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Structural Change, Labor Market and Employment in Brazil after the 2017 Labor Market Reform

Summary: The objective of this study is to analyze the effects of the set of measures adopted by the labor reform of 2017 on the generation of employment and income in Brazil. The study is based on the literature that highlights the importance of structural change in employment as a key element for economic growth and development, emphasizing that in Brazil, there is still a view that the labor market should take on more flexible work relationships to advance in the improvement of jobs, levels of employment, productivity and income. Subsequently, the article summarizes and critically comments on the main measures of the labor law reforms adopted in post-2017 Brazil. Finally, it presents an analysis of the behavior of the labor market in Brazil between 2012 and 2022 based on data from the PNADC/IBGE survey. The main results of the survey confirm that the labor reform of 2017 has not shown advances in labor market indicators or in the main macroeconomic aggregates of the country. In contrast, the data suggest deterioration in the indicators of employment, income and allocation of workers in occupations with low productivity and income characteristics.

Keywords: Employment, Formal work, Income, Economic growth, Reforms.

JEL: J08, J83, O11, O43.

Beginning in the mid-2000s, the Brazilian economy began a period of relatively high annual growth of 4.5%, on average, between 2004 and 2010 – which resulted in a substantial improvement in employment and income levels in the country. The reversal of the orientation of economic policy, when assuming a more developmentalist character after 2003, was accompanied by important economic and social advances, especially in the labor market, with a significant drop in the unemployment rate, reaching in 2014 the lowest level since 2002.

After 2015, however, the economy had a turning point and entered one of the most serious crises in its history, marked by slow economic growth, high unemployment, contraction of workers' income, increased poverty and inequality.

One of the views on this crisis posited that the problem of unemployment would be in the Brazilian labor market, which was not duly flexible. Thus, the solution to the crisis would depend on labor reforms, characterized by greater labor flexibility, which could reduce the costs of companies, make them more competitive and generate more employment and income for workers.

From this perspective, Brazil implemented a series of changes in the legal rules governing labor relations in the country in 2017, with the justification that labor reform

was a precondition for overcoming the various problems associated with the Brazilian labor market. Hence, the emphasis on the need to modernize labor relations, increase labor productivity and stimulate business competitiveness.

With regard to the effects of the set of measures adopted by the labor reform, it is noteworthy that it caused profound changes in labor relations, in working conditions and in the world of work in general in Brazil. It is the effects of these changes that the present study intends to investigate in light of the literature on the relationship between economic growth, employment and structural change, highlighting the effects of these changes on the labor market, employment and economic growth in Brazil.

We know that the problem that permeates such an analysis is that, in the years that followed after the approval of the labor reform, several factors other than the approved measures have affected the labor market in Brazil, such as the economic crisis associated with the Covid-19 pandemic. These other factors make it difficult to identify the effects of the reform itself. However, this research tries to bring together theoretical foundations, historical and empirical evidence in an attempt to understand the effects of the labor reform on the Brazilian labor market.

The economic literature offers a critical view of the development model adopted by the Brazilian economy in recent decades, highlighting discussions about the progress of regressive structural change Gabriel Palma (2005), Sergio Firpo and Renan Piere (2017) and Paulo Gala et al. (2018). In fact, since the 1990s, the participation of industry in GDP has strongly declined in recent years, reaching only 10% of GDP in 2020, with growth obtained from weak sectors, such as traditional services (trade and personal services, such as restaurants, clothing, hair stylists); infrastructure works (for example, low-cost housing, through the “Programa Minha Casa, Minha Vida”); and other activities that expanded due to the increase in the wage bill, the dynamism of international trade, income transfer, social assistance policies and the expansion of credit.

This trajectory tends to be problematic in the long term because economic development depends on the effort and ability of countries to generate jobs in advanced sectors, that is, in the manufacturing sector and, more recently, in a range of “sophisticated” services, which have a high connection with the manufacturing sector, have high productivity and dynamism (Margaret Mcmillan, Dani Rodrik, and Ínigo Verduzco-Gallo 2014; Gala et al. 2018).

To achieve the proposed objective, this article is structured as follows. After the introduction, the first section discusses the relationship between economic growth, employment and structural change, which emphasizes the relevance of the reallocation of labor from the traditional sectors to the dynamic sectors. The second section summarizes some theoretical and empirical papers on the effects of labor market reforms. The next section reviews and comments on the main measures of the post-2017 labor law reforms adopted in Brazil. The fourth section analyzes the behavior of the labor market in Brazil between 2012 and 2022 based on data from the PNADC/IBGE survey, in the sequence the fifth presents some preliminary results of the labor reform for the Brazilian labor market, considering the limited period of time and also the impact of the global health crisis. Finally, by way of conclusion, a discussion of the main results and

policy implications of the effects of labor reform on working conditions in Brazil is presented.

1. Relationship between Economic Growth and Employment: Theoretical Aspects

One of the most central insights in the literature on economic development is the importance of structural changes. In this literature, the countries that are able to break the barriers of poverty are those that are successful in diversifying their activities beyond agriculture and related segments.

McMillan, Rodrik, and Verduzco-Gallo (2014), for example, emphasize that when labor and other resources migrate to modern economic activities, productivity generally increases and income expands. The speed with which this structural transformation occurs is the key factor that differentiates countries with successful trajectories of economic growth from countries that remain stagnant over time.

In the case of developing economies, the authors emphasize that these economies tend to be characterized by large productivity gaps between different sectors of the economy and significant gaps between manufacturing companies in the same industry. In these economies, if labor and other resources could move from less productive activities to more productive activities, economies would grow even if there was no productivity growth in the sectors, which would be characterized as case of a pro-growth structural change, with the concentration of productive structure in sectors with higher productivity.

The evidence presented by McMillan, Rodrik, and Verduzco-Gallo (2014) indicates that most of the difference between recent growth in Asia, on the one hand, and Latin America and Africa, on the other hand, can be explained by the variation in the contribution of structural change to general work productivity. In the case of many Latin American and sub-Saharan countries, the patterns of structural change have served to reduce rather than increase economic growth since the 1990s, which contributed to poor performance in terms of economic growth in these countries. Conversely, in many Asian countries, the finding is in the direction of structural changes for economic growth.

Gala et al. (2018) emphasize that the possibilities of mechanization and specialization are greater in manufacturing than in other sectors, also highlighting the potential of the so-called “sophisticated services” such as finance, engineering, design, accounting, consulting and telecommunications, which are considered high productivity activities that are connected with the manufacturing industry. In these activities, a greater division of labor, potential for technological advancement, economies of scale, agglomeration and networks predominate, which produce impacts within and outside the manufacturing sector. The expansion of sophisticated services, according to the authors, has been of great importance in countries such as India, Sri Lanka and Singapore, and in their *cross-country* analysis, it was found that an increase in the degree of economic complexity can be obtained when the relative share of workers engaged in manufacturing and sophisticated services expands.

The discussion about the importance of specific sectors for the process of economic growth and development is quite fruitful, among other reasons because analyses based on neoclassical-inspired economic models do not distinguish the importance of a particular sector of activity for growth. Therefore, the contribution that each individual sector provides in the generation of the total product, as both agriculture, industry and simple or sophisticated services, and even activities related to research and development, are indifferent in terms of their contributions to product growth in mainstream models of neoclassical inspiration.

An alternative view has gained prominence in recent decades mainly linked to post-Keynesian/neo-structuralist authors and it makes an important contribution by emphasizing that the development process is not sector neutral but necessarily involves structural change. In this process, the manufacturing sector has a central role given its ability to generate and propagate technological changes, such as changes in productivity growth – sectoral and total, and changes in the generation of positive externalities and synergies, in addition to contributing to the sustainability of the balance of payments, generating trade gains and, for this reason, being intensely related to the *catching up* process Palma (2005).

Therefore, the central idea is that throughout the development process, the resources of a country need to be reallocated from traditional activities such as agriculture and mining, for example, to modern economic activities, such as the manufacturing industry, which is a factor that results in increased total productivity and sustained growth Gaaitzen Vries, Marcel Timmer, and Klaas Vrieszero (2013).

In this sense, a transition to be made by low-income countries that involves the exit from a condition in which agriculture is predominant and represents a significant portion of total employment to a situation in which the manufacturing sector expands. In this intermediate phase, the industry has a key role in increasing sectoral and total economy productivity and continues expanding until reaching a peak in the level of average income, from which it begins to decline in relative terms. In this stage, the economy moves to a new configuration reaching high levels of *per capita* income, with the predominance of the services sector to which the largest portion of the workforce moves Neil Foster-McGregor and Bart Verspagen (2016).

Given the above, the following sections will discuss theoretical and empirical papers on the effects of labor market reforms. This will help us to understand whether such changes are aligned with the theoretical and empirical literature that relates structural change and growth and with the expected of labor markets reforms

2. Theoretical Foundations and Empirical Evidence on the Impacts of Labor Market Reforms

The theoretical and empirical debate on the effects of labor law reforms on the labor market stems from the discussion that, in the 1970s, highly regulated relationships in European countries, especially the high cost of dismissal, implied reluctance on the part of companies to hire new workers. This was, therefore, an important factor to explain the low performance observed in employment growth in Europe in this period.

Inserted in this context, the work of Samuel Bentolila and Gilles Saint-Paul (1994) proposes a theoretical model showing that an increase in dismissal costs reduces the company's willingness to hire and dismiss employees. The effect of these costs on labor demand is typically negative for low values of labor market adjustment costs, but tends to be positive for large values of these costs.

Tito Boeri and Pietro Garibaldi (2007) also investigate whether the reforms that made the labor market more flexible had effects in terms of job growth. To understand this relationship, the authors start from the asymmetrical reforms in the Employment Protection Legislation (EPL) carried out in several European countries in the 1990s. Through a series of marginal reforms that liberalized the use of temporary contracts, leaving practically unchanged the legislation applicable to the stock of workers employed on a permanent basis. In theoretical and empirical terms, the article argues that two-tiered labor market reforms are transitory in terms of their effects on job creation. However, in a dynamic theoretical model of job search under uncertainty, the article predicts that the consequence of the reforms, in addition to the increase in employment, also implies the reduction of job inaction and the mean and cross-sectional variance of labor productivity.

Alfred Kleinknecht (2020) starts from the context of the productivity slowdown after 2005, discussing theoretical arguments of how and why supply-side labor market reforms harmed innovation and productivity. According to the author, this occurs in industries where the long-term accumulation of tacit and company-specific knowledge is important for innovative competencies, as in this case knowledge tends to be embedded in people and high rates of labor turnover hinder the accumulation of knowledge. For the author, this is the case for the medium-high and high technology sectors, as for the low technology sectors, as well as for high technology entrepreneurship, where the cumulateness of knowledge is low, the effects of the referred reforms are low or nonexistent. The article's conclusions go towards discussing the implications for economic and political theory, emphasizing that there are a series of trade-offs between static and dynamic efficiency, so that what looks good for an efficient allocation of scarce resources can be counterproductive for the innovation processes.

Kleinknecht (2020) also summarizes arguments and empirical investigations of how labor market reforms can influence innovation policies and productivity. The first argument is that supply-side reforms change the power relations between capital and labor, leading to weaker wage growth, which in turn reduces labor productivity growth. The first argument is that supply-side reforms change the power relations between capital and labor, leading to weaker wage growth, which in turn reduces labor productivity growth through a slower speed of technology diffusion that saves labor. In terms of empirical evidence on this Robert Vergeer and Kleinknecht (2011) show that the five countries that advocated supply-side labor market reforms (USA, United Kingdom, Canada, New Zealand and Australia) in the 1970s and 1980s, showed weak growth in real wages and labor productivity until the mid-1990s.

The second argument highlighted by Kleinknecht (2020) refers to the discussion that easier dismissals and higher labor turnover create unfavorable conditions for organizational learning and knowledge management, in particular, if knowledge is "embedded" in people. About this, Viral V. Acharya, Ramin P. Baghai, and Krishnamurthy

V. Subramanian (2010) present empirical evidence analyzing patent data and patent citations in the United States and find that an improvement in protection against dismissals led to a higher number of patents and patent citations in the United States.

Finally, the last argument that Kleinknecht (2020) draws attention to is that the decentralization of wage negotiation increases the gap between innovative leaders and laggards, as it allows for a slower adoption of advanced process technology in laggard companies. About this, Dan Andrews, Chiara Criscuolo, and Peter N. Gal (2015) present empirical evidence at the microeconomic level for OECD countries that suggest that the trend towards decentralized wage bargaining may be an explanation for the growing productivity gap between larger firms and laggards from a Schumpeterian perspective

Therefore, the academic debate on labor reform involves the discussion of the relationship between the dynamics of contemporary capitalism and the challenges on the discussion of a public regulation of labor established from a politicization of labor relations in which social agents directly participate, unlike private regulation, which is built based on the self-regulated market, with individualized relationships. The positions in this debate are located between two poles, as follows: (1) the defense of a structure of the labor market with implications for the quality of social relations; and (2) the affirmation of business, which highlights the need for greater flexibility in hiring, in the use and in the remuneration of the work.

In the version that dominates the economic debate and imposes itself as common sense, there is a direct relationship between the cost of labor and unemployment. The origin of this relationship goes back to neoclassical economic theory and its updates, which assume that if the cost of labor decreases, employment increases because companies can produce and sell in the market without reducing their profits. In addition, the increase in profit from cost cutting can increase savings in the economy, increasing investments and, consequently, jobs.

Thus, greater labor flexibility could reduce the costs of companies; as a result, they would become more competitive and could generate more jobs. Therefore, the problem of unemployment is explained by the fact that labor markets are not sufficiently flexible (Edward J. Amadeo et al. 1994; José Pastore 1995).

3. Labor Reform in Brazil: Theoretical Arguments and Main Measures Adopted

Aligned with the vision that aims to make the labor market more flexible, the changes imposed by the reforms discussed for the Brazilian economy aim to formalize the restructuring in the production process, that is, actions that can be considered strategies consistent with the “new spirit of capitalism” Luc Boltanski and Eve Chiapello (2009), with the purpose of increasing the productivity and competitiveness of companies introduced in a context of greater competition.

In this context, in the 1990s, specifically in 1994, 1996, 1998 and 1999, especially during the Fernando Henrique Cardoso administration, a set of changes were implemented in the legislation to promote the flexibility of the labor market and that addressed the characteristics of new precarious work relationships.

This set of changes in the 1990s led to precarious working conditions, understood as an increase in the precarious nature of working conditions, with the expansion of salaried work without a license and self-employment (self-employed) and identified by the increase in work by time, without fixed income, or as part-time work. Another consequence is the process of deterioration of labor relations, with the expansion of work deregulation, temporary contracts, false work cooperatives, contracts by company or even unilateral contracts Jorge Mattoso (2000), this scenario can be characterized by the absence of contribution to social security and, therefore, without the right for retirement.

Another reform was presented in 2016, proposal N°. 6787/2016. At the end of the text, the following reasons were presented to justify its presentation: appreciation of collective bargaining; reduction in labor judicialization; improvement in the work environment; increased productivity of companies; reduction in informal employment; and finally, an increase in the supply of jobs.

Approved in 2017, the labor reform, Law N°. 13,467/2017, was an instrument of the process of the deconstruction of rights that has been taking place in Brazil since then. It is supported on a tripod that promotes the dismantling of social protection; deepening of the flexibility process of the aspects that govern the employment relationship; weakening of public institutions and trade union organization; and individualization of risk, condemning Brazilian workers to social vulnerability.

The tonic of rhetoric is always the issue of modernization. To achieve the intended modernization, the reform altered more than 200 points of the Consolidation of Labor Laws – CLT, which concern the capital-labor relationship, that is, the labor contract, union relations, and legal issues arising from the labor claim.

Among the main points of the 2017 labor reform, the Intermittent Labor Contract, which, although controversial, was one of the main bets of modernization of labor relations in Brazil, and had its legislation inspired by the United Kingdom model. The argument is that this type of contract introduces a beneficial flexibility in the labor market, contributing to reducing unemployment and benefiting people who do not want or cannot have a regular employment contract, such as young students and mothers with small children.

The adoption of this type of contract, and others that also do not ensure full labor protection for workers, is closely related to the recession and the need for companies to reduce costs, with the counterpart being the generation of low-wage jobs that are mostly below the minimum wage, and given the format of this type of workforce hiring is a fact that is not positive for the social protection of workers Rinaldo Galete (2022).

The growth of this type of employment contract, as well as other types of non-regular work, such as part-time work, outsourced work and autonomous work, is linked to an increasing of the precariousness in labor market and reduced income. Thus, low-quality and low-wage jobs are generated Galete (2022). This is because the salary depends on the number of hours worked, which is decided by the employer, with no way to predict the monthly income¹.

¹ For this reason, the IRS determined that it will be up to the worker to pay the difference between the contribution on the paycheck and the minimum required by Social Security. Currently, an instruction

It is necessary to consider substantive modifications to the CLT. These changes, centered mainly on changing the source of labor rights, attributed a status of prevalence to individual employment contracts, and not to public regulation, at important times of the employment relationship, and in essence commodifying it. At the same time, it is privileged, through the new wording of Art. 620 of the CLT, the decentralization of collective bargaining, with the attribution of more value to Collective Labor Agreements² than the Collective Labor Conventions³, although this implies the prevalence of a less favorable norm for employees.

These are changes that occurred, in summary and mainly, in the following points, in addition to the introduction of procedural rules burdening the lawsuits and placing obstacles to access the Judiciary: legitimization or expansion of ways to hire the workforce, such as the intermittent contract, in part-time and temporary time; expansion of outsourcing to any and all activities; the introduction of hiring an autonomous worker; workday and use of workforce; remuneration; hygiene and safety at work; the role of unions and the source of resource allocation, such as the suppression of assistance for contract terminations, which was until then mandatory for employees with more than one year of employment; in addition to the elimination of the so-called Union Tax, which became optional after the 2017 labor reform.

In addition to the flexibilization trends in the forms of hiring labor that are being stimulated in labor reform, there has been a worsening and expansion of processes and old forms of flexibilization, among which is the liberalization of outsourcing⁴.

Another possible expression of outsourcing is the *home office* or teleworking. In a very synthetic way, the reform modified the central elements of the employment relationship, since it expands the possibilities of using modalities of fixed-term employment and introduces the figure of the intermittent contract, the permanent self-employed worker and the *home office*; it enables numerous ways of making the use of the worker's life time more flexible in favor of the company and allows the advancement of variable remuneration and the payment as non-salary. In other words, it constitutes a system that expands the power and freedom of capital to determine the conditions of employment, use and remuneration of labor.

Normative No. 1867/2019 of the Internal Revenue Service attributed to the social security contribution of the intermittent tax worker, recognizing him as mandatory insured. However, in order to maintain coverage for the receipt of sickness benefits, maternity salary, retirement, among others, the worker must supplement, at his or her own expense, contributions when the perceived remuneration is less than the minimum wage.

² Concluded between workers' unions and each company, covering only employees of that company.

³ Celebrated between workers' unions and employers' unions, covering the whole category, and therefore tended to be more robust.

⁴ Outsourcing is another expression of the company's workforce management strategy, as the contractor continues to have control and influence in determining the product or service over in the contract. Labor reform encourages outsourcing by establishing greater distance between the legal responsibilities of the service taker and the contractor and allowing it to occur at any level of activity. The labor reform approved two laws regulating the labor force, allowing its adoption in an unrestricted way in the company's end-activities, previously sealed by jurisprudence, and began to allow outsourcing in all end-activities of the company. With these changes, the legislation favors not to protect workers in new occupations, and provides a range of flexible and precarious possibilities of hiring work, so that precariousness becomes a characteristic feature of these new occupations.

Among the new modalities of work organization, teleworking comprises those activities that can be performed outside the company (physical space) and can be organized in a network, which is made possible by the technology. Teleworking is a form of work performed outside the central company and the production center and involves a new technology that allows for separation and facilitates communication. Teleworking allows transfer part of the costs and risks of the economic activity to the employee. In addition, the labor reform ensures that these companies can have a workforce without working hour's limits, without the right to vacations and other protections.

In relation to overtime, the dynamics of the labor market, flexibilization and labor reform have changed their nature by trivialization. With the labor reform, the bank of hour, which is one of the compensation mechanisms that lead to the denaturation of overtime, had its use intensified as a tool for unilateral working time management. New deadlines for compensation were waived with the need for collective bargaining.

The bank of hours was already consolidated as a negotiation practice at the time of the 2017 reform. In this sense, the reform was an instrument to legalize practices already underway and to bind public institutions (Supervision of the Ministry of Labor and the Judiciary – Labor Justice) to avoid hindering companies from expanding their power to determine, preferably with union consent, the use of the workers' lifetime.

In addition to reducing labor costs, the reform stimulates variable remuneration, especially through PLR and premium payments, with the purpose of linking remuneration to fluctuations in economic activity and the performance of workers and the company. Nevertheless, it is used to implement the human resources policies of companies to pressure the worker to achieve new goals. The PLR is considered a bonus, and therefore, its value is not incorporated into wages. Therefore, this compensation amount does not include the portion in which charges and social security and labor rights are levied, i.e., variable remuneration weakens the sources of social security financing and social policies that are linked to the payroll. It also has negative effects on the health of workers, given the pressure for results, and tends to generate competition among workers and break solidarity.

Some empirical works implemented for Brazil corroborate this result. Gustavo P. Serra, Ana Bottega, and Marina S. A. Sanches (2022) carry out an exercise evaluating the effects of the 2017 labor reform on the unemployment rate in Brazil. To do so, they employ the synthetic control method, building a synthetic version of Brazil without reform from a sample of 11 countries in Latin America and the Caribbean. With this, they compare the evolution of the unemployment rate in Brazil post-reform with the evolution in the synthetic control group, without reform. Taking the results for Brazil and the placebo tests together, the authors find no evidence that the labor reform had any effect, either positive or negative, on the unemployment rate. The work by José D. Krein, Marcelo Manzano, and Marilane O. Teixeira (2021) also finds evidence that, after the labor market reform in 2017, the greater freedom of companies to hire without following the protective measures of the legislation, generated more occupational opportunities in private employment without a formal contract and in self-employment, that is, people kept work, but not necessarily included in formal sector. Additionally, Andressa L. Nulle and Cássio S. Moreira (2019) showed that the reform of

the 2017 labor laws contributed to an increase in informality, a reduction in social security contribution, what are linked to the precariousness of occupations.

In addition, there is empirical evidence to capture some of the effects of labor reform on the labor market, employment and income distribution in Brazil, demonstrating that the labor reform of 2017 is well below the expected results; in contrast, it has further increased the precariousness of relations of work and working conditions in Brazil, further aggravating the already fragile social conditions in the country Galete (2022).

By way of conclusion, it should be noted that the labor reform, in addition to not fulfilling all its promises, was an instrument of the process of deconstruction of rights that has been taking place in Brazil since the 1990s. The labor reform promotes the dismantling of social protection; deepening of the flexibility process of the aspects that govern the employment relationship; weakening of public institutions and trade union organization; and individualization of risk, condemning Brazilian workers to social vulnerability.

4. The Behavior of the Brazilian Labor Market since 2012

Historically, as highlighted in the previous section, unemployment, low income and informal work characterize the Brazilian labor market. There are countless reasons for such conditions, from historical elements and relationships between social classes in the country to issues related to worker productivity and current labor legislation (Claudio S. Deddeca and Paulo E. A. Baltar 1997; Deddeca 2005).

The fact is that Brazilian workers have low rates of formalization of work, low average income and, constantly, with the setbacks of the Brazilian economy, they face high unemployment rates. The diagnosis of this issue went through different phases in Brazil, highlighting, according to Deddeca (2005), the prevailing view in the government in the mid-1990s that the problem of unemployment in Brazil was the model of institutional regulation, a view that neglects more complex factors and the historical roots of the issue. Since then, the diagnosis of the need to make the labor regulation model more flexible in Brazil has gained momentum to enable it to adhere to the new operating conditions of the economy, while the other conditions of unemployment in the country are neglected. The idea of making labor relations in Brazil more malleable gained even more momentum with the opening of trade in the early 1990s.

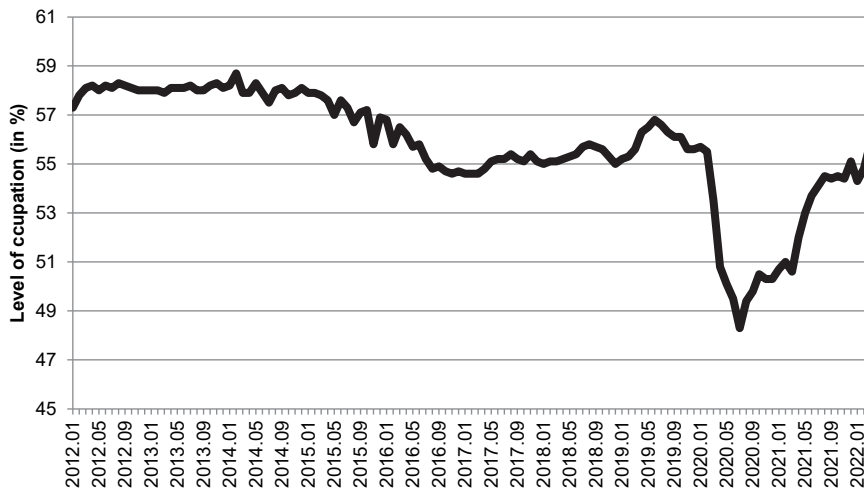
In that period, in face of productive internationalization and greater commercial openness in Brazil, unemployment increased substantially, and from 1990 to 1999, more than 5.5 million people became unemployed, despite the strong movement of outsourcing, subcontracting and weakening of work relationships. Thus, contrary to what was expected, the flexibilization of labor relations led to a worsening in the labor market during this decade Deddeca (2005).

Even in the face of such evidence, this misdiagnosis remains in the debate about the labor market in the country throughout the 1990s but loses strength in the early 2000s, given the favorable results observed after 2003 in the labor data and employment in the country, such as reduction in the unemployment rate, better formalization of work, continuous increase in the minimum wage and increase in the average income

of the workers, a condition that results, according to Laura B. Carvalho (2018), from the good phase that the Brazilian economy was going through.

However, in the last decade – the period from 2012 to 2022 – the good results of the Brazilian economy show signs of wear, and the labor market shows unfavorable results again, which rekindles the reformist momentum, and the changes in labor regulation are indicated as a solution to the problems of work and employment in Brazil.

To illustrate how the labor market data have behaved in Brazil in the last decade, it is first necessary to observe Figure 1, which shows the trend of the labor force occupation level⁵.

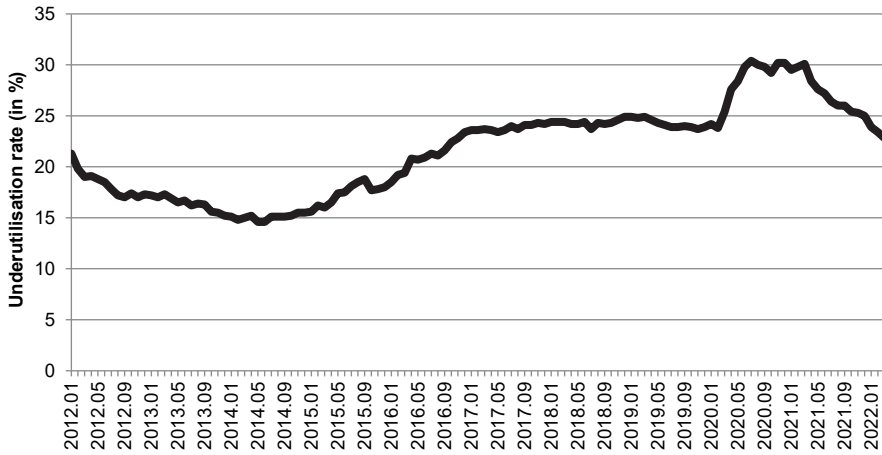


Source: Continuous PNAD, monthly and seasonally adjusted series (Instituto Brasileiro de Geografia e Estatística - IBGE 2022a).

Figure 1 Level of Workforce Occupation in Brazil for People Aged 14 Years or Older - in % - from January 2012 to March 2022

It is possible to infer (Figure 1) that the occupancy rate has been decreasing in the last decade and does not exceed 60%, which shows the low dynamism of the labor market in this period, reflecting the low growth of the economy. Another highlight that should be mentioned, as a characteristic of employment and work in Brazil in the last decade, is the underutilization of the labor factor, which is the situation in which the worker enters the labor market fewer hours than he would like or is when not occupied. The trajectory of this indicator in the last decade (Figure 2) indicates that there is a drop in the level of occupation of individuals, in line with the data presented in Figure 1, and that employed individuals work fewer hours than they are willing or would like to work.

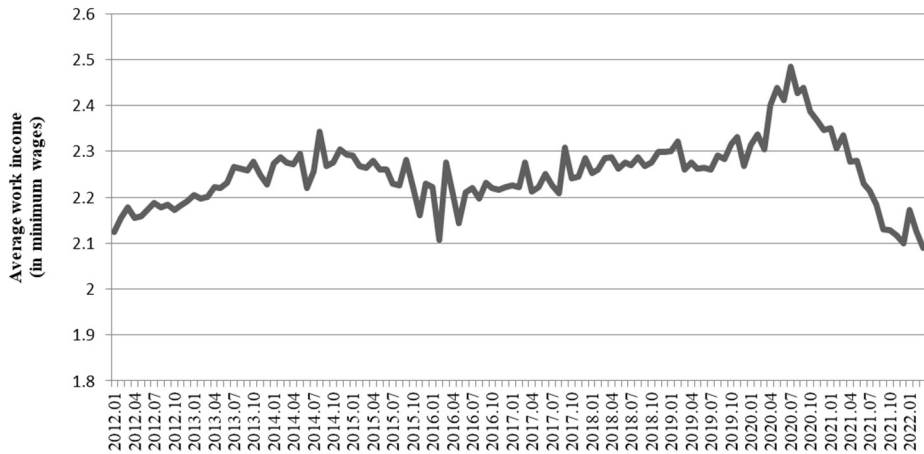
⁵ Data for the labor market are presented for the period after 2012, as this is the beginning of the dissemination of data from the continuous PNAD of IBGE.



Source: Continuous PNAD, monthly and seasonally adjusted series (IBGE 2022a).

Figure 2 Combined Rate of Unemployment and Underemployment Due to Insufficient Hours Worked - in % - from January 2012 to March 2022

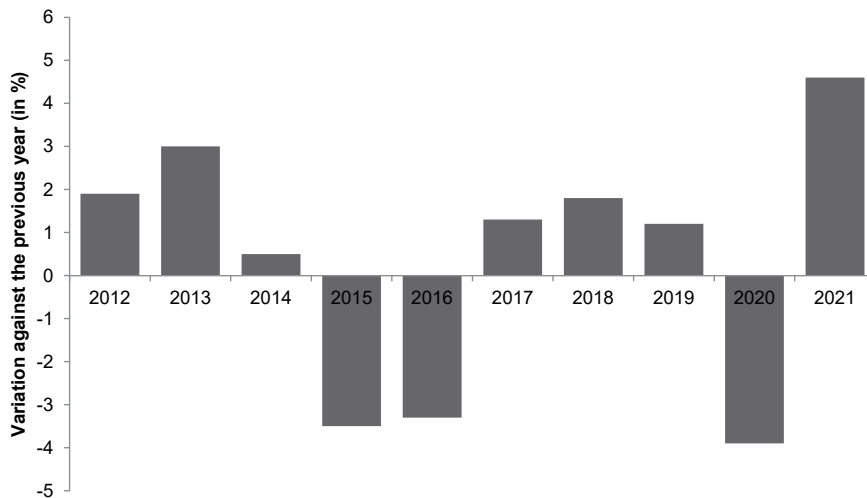
Concerning the average labor income (Figure 3), the data from the continuous PNAD show that in the last decade, they remain between 2.2 and 2.3 minimum wages (which in 2022 is \$ 1,200 reais and is equivalent to approximately \$ 240 dollars), indicating that such incomes consider formal and informal workers to be occupied. The data analysis shows that such incomes were stagnant between 2013 and 2020.



Source: Continuous PNAD (IBGE 2022a), monthly and seasonally adjusted series. Values deflated by the IPCA.

Figure 3 Average Real Income from Work - in Minimum Wages - from January 2012 to March 2022

The weak results of the Brazilian economy in the last decade (Figure 4), associated with high informality of work, low income from work and the occupation of workers in low-productivity functions, especially services (Figure 5), characterize a worsening in work and in employment in Brazil and rekindles the view, which reverberates strongly in government sectors, that institutional regulation and labor legislation are the main employment problems in the country.

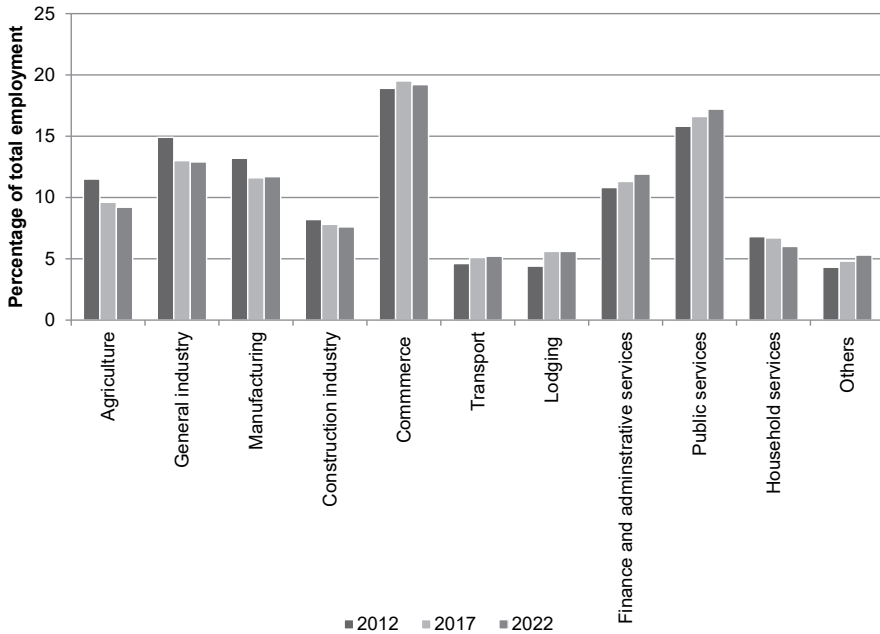


Source: IBGE (2022b).

Figure 4 Brazilian Gross Domestic Product - Variation against the Previous Year in % - from 2012 to 2021

Figure 5 shows the distribution of the employed EAP in Brazil by grouping of activity for the first quarter of 2012, 2017 and 2022 and highlights the concentration of Brazilian workers in segments of low productivity and therefore low remuneration, such as agriculture, commerce, transportation, lodging and food, domestic service and other occupations. It is possible to observe that in the analyzed period, there is a drop in both industrial employment and manufacturing industry in the country, contrary to the elements already presented in this article about structural change and employment trajectory, in the argumentative line of Mcmillan, Rodrik, and Verduzco-Gallo (2014) and Gala et al. (2018). The elements presented (Figure 5) reinforce the condition that work in Brazil is concentrated in low-productivity occupations and that there is no migration trend toward more dynamic sectors of the economy, i.e., there is no structural change in employment.

Thus, in 2017, amidst great economic, political and social turbulence in Brazil and a misdiagnosis of the labor market in the country, the Brazilian labor reform, Law N°. 13,467 of 2017, is the object of this study. It should be noted that the topic is discussed in the context of consecutive years of zero and negative growth – 2014, 2015 and 2016 – of the Brazilian GDP (Figure 4).



Source: Continuous PNAD (IBGE 2022a), quarterly series.

Figure 5 Distribution of the Employed EAP in Brazil by Group of Main Job Activity - in Percentage of the Total - for the First Quarters of 2012, 2017 and 2022

The set of data presented in this section reinforce the arguments of this paper that the Brazilian labor reform of 2017 has not shown advances in labor market indicators or in the main macroeconomic aggregates of the country. As shown (Figures 1 and 2) the level of workforce occupation oscillated between 54-55% from 2017 to 2020 and the rate of unemployment and underemployment due to insufficient hours worked between 23-24% in the same period. Furthermore, the average of real income did not change after the 2017 reform, and we did not see changes for income distribution or GDP trend. For these reasons, taking into account the pandemic period, and thus analyzing the period from 2017 to 2020, the flexibilization and the new rules of contracts for labor market in Brazil did not contribute for a better performance of labor or income in the country. In short, the historical unemployment and low level of income and work formalization in Brazil are the same and the results of the labor market flexibilization are not clear. By the other hand, the absences of gains for the workers are clear.

The debate about the effects of the 2017 labor reform on the Brazilian economy is a heated debate and is still ongoing, and the efforts to understand its effects are of great importance. As labor relations and union action were profoundly altered at the time and the rhetoric about their impacts is not convergent, it is therefore of great importance to evaluate some indicators of the Brazilian economy as indicators of this process and its trajectory.

5. Some Preliminary Results of the Labor Reform for the Brazilian Labor Market

The objective of this section is to present some preliminary results of the labor reform for the Brazilian labor market, considering the limited period of time and also the impact of the global health crisis.

Regarding the generation of jobs, a central element of the discussion regarding flexibilization admitted by labor reform, the data from the continuous PNAD/IBGE survey show no improvement in the unemployment rate, and in the fourth quarter of 2017 this rate was 11.9%, reaching 13.2% in the first quarter of 2018, with a peak in the first quarter of 2021 of 14.9% and remaining in the first quarter of 2022 at 11.1%.

It is noteworthy that, while in November 2017 there were 12.6 million unemployed in Brazil, in August 2020 unemployment reached approximately 13.8 million people in the country, a very high contingent of unemployed. When considering the CAGED data (Cadastro geral de empregados e desempregados 2022), it can be observed that in the first three years of the reform between 2017 and 2020, slightly more than 286 thousand formal jobs were generated, well below the predictions presented in the proposal, which was 6 million jobs to be generated.

It is necessary, therefore, to admit that the changes imposed in the scope of the labor market have resulted in an increase in the occupancy rate in the Brazilian labor market, a fact that puts into question the most used argument to defend the flexibilization of the labor regime in Brazil, that the change would result in job creation.

Notably, the employment data in Brazil have shown an improvement since 2021, a trajectory conditioned on the recovery of the post-pandemic economy; however, the improvement in the level of employment since 2021 is characterized by an increase in informal work. In this sense, the lower quality of the jobs generated and lower pay also stands out, which helps reduce the average income of workers. The data from the continuous PNAD/IBGE survey show that the average real usual incomes showed a decrease of 6.6% in the second quarter of 2021 compared to the same quarter of 2020.

The changes in labor relations imposed by the 2017 reform should also be analyzed in light of the COVID-19 pandemic, in which the study by Nicole R. Castro and Gustavo C. Moreira (2021), evaluating remote work in the pandemic, highlights that workers who worked less remotely were the poorest, including the categories of men, the rural residents, the nonwhites, the youngest and the workers without higher education, which allows us to infer that the portion of the richest, educated and formalized workers could protect themselves more satisfactorily in terms with respect to the contagion of the virus, which imposed on others the need to choose between employment and income and the risk of infection. The greater flexibility in labor relations and informality increased inequality among workers in Brazil, especially among workers with different levels of education, different incomes, different jobs and formal and informal work relationships. This inequality occurs both in terms of income and relative to opportunities for choice.

These results are consistent with those of Lauro Mattei and Vicente L. Heinen (2020), who indicate that the workers most affected by the pandemic, both in terms of

income security and the possibility of remote work and health protection, were workers with flexible work contracts, the youngest and those with a low educational level.

The aforementioned facts reinforce that the pandemic, seen as a shock of wide scope in the economy, placed a large contingent of workers in precarious conditions in relation to joining the labor market and that the changes imposed by the aforementioned reform contributed to accentuate this situation of precariousness.

Regarding the income distribution, the observed evidence is also not favorable. Taking into account the Gini index and the continuous PNAD/IBGE survey data for *per capita* household income from work as an indicator for the inequality of workers' income, it can be observed that this indicator, which was 0.52 in the last quarter of 2017, was maintained at this level in all quarters of 2018 and reached 0.53 in 2019, which shows a trend of concentration of labor income, a fact that indicates that there was a worsening in the inequality of workers' incomes. The trend is the same when considering all income, in which the *per capita* household income – from work and nonwork – which had a Gini index of 0.62 in the last quarter of 2017, maintained this value for all quarters of 2018 and reached 0.63 in the first quarter of 2019.

Another change brought by the labor reform of 2017 is related to intermittent work, which refers to the regime in which the worker can alternate periods of work and inactivity in their employment relationship. The objective of the regulation of intermittent work was to improve the formalization of more flexible work relationships, a fact that has made little progress. Data from CAGED (2022) show that in 2019, these types of contracts were still scarce in the labor market, and even after 2 years of retirement, slightly more than 1% of workers with a formal contract were under this modality – which is a total of 16,197,040; among workers with a formal contract in Brazil, in 2019, only 155,422 were intermittent employment contracts. When evaluating the level of informal work in the Brazilian labor market, with data from the continuous PNAD/IBGE survey by quarters, there are no elements that maintain that the more flexible forms of work allowed greater formalization and thus greater guarantee of rights and social protection. In the last quarter of 2017, the informality rate was 40.5% of workers, rising to 41% in the following quarter and remaining so in the years 2018 and 2019.

Furthermore, it is also necessary to evaluate the duration of unemployment, a fact of great relevance, since the inactivity of the worker for long periods represents losses for the economy and worsening of the living conditions of these individuals. Regarding this aspect, the data from the index constructed by Instituto de Pesquisa Econômica Aplicada (IPEA 2022), based on the continuous PNAD/IBGE survey, show that in 2019, approximately 25% of Brazilian workers sought employment for more than two years, and this indicator is even more affected with the advance of the pandemic, having, according to IPEA (2022), exceeded 30% in the last quarter of 2021.

Concerning the use of the workforce, the composite rate of underutilization of work, which was 23% in 2017, increased to 24.2% in 2018, reached 24.1% in 2019 and further increased to 30.4% in 2020, the highest value of the historical series. This indicator highlights that a considerable part of the expanded workforce in Brazil remains underemployed, either due to insufficient hours worked or even because they are unemployed. Based on this, it is quite evident that even with the flexibilizations of

working hours and the general changes imposed by the labor reform of 2017, there are no advances in the formalization of work or even in the use of work.

The set of indicators of the Brazilian labor market highlights that there is little evidence that the labor reform of 2017 promoted improvement for labor in the country. It can be inferred, based on the data presented, that the historical problems of the Brazilian labor market unemployment, informal work and low incomes persist and that the changes that were incorporated into labor legislation were also insufficient to improve the use of the labor factor.

It should also be noted that the impacts of the pandemic on the labor market reinforced the exclusionary and unequal nature of work in Brazil, a fact that reveals that the reform was also not efficient in improving inequalities in this market and expanding social protection at a given critical time.

6. Final Remarks

Even in the face of robust evidence in the international literature on the importance of structural change in employment as a key element for economic growth and development, the view still persists in Brazil that the labor market should assume relationships as flexible as possible and that only in this way can it advance improvement of employment levels and supposedly of income. It is in light of this interpretation that, in 2017, another labor reform in the country was approved.

With a misdiagnosis of the labor market and its relationships, the labor reform of 2017 has not shown advances in labor market indicators or in the main macroeconomic aggregates of the country. In contrast, the data suggest worsening in the indicators of employment and income and allocation of workers in occupations with low productivity and income characteristics.

The main contribution of this article is the diagnosis that the trajectory of the Brazilian economy follows a direction contrary to that referenced by the model of structural change, which advocates that a nation that wants to advance in terms of growth and economic development should seek a transition of labor to more dynamic sectors, thus increasing the productivity of the economy. The prevailing view of the economy with respect to work and the consequent reforms carried out in recent decades only led Brazil to deviate from a trajectory of structural change in employment and, therefore, growth and development.

This article reinforces the importance of an academic and economic policy debate that contributes to a change in trajectory about the interpretations of labor and its relations in the country, especially in an approach to the post-Keynesian and neo-structuralist lines of this debate. On the other hand, this study also suggests a deep evaluation of orthodox macroeconomics and its current economic policy agenda.

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