The labour market fallout of COVID-19: Who endures, who doesn’t and what are the implications for inequality

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Abstract. Government responses to the COVID-19 pandemic have differed in scope and design, with important implications for the labour market as a whole but also for specific groups of workers. Using labour force survey data from seven middle- and high-income countries, this article analyses transitions in the labour market in the first two quarters of 2020 and compares them with transitions in the previous year. The authors find that governments that favoured wage subsidies over other forms of income support were able to lessen labour market volatility, but that in all seven countries studied the COVID-19 pandemic exacerbated labour market inequalities.

Keywords: labour market transitions, COVID-19, labour market inequality, labour market policy.

1. Introduction: The COVID-19 disaster and labour market transitions

The COVID-19 pandemic has been devastating for humanity. As of December 2021, there had been more than 263 million confirmed cases of the disease, resulting in over 5 million deaths reported to the World Health Organization. The economic impact of the pandemic and the ensuing lockdowns has been no less dramatic. The International Monetary Fund (IMF) estimates that the world economy contracted by 3.3 per cent during 2020, which is the greatest fall since the Second World War, doubling the 1.7 per cent contraction of 2009 (IMF 2021). During the second quarter of 2020, which is the period of reference for this study, the ILO estimated that 94 per cent of the world’s workers lived in countries with some kind of workplace closure and that, relative to the fourth quarter of

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1 https://covid19.who.int/ (accessed 6 December 2021).
2019, working hours fell by 17 per cent. Similarly, labour income fell by 10.7 per cent during the first three quarters of 2020 compared with the same period in 2019 (ILO 2020a).

Across the world, governments responded to the COVID-19 pandemic by shutting down economic activities in an attempt to forestall the spread of the virus. Whereas most economic and employment impacts are demand shocks, the decision of governments, firms and individuals to curtail economic activities to arrest contagion meant that this crisis began with a dramatic supply shock that would also affect aggregate demand. The policy packages delivered to support shuttered businesses and their employees differed in both scope and design. These differing policy responses, combined with the contrasting institutional and cultural workings of the respective labour markets, suggest that employment results also differed among countries.

The exact quantification of the scale of the disaster and how effective the mitigation policies have been is a challenge for researchers worldwide. We hope to contribute to efforts in this regard by examining labour market transitions during the COVID-19 pandemic in seven countries. Specifically, we examine the characteristics of individuals and the work they perform as they transition in and out of the labour market. In this way we seek to glean information about who does and does not endure and the potential implications for inequality, as well as assessing the policy measures implemented.

There are various ways to quantify labour market transitions. Repeated cross-sections can be used to compare groups of workers and thereby make some kind of inference as to the underlying transitions, but this requires many hypotheses. Alternatively, labour market transitions can be directly measured using those labour force surveys that follow workers from one quarter to the next. Limiting our analysis to countries with such labour force surveys, which make the intertemporal identification codes easily available and which provide data for at least the second quarter of 2020, greatly narrows the scope of analysis. The seven countries that met all these conditions at the time of writing were Brazil, Costa Rica, Mexico, Poland, Portugal, the United Kingdom and the United States. Nevertheless, these countries offer an interesting source of comparison as they differ both in their labour market structures, given the mix of middle- and high-income countries, and also in their policy responses to the labour market shocks of the COVID-19 pandemic.

One question we attempt to answer, at least in a preliminary way, concerns the implications that these labour market transitions have for existing labour market inequalities. One way to do this would be to use pre-COVID-19 data, simulate a full distribution analysis using standard simulation models along the lines of Lustig et al. (2020) and integrate labour market transitions. While this is an appealing approach that would allow full quantification and attribution, it again requires many hypotheses and has limitations due to the endogenous structure of the labour market in a specific country or of country-specific policy responses. For this reason, and given the limited state of knowledge about COVID-19 and labour market transitions, an approach based upon the direct measurement of what is actually going on is more appropriate.
Accordingly, we limit our analysis to the direct measurement of labour market transitions for different groups of workers. The effects will be measured for transitions between the first and second quarters of 2019 as a baseline, and between the first and second quarters of 2020 to see the impact of the pandemic. The most important statistic we consider is the difference between the transitions of 2020 and 2019. This means that the identification hypothesis is that 2019 was in some way a “normal” year and that any differences are due to the effects of the pandemic. Figure 1 shows the transition probabilities up to 2019 for Brazil, Costa Rica, Mexico, Poland, Portugal and the United States. Portugal shows a long-run trend towards lower transitions from employment to non-employment, and Costa Rica shows higher volatility than the other countries, but nothing suggests that 2019 was in any way different.

Figure 1. Transition rates for six countries from 2010 to 2019 (percentages)

Panel 1. From employment to out of work

Panel 2. From out of work to employment

Note: Q1 and Q2 refer to the first and second quarters, respectively.
Sources: Authors’ calculations using BAEL, CPS, ECE, ENOE/ETOE, IE, PNADC microdata (see section 2). For the CPS, the identified panel data were provided by Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 8.0 [data set]. Minneapolis, MN: IPUMS, 2020.
Our approach also differs from much of the literature analysing the effects of the pandemic on particular groups, such as women or youth, in that we compare the effects on groups defined not only by demographic characteristics but also by types of labour market insertion.

The remainder of this article is organized as follows. The next section succinctly describes the data used and the methodology followed. The third section offers a quick review of the policy responses of the seven countries under consideration and summarizes the limited literature on COVID-19 and labour market transitions. The fourth section compares both employment numbers and transitions into and out of employment before and after the pandemic for each of the countries under analysis. In the fifth section, which is the heart of the article, we compare transition probabilities according to three demographic and eight labour market insertion variables. The final section assesses policy responses in the light of our data analysis and concludes.

2. Data and methodology

This article concentrates on the impact of COVID-19 on labour market transitions, which means that individuals must be observed at two consecutive points in time. This restricts the number of countries included in our study to those that have both longitudinal data (i.e. rotating panels) and data available for at least the second quarter of 2020. At the time of writing, in Latin America, statistical institutes have released Brazil’s *Pesquisa Nacional por Amostra de Domicílios Contínua* (PNADC) and Costa Rica’s *Encuesta Continua de Empleo* (ECE) for the first three quarters of 2020. Data for Mexico’s *Encuesta Nacional de Ocupación y Empleo* (ENOE) are available for the first and third quarters but the second quarter is partially covered by the *Encuesta Telefónica de Ocupación y Empleo* (ETOE). The ETOE is an imperfect substitute for the ENOE – it was undertaken by telephone and uses a smaller sample – but at least it allows estimates of how workers observed in the first quarter by the ENOE were faring in the second quarter. The US Census Bureau has released monthly data for the Current Population Survey (CPS) up to October of 2020. In this case, we did not use the entire first and second quarters. Given how the CPS rotating panel is set up, there are individuals who are interviewed on successive months. In order to circumvent this problem, we compared only the mid-points of each quarter: February to May. In Europe, data for the United Kingdom’s Labour Force Survey (LFS) and Portugal’s *Inquérito ao Emprego* (IE) are also available for the third quarter of 2020. Data are available for Poland’s *Badanie Aktywności Ekonomicznej Ludności* (BAEL) up to the second quarter of 2020.

Many other labour force surveys also have rotating panels, but either their data had not yet been released or the matching codes were unavailable. This means that our analysis will be undertaken for the seven countries mentioned above: Brazil, Costa Rica, Mexico, Poland, Portugal, the United Kingdom and the United States. This should allow for a comparison between countries with different levels of economic development, different approaches with respect to labour market regulations, as well as different policy responses to address the consequences of the crisis. As we will show, the outcomes are also quite different.

Table 1 summarizes the sample sizes that we will be working with. Even after panel attrition, their sizes are reasonable. The smallest sample is of 15,000 people
for Costa Rica and the largest is of 322,000 for Brazil. Nevertheless, since we are working with differences in differences, larger samples are required and in a few cases p-values are high due to the limited sample size.

All our calculations in the remainder of the article use the weights provided in each survey’s microdata samples. Since these weights are not calculated with panels in mind, they do not add up to population totals. This is not a problem since all the numbers given, apart from the sample sizes, are relative.

As mentioned above, most of the analysis of the effects of the COVID-19 pandemic on different groups of workers has been limited to a snapshot of the effect of the pandemic’s onset on working-age individuals. Yet analysing changes in the labour market from the first to the second quarters of 2020, while useful, is also limited as we do not know if what we are observing is business as usual given the high rate of transitions in labour markets in general, especially in developing countries. Hence, our approach is to compare, whenever possible, the transitions observed from the first to the second quarters of 2020 with those observed one year earlier, from the first to the second quarters of 2019. We will also attempt to present our findings in this way, in other words comparing what is usually observed in each labour market with what changed after the onset of the COVID-19 pandemic.

3. The labour market impacts of the COVID-19 pandemic and policy responses

Countries responded to COVID-19 by instituting an array of measures to protect public health and, given the economic fallout from these containment measures, to mitigate the pandemic’s economic effects. According to the Oxford COVID-19 Government Response Tracker, all seven countries analysed here began instituting workplace closures in mid-March 2020. As figure 2 indicates, they mostly did this through recommended closing or working from home (workplace closing stringency level 1), but also by requiring some businesses to close (level 2) and,

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2 See https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker.
in some cases, by elevating the stringency level to include the closure of all but essential workplaces (level 3). The majority of these measures lasted throughout most of the second quarter of 2020 (Hale et al. 2020).

The fact that most countries had containment measures in place during the last week or two of the first quarter of 2020 somewhat dampens our identification strategy, since the first quarter is not “pure pre-COVID” but rather “largely pre-COVID”. Unfortunately, only in the Mexican ENOE can the survey week be identified.\(^3\) Given this impossibility of identifying the last week or two of the quarter, the numbers given may be interpreted as lower bounds of COVID-19 labour transition effects.

While the containment measures are largely similar across countries, the measures to provide relief to businesses and workers, both in design and scope, have varied widely across the seven countries. As table 2 shows, fiscal spending in response to the pandemic as a percentage of GDP varied from a paltry 0.6 per cent in Mexico to a hefty 11.8 per cent in the United States. But the focus of the spending also differed, with important implications for job retention, particularly during the period under study.

As regards support for workers, Brazil, Poland, Portugal and the United Kingdom favoured subsidies that could retain workers in their jobs, whereas the United States and (at a much smaller scale) Costa Rica favoured policies that

\[^3\] We did the analysis for Mexico excluding the last two weeks of the first quarter and it did not change the results.
supported workers who lost their jobs. Some such measures also existed in the other countries (in addition to worker retention subsidies) and the policy was followed by some Mexican states.

Of the countries under study, the United Kingdom had the largest employment subsidy programme, the Coronavirus Job Retention Scheme, which included the payment of 80 per cent of the wages of furloughed workers, up to £2,500 per month. This policy marked a shift from efforts made in past recessions since it kept workers in their jobs, even if they were idle at home. As a result, the decline in economic activity was accompanied by a reduction in average hours worked, rather than a fall in employment. Similarly, support for the maintenance of employment contracts was a pillar of the relief package in Portugal, where the Government used social security funds to pay 70 per cent of wages, while the employer covered the remaining 30 per cent. The measure was less generous in Poland, where the Government paid no more than 40 per cent of the average monthly salary from the previous quarter. The Polish and Portuguese Governments also instituted support for workers who needed to stay at home to care for young children unable to attend school or nursery on account of closures.4

In Brazil, the labour market benefitted from policies already in place at the time of the crisis such as the “bank of hours”, which gives employers flexibility to spread working hours over the course of a year. The Government also instituted the Benefício Emergencial de Preservação do Emprego e da Renda, which provided for the proportional reduction of working hours and wages or the temporary suspension of employment contracts through the payment of a counterpart from the Federal Government, subject to individual or collective agreement. The Government estimates that more than 10 million jobs were preserved as a result of the emergency benefit. In addition, the Auxílio Emergencial provided cash for informal workers through a negative targeting scheme (the scheme was universal for all adults who were neither formally employed nor recipients of any other state benefit).

Table 2. Additional spending in response to the pandemic (percentages of GDP)

| Country        | Total | Health sector | Non-health sector |
|----------------|-------|---------------|-------------------|
| Brazil         | 8.3   | 0.9           | 7.4               |
| Costa Rica     | 1.4   | 0.3           | 1.1               |
| Mexico         | 0.6   | 0.2           | 0.5               |
| Poland         | 6.7   | 0.4           | 6.3               |
| Portugal       | 3.2   | 0.8           | 2.4               |
| United Kingdom | 9.2   | 1.5           | 7.6               |
| United States  | 11.8  | 1.5           | 10.3              |

Note: Spending up to September 2020.
Source: IMF database of fiscal policy responses to COVID-19.

4 This section and the description of measures that follows draws on the ILO’s “COVID-19 and the World of Work: Country Policy Responses” database. https://www.ilo.org/global/topics/coronavirus/regional-country/country-responses/lang–en/index.htm (accessed January 2021).
Contrary to the priority given in the above four countries (as well as other European countries) to employer subsidies aimed at worker retention, the US policy package focused on boosting unemployment payments and loosening eligibility requirements so that more workers, including the self-employed, could access benefits, in addition to providing direct support to individuals, irrespective of their labour market status, through stimulus cheques. Given the flexibility of dismissal laws in the United States, and the knowledge that workers would be better protected once laid off, employers responded to the economic fallout of the pandemic and its lockdowns by dismissing workers en masse. In April 2020, the seasonally adjusted unemployment rate climbed to 14.8 per cent – a level not seen since the Great Depression of the 1930s. Fortunately, many of these workers were re-hired in the summer, unemployment falling to 10.2 per cent in July 2020 and continuing to decline in subsequent months.

In Costa Rica and Mexico, workers were given limited support. Costa Rica created a solidarity fund for dismissed workers; it also passed legislation easing dismissal. Mexico, whose paltry assistance was criticized by the IMF, had difficulty in increasing public spending, in large part because of a constitutionally mandated (and arguably, flawed) policy that restricted new debt issuance (UN 2021; Martín Cullell 2020). The assistance that was provided was largely limited to the extension of credit lines, a measure that also featured prominently in the other countries under study.

The effects of the scope and design of the policies is evident in the aggregate labour market outcomes discussed in the next section. What is less clear is how different types of workers and different types of employment fared. This is the main question we address in this study.

Since the pandemic struck, a few other researchers have considered this question. One of the earliest studies is by Adams-Prassl et al. (2020), who compare the labour market impacts of the pandemic in Germany, the United Kingdom and the United States, using an ad hoc internet-based survey. The authors find that job losses were high in the United States, intermediate in the United Kingdom and low in Germany, which is well known for its short-term wage subsidy programme, Kurzarbeit. In addition, the authors find that women and young people in all three countries were more likely to lose their jobs, and that in the United States and the United Kingdom, but not Germany, the highly educated were more likely to keep theirs. They conclude that the pandemic had negative impacts on equality in the labour market, even if these impacts were smaller for Germany.

Cowan (2020) uses the same CPS data that we use to examine labour market transitions in the United States. Unsurprisingly, the effects that he finds are very large: increased unemployment and decreased labour force participation. He further finds that vulnerable workers, such as women, youth and the poorly educated, experienced the largest losses in employment and hours. Montenovo et al. (2020) find that the massive and unequalizing job losses in the United States are largely explained by the characteristics of occupations. In particular, they find that workers in occupations with high face-to-face and low remote working indices were far more likely to lose their jobs. Women, youth and the poorly educated were more likely to be in these occupations.
Although previous studies have been carried out for Brazil (Hirata and Machado 2010), Costa Rica (Castro Vincenzi, Garita Garita and Odio Zúñiga 2014), Latin America (Beccaria and Maurizio 2020) and Europe (Ward-Warmedinger and Macchiarelli 2013; Theodossiou and Zangelidis 2009) using a similar methodology of transitions, and other studies have examined the impacts of the crisis on different groups (e.g. ILO 2020b), ours is the first study to compare transition probabilities by individual and employment characteristics across a mix of regions during the pandemic.

4. Descriptive statistics and transition probabilities

The place to start is the employment rate, which is the ratio of the employed (including self-employed) to total working-age population. There has been wide media coverage of millions falling into unemployment or inactivity in the United States, but such catastrophes appear to have been mitigated in Europe – at least for most of 2020. The two panels in figure 3 show that indeed there is a considerable difference in how the employment rate in each country responded to the pandemic over the period of our study. In Latin America and the United States, there were massive falls in the percentage of people who were employed or self-employed. The employment rate fell by 6 percentage points in Brazil, 8 in the United States, 11 in Mexico and 12 in Costa Rica. By contrast, the percentage of Portugal’s working-age individuals who were in fact working fell by only 2 percentage points. In the United Kingdom, the fall was of just 1 percentage point and in Poland there was no observable fall at all. In other words, figure 3 shows that, while the reductions in the employment rate in the Americas are large, those in Europe are barely distinguishable from seasonal variations.

Changes in employment are a result of two flows. The first is made up of workers in employment losing their jobs (and entering either unemployment or inactivity) and the second is made up of people who are not in employment finding work. With panels, both flows can be directly measured. The results can be found in table 3, where the first two columns of matrices present these flows for 2019 and 2020, respectively, and the third “Difference” column, shows the effect of the COVID-19 pandemic on the labour market if the identifying hypothesis that 2019 was a “normal” year holds. The category “employed” (as well as “employment” in subsequent tables, unless otherwise indicated) covers both employees and the self-employed, and “out of work” covers both the unemployed and the inactive. Countries are ordered (as in subsequent tables) by latitude, from South to North.

Independently of COVID-19, the Latin American labour markets are characterized by much higher flows into and out of employment than the European labour markets. Only 49 per cent of the working-age population in Brazil and Costa Rica were in employment in both the first and second quarters of 2019. This contrasts with 53 per cent in Portugal and Poland, 57 per cent in the United States and 70 per cent in the United Kingdom (although the figure for the United Kingdom is not comparable to the figures in other surveys). Conversely, only

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5 The United Kingdom’s survey omits housewives, people undertaking study and those over the age of 64 from its definition of population, making the denominator smaller and the overall employment-to-population ratio larger.
35 per cent of working-age Costa Ricans were out of work in both quarters, while 45 per cent were out of work in Poland. This is likely to be at least partially a result of high levels of informal own-account work.

The immobility indicator, which is the percentage of working-age individuals who have the same labour market status in two consecutive quarters, gives us an indication of the rate of the flows into and out of employment. While 98 per cent of Poles had the same labour force status in both the first and second quarters of 2019, this was true of only 84 per cent of Costa Ricans. According to this indicator, the United States looks more European than Latin American, since 93 per cent of Americans had the same labour force status in those two consecutive quarters.
Are our findings in accordance with pre-pandemic analysis of labour market flows? Roughly, yes. Hirata and Machado (2010) and Cuco and Barreiro de Souza (2019), among others, analyse the determinants of transition in the Brazilian labour market. While they are mostly looking into transitions between formality and informality, their results are consistent with the figures estimated here. Likewise, the results obtained by Castro Vincenzi, Garita Garita and Odio Zúñiga (2014)
for Costa Rica are not far from ours. Escobedo González and Moreno Treviño (2020) show figures for Mexico that are also roughly in accordance with ours. Kroft et al. (2016) study month-to-month transitions using the American CPS, making their transition numbers somewhat lower than ours, since we study quarter-to-quarter changes. For the United Kingdom, Gomes’s (2012) findings are more or less the same as the results from our analysis.

For pandemic labour flows, only Cowan (2020) calculates numbers comparable to ours and only for the United States. While our employment-to-employment rate is 50 per cent, his is 47 per cent and his rate of workers remaining out of work is 36 per cent, while ours is 37 per cent. The numbers are quite close and we suspect the difference comes from his using the category “absent”, which we do not use. Like Cowan, we also compare the middle months of each quarter.

Having established the differences between the two types of labour market, what is the best way to view how these flows changed with the arrival of the pandemic? The obvious indicator is the difference matrix (third column of matrices in table 3), which is nothing more than the 2019 matrix subtracted from the 2020 matrix.

The total lack of change in Poland and the United Kingdom is indicated by the fact that their difference matrices are very close to zero. Portugal’s difference matrix shows a slight reduction in employment to employment, which was compensated for by an increase in the flows from out of work into employment. The United States shows a massive drop in the employment-to-employment flows (7 percentage points) and a small decrease in the flows from unemployment and inactivity into employment. Lastly, Latin American countries all show a similar pattern: falls in both employment to employment and in out of work to employment.

The sum of the absolute value of the entries in the difference matrix serves as an indicator of volatility in the labour market (the sum of the values themselves will always equal zero, since everyone ends up in some status). For Costa Rica, Mexico and Brazil, this indicator can be calculated at 24, 19 and 12 percentage points, respectively. For the United States, it is 16. For Portugal, the United Kingdom and Poland it is 5, 1 and 1 percentage points, respectively. While flows changed little with the pandemic in Europe, they were dramatically affected in the Americas.

A final finding from the transition matrices is the difference in which type of flow explains the loss of employment in the United States and in Latin America. In the United States, 89 per cent of the reduction in employment is explained by people losing jobs and moving from employment into unemployment or inactivity. Flows from out of work into employment suffered only modest reductions. But in Latin America, the reduction of flows into employment were as important as flows out of employment. In Brazil, 62 per cent of the reduction in employment came from fewer people moving into employment as compared to 2019. Hence, the pandemic interrupted the normal transitions in the Brazilian and other Latin American labour markets in both directions.

5. Effects of different variables on transitions

How did these transitions affect particular workers? Are certain characteristics (covariates) associated with these transitions? How does being a woman, holding a permanent employment contract or being a professional affect one’s prob-
ability of transitioning to a particular labour market status? Instead of one table containing all the covariates, we break our analysis down by covariate, beginning with sex. In addition to sex, we look at age and schooling as individual covariates of transition probabilities. We also consider earnings, hours worked, labour market insertion (employee versus self-employed), public versus private sector, temporary versus permanent contracts, formal versus informal contracts, as well as two occupational variables: managers, and professional and technical occupations. This gives us 11 variables to analyse. Not all are available for all countries. Poland’s BAEL aggregates age into bands that are not usable; only the Latin American surveys contain questions on informality; Portugal’s IE does not include a question about earnings and in the United Kingdom’s LFS only employees are asked about their earnings. We use what is available. In all cases, the characteristics were measured in the first quarter of each year. This means that the second-quarter data were used only to determine to which labour status (employed or out of work) workers transitioned.

5.1. Demographic variables

Sex

The top panel of table 4 shows the differences in the employment-to-employment probabilities by sex. It gives the disaggregated probabilities for remaining in employment from the first to the second quarter of 2019 and from the first to the second quarter of 2020, with 2019 serving as the baseline. The column showing the change between 2019 and 2020 is interpreted as the impact of the COVID-19 pandemic, controlling for the “usual” transitions from the 2019 baseline. Lastly, the column that shows the differential impact of the COVID-19 pandemic on women as opposed to men is labelled ΔΔ. This is the column that will be the subject of our main analysis henceforth. The \( p \)-value in the final column refers to the likelihood of this difference being equal to zero (a low \( p \)-value means the difference is significantly different from zero; a high \( p \)-value means that the number is statistically zero).

Unlike past recessions, which have had a more negative affect on men – usually owing to declines in economically sensitive sectors such as construction and manufacturing – the COVID-19 recession has been particularly severe on women (ILO 2020c). Our results show that, in general, women were less likely to keep their jobs during the pandemic. The chances of keeping one’s job fell for everyone (except for Polish males), but female employment-to-employment probabilities fell by more than male probabilities did (apart from in the United Kingdom, where they both fell by 1 percentage point). This means that the key statistic indicating the impacts on gender inequality, ΔΔ, shows that the pandemic worsened gender inequality from the point of view of keeping one’s job in all countries with the exception of the United Kingdom.

The other important flow, given in the bottom panel of table 4, is the transition from being out of work into employment. Given that women are more likely than

6 In this article, we do not subscribe to any a priori significance threshold (1, 5, 10 per cent or any other). The significance of each number can be gauged by its \( p \)-value.
men to enter inactivity rather than unemployment, the consideration of both inactivity and unemployment in the “out of work” category is of particular importance for this assessment (Razzu and Singleton 2016). Once again, women who are out of work (unemployed or inactive) have lower chances of finding a job in all seven countries but Poland. The effect of the pandemic on this probability, however, is not clear. While in Europe female transitions into employment fell more than those of men, in the Americas the opposite occurred. The ΔΔ statistic is negative for European countries and positive for those in the Americas.

The main takeaway is that women appear to be at greater risk of losing their jobs, especially in Latin America but also in the United States, though to a lesser degree. This effect, however, is partially compensated for, in the working-age population as a whole, by the smaller fall in the probability of women moving from out of work into employment.

**Age**

To analyse the consequences of the pandemic on young people, we created a group called “Youth”, defined as those from 15 to 25 years old, and a group “Above 25” for workers over the age of 25. In the Polish BAEL, age was aggregated in categories that did not allow comparison with other countries.

Results for age (which is also a proxy, to some degree, for experience) are clear (see table 5). Age protects workers from unemployment and inactivity in normal years and this protection becomes stronger relative to younger workers under COVID-19. The differences in the probability of losing one’s job are as much

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**Table 4. Transition rates by sex**

| Country          | 2019 baseline Male (%) | 2019 baseline Female (%) | 2020 COVID-19 Male (%) | 2020 COVID-19 Female (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value (%) |
|------------------|------------------------|--------------------------|------------------------|--------------------------|--------------------------|---------|-------------|
|                  | Male                   | Female                   | Male                   | Female                   |                          |         |             |
| Employment to employment |                       |                          |                        |                          |                          |         |             |
| Brazil           | 91                     | 88                       | 87                     | 83                       | -0.03                    | -0.05   | -0.02       | 0        |
| Costa Rica       | 90                     | 79                       | 79                     | 66                       | -0.11                    | -0.13   | -0.01       | 0        |
| Mexico           | 91                     | 79                       | 78                     | 63                       | -0.13                    | -0.16   | -0.03       | 0        |
| United States    | 95                     | 93                       | 85                     | 80                       | -0.10                    | -0.13   | -0.02       | 0        |
| Portugal         | 95                     | 96                       | 93                     | 93                       | -0.02                    | -0.03   | -0.01       | 0        |
| Poland           | 97                     | 98                       | 97                     | 95                       | 0.00                     | -0.02   | -0.02       | 0        |
| United Kingdom   | 98                     | 97                       | 97                     | 96                       | -0.01                    | -0.01   | 0.00        | 6        |
| Out of work to employment |                   |                          |                        |                          |                          |         |             |
| Brazil           | 11                     | 8                        | 4                      | 3                        | -0.06                    | -0.05   | 0.01        | 0        |
| Costa Rica       | 22                     | 15                       | 10                     | 5                        | -0.13                    | -0.10   | 0.03        | 0        |
| Mexico           | 28                     | 17                       | 19                     | 10                       | -0.09                    | -0.07   | 0.03        | 0        |
| United States    | 10                     | 7                        | 7                      | 5                        | -0.03                    | -0.02   | 0.01        | 0        |
| Portugal         | 8                      | 6                        | 7                      | 4                        | -0.01                    | -0.01   | -0.01       | 1        |
| Poland           | 2                      | 2                        | 3                      | 2                        | 0.00                     | 0.00    | -0.01       | 12       |
| United Kingdom   | 8                      | 7                        | 9                      | 6                        | 0.01                     | -0.01   | -0.02       | 7        |

Notes: ΔΔ = difference in differences; pp = percentage points.
Sources: See table 3.
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The results for entering employment for those out of work in the first quarter (second panel) are also clear, although not as strong. With the exception of Costa Rica, labour market experience also works in favour of those trying to move into employment.

The inevitable conclusion to be drawn from these data is that the pandemic was especially devastating for youth. Young people were much less likely to keep their jobs if they had them and somewhat less likely to find a job if they were out of work.

Level of education

In most countries, higher education is a passport to higher-paying jobs. We analyse the effects of having higher education on labour market transitions during the pandemic, comparing the transitions of those with higher education and those with lower levels of education.

As expected, having higher education makes it much more likely that workers will keep their jobs (table 6). At the 2019 baseline, workers with higher education were 1 to 7 percentage points more likely to remain employed than those with lower educational levels. With the arrival of the COVID-19 pandemic, the likelihood of remaining in employment fell more for workers with lower levels of education in all seven countries. The differences embodied in the

| Country       | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value (%) |
|---------------|-------------------|-------------------|--------------------------|--------|-------------|
|               | Above 25 Youth    | Above 25 Youth    |                          |        |             |
| Brazil        | 91                | 83                | 86                       | 79     | -0.04       | 0.00        | 0         |
| Costa Rica    | 87                | 79                | 76                       | 61     | -0.11       | -0.18       | -0.08      | 0         |
| Mexico        | 87                | 79                | 74                       | 63     | -0.14       | -0.16       | -0.03      | 0         |
| United States | 95                | 88                | 85                       | 70     | -0.10       | -0.18       | -0.08      | 0         |
| Portugal      | 96                | 90                | 94                       | 81     | -0.02       | -0.09       | -0.06      | 0         |
| United Kingdom| 98                | 95                | 97                       | 92     | -0.01       | -0.02       | -0.02      | 2         |

Out of work to employment

| Country       | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value (%) |
|---------------|-------------------|-------------------|--------------------------|--------|-------------|
|               | Above 25 Youth    | Above 25 Youth    |                          |        |             |
| Brazil        | 13                | 15                | 5                        | 6      | -0.08       | -0.09       | -0.01      | 0         |
| Costa Rica    | 19                | 13                | 7                        | 6      | -0.12       | -0.08       | 0.04       | 0         |
| Mexico        | 21                | 19                | 14                       | 11     | -0.07       | -0.08       | -0.01      | 0         |
| United States | 7                 | 13                | 5                        | 9      | -0.02       | -0.04       | -0.02      | 0         |
| Portugal      | 7                 | 7                 | 6                        | 4      | -0.01       | -0.02       | -0.02      | 1         |
| United Kingdom| 5                 | 13                | 5                        | 13     | 0.00        | 0.00        | 0.01       | 89        |

Notes: ΔΔ = difference in differences; pp = percentage points.
Sources: See table 3.
ΔΔ indicator vary from less than 1 percentage point in the United Kingdom up to 12 percentage points in Costa Rica; the results are in all cases positive and in all but Costa Rica are statistically significant at 10 per cent.

The effect on moving into employment is less clear. The ΔΔ statistic indicates that those with higher education were less likely to move into employment in Brazil, Portugal and Poland, more likely in Costa Rica, Mexico and the United States (though the difference was less than half a percentage point for the United States) and there was no significant difference in the United Kingdom (p-value of 23 per cent). In conclusion, higher education diplomas appear to protect workers from losing their jobs, but the effect on moving from out of work into employment is not as clear.

This concludes our analysis of individual characteristics. A second question is whether job characteristics also influenced how likely a worker was to stay in employment.

5.2. Labour market insertion variables

 Labour earnings

The first and most obvious question relating to inequality and labour market transitions is how earnings influence the transitions. If high earners are more likely to keep their jobs, then the impact of COVID-19 is unequalizing. If, on the contrary, low earners are more likely to stay in employment, then COVID-19 is equalizing. We considered a person to have high earnings if he or she was in

| Country       | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value (%) |
|---------------|-------------------|-------------------|--------------------------|---------|-------------|
|               | No higher | Higher | No higher | Higher | No higher | Higher |
| Brazil        | 88       | 95     | 83       | 91     | -0.05    | -0.04   | 0.01     | 0        |
| Costa Rica    | 84       | 90     | 70       | 87     | -0.14    | -0.03   | 0.12     | 13       |
| Mexico        | 85       | 90     | 69       | 81     | -0.16    | -0.09   | 0.07     | 0        |
| United States | 93       | 95     | 77       | 86     | -0.16    | -0.09   | 0.07     | 0        |
| Portugal      | 95       | 98     | 91       | 96     | -0.03    | -0.02   | 0.02     | 0        |
| Poland        | 97       | 98     | 95       | 97     | -0.02    | -0.01   | 0.01     | 3        |
| United Kingdom| 97       | 98     | 96       | 97     | -0.01    | -0.01   | 0.00     | 5        |

Out of work to employment

| Country       | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value (%) |
|---------------|-------------------|-------------------|--------------------------|---------|-------------|
|               | No higher | Higher | No higher | Higher | No higher | Higher |
| Brazil        | 10       | 16     | 4        | 7      | -0.06    | -0.10   | -0.04    | 0        |
| Costa Rica    | 18       | 17     | 7        | 8      | -0.11    | -0.08   | 0.02     | 1        |
| Mexico        | 20       | 24     | 12       | 18     | -0.07    | -0.07   | 0.01     | 2        |
| United States | 7        | 9      | 5        | 7      | -0.02    | -0.03   | 0.00     | 0        |
| Portugal      | 6        | 14     | 5        | 8      | -0.01    | -0.06   | -0.05    | 0        |
| Poland        | 2        | 5      | 2        | 3      | 0.00     | -0.02   | -0.02    | 4        |
| United Kingdom| 7        | 8      | 6        | 10     | -0.01    | 0.01    | 0.02     | 23       |

Notes: ΔΔ = difference in differences; pp = percentage points.
Sources: See table 3.
The labour market fallout of COVID-19

The labour market fallout of COVID-19

The results shown in table 7 are once again clear: COVID-19 exacerbated already existing inequalities, as workers in the highest quartile were more likely to keep their jobs than those in the other three. The COVID-19 effect is strongest in Costa Rica at 12 percentage points. Although the earnings effect is not significant in the United Kingdom, it is high at 4 percentage points in Brazil and 6 points in Mexico and the United States.

**Hours worked**

The effect of hours worked on the change in probability of losing one’s job under COVID-19 is about the same as that of income quartile. The definition we used is that workers are considered part-time if they usually work less than 35 hours per week and full-time otherwise.

Part-time workers were more likely to lose their jobs in 2019 and this effect is exacerbated by the pandemic. As usual, the effect varies, from a very high 11 percentage points among workers in the United States, where part-time workers are commonly found in the hospitality and retail sector, to less than 1 percentage point (but still significantly different from zero) in the United Kingdom (table 8).

| Table 7. Labour earnings: Employment to employment |
|-----------------------------------------------|
| **Country** | **2019 baseline** (%) | **2020 COVID-19** (%) | **2019 to 2020 change (pp)** | **ΔΔ (pp)** | **p-value (%)** |
| | Qt1 – Qt3 | Qt4 | Qt1 – Qt3 | Qt4 | Qt1 – Qt3 | Qt4 |
| Brazil | 88 | 96 | 82 | 94 | -0.06 | -0.02 | 0.04 | 0 |
| Costa Rica | 85 | 95 | 71 | 93 | -0.14 | -0.02 | 0.12 | 1 |
| Mexico | 85 | 93 | 68 | 82 | -0.17 | -0.11 | 0.06 | 0 |
| United States | 93 | 98 | 84 | 94 | -0.09 | -0.11 | 0.06 | 0 |
| United Kingdom | 97 | 99 | 96 | 99 | -0.01 | 0.00 | 0.01 | 47 |

Notes: ΔΔ = difference in differences; pp = percentage points; Qt = quartile. Earnings data in the United Kingdom refer only to employees.

Sources: See table 3.

| Table 8. Hours worked: Employment to employment |
|-----------------------------------------------|
| **Country** | **2019 baseline** (%) | **2020 COVID-19** (%) | **2019 to 2020 change (pp)** | **ΔΔ (pp)** | **p-value (%)** |
| | Part time | Full time | Part time | Full time | Part time | Full time |
| Brazil | 81 | 92 | 75 | 88 | -0.06 | -0.04 | 0.01 | 0 |
| Costa Rica | 72 | 90 | 54 | 81 | -0.19 | -0.09 | 0.10 | 0 |
| Mexico | 74 | 88 | 54 | 75 | -0.20 | -0.13 | 0.07 | 0 |
| United States | 86 | 96 | 65 | 86 | -0.20 | -0.09 | 0.11 | 0 |
| Portugal | 85 | 97 | 77 | 95 | -0.08 | -0.02 | 0.06 | 0 |
| United Kingdom | 95 | 98 | 95 | 97 | -0.01 | -0.01 | 0.00 | 0 |

Notes: ΔΔ = difference in differences; pp = percentage points.

Sources: See table 3.
The self-employed versus employees

The manner in which labour market insertion is affected by the crisis is likely to be contingent on the policy package applied, but will also reflect the nature of the different types of insertion. In particular, self-employed workers (including employers) have greater agency over business decisions and may continue working even when their income plummets. Employees, on the other hand, have less agency, and their fate is likely to be dependent on the design and scope of policy packages and decisions by firms that could potentially keep them on payroll, even if work has dried up. The labour force surveys used in this analysis consider that employees who are still receiving a salary but cannot perform their duties because of pandemic restrictions are “employed”, even if they are idle at home.

Table 9 shows that the results indeed reflect the policy response. In Portugal, the United Kingdom and, to a lesser extent, Brazil, where subsidies to keep workers on payroll were a prominent component of policy packages, the fall in employment-to-employment transitions for employees from 2019 to 2020 is much less severe than in Costa Rica, Mexico and the United States, where such direct subsidies did not exist. For the first three, the falls in employment-to-employment transitions for employees range from 1 to 5 percentage points, whereas among the other three they range from 9 to 12 percentage points.

For the self-employed, the results are less straightforward. The sharp falls in Costa Rica and Mexico may reflect the rapid decline in aggregate demand as a result of the much smaller fiscal response. In Brazil, Portugal, the United Kingdom and, to a lesser extent, the United States, the self-employed fared better. This may be a result of the stronger fiscal response in these countries.

Public versus private sector

Some of the advantages often attributed to work in the public sector are that it is more “recession-proof”, as it provides needed services that must continue even in a crisis, that it is not subject to the same financial constraints as the private sector, and that dismissal protection is often stronger for its employees. Indeed, Fontaine et al. (2020), in a study of public and private sector flows in France, Spain, the United Kingdom and the United States, find

| Country          | 2019 baseline (Employee) | 2020 COVID-19 (Employee) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value (%) |
|------------------|--------------------------|--------------------------|--------------------------|---------|-------------|
| Brazil           | 91                       | 87                       | -0.05                    | -0.03   | 0.02        |
| Costa Rica       | 87                       | 82                       | -0.09                    | -0.20   | -0.11       |
| Mexico           | 88                       | 81                       | -0.12                    | -0.22   | -0.09       |
| United States    | 94                       | 92                       | -0.12                    | -0.07   | 0.05        |
| Portugal         | 97                       | 89                       | -0.03                    | -0.03   | 0.00        |
| United Kingdom   | 97                       | 97                       | -0.01                    | -0.01   | 0.01        |

Notes: ΔΔ = difference in differences; pp = percentage points.

Sources: See table 3.
that during the period 2003–18, aggregate job-separation rates in the public sector were lower than in the private sector across all four countries, despite differences in the size of the public sector. Crises, however, can upset these trends, as austerity policies can lead to job losses in the public sector, as can decisions regarding the privatization of public services. Indeed, during the global financial crisis of 2008, public sector employment was procyclical in France, but anticyclical in the United States, reflecting the opposing policy directions of the two governments.

In the second quarter of 2020, movements out of employment were the same or worse in the private sector compared with the public sector, in all seven countries, but there were nonetheless important movements out of public sector employment in Costa Rica, Mexico and the United States (table 10). As already mentioned, Mexico had tight fiscal rules, which translated quickly into public sector job losses. In the United States, state and local governments facing declining tax revenues and no support from the federal government also shed employment, most of it in education. With the shift to online schooling, teachers’ aides and other staff, including janitorial and cafeteria workers, from elementary through to tertiary education, were dismissed (Wolfe and Kassa 2020).

**Table 10. Public versus private sector: Employment to employment**

| Country         | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value |
|-----------------|-------------------|-------------------|--------------------------|---------|---------|
|                 | Private | Public | Private | Public | Private | Public | Private | Public |      |
| Brazil          | 90      | 96     | 85      | 91     | -0.05   | -0.05  | 0.00    | 0      |
| Costa Rica      | 85      | 94     | 74      | 96     | -0.11   | 0.01   | 0.13    | 30     |
| Mexico          | 88      | 93     | 74      | 89     | -0.14   | -0.04  | 0.10    | 0      |
| United States   | 94      | 95     | 84      | 87     | -0.10   | -0.09  | 0.02    | 0      |
| Portugal        | 97      | 99     | 94      | 98     | -0.03   | -0.01  | 0.02    | 0      |
| Poland          | 97      | 98     | 96      | 97     | -0.01   | -0.01  | 0.01    | 0      |
| United Kingdom  | 97      | 99     | 96      | 98     | -0.01   | 0.00   | 0.01    | 58     |

Notes: ΔΔ = difference in differences; pp = percentage points.
Sources: See table 3.

**Type of contract: Permanent versus temporary**

Temporary workers, by definition, have a greater propensity to transition in the labour market and often transition from temporary status to unemployment or inactivity, even in good times (ILO 2016). Particularly in labour markets that have a high degree of duality, such as in Southern Europe, most movements from employment to non-employment involve workers on temporary contracts (Silva and Vázquez-Grenno 2013). Thus it is no surprise that temporary workers were more likely to lose their jobs during the 2019 baseline, nor that during the pandemic their likelihood of remaining in employment fell considerably compared with workers on permanent contracts. The values are large, ranging from 3 percentage points in Brazil to 8 percentage points in Portugal (table 11).
Formal versus informal contracts

While being employed informally – or “off the books” – does occur in high-income countries, the practice is more common in developing countries, and for this reason it is probed in the labour force surveys of Brazil, Costa Rica and Mexico, but not in those of the other countries in our study. The effects of informality are as expected and quite strong: employees on informal contracts were more likely to lose their jobs in the 2019 baseline year, but also experienced a higher transition out of employment under the labour market effects of the COVID-19 pandemic (table 12).

Managers

Given that managers are necessary to continue firm operations, we hypothesize that being a manager would provide some protection from dismissal during the crisis. The data in table 13 show that this is only partially true, perhaps because many managers, especially in larger organizations, also have bosses themselves, and because managers in sectors such as hospitality and retail, that were severely affected by the pandemic, may not have been able to shield themselves from its effects. While the $\Delta\Delta$ statistic is always positive, it is not statistically different from zero in Brazil and Portugal, and barely so in Mexico. Managers in the United States appear to have been the best at keeping their own jobs at a rate of 9 percentage points more than non-managers.

Table 11. Type of contract: Employment to employment

| Country  | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | $\Delta\Delta$ (pp) | p-value (%) |
|----------|------------------|------------------|--------------------------|---------------------|-------------|
|          | Permanent | Temporary | Permanent | Temporary | Permanent | Temporary |         |          |         |
| Brazil   | 90       | 83       | 86       | 76       | -0.04     | -0.07     | -0.03 | 0        |
| Costa Rica | 87      | 69       | 75       | 50       | -0.12     | -0.19     | -0.07 | 0        |
| Mexico   | 87       | 84       | 75       | 66       | -0.12     | -0.18     | -0.06 | 0        |
| Portugal | 96       | 92       | 95       | 83       | -0.02     | -0.10     | -0.08 | 0        |
| United Kingdom | 98   | 90       | 97       | 88       | -0.01     | -0.02     | -0.02 | 25       |

Notes: $\Delta\Delta = \text{difference in differences}$; pp = percentage points. Sources: Authors’ calculations using ECE, ENOE/ETOE, IE, LFS, PNADC microdata.

Table 12. Formal versus informal contracts: Employment to employment

| Country  | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | $\Delta\Delta$ (pp) | p-value (%) |
|----------|------------------|------------------|--------------------------|---------------------|-------------|
|          | Formal | Informal | Formal | Informal | Formal | Informal |         |          |         |
| Brazil   | 94     | 83     | 90     | 75     | -0.04  | -0.08  | -0.04 | 0        |
| Costa Rica | 92     | 75     | 88     | 56     | -0.04  | -0.19  | -0.15 | 0        |
| Mexico   | 92     | 84     | 85     | 65     | -0.07  | -0.19  | -0.12 | 0        |

Notes: $\Delta\Delta = \text{difference in differences}$; pp = percentage points. Only employees considered. Sources: Authors’ calculations using ECE, ENOE/ETOE, PNADC microdata.
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Table 13. Managers: Employment to employment

| Country     | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value |
|-------------|-------------------|-------------------|--------------------------|---------|---------|
|             | Other             | Manager           | Other                    | Manager |         |
| Brazil      | 89                | 96                | 85                       | 95      | -0.04   | 0.04    | 36      |
| Costa Rica  | 86                | 98                | 74                       | 92      | -0.12   | 0.06    | 9       |
| Mexico      | 86                | 92                | 71                       | 80      | -0.15   | 0.02    | 14      |
| United States | 94             | 96                | 81                       | 92      | -0.13   | 0.09    | 0       |
| Portugal    | 95                | 98                | 93                       | 98      | -0.03   | 0.03    | 61      |
| United Kingdom | 97          | 98                | 96                       | 97      | -0.01   | 0.00    | 9       |

Notes: ΔΔ = difference in differences; pp = percentage points.
Sources: See table 3.

Table 14. Technical and professional occupations: Employment to employment

| Country     | 2019 baseline (%) | 2020 COVID-19 (%) | 2019 to 2020 change (pp) | ΔΔ (pp) | p-value |
|-------------|-------------------|-------------------|--------------------------|---------|---------|
|             | Other             | Technical/ professional | Other                    | Technical/ professional |         |
| Brazil      | 88                | 95                | 84                       | 91      | -0.05   | -0.04   | 0.01    | 0       |
| Costa Rica  | 84                | 91                | 71                       | 85      | -0.13   | -0.06   | 0.07    | 0       |
| Mexico      | 86                | 88                | 70                       | 79      | -0.16   | -0.09   | 0.06    | 0       |
| United States | 93            | 96                | 81                       | 87      | -0.12   | -0.09   | 0.04    | 0       |
| Portugal    | 95                | 98                | 91                       | 97      | -0.03   | -0.01   | 0.02    | 4       |
| United Kingdom | 97          | 98                | 96                       | 98      | -0.01   | 0.00    | 0.00    | 10      |

Notes: ΔΔ = difference in differences; pp = percentage points.
Sources: See table 3.

**Technical and professional occupations**

Table 14 shows that workers in technical and professional occupations as a whole fared better than managers. In all countries, the ΔΔ statistic is positive for technical and professional workers, although this varies from 7 percentage points for Costa Rica to less than 1 percentage point for the United Kingdom. Given the ease with which most technical and professional workers can telework, this is not a surprise. It also exacerbates existing inequalities, since these workers are more likely to keep their jobs, and their earnings are higher.

**5.3. Discussion**

In our empirical analysis, we have looked at three individual characteristics – sex, age and schooling – as well as eight employment characteristics – earnings, hours, labour market insertion, public versus private sector employment, and temporary or permanent and formal or informal contracts, as well as two types of privileged occupations. In almost all cases, the COVID-19 pandemic exacerbated existing inequalities.

Women, young people and those with lower levels of education were less likely to keep their jobs relative to men, older workers and those with higher
education, and the differences increased with the onset of the COVID-19 pandemic. Those in the highest quartile of earnings, full-time workers, permanent workers, formal workers, managers and workers in technical or professional occupations were all more likely to keep their jobs than those in the lower tails of the earnings distribution, part-time workers, temporary workers, informally employed workers and those in other occupations. There was no consistent effect for being an employee as opposed to being self-employed. Being a public sector worker afforded some protection, but the effect was weakened in some countries.

The inescapable conclusion is that the pandemic indeed exacerbated inequalities in labour market transitions. While this effect was proportional to the impact of the pandemic on labour markets, which was somewhat mitigated in Europe compared with the much larger impact in the Americas, it existed everywhere.

However, a few caveats must be made. These analyses are univariate and they do not necessarily add up. The effects of schooling, earnings and occupation, for example, may be confounded. The sample sizes were too small for multivariate analysis. A second caveat is that these are short-term effects as we are comparing transitions from first to second quarters. The pandemic continued raging throughout 2020 and into 2021 and thus the effects may differ over time, especially as fiscal pressure mounts.

6. Conclusion

The COVID-19 pandemic led to a curtailment of “non-essential” activities with dramatic effects on economies and their labour markets. Unlike similar crises brought on by a shock in aggregate demand, this crisis was initially a supply shock. Recognizing the peculiarity of the crisis, many countries in Europe, but also elsewhere, as in Brazil, made efforts to moderate dismissals by offering wage subsidies to employers to keep workers on their payroll. The hope was that, when the pandemic was under control and businesses were able to resume their activities, these firms would be able to recall their existing workers more easily, thereby bypassing the costs of rehiring. The outcome of such policies is evident in the transition matrices analysed in this study, which show how such policies mitigated labour market volatility in countries that favoured them as opposed to income support measures. Without doubt, this was beneficial for workers as they did not have to face the insecurities associated with job loss, nor the well-known scarring effects caused by unemployment on labour market trajectories. Moreover it is likely that the policy enabled these individuals to stay at home, thus lessening the spread of the virus.

Our study indicates that the immediate labour market fallout varied dramatically across countries and that the suffering caused was not shared equally. Workers who were already more vulnerable in the labour market saw their vulnerability rise as a result of the pandemic. Thus labour market inequalities increased for women, young people, the less educated, the less well-off, and for workers with temporary and informal contracts. This finding reiterates the importance of the overall design and scope of measures, given that the impact of
any worsening of labour markets is not equally shared. Accordingly, an improvement in the labour market is also an improvement for vulnerable groups. But it also suggests the need for labour policies, as well as other social and economic policy interventions, that can equalize labour market outcomes across groups. One approach concerns the characteristics of the jobs themselves. Our findings show that workers in temporary and informal contracts fare worse; regulations and policies that support the use of formal and permanent contracts can lessen labour market volatility. As women, young people, the less educated and the less well-off are more likely to be in temporary and informal contracts, such efforts can directly benefit these groups.

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