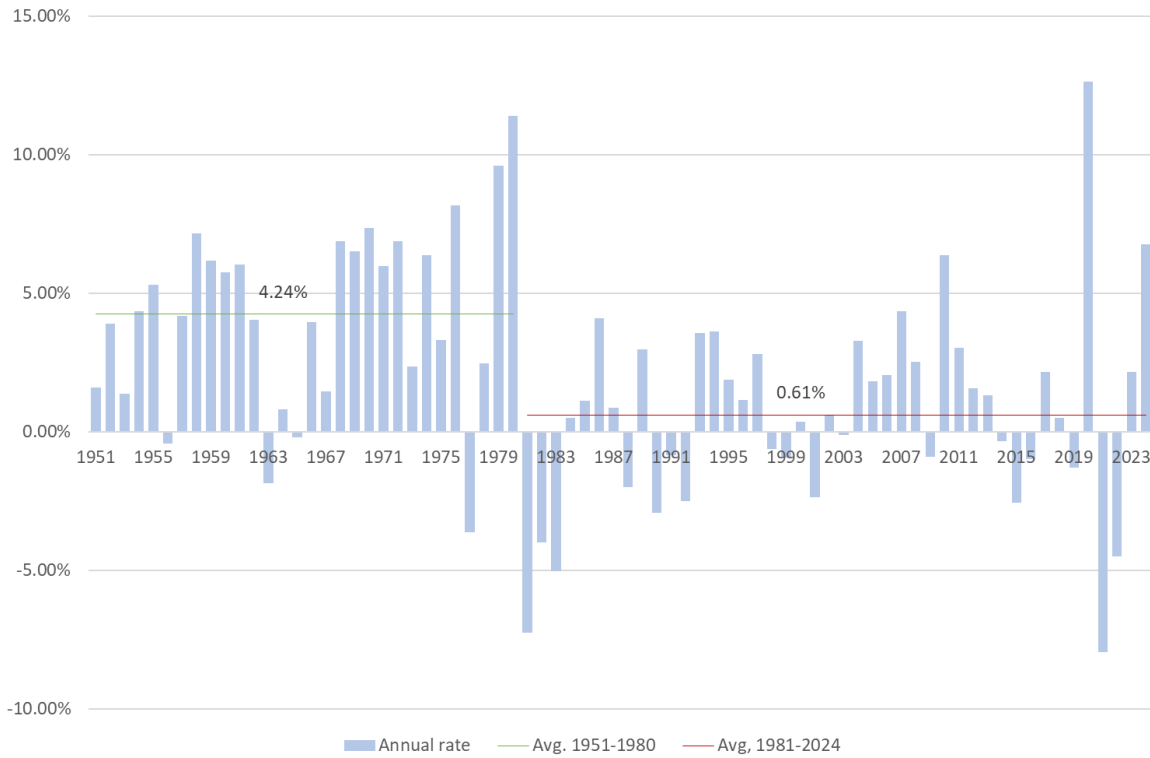
Source: Elaborated by the authors using data from The Conference Board Total Economy Database, Sep. 2025.

The figure shows that after three decades of especially high GDP growth rates, Brazil seems to have plunged into a low growth valley from the 1980s onward. During the 1950s, 1960s and 1970s, average annual GDP growth rates were well above 5%. However, after the 1970s, labour productivity (GDP per hour worked) showed average growth rates as low as 0.14% in the 1980s, 0.49% in the 1990s, 1.14% in the 2000s, 0.95% in the 2010s and 1.55% in the early 2020s. Until the 1980s, both labour input and labour productivity contributed to relatively high and balanced rates to GDP growth. However, over the last four and a half decades, labour input has not been as high as in the past (partially because of demographic reasons) and labour productivity growth fell to levels of about 1% per year on average. Even during the period 2000-2009, which represents a peak in the series that began in the 1980s, the contribution of productivity growth to GDP growth was just above 1%, so that $\frac{2}{3}$ of GDP growth during that decade can be attributed to the labour input.

A specific look at the annual productivity growth rates reinforces the perception of a clear divide between two periods, before and after 1980 (figure 2).

Figure 2

Growth in labour productivity (GDP per hour worked), Brazil, 1951 – 2024 (per cent)



Source: elaborated by the authors using data from The Conference Board Total Economy Database, Sep. 2025.

Between 1951 and 1980, the simple average of the productivity growth rates per hour worked reached 4.24%. However, after 1980, there were periods of sharp decline, and on only a few occasions did the growth rate exceed 4%. This perception holds true even when excluding the period between 2020 and 2022, which was marked by the Covid-19 pandemic. A simple average of the rates recorded during the period reached only 0.61% per year.

In order to explore the reasons behind the low labour productivity growth rates in Brazil, it is useful to decompose them into their main components as follows. First, as shown by de Vries and Erumban (2022, p. 20), equation 2 below decomposes GDP growth into the contributions of capital input (K), labour input (L), and total factor productivity (TFP):

$$\Delta \ln(GDP) = \bar{v}_K \times \Delta \ln(K) + \bar{v}_L \times \Delta \ln(L) + \Delta \ln(TFP) \quad (2)$$

Where $\bar{v}_K$ and $\bar{v}_L$ indicate the shares of capital compensation and labour compensation in nominal GDP.

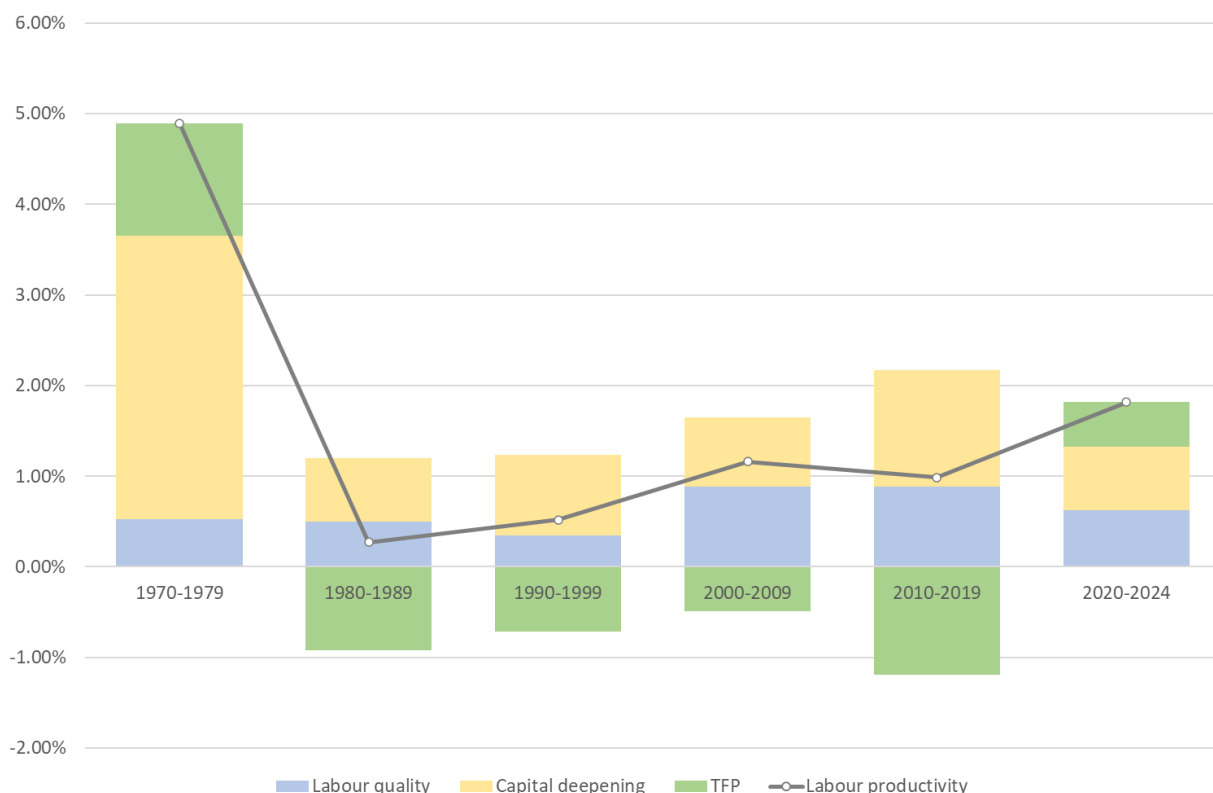
Considering that the contribution of labour input can be split into the contributions of employment quantity (H) and labour composition or quality (LQ), and subtracting the growth rate of labour quantity $\Delta \ln(H)$ of both sides of equation 2, labour productivity growth can be decomposed into capital deepening ($k = K/L$) and TFP as follows:

$$\Delta \ln(y) = \bar{v}_K \times \Delta \ln(k) + \bar{v}_L \times \Delta \ln(LQ) + \Delta \ln(TFP) \quad (3)$$

Using the decompositions outlined above, it is also possible to explore the reasons behind the evolution of labour productivity growth in Brazil. Figure 3, adapted from Van Ark, de Vries and Pilat (2023), presents the decomposition of labour productivity growth rates in Brazil from the 1970s to the 2020s into the growth rates of the three factors that most directly influence it: TFP, investment (or, more precisely, capital deepening), and labour quality (proxied by educational attainment of workers).

Figure 3

Decomposition of labour productivity growth in labour quality, capital deepening and TFP growth, average annual rates in each decade, Brazil, 1970 – 2024, in percentage points



Source: adapted from Van Ark, de Vries and Pilat (2023) using data from The Conference Board Total Economy Database, Sep. 2025.

Figure 3 shows that:

- In the 1970s, the reasonably high labour productivity growth rates in Brazil were primarily driven by capital deepening — that is, by high levels of investment in physical capital. Although to a lesser extent, TFP growth and improvements in labour quality also contributed to labour productivity growth during that decade.
- However, from the 1980s onward, capital deepening no longer played such a significant role, and its contribution to labour productivity growth became roughly equivalent to that of labour quality. In addition, since the 1980s, TFP has contributed negatively to labour

productivity growth.³ This implies that, since then, the available production factors in the country have not been combined efficiently, suggesting that incentives may not be aligned with sustainable productivity gains.

3 Mapping pro- and anti-productivity policies in Brazil and related empirical evidence

In their analyses of productivity trends, drivers of productivity growth and pro-productivity policies across G-20 economies, Van Ark, de Vries and Pilat (2023) present four case studies including Brazil. For each of those countries, they examined “the productivity policies that were recommended and (at least in part) implemented sometime during the 1960s/1970s (when most economies exited the early phase of post-war reconstruction or decolonisation), the late 1980s/early 2000s (when the Washington consensus took precedence), and the 2010s/2020s (following the global financial crises and the heydays of globalisation)”.

Pro-productivity policies are grouped into five categories involving direct and indirect drivers of productivity as well as foundational policies: *i*) accumulation of factors of production (direct); *ii*) technological and structural change (direct); *iii*) markets and resource allocation (indirect); *iv*) internationalisation (indirect); and *v*) institutions and frameworks (foundational). These policies also evolve as countries move forward in the process of economic development: *i*) low income, start of development process (cells in orange in their tables); *ii*) middle income, overcoming middle-income trap (cells in blue); and *iii*) highly developed and internationalised (cells in green). Occasionally, Van Ark et al. (2023) also address policies with potential anti-productivity effects (cells in yellow in their table). In the Brazilian case, they also include a sixth category, namely inclusion).

In this section, we deepen the analysis of the Brazilian productivity policies (both pro- and anti-ones) according to the typology proposed by Van Ark, de Vries and Pilat (2023, 2024) addressing the related empirical evidence. We followed their typology and colour coding, explicitly also addressing anti-productivity policies and features. Whenever there are both pro- and anti-productivity policies or features in the same cell, the colour was set to “pro-productivity”, but anti-productivity policies or features were typed in red. We decided to cover all decades from the 1950s onward, but we merged the 1950s, 1960s, and 1970s, as they broadly form a “crescendo” of developmentalist policies.

The analysis is based on a systematic review of key studies on the performance and drivers of productivity in Brazil, with a focus on empirical evidence regarding the effects of pro- and anti-productivity policy interventions. In addition, preliminary results from the “business environment and productivity” project currently being conducted at the Brazilian Institute for Applied Economic Research (Ipea) are also used, especially regarding the more recent period. Some occasional interviews with selected experts also supported the analysis. The stylised policies and features that affected productivity in Brazil are presented in table 1.

³ Except in the 2020s, which relies on preliminary estimates and projections.

Table 1

Stylised policies and features that affected productivity in Brazil

	1950s – 1970s	1980s	1990s	2000s	2010s	2020s
Policies aimed at the accumulation of factors of production						
Investment	Import-substitution industrialisation. Incentives to local production. Protective tariffs. Import restrictions. State investment in key industries. Investments in infrastructure.		Privatisation of public utilities funded by the BNDES.	Public investments in infrastructure. Sector-specific tax incentives for investment.	Local content policies. Expansion of the BNDES.	
Human capital (educations and skills)	Low-skilled labour. Expansion of technical and vocational education for specific areas.	Low-skilled labour. Increasing enrolment in all education levels.	Increasing in education spending. Improvement of access to basic education.	Increasing in education spending. Improvement of access to basic education. Expanding access to tertiary education.	Increasing in education spending. Improvement of access to basic education. Expanding access to tertiary education.	
Energy, environment and resources	Creation of a state-owned company for oil exploration and refining and for hydroelectric power. Increasing importance of state enterprises.		Privatisation of public utilities (electricity and telecommunications).	Increasing investment in renewable energy. Increasing oil production.		
Policies for technological and structural change						
Innovation & technology	“Tripartite” model (state, domestic private and foreign capital) as an attempt to develop absorptive capacity. Creation of the Brazilian Agricultural Research Corporation in 1973.	Incentives for ethanol production as an alternative to gasoline in automobiles.		Improvements in innovation policies (innovation law, tax expenditures for R&D, sectoral funds).	Increasing investment in R&D.	

	1950s – 1970s	1980s	1990s	2000s	2010s	2020s
Industrial policies	Industrialisation policy for structural change. Sector-specific policies.			Sector-specific tax incentives for investment.	Local content policies.	
Creative destruction and business dynamics	Protectionism reduced allocative efficiency (no selectivity).	BNDES as instrument to bail out firms in trouble (survival of rent-seeking activities).		Lower taxes for SMEs created incentives for low-productivity firms.	Refinancing of fiscal debts leads to the survival of low-productivity firms. Lower taxes for SMEs created incentives for low-productivity firms.	Lower taxes for SMEs created incentives for low-productivity firms. Pandemic led to large subsidies to firms, but programs lacked proper targeting.
Policies for markets and resource allocation						
Financial markets	Reform of financial markets and establishment of the Central Bank (1960s).		Restructuring of the financial system (privatisation, M&A) because of inflation control.	Credit expansion. Bankruptcy law. Financial inclusion.	Fintech regulation. Central bank autonomy. Instant payment system (PIX). Some expansion of private long-term credit.	
Product markets			Persistent difficulties in doing business.	Persistent difficulties in doing business.	Persistent difficulties in doing business.	Difficulties in doing business. 2020 law reduced bureaucracy and administrative regulations.
Labour markets			High informality limits productive growth. Rigid labour market regulations, but some reforms (temporary work and overtime compensation).	Employment programs. Partial labour market reform (individual microentrepreneur).	Partial labour market reform (outsourcing).	

	1950s – 1970s	1980s	1990s	2000s	2010s	2020s
Competition policies	State monopoly in the oil sector. Survival of rent-seeking activities.	Survival of rent-seeking activities.	Strengthening of the competition defence agency. Creation of regulatory agencies. End of State monopoly in the oil sector. Survival of rent-seeking activities.	High degree of rent-seeking.	High degree of rent-seeking.	High degree of rent-seeking. Some microeconomic reforms increased competition.
Policies for internationalisation						
Trade policies	Protectionism. Foreign exchange policy used as instrument to stimulate import substitution.	Highly protected economy.	Some import liberalisation.	High commodities prices and rising exports.	Persistently high levels of trade protection.	
FDI	Attraction of FDI for import substitution (but not for export-led growth).		Liberalisation of regulations for foreign investment (electricity, telecommunications and banking).			
Immigration						

	1950s – 1970s	1980s	1990s	2000s	2010s	2020s
Policies for institutions and frameworks (aimed at the foundations of pro-productivity policies)						
Institutions (institution building)	Establishment and consolidation of the national development bank (BNDES). Establishment of the Central Bank (1960s). Increasing importance of state enterprises.	Redemocratisation. 1988 Constitution (democracy and negative impact on public finances).	Creation of several regulatory agencies.	Crony capitalism regarding subsidies and BNDES credits.	Crony capitalism regarding subsidies and BNDES credits.	Rising influence of the National Congress over the budget fostered fragmented policymaking and fuelled fiscal imbalances.
Government capabilities			State and public sector reform.	Expansion of online services (E-government).	Expansion of online services (E-government).	Expansion of online services (E-government).
Macroeconomic policy and taxation	Fiscal adjustment and tax reform in the mid-1960s (control of inflation). Increasing external debt (“debt-led growth”).	Debt crises and fiscal imbalances led to hyperinflation.	Deep macroeconomic reforms in order to control inflation.	Budget stability law.	Debt crisis (2014 /2015). Creation of a public spending ceiling (budget stability). Pension system reform (2019)	Tax reform.
Policies for inclusion						
Inclusion			Poverty reduction associated with the control of inflation.	Social inclusion and poverty reduction (cash allowances and minimal wage policy).	Social inclusion and poverty reduction (cash allowances and minimal wage policy).	Increasing inequality (pandemics). Social inclusion policies to deal with Covid-19.

Legend:

- Stylised pro-productivity policies of low-income economies;
- Stylised pro-productivity policies of middle-income economies.
- Stylised pro-productivity policies of advanced economies.
- Stylised anti-productivity policies (potential anti-productivity effects); typed in red.

Note: whenever there are both pro- and anti-productivity policies or features in the same cell, colour is set as “pro-productivity”, but anti-productivity policies or features are typed in red.

Sources: Amann & Azzoni (2018); Araújo et al. (2012); Bacha & Bonelli (2004); Bacha & Bonelli (2005); Baer (2008); Barros et al. (2010); Bonelli (2005); Bonelli (2014); Cavalcante (2015); Cavalcante (2018a); Cavalcante (2018b); Curado & Curado (2018); De Negri (2021); Dutz (2018); Lazzarini (2011); Lazzarini et al. (2015); Lemens (1997); Limoeiro (2021); Lisboa & Latif (2013); Martha & Alves (2018); Mation (2014); Mendes (2014); OECD (2020) and Vasconcelos (2017). Elaborated by the authors.

As shown in table 1, the 1950s, 1960s and 1970s were marked by a sort of “crescendo” of industrial (or developmentalist) policies (Baer, 2008, p. 192, Amann & Azzoni, 2018, p. 7). Despite a short liberalizing break in the mid-1960s (when the Central Bank was established and fiscal adjustment and a tax reform took place), most of the period is associated with the so-called Import Substitution Industrialisation (ISI), i.e., a kind of industrialisation policy aimed at structural change through sector-specific interventions in industries such as automotive, durable consumer goods, capital goods, oil, petrochemicals, and infrastructure. The primary tools used to promote industrialisation focused on accumulating factors of production, including subsidies, protective tariffs, import restrictions, and state investment in key sectors. As a result, the attraction of FDI was basically aimed at import substitution rather than exports. Overall, “government intervention to protect selected sectors and provide specific benefits has been seen as a legitimate, and necessary, mechanism to induce economic development” (Lisboa & Latif, 2013). This perception reached not only the sectors which directly benefited from the government intervention (e.g., business associations), but also other social segments, such as academic communities (Cavalcante, 2018b).

As shown in figures 1 and 3, these policies did boost labour productivity between the 1950s and the 1970s (as they favoured capital deepening and TFP increases), but the focus on the internal market led to industries hardly exposed to international competition and with a low appetite for innovation. In other words, protectionism reduced allocative efficiency, as the firms that benefited from the policies tended to be either state companies or private firms with strong connections with the government (Lisboa & Latif, 2013; Mendes, 2014). Besides, those policies ended up leading to external debt and fiscal imbalances (Malan & Bonelli, 1990).

The effects of those problems were clearly perceived in the 1980s, widely known as the “lost decade” because of the low rates of growth (figures 1, 2 and 3). In fact, many policies adopted up to the 1970s led to long-term liabilities that undermined the country’s economic performance in the 1980s (Malan & Bonelli, 1990). During that decade, debt crises and fiscal imbalances led to hyperinflation and the economy remained highly protected. On the other hand, the 1980s are also marked by the “redemocratisation” process and by the adoption of the 1988 Federal Constitution (Baer, 2008, p. 121). While representing significant institutional progress, some authors, like Mendes (2014), argue that these developments negatively affected public finances by increasing expenditures without corresponding revenue growth. The high level of protectionism coupled with competition policies frequently aimed at creating barriers to entry of new firms and the survival of rent-seeking activities (as in the case of the use of the Brazilian Development Bank as an instrument to bail out firms in trouble) led to misallocation and to negative TFP growth rates.

The 1990s in Brazil were characterised by significant macroeconomic reforms aimed at controlling inflation. These reforms involved several policies aligned with the Washington Consensus (Williamson, 2004), including:

- Budget deficit reduction (including state and public sector reform) to sustainable levels without relying on inflation financing.

- Financial liberalisation (restructuring of the financial system as a consequence of inflation control).
- Some import liberalisation.
- Liberalisation of regulations for foreign investment (especially in electricity, telecommunications and banking).
- Privatisation of state-owned enterprises, including public utilities (electricity distribution and telecommunications), often funded by the Brazilian Development Bank (BNDES).
- Implementation of some competition policies, such as strengthening the competition defence agency (CADE), creating regulatory agencies, and ending the state monopoly in the oil sector.

By the mid-1990s, Brazil managed to control inflation and, according to Clements (1997) “formal sector employees saw their monthly average real incomes go up 18.7% between 1994 and December 1995, while workers in the informal sector enjoyed an increase of 38.4%”. Considering the high level of inequalities in Brazil, poverty reduction had a significant impact on the levels of consumption and GDP in the country. That explains why a sixth category of drivers of productivity has been included in Van Ark, de Vries and Pilat’s (2023) framework.

These reforms resulted in slightly higher GDP growth rates when compared to the preceding decade (figure 1) and contributed to some labour gains in productivity, as evidenced by a less negative contribution of TFP to GDP growth than in the 1980s (figure 3). However, several areas continued to pose challenges, as regulations that impeded the entry of new firms or restricted competition were not entirely eliminated. Furthermore, the conditions for doing business in Brazil remained unfavourable. Finally, rent-seeking activities continued to be a feature of the economic landscape.

The 2000s and early 2010s saw higher GDP and labour productivity growth compared to previous full decades since the 1970s, but growth still remained low by international standards (compared to most G-20 economies). As shown in figure 3, over the last decades, the labour quality contribution to labour productivity increased, as the country “strongly increased education spending and improved access to basic education” (OECD, 2020), and an expansion of the access to tertiary education was observed (as a result of the creation of several new federal and private universities and colleges). However, “rising access to education has not been accompanied by increases in the quality of education” (OECD, 2020).⁴ On the other hand, both the 2000s and the 2010s were marked by a negative contribution of TFP growth to labour productivity, especially in the 2010s. The 2000s witnessed high commodity prices and increasing oil production, which acted as exogenous features that boosted GDP growth rates during this period. However, by the late 2000s and early 2010s, Brazil also implemented “old-fashioned” or developmentalist policies (like tax incentives, sector-specific, and local content policies) to maintain high GDP growth (especially when commodity prices were less supportive

⁴ According to the OECD (2020), “comparing PISA test scores of 15-year-old students, Brazil ranks lower than other Latin American countries or the OECD average, although its education spending is with 6.2% of GDP even higher than in the average OECD country”.

in the late 2010s), potentially leading to misallocation (and to a larger negative contribution of TFP growth to labour productivity in the 2010s). As in the previous decades, rent-seeking remained high, and “crony capitalism” (which has been an attribute of Brazilian economy over the centuries) became more evident, as discussions about tax expenditures and BNDES subsidies escalated (Lazzarini, 2011; Limoeiro, 2021).

Crony capitalism is usually thought of as a system in which those close to the political authorities who make and enforce policies receive favours that have large economic value. These favours allow politically connected economic agents to earn returns above those that would prevail in an economy in which the factors of production were priced by the market (Haber, 2016, p. xii). In Brazil, over the recent decades, crony capitalism is strongly connected with the so-called “coalition presidentialism”, which describes a political system where the president, despite having significant powers, must form and maintain multiparty coalitions to ensure governability, especially in the National Congress (Abranches, 1988). In the early 2020s, in a context marked by political polarisation and by the Congress’s rising influence over the budget, the lack of policy coordination appears to have intensified. This resulted in further difficulties in addressing politically costly reforms, fostered even more fragmented policymaking, and fuelled fiscal imbalances.

On the other hand, some reforms were implemented during specific periods, including the bankruptcy law, greater labour market flexibility, central bank autonomy, and some expansion of private long-term credit was observed. Social inclusion and poverty reduction (associated with cash allowances and minimum wage policy, for example) (Barros et al., 2010) also helped growth after the mid-2000s.⁵ Interestingly, over the 2000s and the 2010s there was a “crescendo” of innovation policies (De Negri, 2012; 2021; Cavalcante, 2018b):

- Establishment of sector-specific funds aiming at providing more stable financial resources and at increasing the total amount directed to R&D activities in the industrial sector in the early 2000s.
- Enactment of the Innovation Law, establishing instruments to regulate the relationship between universities and the industrial sector and to provide the legal background for the allocation of grants to business enterprises (Law 10.973/2004).
- Enactment of the legal framework to provide fiscal incentives to R&D activities (Law 11.196/2005).
- Creation of the legal framework for the use of public procurement as an instrument to support innovation efforts made by business enterprises (Law 12.349/2010).
- Enactment of Constitutional Amendment 85/2015, altering several constitutional provisions to improve the articulation between the state and public and private research institutions and to broaden the set of institutions eligible for public support for research.

⁵ Silveira-Neto and Azzoni (2011) also show that these “spatially blind social programs” were responsible for the largest part of the reduction in regional inequalities in Brazil. Their results suggest that social programs may be more efficient to reduce regional inequalities in Brazil than the regional development policies themselves.

- Enactment of the legal framework for startups and innovative entrepreneurship, defining startups and establishing fundamental principles and guidelines for government support to this type of enterprise (Complementary Law 182/2021).
- Regulation of technology procurement (ETEC) as an instrument to foster innovation, inspired by U.S. and European models, introduced by the Innovation Law (Law 10.973/2004), amended by Law 13.243/2016, and regulated by Decree 9.283/2018 (Maciel, 2024).

As a result of those initiatives, Brazilian innovation policies seem similar to the ones adopted in more developed countries. Those policies did contribute to an increase in R&D expenditures as a percentage of GDP (see, for example, Araújo et al., 2012), but to a level far below the advanced economies. According to the Brazilian Ministry of Science, Technology and Innovation (MCTI), Brazil's gross domestic expenditure on research and development (GERD) was 1.14% of GDP in 2020. In contrast, South Korea allocated 4.81% of its GDP to R&D, and the United States allocated 3.45% of GDP to R&D in the same year. That suggests that the reasons why such policies failed to contribute more effectively to the increase of the Brazilian technological efforts “have less to do with the policies themselves and more to do with their detachment from the institutional framework used to implement them” (Cavalcante, 2018b).

In short, GDP and labour productivity growth followed an inverted U-shaped curve during this two-decade period, but the averages improved only marginally compared to the 1980s and 1990s. As stressed by Van Ark, de Vries and Pilat (2023), “stagnant productivity growth, driven by small increases in capital deepening and negative TFP growth, has plagued Brazil's economy into the 21st century”.

A horizontal look at the stylised policies and features that affected productivity in Brazil (i.e., focusing on the categories proposed by Van Ark, de Vries and Pilat, 2023, 2024) can be summarised as follows:

- Policies aimed at accumulation of factors of production (especially investments) were pervasive over the entire period.
- Policies aimed at technological and structural change were adopted from the 1950s to the 1970s and from the 2000s onward. In most cases, these policies involved protectionism and sector-specific initiatives based on subsidies.
- Policies and features related to markets and resource allocation affected the targeting of productivity-focused interventions, often leading to misallocation of resources and low business dynamism.
- Policies aimed at internationalisation were marked by protectionism. There were also policies to attract FDI, but their focus was on import substitution (and not on export-led growth).
- The foundations for productivity policies were marked by crony capitalism as a pervasive feature of the Brazilian economy.

Furthermore, a broad look at the typology in table 1 shows that:

- Stylised pro-productivity policies of low-income economies are present even in recent periods, as in the case of industrial policies based on sector-specific tax incentives for investment and local content.
- The policies for technological and structural change and the policies for markets and resource allocation are marked by several anti-productivity initiatives or features leading to misallocation and reducing business dynamism.

4 Markets and resource allocation policies

In this section, we delve deeper into the markets and resource allocation policy group, focusing on the features that create barriers to entry and foster rent-seeking activities. Our basic argument is that markets and resource allocation policies in Brazil have not been sufficient to foster competition and to address the features of the Brazilian economy that negatively affect the targeting of policies focused on the direct drivers of productivity.⁶ Particularly in the area of product markets and competition policies, Brazil has been marked, over the entire period, by difficulties in doing business (which created barriers to entry) and by the survival of rent-seeking activities. As a result, on several occasions, the industries that benefited from incentives for investment, for example, were not the most competitive, but incumbents or industries with strong political connections. The poorly targeted subsidies for investments therefore resulted in lower-than-expected labour productivity gains, as they ended up favouring rent-seeking activities.

Numerous studies emphasize the role of markets and resource allocation as key mechanisms for increasing aggregate productivity:

- Regarding product markets, difficulties related to the regulatory framework and the public services that affect entrepreneurial activities result in misallocation of resources and reduce business dynamism. Generically called “business environment” or “ease of doing business”, these regulations and services involve various types of procedures adopted throughout the life cycle of firms, such as starting a business (Djankov et al., 2002; Klapper, Laeven & Rajan, 2006), getting credit (Djankov, McLiesh & Shleifer, 2007), or paying taxes (Djankov et al., 2010). These procedures involve multiple stages and require significant resources (time and money).⁷ Simpler procedures favour investment, but more complex procedures tend to generate economic distortions (barriers to entry and misallocation, for example) (Besley, 2015).

⁶ The policies focused on the direct drivers of productivity are the ones aimed at the accumulation of factors of production and at technological and structural change.

⁷ Canuto (2025) argues that a favourable business environment contributes to productivity through several channels:

- Reduction of costs and inefficiencies, by mitigating excessive bureaucracy, regulatory instability, and corruption;
- Incentives to investment, through increased expected returns on productive activities;
- More efficient resource allocation, by facilitating the reallocation of capital and labour to more productive firms and sectors;
- Promotion of innovation, by encouraging competition; and
- Support for formalization and scale, through simpler and more proportional regulatory frameworks.

- Regarding allocation policies, the literature has shown that “differences in the allocation of resources across establishments that differ in productivity may be an important factor in accounting for cross-country differences in output per capita” (Restuccia & Rogerson, 2008). Empirical evidence reinforces this perception: Restuccia and Rogerson (2008) “show that policies which create heterogeneity in the prices faced by individual producers can lead to sizeable decreases in output and measured total factor productivity (TFP) in the range of 30 to 50 percent”. Hsieh and Klenow (2009) calculate “manufacturing TFP gains of 30%–50% in China and 40%–60% in India” when capital and labour are hypothetically reallocated to equalize marginal products to the extent observed in the United States. Similarly, Syverson (2011) surveys and evaluates empirical work addressing the question of why businesses differ in their measured productivity levels. In particular, he argues that “microdata is building the case that a substantial portion of these productivity gaps arise from poor allocation of inputs across production units in developing countries”. As a result, public policies that distort resource allocation and interfere with the competitive selection of firms reduce aggregate productivity by allowing less productive firms to remain in the market.

As for markets, measures of the business environment have been proposed by the World Bank involve: *i)* Ease of Doing Business (EDB); *ii)* World Bank Enterprise Surveys (WBES); and *iii)* Business Ready (B-Ready).⁸

- Launched in 2002 and discontinued in 2021, the World Bank’s EDB measures aspects of business regulation affecting small and medium-sized domestic firms defined based on standardized case scenarios and located in the largest business city of about 190 economies (Djankov, 2016). Up to the early 2020s, it was the most widely used metric of the business environment. EDB is essentially a composite indicator of a series of parameters associated with the regulatory framework and the public services related to entrepreneurial activities. As stressed by Canuto (2025), the EDB definition implies a vision of the business environment as a set of legal and administrative regulations. In essence, a higher EDB score indicates that the business environment is more favourable to starting and operating a local firm. Although controversial for a number of reasons (Adhikari & Whelan, 2023), EDB has been widely used in international comparisons of the business environment.
- In contrast to EDB, WBES emphasize practice over norms (Canuto, 2025). According to the World Bank, WBES “are nationally representative firm-level surveys with top managers and owners of businesses in over 160 economies, reaching 180 in upcoming years, that provide insight into many business environment topics such as access to finance, corruption, infrastructure, and performance, among others”.⁹
- The B-Ready report assesses the regulatory framework and public services directed at firms, and the efficiency with which these aspects are combined in practice (World Bank,

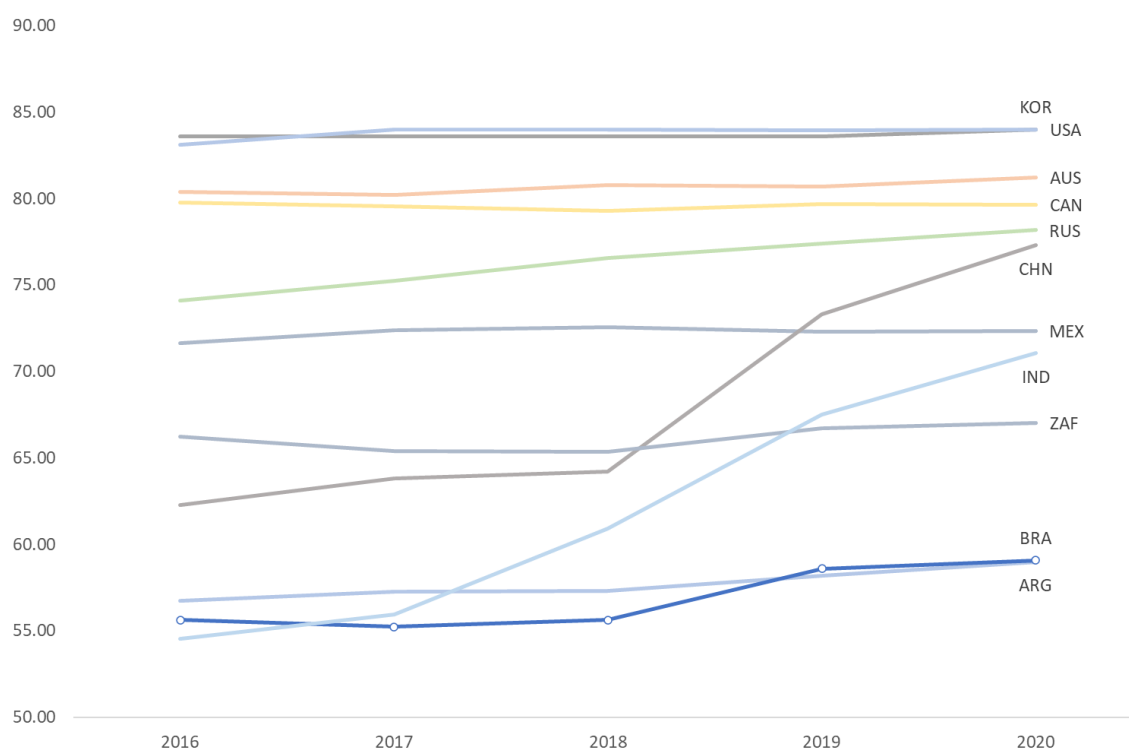
⁸ Of course, other measures of specific elements of the business may also be used. This is the case of “rule of law” indicators or of the Tax Complexity Index, which “measures the complexity of a country’s corporate income tax system as faced by multinational corporations” (<https://www.taxcomplexity.org/>).

⁹ Canuto (2025) exemplifies: “while the EDB may indicate that starting a business takes five days, the WBES may reveal that, in practice, the process takes weeks due to administrative delays or informal requirements”.

2024). It includes both de jure information and de facto measurements, collecting information directly from firms based on their experiences with the business environment. As a result, it combines the normative elements of EDB with the practical aspects observed in WBES (Canuto, 2025).

To date, B-Ready has yet to include comprehensive information about Brazil. Nevertheless, data from the EDB and the WBES, despite their different natures, provide a similar “big picture” of the Brazilian economy. Therefore, we decided to compare the evolution of EDB scores for a selected group of countries between 2016 and 2020 (Figure 4). In addition to Brazil, the group includes major Latin American economies (Mexico and Argentina), the other countries that form the BRICS acronym (the Russian Federation, India, China, and South Africa), and several developed countries (the United States, Canada, Australia, and South Korea).

Figure 4
EDB scores, 2016 – 2020, selected countries



Source: elaborated by the authors using data from the World Bank.

It is clear from figure 4 that the small improvement in the EDB observed in Brazil between 2016 and 2020 was not enough to bring the country closer to the others in the sample (except for Argentina, which was marginally surpassed by Brazil over the period). The significant improvement observed in China and India over the same period is particularly noteworthy and places China at a level not far from the developed countries in the sample.

According to Canuto and De Negri (2017), an analysis of EDB dimensions also shows that in most cases “Brazil’s business environment not only takes a toll in terms of waste in the use of resources, but also does not create incentives toward innovative, technology-adaptive,

productivity-enhancing firm behaviour”. They also report the negative consequences of Brazil’s business environment for productivity:

- Subtracting productivity at both enterprise and macroeconomic levels by leading to resource waste in value-less activities;
- Stifling competition, as it raises barriers to entry and to the contestability of markets, especially for smaller firms unable to dilute the costs of doing business through scales; and
- Stimulating informality.

There are several pieces of evidence showing the negative impacts of the difficulties in doing business on productivity, investment, and growth indicators in Brazil.

- Mation (2014, p. 197), drawing upon a fixed-effects panel analysis, concludes that “a 1% improvement in the business environment towards the global frontier would yield labour productivity gains of USD 110 and 0.0047 of TFP” (authors’ translation). While enumerating a series of methodological caveats applicable to this type of estimation, he argues that his findings can serve as a basis for approximating the orders of magnitude of the potential productivity gains stemming from improvements in the business environment in Brazil.
- Based on panel data from 81 countries (2005-2011), Cavalcante (2015) used fixed-effects panel regressions to estimate the impact of EDB improvements on capital stock per worker and subsequently on labour productivity. Projections for Brazil indicated that matching the business environment of reference countries like China, Poland, Turkey, Mexico, or Chile could significantly boost investments (from 15% to 45%).
- Curado and Curado (2018) conducted an empirical study on the relationship between growth and the business environment, focusing on Brazil, using the World Bank’s EDB distance to frontier score for 2010-2015. Controlling for educational quality and political risk, their results suggest a statistically and economically significant causal link between a country’s EDB and its per capita growth. They estimate that if Brazil achieved the average institutional development level of Latin America (excluding Brazil), it could see an additional annual growth of 0.29%. Matching Chile’s business environment could boost Brazil’s annual growth by 0.90 percentage points.

In addition to product markets, allocation policies strongly affect the low levels of productivity in Brazil. Essentially, these policies favour an excessive participation of low-productivity firms or sectors in the local economy (Barbosa Filho, 2025). The empirical evidence, no matter the approach or the timeframe, is abundant and pervasive. Some of the papers focus on showing that resources are suboptimally allocated among firms or sectors, while other papers focus on the impact of public policies on misallocation. Some examples of the first group are indicated below:

- Gomes and Ribeiro (2014) show a decreasing covariance between firm size and productivity, suggesting that reallocation has not played a significant role in boosting aggregate productivity in Brazil.

- Vasconcelos (2017) analyses misallocation in the Brazilian manufacturing industry and concludes that this segment “operates at about 50% of its efficient product”. He finds no evidence that Brazil’s high tax burden is the main cause of the significant misallocation.
- Veloso, Matos, Ferreira, and Coelho (2017) argue that Brazil's lower productivity is primarily due to the intrinsically lower productivity levels within its sectors compared to more productive countries. While shifts in the productive composition of the Brazilian economy could enhance aggregate productivity, the core issue remains the low productivity of individual sectors.
- Low productivity is pervasive across all sectors of the economy and cannot be attributed to misallocation of factors between sectors, but rather within sectors (De Mello, Duarte & Dutz, 2018).

A second group of papers addresses the impact of public policies on misallocation:

- Appy (2017) discusses the peculiarities and distortions of Brazil's tax system, including those affecting relative prices and the inefficient allocation of resources across different sectors and regions. He further notes that special rules for small and medium-sized enterprises (SMEs) in Brazil, though welcome for decreasing compliance costs, also result in a reduction in taxes for these companies. This, in turn, created incentives for the existence of low-productivity firms.
- Barbosa Filho and Corrêa (2017) examine the effects of public policies that influence the process of firm selection and resource allocation. They show that low-productivity firms manage to survive longer than it would be expected. Those authors also discuss tax policies that disproportionately tax more productive firms (compared to less productive ones).
- Several other works address misallocations resulting from regional policies. Niquito (2022) points to the presence of regional misallocation resulting from free trade areas in Brazil, and Cavalcante (2025) argues that many firms that benefited from fiscal incentives to establish themselves in the poorer regions of the country could have done it without relying on these subsidies, as their location is primarily determined by factor endowments.

The magnitude of the potential distortions is evidenced in the Brazilian Federal Revenue’s tax expenditures reports, which indicate that tax waivers for federal taxes in Brazil amount to nearly 5% of GDP and over 20% of total revenue. Many of these waivers stem from programs lacking detailed evaluations. For example, regarding the main item within these tax expenditures (“Simples Nacional”, a simplified tax regime for SMEs that accounts for over 20% of all tax waivers), Appy (2022) points out that “the few methodologically consistent studies available suggest that [its] impact on the formalization of businesses and jobs is small or non-existent, and that simplified tax regimes may be contributing to a significant reduction in productivity in Brazil” (authors’ translation). About the same initiative Dutz et al. (2017) argue that “not only is the fiscal cost of business support policies high, but there are also serious concerns about its effectiveness and efficiency”. In short, misallocation in Brazil stems from bad incentives, which, in turn, result from public policies that tend to favour low-productivity firms and sectors.

5 Obstacles to the adoption of more efficient pro-productivity policies

In the previous section, we showed that markets and resource allocation policies in Brazil have been characterized, over the past decades, by barriers to entry (as a result of a high degree of bureaucracy and administrative regulation) and rent-seeking. As reflected in low EDB indicators, many regulations obstructed competition, contributed to resource misallocation, and prevented productivity gains, even in the presence of pro-productivity policies.

In this section, we discuss the factors that have hindered reforms and the adoption of more efficient policies aimed at markets and resource allocation, as well as the reasons why certain anti-productivity policies or features have remained pervasive and resilient over several decades in the country.

As previously discussed, the periods of economic growth in Brazil were typically accompanied by strong state intervention (e.g., the 1950s to the 1970s, or even in the late 2000s and early 2010s). The central idea was to address market failures (for example, tax waivers, import tariffs, or subsidized BNDES long-term credit for investments) in a kind of state-led capitalism. Overall, “government intervention to protect selected sectors and provide specific benefits has been seen as a legitimate, and necessary, mechanism to induce economic development” (Lisboa & Latif, 2013). The intervention has assumed various forms over time, including “Leviathan as an entrepreneur”, “Leviathan as a majority investor”, and “Leviathan as a minority investor” (Musacchio & Lazzarini, 2014, p. 8). From the 1990s onward, these policies have echoed Evans’ (1995) concept of “embedded autonomy”, which emphasizes that state effectiveness depends on a balance between bureaucratic independence and strong societal linkages. They also align with Amsden’s view of the Korean chaebols. However, several authors oppose “state-led capitalism” to “crony capitalism”.

Lazzarini (2011), for instance, argues that “for some economists, crony capitalism is a kind of market distortion, in which projects or investment decisions are influenced by networking and political criteria rather than more impartial assessments of their economic merit” (authors’ translation). Limoeiro (2021) relies on Lazzarini (2011) to argue that “the prevalence of ‘*capitalismo de laços*’ [...], or crony capitalism, in Brazil has fostered an environment where close ties to political authorities yield economic advantages, distorting market mechanisms and hindering efficient resource allocation”.

That leads him to question the concept of state-led capitalism in the country:

The problem with the notion of state-led capitalism, as discussed by Musacchio and Lazzarini (2014), is that it focuses too heavily on the state and its agents, while overlooking the role of business in shaping the institutional equilibrium. By doing so, it under-theorizes how business elites benefit from the particular form of market economy that emerges. Contrary to what the term suggests, the state is not the sole protagonist; rather, the economy is driven by a coalition between the state and selected actors within the business community. The notion of cronyism better captures the dynamics of this coalition (Limoeiro, 2021).

In other words, the basic argument is that policies originally designed to correct market failures may turn into government failures that ultimately surpass the problems they intended to solve.

Although more explicitly discussed in the 2010s, crony capitalism may be considered a pervasive and resilient feature of the Brazilian economy. In fact, Lazzarini (2011) traces its historical roots to the works of Sérgio Buarque de Holanda, Raymundo Faoro, and Cardoso and Faletto (i.e., by mid-20th century this feature was discussed in Brazil), arguing that connections between public and private actors have long permeated the country's economic history.

Crony capitalism is not only reflected in the difficulties of doing business (which end up creating barriers to entry and favouring the economic agents that have close connections with political authorities), but also in the strategic use of state institutions like the BNDES. While development banks can play a crucial role, evidence from the BNDES between 2002 and 2009 shows that lobbying leads to greater access to subsidized credit (Lazzarini et al., 2015).

As a result, politically organized groups often exert strong lobbying pressure in favour of sectoral incentives or regional advantages (Bonelli, 2014; Mendes, 2014; 2019). The argument is straightforward: whenever benefits are concentrated in specific segments with strong lobbying capacity and costs are dispersed in the population as a whole, distortions tend to be reinforced (see Mendes, 2019). Over time, this configuration has contributed to what Doner and Schneider (2016) frame as a “middle-income trap”, wherein institutional inertia and the entrenchment of interest groups constrain policy reform and hinder the transition to a more innovation-driven growth model.

Moreover, policies initially designed to foster productivity — such as protectionism or targeted tax incentives — may become counterproductive if they persist beyond their optimal timeframe or favour companies only because they are close to the government.¹⁰ This phenomenon reflects the endogenous nature of rent-seeking institutions, which tend to reproduce themselves through the very interest groups that benefit from them (Lisboa & Latif, 2013). As a result, both pro- and anti-productivity policies are filtered through an institutional environment that selectively favours stability over efficiency, reinforcing a suboptimal equilibrium resistant to reform (see Mendes, 2019).¹¹

Recent empirical evidence reinforces the view that crony capitalism is present in Brazil, as shown by composite indicators such as the Elite Quality Index (Casas & Cozzi, 2024).¹² In the

¹⁰ Interestingly, Paul Krugman, in his New York Times column, warns that crony capitalism would be coming to America. Krugman argues that recent trends — including tariff policies favouring connected businesses and the weaponization of immigration enforcement against perceived political opponents — threaten to undermine market efficiency. <https://www.nytimes.com/2024/11/25/opinion/trump-tariffs-deportations.html>.

¹¹ For example, the pandemic led to large subsidies to firms, but the programs lacked proper targeting, as in the case of the *Programa Emergencial de Retomada do Setor de Eventos (Perse)*, which, once initiated, is rarely discontinued. A similar criticism can be levelled against the payroll tax exemption, which mobilizes large lobbies, but lacks a positive evaluation of its impacts.

¹² Another measure of cronyism is the “Crony Capitalism Index by The Economist”, which estimates rent-seeking by calculating the share of billionaire wealth derived from sectors prone to cronyism. However, this index overlooks broader forms of elite capture, focuses narrowly on certain industries, and underrepresents countries like Brazil, where cronyism is deeply institutionalized but not fully reflected in billionaire wealth.

2024 report, it is argued that “elites are a mathematical certainty” but can be high-quality value creators, or low-quality value extractors:

At one extreme, “rentier capitalism” is when “economic and political power allows privileged individuals and businesses to extract a great deal of such rent from everybody else” (Wolf, 2019). In contrast, high-quality elites have a transformative role in the political economy – and on society in general – as, by definition, they give more than they take (Casas & Cozzi, 2024).

Brazil’s relative position on several criteria used in the Elite Quality Index 2024 points to low-quality local elites:

- High inequality levels (position 135th and 140th out of 151 countries in the criteria “top 10% share of pre-tax national income” and “Gini coefficient on net national wealth”).
- Regressive tax system (for example, 130th in the criterion “corporate tax rate”).
- Regulatory capture (76th in “regulatory quality”, 64th in “regulatory enforcement” and 106th in “ease of challenging regulations”).

Even when Brazil ranks around the middle (as in the case of regulatory issues), the local elites seem more extractive than the ones in most BRICS or Latin-American countries. In short, despite the usual limitations of this kind of composite indexes, the data highlight areas where the country performs poorly, reflecting practices that favour value extraction over the sustainable creation of value.

While a forward-looking perspective suggests that eliminating crony capitalism is essential for sustained productivity growth, improvements in coordination, transparency, monitoring, and evaluation mechanisms—as well as enhancements in education and labour quality and initiatives for social inclusion—also contribute to more effective policies targeting the direct drivers of productivity. Recently available disruptive technologies, such as artificial intelligence and big data processing, may help prevent policy mistargeting by integrating systems and flagging when policies are basically supporting the survival of low-productivity firms. Moreover, policies aimed at the direct drivers of productivity can serve as incentives for institutional change, as their outcomes may provide valuable references for properly targeting beneficiaries.

6 Final remarks and future challenges

In this paper, we gathered evidence that productivity in Brazil has not shown sustained growth since the 1980s (section 2) and mapped Brazilian productivity policies (both pro- and anti-ones) according to the typology proposed by Van Ark, de Vries and Pilat (2023, 2024) (section 3). We showed that policies aimed at factor accumulation and technological and structural change did boost labour productivity between the 1950s and the 1970s in Brazil (as they favoured capital deepening and TFP increases), but the focus on the internal market led to industries hardly exposed to international competition and with low appetite for innovation. These policies also created long-term liabilities that undermined the country’s economic performance in the 1980s, culminating in the so-called “lost decade”. Reforms implemented

from the 1990s onward, which focused on improving market efficiency, resource allocation, and internationalisation, contributed to some productivity gains. Nevertheless, the persistent challenges to the ease of doing business and the high degree of rent-seeking hindered creative destruction, led to resource misallocation, and reduced business dynamism. The 2000s and early 2010s saw higher GDP and labour productivity growth compared to previous full decades since the 1970s, but growth still remained low by international standards (compared to most G-20 economies).

In section 4, we deepened the analysis of the markets and resource allocation policies by focusing on the features that create barriers to entry and foster rent-seeking activities. We argued that markets and resource allocation policies in Brazil have not been sufficient to foster competition and to address the features of the Brazilian economy that negatively affect the targeting of policies focused on the direct drivers of productivity (*i.e.*, policies aimed at the accumulation of factors of production and at technological and structural change).

We then turned to the factors that have hindered reforms and the adoption of more efficient policies aimed at markets and resource allocation in Brazil (section 5). We also discussed the reasons why certain “anti-productivity” policies or features have remained pervasive and resilient over several decades in the country.

A broad look at the set of policies and features that affected productivity in Brazil over the period between the 1950s and the early 2020s indicates that, in general:

- The country did implement policies focused on the direct drivers of productivity (accumulation of factors of production and technological and structural change); but
- On several occasions, the policies and features related to the indirect drivers of productivity (markets and resource allocation and internationalisation) hindered creative destruction and obstructed efficient resource allocation and business dynamism; since
- Foundational policies and features (institutions and frameworks) strongly relied on relationships often characterised as “crony capitalism”.

We argued that the prevalence of crony capitalism throughout Brazilian economic history has fostered an environment where close ties to political authorities yield economic advantages, distorting market mechanisms and hindering efficient resource allocation. In the Brazilian case, the main obstacle is not the absence of pro-productivity policies, but rather the pervasive presence of anti-productivity features that reflect the institutional characteristics of the country. That does not mean, however, that there is no room for improving policies focused on the direct drivers of productivity, as many of the usual recommendations remain valid:

- Improve coordination, transparency, monitoring, and evaluation mechanisms, as these are essential components of effective productivity policies. This may involve the creation of dedicated pro-productivity institutions.

- Enhance education and labour quality, especially considering the profound transformations brought about by the diffusion of artificial intelligence and other disruptive technologies.

Moreover, social inclusion and poverty reduction initiatives can also improve the policies focused on the direct drivers of productivity, as they are growth-friendly and help expand the base of human capital and innovation. Other issues like artificial intelligence, climate change, and the breakdown of globalisation will also affect Brazil's future productivity, although it is hard to predict their specific impacts given their disruptive characteristics and pervasive effects across the entire planet.

However, as shown in Van Ark, de Vries and Pilat's (2023, 2024) framework, most of these initiatives are circumscribed by the foundational policies. For example, regarding dedicated pro-productivity institutions (in the sense of "organisations" or "boards"), it seems that only if the institutions (in the sense of "rules of the game") improve, they may play a role in enhancing policy effectiveness. Otherwise, these organisations tend to be captured by some interest group.¹³ The same may apply to control institutions, as they must be insulated from political pressures to avoid their conversion into just another step of the bureaucratic structure without effectively preventing rent seeking.

In an environment where firms obtain better returns by investing in lobbying and legal manoeuvring rather than innovation and risk-taking, rational behaviour at the microeconomic level leads to suboptimal policy outcomes. Coping with these problems seems to be a key condition to improve market efficiency in the country. In order to cope with challenges of that nature, Lazzarini (2011) proposes a set of four actions: more transparency, more political insulation, generalised reduction of transaction costs, and combating anti-competitive behaviour. That may sound unrealistic, because in the Brazilian context, such strategies seem anecdotal, given the depth of institutional weaknesses and the difficulties in disciplining rent-seeking behaviour, but that seems to be the only alternative left to avoid relying on a hardly predictable combination of effects stemming from global disruptions. To conclude, it seems fair to say that Brazil's most important challenge is to deal with the institutional features that undermine the effectiveness of the national pro-productivity policies.

¹³ Brazil has an agency of industrial development (ABDI) originally created to coordinate industrial policies. Over time, however, it became increasingly focused on specific projects.

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