

Effects of the COVID-19 pandemic on the Brazilian labor market: increasing inequalities

Efeitos da pandemia de COVID-19 no mercado de trabalho brasileiro: aumento das desigualdades

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ABSTRACT

In addition to the difficulties that plague Brazilian society with the downturn in economic activity, high inflation, high interest rates, the closure of business activities in various business segments and the destruction of jobs, there are also the effects of the crisis health of the Covid-19 pandemic that manifested itself in an overwhelming way in various sectors of society from the year 2020, causing the existing inequalities in the Brazilian labor market to increase. The objective of this work is based on a review of the existing literature, to identify how the Covid-19 pandemic has impacted different groups of workers differently, considering gender and race. The results point to a greater gap in unemployment rates between female and black groups, showing that these workers suffered more strongly.

Keywords: labor market inequalities, unemployment, COVID-19.

RESUMO

Não fossem as dificuldades que atormentam a sociedade brasileira com a retração da atividade econômica, inflação elevada, alta nas taxas de juros, o encerramento de atividades empresariais em vários segmentos de negócios e a destruição de postos de trabalhos, há ainda os reflexos dos efeitos da crise sanitária da pandemia do Covid-19 que se manifestou de forma avassaladora em diversos setores da sociedade a partir do ano de 2020 fazendo com que as desigualdades existentes no mercado de trabalho brasileiro aumentassem. O objetivo deste trabalho é, com base numa revisão de literatura existente, identificar como a pandemia do Covid-19 impactou diferentemente os diversos grupos de trabalhadores, a considerar gênero e raça. Os resultados apontam para um maior



distanciamento nas taxas de desemprego entre grupos femininos e negros evidenciando que estes trabalhadores sofreram mais fortemente.

Palavras-chave: desigualdades do mercado de trabalho, desemprego, COVID-19.

1 INTRODUCTION

The unemployment rate in Brazil has shown a growing and persistent trajectory. As of 2014, it increases from 6.5% to 13.7% in 2017. Between 2018 and 2019 it stabilizes at 12% and in the first quarter of 2021 it reaches the record mark of 14.7%, falling back slightly to 11.1% in the first quarter of 2022, according to IBGE data (2022). Among all the possible reasons, it can be said that the situation of recent unemployment in Brazil is caused by the various situations of economic maladjustment that the country has been experiencing in the most contemporary period. As if the difficulties that plague Brazilian society with the downturn in economic activity, high inflation and consecutive high interest rates, the closure of business activities in various business segments and the extinction of jobs were not enough, there are still the effects of the of the health crisis of the SARS-CoV-2 (Covid-19) virus pandemic that manifested itself in an overwhelming way in various sectors of society from the year 2020.

The actions taken by the public authorities to combat the impacts of the pandemic included health policies, fiscal policies and financial resources management policies aimed at financing expenses associated with combating the proliferation of the virus. Regarding the business operations of private companies, most of them, in the most varied areas, promoted technological adaptations that made the activities of workers migrate to the modality of remote work. Obviously, the workers who were able to adhere to or adapt to such conditions were those with greater professional qualifications, those whose activity does not depend on contact with the public, workers who do not relate to other people and, finally, workers considered to have greater productivity. These groups are therefore less vulnerable to such a crisis, as Komatsu and Menezes-Filho (2020) comment.

Even before this health crisis, the Brazilian labor market was already facing, in addition to the increase, the persistent effects of unemployment, culminating in the difficulty of returning the unemployment rate to its equilibrium level (LIMA, 2021). If, on the one hand, structural economic factors do not favor the creation of jobs and the generation of jobs, on the other hand, the event of a global pandemic was observed, which



implied the adoption of health policies that, among several safety protocols and restrictive measures, indicated the closure of affected cities or regions, in addition to guidance to the population on individual behavior. It is worth mentioning the strong public incentive for actions against the dismissal of employees in the private sector, which contributed to the maintenance of the unemployment rate in force at the time.

Another situation to be discussed is the discouragement of individuals who are looking for work. Only in 2020, the most impacting period of the health crisis, surveys by the Brazilian Institute of Geography and Statistics - IBGE, through the National Household Sample Survey - PNAD COVID-19¹, indicated that the number of people who did not look for work for due to the pandemic or lack of work in the locality in the third quarter of that year reached 15.3 million people. It is known that being away from the labor market for long periods of time can reduce the future opportunities of individuals in the labor market and, with that, impact their motivation in the search for a job, leading to a feedback mechanism for the maintenance of unemployment rates, while the probability of the same individual becoming unemployed increases.

Fluctuations in unemployment are largely driven by fluctuations in the entry of individuals into jobs, as reported by Petrolongo and Pissarides (2008) and Shimer (2012). In this way, the probability of an individual losing their job has little impact on the level of occupation (COSTA; BARBOSA; HECKSHER, 2020). Thus, as Shimer (2012) reveals, it is fluctuations in the probability of entering a job that drive both the level of employment and the unemployment rate. It is possible that such movements were observed more strongly during the pandemic period in which a large contingent of workers who, given the reasons presented, further reduced their possibilities of returning to work activities in the formal market.

In this way, it's important to identify how the impacts of the current health crisis are related to the unemployment rate in the different Brazilian demographic groups. Therefore, the objective of this work is to identify, through the literature review method, how the Covid-19 pandemic differently impacted the different groups of workers, considering gender and race.

¹ The PNAD COVID-19 began on May 4, 2020 with surveys carried out by telephone and aimed at estimating the number of people with symptoms associated with COVID-19 and also monitoring the impacts of the pandemic on the Brazilian labor market.





In addition to this introduction, the structure of this study includes section 2, which presents the distribution of unemployment in Brazil and its different impacts by region and by gender; session 3, which presents elements of transition of states of individuals in the labor market and their direct impacts on unemployment rates, and concluding the study with final considerations.

2 UNEMPLOYMENT

2.1 UNEMPLOYMENT IN BRAZIL

It is well known that unemployment refers to the total number of people who are actively seeking employment but who are not employed and that a country's workforce comprises the total between employed and unemployed people. Those who are discouraged from seeking an opportunity in the job market because they have no expectations of finding one are not included in the official workforce, although the time factor these individuals are out of the job market can severely impact their chances of returning to the job market. The unemployment rate, therefore, is a measure of the percentage of unemployed in the labor force. In the labor market there is a perpetual flow that determines the fraction of the workforce that is employed or not, and these fluctuations reveal a country's unemployment rates. The result of this indicator becomes important because, given the reasons or determinants of the phenomenon of unemployment, its result will be commonly used as a guide to measure the success or failure of economic policies implemented by governments.

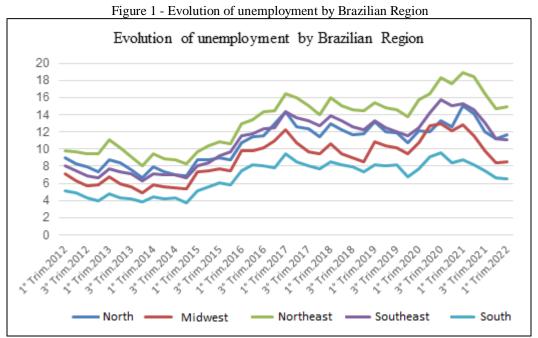
Nicolay and Lima (2021) comment that studies that address the job market on unemployment can be divided into: i) a group that seeks to improve the concept of unemployment and specify how it should be empirically operationalized; ii) another group that seeks to determine the variations in the aggregate unemployment rate under the effects of macroeconomic determinants that compose it and; iii) a last group that focuses, based on demographic segmentation criteria, to determine the structure of the unemployment rate. In the case of this particular material and aligned with the third group, it can be understood that labor market fluctuations occur in a non-linear way between different demographic groups and impact differently on each of these groups.

Evidence reveals that workers are affected in different ways by unemployment, since unemployment is concentrated among specific demographic groups and workers in specific sectors of the economy, as Borjas (2012) comments. It is easy to assume that the



references are to the most vulnerable groups, with less qualification and experience in the labor market and even that these manifestations can occur in different intensities given the location where the indicator is being calculated.

A broader analysis of unemployment across Brazilian regions reveals such disparities, as in Figure 1.



Source: IBGE (2022)

Although in a first static and visual analysis unemployment appears to follow the same trajectory and oscillations in all regions in a uniform way, as shown in Figure 1 on the graph, a closer look reveals some interesting points.

The Southeast and Northeast regions are the most populous and together represent about 69% of the entire Brazilian population, with 42% being from the Southeast and approximately 27% from the Northeast region. However, the Northeast region had, on average, the highest unemployment rate among the other regions in the period from 2012 to 2022. The North region, despite being much less populous than the South region, has average unemployment in the last 10 years at 10.64 % against 6.96% in the South region, as shown in Table 1.

When looking at the extract that includes only the evolution of unemployment rates from the second quarter of 2020, period that included the state decree of public calamity due to the Covid-19 pandemic, the average unemployment situation in all



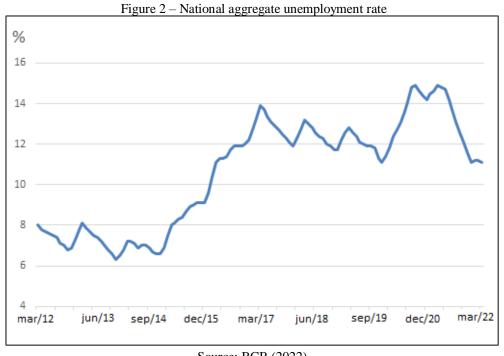
regions all regions increased significantly, with the prevalence of the Northeast region being maintained in this scenario.

Table 1 - Population distribution and unemployment rate by Brazilian regions.				
Region	Total population by region	Participation in the total pipulation	Average unemployment rate 2012-2022	Average unemployment rate from Covid-19
North	19.123.000	8,90%	10,64%	12,73%
Midwest	16.904.000	7,87%	8,86%	11,1%
Northeast	57.945.000	26,98%	13,35%	16,96%
Southeast	90.221.000	42,00%	11,18%	13,79%
South	30.602.000	14,25%	6,96%	8,09%
Total	214.795.000			

Source: IBGE (2022).

Note: Unemployment rate cut with quarterly data; the cut-off from the second quarter of 2020 to the first quarter of 2022 is considered for the unemployment rate from the Covid-19 pandemic.

In this period, attention is drawn to the result of the North region, which was close to the unemployment rates of the Southeast region, with a number five times greater than the first region. Evidently, absolute population values are being observed and, in this case, only the working-age population is being considered in this relationship. However, even so, this exercise continues to be a good guide to verify the impacts of eviction by region.



Source: BCB (2022). Note: Monthly unemployment data.



Such impacts can come from variables such as income, society's level of education, technical qualifications of individuals, age of citizens, development and local infrastructure, tax incentives for setting up companies, among others, and these factors become more apparent in the results of unemployment rates by regions. In the national aggregate, the historical series of unemployment reaches its highest value in October 2022, reaching the mark of 14.9%.

Figure 2 shows that the Brazilian unemployment rate, from the beginning of 2015, has an ascending trajectory and, from a certain point of view, persistent in the maintenance of unemployment rates. This period was, notably, the beginning of a phase of recession in the country.

The literature on the labor market that investigates the unemployment phenomenon classifies the maintenance of unemployment rates and their persistence at high levels of unemployment hysteresis. It reveals the difficulty that the unemployment rate has in returning to its equilibrium condition, given the occurrence of a permanent or transitory shock that changes it. Lima, Oliveira and Silva (2015) investigated the response that the unemployment rate in Brazil presents with its level of persistence. The period comprises the years 1980 to 2002. Their conclusions are in the direction of having found evidence of strong hysteresis for the period.

However, unemployment hysteresis can be classified as low or strong persistence and given the changes in the economic context to the detriment of a series of conjunctural and structural factors, it can cease to exist or change. Lima (2021), for example, in an analysis of a more contemporary period, found evidence that points to the existence of weak hysteresis in the Brazilian labor market from March 2012 to August 2020. In his results, he also concluded that the trajectory of unemployment in Brazil suffered structural breaks that changed its natural behavior in December 2014 and again in March 2016, that is, the occurrence of exogenous shocks provided changes in the Brazilian economic environment and these ended up impacting the labor market. Apparent effects of a cause linked to a serious political and economic crisis that began to manifest itself more clearly in 2013 (LIMA, 2021).

Therefore, in addition to all the difficulties and challenges in the national economic scenario, such as low growth, retraction of economic activity, high inflation, rising interest rates and a persistent level of unemployment, it is still possible to observe the effects of the crisis health of the Covid-19 pandemic from the year 2020.



2.2 THE DIFFENT IMPACTS ON GENDER AND RACE

In addition to the high rates of aggregate unemployment in Brazil, as well as the particularities of each region of the country, there are also differences between genders to be analyzed.

Evidence points to the fact that unemployment among women over time proves to be higher than unemployment among men. In part, this disparity can be explained by the fact that the female population is much larger than the male population. The growing numbers expressed by the evolution of the unemployment rate among female groups leave no doubt about this disparity.

Analyzing the variations between the unemployment rate of men and women in the time frame that goes from the first quarter of 2019 to the first quarter of 2021 as shown in Figure 3 below, it is possible to attest that unemployment among women is higher than that of men in approximately 37% on average. The second quarter of 2020, with social isolation already established in several Brazilian cities, revealed an increase in the unemployment rate of female groups compared to the first quarter of the following year by 23.5%, while unemployment among men increased by 10, 4% in the first quarter of 2020 to 12.2%, showing a variation of approximately 17%.

The first quarter of 2019, compared to the first quarter of 2020, reveals that there were no significant fluctuations in unemployment between men and women. This shows that female unemployment was more impacted than male unemployment during the pandemic period.



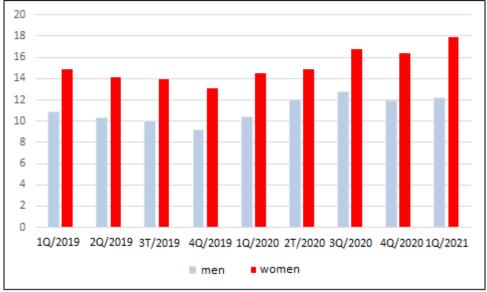


Figure 3 - Variations between the unemployment rate from 2019 to 2021 for men and women.

Evidently, the situation of the pandemic with determination of social isolation has made women active in the labor market develop new ways to adapt to the demands and obligations of work at the same time that the obligations and demands of domestic work cannot be discarded. Such situations attributed to the woman, in many cases and circumstances, the decision to give up work activities to the detriment of domestic activities during the pandemic period.

Bueno (2020) comments that female participation in the world of productive work suffered a certain threat in the sense that there were no institutional measures to guarantee support for families and working women, particularly those from the less privileged strata. As an example of the above, it can be noted that women are the overwhelming majority involved in domestic activities and that the category of domestic workers, at the time of the lockdown, were the first to be removed from their activities. Despite the fact that the female workforce has a lower participation in the industrial segment, in production activities, logistics and transport, civil construction and others, another concentration of activities carried out by them are those related to aesthetic and wellness services.

Mattei and Heinen (2020) point to the fact that during the quarantine period these sectors were not considered essential for them to maintain their functioning and, therefore, this situation may also have contributed to the worsening of the situation in which observes the situation of women in the labor market.

Source: IBGE (2022)



It is important to mention that even with the regulation of the domestic worker activity in 2015, many are still working informally and do not have the guarantees and protection that labor legislation offers to formal workers with a formal contract.

If the problems caused by the harmful effects of the Covid-19 pandemic have greater impacts on the female population, they are even more harmful if we associate the race factor with this public, being more categorical, the one composed of the black population - and at this point the male workforce is also strongly affected. Many of these workers also work informally, focusing on street trading activities, playing the roles of street vendors. On this point, it is unnecessary to comment, again, that with the measures of social isolation, the activities carried out on the streets became unfeasible and these workers found themselves without alternatives to work and, consecutively, without income.

Informality is another variable that deserves to be carefully observed. In the second quarter of 2021, data from the IBGE's Continuous PNAD pointed to an increase in the informality rate, which resulted in 40% of the employed population in the same year. Where of the 86.7 million employed people in Brazil, 34.7 million were workers without a formal contract or popularly called 'without a formal contract', people who work on their own without registration in the National Registry of Legal Entities (CNPJ) and, those who work helping the family (AGÊNCIA BRASIL, 2021).

According to the IBGE, informality is distributed among Brazilian workers so that 48% are black and brown, 35% are white and the rest are divided between indigenous or yellow. It is true that the small and weak improvement in unemployment indicators observed over the years 2018 and 2019 is related to informal occupations, as Mattei and Heinen (2020) stated, but the fact is that the population that is in this situation workers normally work in very precarious and unstable conditions. And if we associate it with the pandemic situation, due to the conditions presented above, these groups were the most affected in the very short term, since the adoption of health policies with the various security protocols and restrictive measures, pointed to the closure of affected cities or regions. That is, activities that were essentially directly linked to contact with the public, without guarantees or protection from the Consolidations of Labor Laws (CLT), mostly informal jobs, suffered more abruptly and immediately the effect of this shock to the transfer of their activities.



3 LABOR MARKET TRANSITIONS DURING COVID-19

3.1 TRANSITIONAL STATES OF INDIVIDUALS IN THE LABOR MARKET

Rising unemployment, especially during a recession, can arise from an increase in the number of periods of unemployment, an increase in the length of periods of unemployment, or both. In the same way, one can decompose the cyclical variation of unemployment in changes in the rates of entry and exit of unemployment, that is, in the transitions of state in the labor market.

The economic literature that focuses on investigations of transition states of individuals in the labor market is linked to labor market fluctuations, more popularly known as "Ins and Outs of Unemployment", as Darby, Haltiwanger and Plant (1986) revealed.

For the Brazilian case, it is possible to find works that show that the variation in unemployment rates is the result of fluctuations in the admission rate, as, for example, in Nunes, Menezes-Filho and Komatsu (2016) and others who point out that the variation in the unemployment rate is related to the decrease in job exit transitions (DA SILVA; PIRES, 2014; CORSEUIL; FRANCA; RAMOS, 2020).

In this way, it is important to identify how the impacts arising from the current health crisis are related to the unemployment rate in the different demographic groups, which are not evaluated by means of dismissals only, but by the transition of the states of individuals in the labor market, a since migrating from one state to another or staying in a certain state generates impacts on the unemployment rate that reveal aspects of a structural problem that reinforces the persistence of levels of this important indicator of the economy.

3.2 TRANSITION OF WORKERS DURING THE PANDEMIC PERIOD

With the advent of the pandemic, several companies were led to reduce a large part of the workforce and this ended up causing more informality in society as well as more precarious working conditions, not to mention that the pandemic, moreover, had a perverse effect, especially for the lower purchasing power strata of the Brazilian population (KOMATSU; MENEZES-FILHO, 2020).

Extending beyond the income item and delving deeper into gender, Gezici and Ozay (2020) in an investigation on the probabilities of transitions in the labor market for demographic groups in the American economy point out that among the differences in



the probability of unemployment between the groups of men and women distinguishing between race and ethnic groups in all categories found evidence that women were more likely to be unemployed than men.

Looking specifically at the pandemic period for the Brazilian case, Corseuil, Franca and Ramos (2020) comment that all categories of workers were similarly affected, but even so, evidence indicates that the impacts were greater among women. The authors applied a phase diagram to identify how supply and demand movements influenced the market based on participation and occupancy rates. Costa, Barbosa and Hecksher (2021) point to the same result in which the Covid-19 health crisis that started in 2020 is associated with a significant increase in the possibilities of transition to inactivity among all groups.

Reis and Águas (2014) in their studies discuss the process of transition of the female workforce and analyze the undertaking of the role of women in relation to the exit from unemployment to employment, which is of a formal or informal nature, but the probability, in the regarding the transition from women's to men's informality, at times it surpasses that of men.

With the health crisis, world economies underwent major transformations and implemented various public policies aimed at helping society, whether on the business side or on the side of support for each individual in the Brazilian nation. In this sense, it is also important to analyze the measures taken by the entities or bodies on the transitions of work at the national level and the effects that affected the different categories of workers.

A point that deserves deeper reflection, for example, is the fact that if the groups most abruptly affected in the labor market were those who work informally and are the most vulnerable to the measures adopted to combat them, they form the part of society that was most assisted by the federal government with protective measures such as emergency aid.

However, it is not difficult to interpret the fact that this incentive, which was responsible for the support of several families at this difficult time, may have been a point that contributed to the period in which a worker remained unemployed.

Bradbury (2014), for example, in an investigation for the North American labor market, analyzed the effects of unemployment insurance for work transitions between 2005 and 2013, showed that the unemployment benefit measure led the individual to



remain unemployed while receiving the benefit until its end, thus increasing the probability of transitioning to inactivity.

Obviously, this is an investigation that does not necessarily address the pandemic period or even the American job market is a market similar to the Brazilian one, however, when it comes to government benefits and incentives, it ends up being a good parameter based on the behavior of agents operating in a collapsed market and unable to generate job vacancies in the job market, at least in the very short term.

In this regard, we emphasize the need for further investigation to empirically verify such relationships, but at this point, the incentives with resources from Federal Government agencies may have contributed to a longer period of inactivity, when compared to previous periods.

4 FINAL CONSIDERATIONS

The phenomenon of unemployment, measured from its rate of change, is one of the macroeconomic indicators that most severely affects the population of a country. In the Brazilian case, society has been facing for a long time the damage caused by the conduct of economic policies that ended up promoting a strong fiscal crisis with the rise in the long-term interest rate, by the reduction of consumption and investments and marked by a deep political and institutional crisis leading to a shattering of confidence and expectations in the country.

As if these events were not enough, which became more evident from the year 2014, in the first quarter of 2020, the whole world was involved in a global health crisis promoted by the Covid-19 pandemic. Many emergency measures implemented by government authorities aimed to control the imminent mass contagion where the main weapon applied was social isolation.

Many discussions were held about the effectiveness of such practices, and, in fact, without reaching a consensus on the effectiveness of these actions. However, what can be said is that the isolation attributed to Brazilian society had different impacts on different layers of workers and also with different impacts in different regions of the country. For example, the northeast region of Brazil was already the one with the highest unemployment rate even before the Covid pandemic. After the first quarter of 2020, this region was also the one with the greatest variation in unemployment numbers, followed



by the Southeast region and, subsequently, the North region. The ones that presented the smallest variation in the unemployment numbers were the Midwest and South regions.

A curious point that draws attention is the fact that the two regions that are among those with the highest rates of unemployment and greater variability in these rates as of 2020, the northeast and north regions, do not have a participation in the population quantity equal to that of the Southeast region and present an unemployment rate and variability greater or practically equal to that presented by the Southeast region. This suggests the reality that these regions, where there is known to be greater informality in the labor market, less qualified labor, lower levels of education among citizens, suffered more from the impacts of actions to combat the pandemic than other regions.

This impact was also more serious among female groups, whose distribution in the labor market is more concentrated in services, commerce and informal activities, aggregating labor that brings together the most vulnerable groups and sensitive to the actions taken by the authorities. during isolation measures. Unemployment among women, which was already higher than that of the male population at 37% before the pandemic, suffered comparative variation with unemployment among men of around 17% during the period of the health crisis. There is evidence in the literature that the probability of being unemployed is also higher among groups of women.

The black population, in general, also suffered severely from the impacts, as many of these workers who make up this group work informally, focusing on street trading activities, which had their work exercises unfeasible. Of the total number of informal workers, blacks and browns make up 48% of the total, with their activities being carried out in very precarious situations and with very great instabilities.

Once this extract of the unemployment situation in Brazilian society after the advent of Covid-19 has been carried out, it is evident that its impacts, from governmental actions aimed at collective security, would need to be seen with the perception of the existence of inequalities in the labor market. work and that these would be evidenced with the triggering of the closure of business activities and with the restriction of the movement of people through the cities, making it necessary, therefore, more specific public policy actions aimed at this public, either with effective unemployment or with the migration of states in the labor market, such as the abandonment of the search for replacement opportunities, the most vulnerable to the actions taken in this period are the ones that have



the most representation in the terrible result of the unemployment rate. These were also the ones that showed evident worsening when this indicator was observed.

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