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The impact of the COVID-19 pandemic on Labour Force Participation in Chile : Evidence from a Difference-in-Differences approach

Diego Orlando Robles Cariaga

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Jeremy Smith (Head of the Department of Economics, University of Warwick) and Michael Ward (Head of the Department of Economics, Monash University)

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The impact of the COVID-19 pandemic on Labour Force Participation in Chile: Evidence from a Difference-in-Differences approach

Diego Orlando Robles Cariaga[1]

Abstract

Due to the rapid global spread of COVID-19, many governments imposed nationwide closures with direct consequences on people's welfare, and Chile is not far from this scenario. Therefore, this paper aims to investigate the impact of the national lockdown adopted by the Chilean government on employment. To this end, a difference-in-differences (DID) methodology is used to compare the occupational situation of the inhabitants of the Metropolitan Region during the post-treatment period. The empirical results, based on a cross-sectional dataset, indicate that employment was not affected due to the lockdown policies adopted by the Chilean government to curb the spread of COVID-19. However, the results show that women, those living in poorer communes, and those less educated are more likely to lose their jobs.

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[1] E-mail: diego.roblescariaga@gmail.com

1 Introduction

Due to the rapid global spread of COVID-19, many governments imposed nationwide closures with direct consequences on people's welfare, and Chile is not far from this scenario. Therefore, this paper aims to investigate the impact of the national closure adopted by the Chilean government on employment. To this end, a difference-in-differences (DID) methodology is used to compare the employment situation of the Metropolitan Region's workers during the post-treatment period. The empirical results, based on a cross-sectional dataset, indicate that the difference in average occupational status in the Metropolitan Region relative to the central macro-zone (Valparaíso, O'Higgins, Maule Regions) under the lockdown policy is insignificant. Furthermore, if all regions of Chile are taken as the treatment group, the result remains statistically insignificant. Nevertheless, the results show that women and less-educated workers are more likely to lose their jobs.

On 12 March 2020, the World Health Organization (WHO) announced the COVID-19 outbreak as a pandemic. By early 2020, COVID-19 had already infected more than one million people worldwide in 204 countries, with more than 55,000 deaths, and the coronavirus pandemic now looms as a human development crisis, with its health consequences and income impact, as it has caused not only significant human costs - nearly 4.7 million deaths globally since its emergence (World Health Organization, 2021) - but also severe economic consequences. As a general pattern of action, countries have adopted stringent measures, including quarantines, lockdown and widespread business closures, destroying some jobs or businesses. In contrast, others have been "frozen" or "semi-frozen" (International Labour Organization, 2020), and causing economic activity around the world to plummet. On 3 March 2020, the first case of Covid-19 was recorded in Chile. On 18 March 2020, President Sebastián Piñera declared a State of Constitutional Exception of Catastrophe throughout Chile, and on 25 March 2020, the government announced a total quarantine for seven communes in the Metropolitan Region, affecting 1.3 million people.

Chile has implemented a wide range of fiscal programmes to help individuals and businesses given the economic and social crisis depth. For businesses, the assistance has consisted of assuring them that they will borrow with the treasury as guarantor, allowing them to stop their activities without paying wages through the "Employment Protection Law" or postponing their taxes. For formal workers, the help has mainly been to make access to their savings via unemployment insurance

more flexible with a subsidy that only operates when individual savings run out. In the case of informal workers and lower-income sectors, in addition to a food package, a "Single Family Grant (SUF)" was approved for three months with decreasing values over time (OECD, 2021). In this lockdown context, the Chilean government decided to maintain in operation those businesses considered essential to the supply chain of products and services so that the population can live, granting a special permit to workers that authorises them to carry out fundamental activities and to people to obtain essential goods and services. However, with the lockdown, about 427,000 businesses operating, about 174,000 continued to operate, which meant that just 2.3 million workers out of 5.6 million were working. Among the sectors of the economy that continued to operate are those related to the Health Industry (laboratories, pharmacies, chemical companies and producers of medicines and medical supplies); Public Utility Services Industry (airports, energy supply companies, gas, electricity, drinking water, fuel, telecommunication, financial institutions, mail and delivery companies, among others); Food Industry (mini markets and supermarkets, businesses dedicated to the production and distribution of food, among others); and Transport Industry (logistics businesses and also airports terminals and railway facilities). Likewise, it also allowed the operation of the chain of suppliers that are essential and basic to its operation (The Government of Chile, 2021).

Therefore, it is of particular interest to measure the real impact of this health and economic crisis on households and their labour participation. The research objective is to use the labour situation to document and quantify the immediate impact of COVID-19 on the employment level of households: What is the effect of the lockdown policy on employment? What are the socio-economic characteristics of individuals where the greatest effect is observed?

The crisis has not only strongly affected households in Chile in a transversal way but also the impact of the global pandemic in economic and health terms, so it is important to study its long-term effects. Namely, using data from the Survey of Income and Programme Participation (SIPP), Almond and Mazumder (2005) found that cohorts who were in utero during the 1918 influenza pandemic have deteriorated health outcomes relative to cohorts born a few months earlier or later. Most worryingly, the fact that these patterns manifest 65-80 years after the pandemic suggests that changes in foetal health may have lifelong effects. Similar results are obtained from another perspective when Karbownik and Wray (2019), in their recent study, explore whether fetal and early childhood exposure to hurricane stress affects human capital development and labour market

outcomes in adulthood. Using a difference-in-difference approach, they estimate that white males who experienced a hurricane in utero or as infants have lower earnings between the ages of 42 and 53. Moreover, considering the economic contraction due to the near absolute decline in activity in several sectors, this negative effect is likely to be prolonged over the long term in terms of wages and employment for those who will enter the labour market in this period of global health crisis and economic recession (Escalonilla, Cueto, & Perez Villadóniga, 2021). However, due to the urgency and contingency in terms of public policy, it is crucial to study the short-term effects of the global health emergency.

The coronavirus pandemic is emerging as a human development crisis in terms of its consequences on health, its impact on employment and people's incomes, which is demonstrated by Palomino, Rodriguez and Sebastian (2020) analysis, which reveals substantial and unequal potential wage losses in the distribution across Europe. Moreover, they find that both poverty and wage inequality increase in all European countries. However, empirical evidence shows that the effects of the pandemic have not been homogeneous. For example, in the case of the UK, wealthier households suffered almost half of the pandemic-related decline in aggregate consumption, and their expenditure fell much more than income.

In contrast, poorer households have seen the smallest expenditure cuts and the largest fall in earnings, but their total income has fallen much less due to increased government benefits (Hacıoğlu-Hoke, Känzig, & Surico, 2021). The situation is no different in the case of the United States, where personal consumption expenditures were significantly affected by the pandemic (Dong, Gozgor, Lu, & Yan, 2021). It is, therefore, reasonable to assume that the crisis will set back the development of many countries and that its impacts will deepen the inequalities that existed before the pandemic.

The analysis focuses on the impact of COVID-19 on the level of employment of households in Chile, since, according to the results presented by the Chilean Ministry of Social Development, during the health emergency, 38.4% of households had fewer people in employment. As a result, during the pandemic, 27.4% of households had none of their members in employment, while before the pandemic, this proportion was 13.9%. The case of Chile is ideal for the methodology of differences in differences since the "COVID-19 Social Survey" database conducted during the second quarter of 2020 is used as a working basis. The survey aims to determine the socio-

economic situation of households after the COVID-19 health emergency. Thus, the survey provides a situation snapshot of the households before and during the emergency regarding income and employment, ideal for the identification strategy.

The results of this paper contribute to an emerging international literature on the impacts of COVID-19 on the labour market in a Latin American country. Consequently, the present study helps determine whether closure regulations cause a decrease in employment and gender inequality in employment outcomes using administrative microdata. In addition, the results contribute to Chilean policy by increasing its capacity to support the households most impacted by the crisis so that the consequences of the crisis are transitory and provide reliable and timely information for the design of public policies that deliver an inclusive response to the crisis.

The limitations on displacement and the social distancing measures implemented to reduce the spread of contagion have impacted the socio-economic conditions of the population, which has prompted individuals and households to cope with the emergency by considering different strategies, with potential effects on access to food, reconciliation of tasks within the household and mental health. Therefore, the importance of the paper is to provide direct evidence on the immediate economic impact in Chile of COVID-19, based on Chile's experience during the first half of 2020 with lockdown policies in the country's main region.

However, this study may have several limitations. First, the study's cross-sectional nature makes the responses assessed likely to change as the pandemic progresses. In particular, lockdown policies were tightened as the pandemic progressed in Chile, so the government conducted a second wave during the second half of 2020; however, there were other respondents, so a longitudinal study is impossible. Secondly, the study used a methodology based on telephone calls lasting approximately 20 minutes where the informant was a household member aged 18 years or older. Although this allowed to obtain responses from a wide geographic distribution quickly, the respondents are only those with access to mobile or fixed telephone.

The remainder of the document is organised as follows. Section 2 provides a brief description of the "COVID-19 Social Survey" as a source of information. Section 3 discusses our identification strategy for estimating the effect of the COVID-19 pandemic on the level of employment and discusses the difference-in-difference method. Section 4 describes the estimation results. Finally, section 5 presents the conclusions of the study.

2 Empirical Methodology

Identification Strategy

A quasi-experiment: Difference-in-Differences. Using the pandemic as a natural experiment, a Difference-in-Differences approach is used to detect the effects of the lockdown policy on labour supply. We compare the difference in outcomes for people living in the Metropolitan Region (treatment) with the same difference for those who have not undergone lockdown.

The fundamental identifying assumption is common trends, i.e., that the evolution of the number of employees in the labour force observed in a macro-area other than the Metropolitan Region without lockdown policies provides a valid counterfactual for what this trend would have been once quarantine was in place. Therefore, the key to identification is that no other political, economic or demographic factors affected the two groups during the periods examined. Figure 1 shows the trend for the number of employed in the Metropolitan Region (Treatment Group) and the Macro Central Zone (Control Group) conformed by the Regions: Valparaíso, O'Higgins and Maule.

Figure 1: Parallel Trends
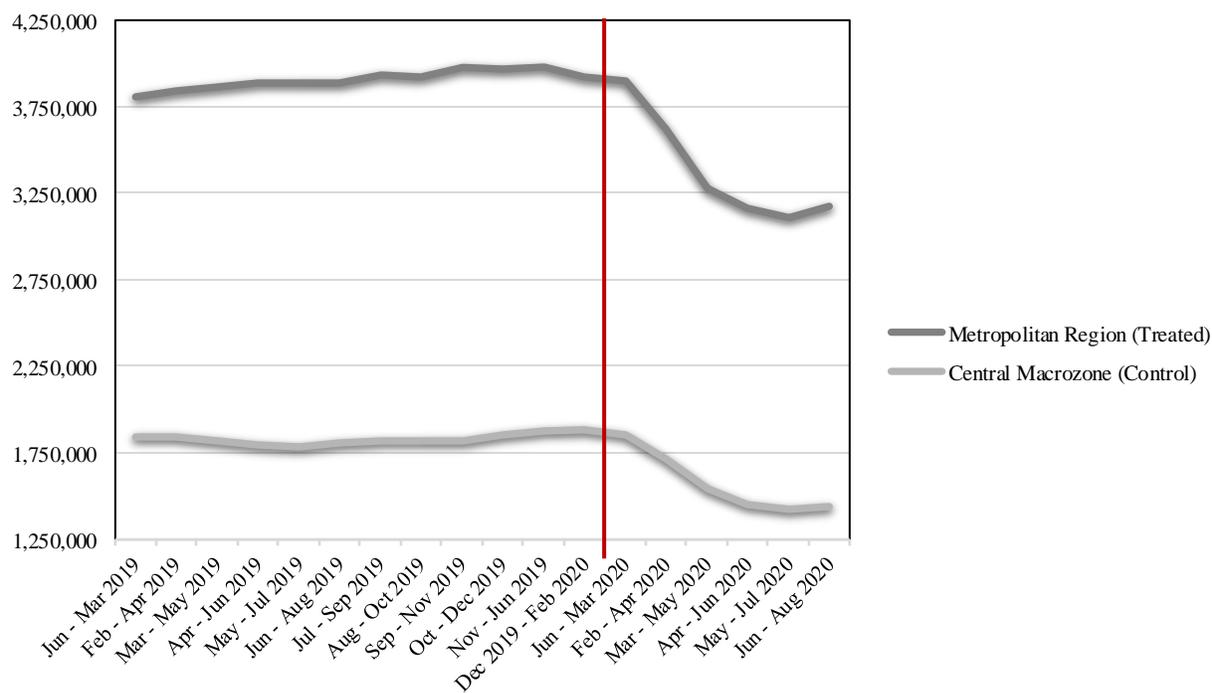
Source: Own elaboration based on data from the National Institute of Statistics of Chile.

Overall, the graph strongly supports the hypothesis of parallel trends. In the pre-COVID-19 period, the trend in the number of employed persons in the Metropolitan Region is quite similar to the trend in the Central Macro-zone, and; therefore, it is reasonable to assume that the fundamental assumption is met in the shorter window of the analysis period which gives less chance of confounding effects of other macroeconomic developments.

Although the "Interviewer's Manual" emphasises that the interviewer should explain to the respondent that the respondent should consider 15 March as the start date of the crisis, for the empirical analysis, the closing date of the communes in the Metropolitan Region (18 March 2020) is used as the start date of the outbreak and the employment situation before and after is compared. Pre-pandemic occupational status is used as the reference group to capture the counterfactual occupational pattern. Consequently, the treatment variable captures those observations belonging to the communes of the Metropolitan Region that suffered the first lockdown measures (2 or more months of quarantine), i.e., it would assess the impact of lockdown on the labour supply of households because they reside in the affected communes and not because they were randomly assigned.

Model Specification

Using the lockdown implementation of the Metropolitan Region, the impact of COVID-19 on the occupational situation is assessed using a difference-in-difference regression approach. The proposed model is as follows:

$$Eit = \beta_1 + \beta_2 RM + \beta_3 D_t + \delta(RM_i \; x \; D_t) + \beta_4 X_i + e_{it} \qquad (1)$$

Where *Eit* is a dichotomous variable that takes the value equal to 1 if an individual is working and 0 if an individual is not working. The treatment variable is the indicator variable RM = 1 if the observation is from the Metropolitan Region, zero if it belongs to the control group. The time indicator is D = 1 if the observation has undergone more than two months of lockdown (after 18/03/2021) and zero if it has not undergone lockdown. Finally, *Xi* is a set of socio-economic characteristics and e_{it} is the error term.

The coefficients of this Difference-in-Difference framework have the following interpretation. β_2 captures the permanent mean differences in outcomes between those living in the Metropolitan Region and those living in the Central Macro-zone (Valparaíso, O'Higgins and Maule). β_3 considers the differences before and after lockdown that are common to the treated and control groups. The parameter of interest is δ. It tests whether the difference in mean scores between people living in the Metropolitan Region and those living in the Central Macro-zone in the post-lockdown period is different from the same difference in the pre-lockdown period. Therefore, δ captures, conditional on X, the additional average impact of the COVID-19 outbreak, reflecting the lockdown policy's effect on those living in the Metropolitan Region.

3 Data

The data on the socio-demographic characteristics of households come from the "Social Survey COVID-19" carried out between 24 June and 7 August 2020, collected by the National Statistics Institute (INE) and conducted by the Ministry of Social Development and Family (MDSF) and the United Nations Development Programme (UNDP). The "Social Survey COVID-19 " was addressed to households residing in private dwellings located in the Chilean national territory, except for some very remote or difficult to access areas, and to the persons who are part of these households. In addition, the "Social Survey COVID-19 " considers indicators measured at both the individual and household levels. It also incorporates territorial, gender and household typology variables, among others, to sensitise the diagnosis to the concrete experience and particularities of the different processes underway. Although the survey is cross-sectional, it provides data on treatment and comparison group outcomes at baseline and end-line because it asks respondents about their employment status before and after the COVID-19 crisis.

Although the survey is cross-sectional, it provides data on treatment and comparison group outcomes at baseline[2] and endline[3] because it asks respondents about their employment status before and after the COVID-19 crisis, thus providing the minimum information required to apply the Difference-in-Differences method (White & Raitzer, 2017).

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[2] Before starting the COVID-19 crisis, did you have a job, business or other income-generating activity?
[3] Concerning that job, business or activity, what was your employment situation last week?

Due to health restrictions, the survey was designed to be applied by telephone to informants aged 18 and over, belonging to households that form part of a representative sample at the national level and for five territorial macro-areas. In total, informants in 4,426 households were surveyed, obtaining information on 13,648 persons. Table 1[4] provides descriptive statistics for the variables included in the estimations using the Central Macrozone as the control group.

Table 1: Descriptive statistics of the variables included in the estimations of Employment

	Full Sample		Treatment Group		Control Group (Central Macro-zone)	
	Mean	Sd	Mean	Sd	Mean	Sd
Women	0.53	0.499	0.53	0.499	0.52	0.499
Home with Elders	0.48	0.499	0.47	0.499	0.51	0.500
Home with Children	0.55	0.498	0.55	0.497	0.52	0.499
Home: Low Poverty	0.87	0.341	0.99	0.095	0.54	0.499
Home: Medium Poverty	0.12	0.329	0.01	0.095	0.42	0.494
Home: High Poverty	0.01	0.103	0	0	0.04	0.193
Primary Education	0.17	0.374	0.13	0.338	0.26	0.441
Secondary Education	0.42	0.493	0.42	0.494	0.42	0.493
Higher Education	0.37	0.487	0.43	0.495	0.28	0.451
Number of observations	**10406**		**7530**		**2876**	

Overall, there are no large differences between the socio-economic characteristics of individuals in the treatment group and the control group. However, an average worker in the Metropolitan Region lives in a commune with a low poverty level and may have more education than an average worker in the control group. Table 2 presents the means of the key variable in the dataset, and they are presented separately for the Metropolitan Region (Panel A: Treatment Group) and the Central Macro-zone consisting of Valparaíso, O'Higgins and Maule (Panel B: Control Group).

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[4] See Table 1 in the Appendix section for the descriptive statistics of the variables included in the estimations using all regions of Chile as the control group.

Table 2: Employment/Unemployment Rates of Individuals in Metropolitan Region and Comparison Macrozone

Panel A	Treatment					
	Full Sample		Pre-Lockdown		Post-Lockdown	
	Mean	Sd	Mean	Sd	Mean	Sd
Employment	0.49	0.498	0.55	0.497	0.42	0.494
Unemployment	0.48	0.500	0.44	0.497	0.51	0.500
Number of observations	7530		3765		3765	

Panel B	Control					
	Full Sample		Pre-Lockdown		Post-Lockdown	
	Mean	Sd	Mean	Sd	Mean	Sd
Employment	0.45	0.500	0.51	0.500	0.39	0.487
Unemployment	0.52	0.499	0.49	0.500	0.55	0.497
Number of observations	2876		1438		1438	

On average, 55% of people were employed before the COVID-19 crisis began in the Metropolitan Region compared to 51% in the Central Macrozone.

4 Results

Four Difference-in-Difference models (Table 3) are estimated to examine the effect of the lockdown policy on the level of employment following equation (1). First, differences in the overall average effect of COVID-19 on employment status in the Metropolitan Region relative to the surrounding regions (Regions of Valparaíso, O'Higgins, Maule) that did not suffer from lockdown are examined in the DD model without including control variables (Table 3, column 1). Socio-economic control variables are then added (Table 3, column 2). Finally, the estimations are repeated, but considering all regions of Chile as a control group (Table 3, column 3 and column 4). The coefficients of the attributes are intuitive and consistent with the existing literature so far.

The estimation results show that women are more likely to lose their job permanently than men, which are similar in the two models where the gender control variable is included. According to model 2, the probability of permanent job loss due to the COVID-19 pandemic is 13% higher for women than for men.

While the crisis has affected all households, lower-income households have been hit harder by the pandemic, as the estimation shows that those living in poorer communes are more likely to lose their jobs than those living in higher-income communes. According to model 4, the probability of permanent job loss due to the COVID-19 pandemic is 12%.

On the other hand, those individuals who belong to households with elders have a higher probability of losing their jobs than those who belong to households with the presence of children and adolescents, which is to be expected given that older adults are the population most at risk of serious complications from COVID-19, so individuals were obliged to stay at home to avoid infecting their family members.

Similar results are observed for the educational categories. Workers with lower levels of education are more likely to lose their jobs than those with higher education. As expected, those with only primary education have been more affected. According to estimates, the probability of permanent job loss due to the COVID-19 pandemic is 16% higher than those with tertiary education.

Control Variables	Model 1 (1) Control: Central Macro-zone	Model 2 (2) Control: Central Macro-zone	Model 3 (3) Control: Full Sample - Country	Model 4 (4) Control: Full Sample - Country
RM: Treatment Group	0.05***	0.02	0.03**	-0.01
	(0.01670)	(0.01852)	(0.011566)	(0.012199)
D: Treatment Period	-0.12***	-0.12***	-0.13***	-0.13***
	(0.02063)	(0.02007)	(0.010882)	(0.010569)
Woman		-013***		-0.14***
		(0.01064)		(0.008078)
Home with Elders		-0.12***		-0.13***
		(0.01083)		(0.008239)
Home: Medium Poverty		-0.02		-0.03***
		(0.01978)		(0.010862)
Home: High Poverty		0.04		-0.12***
		(0.05289)		(0.024498)
Primary Education		-0.16***		-0.15***
		(0.01598)		(0.011600)
Secondary Education		-0.09***		-0.08***
		(0.01166)		(0.009069)
Treatment Effect				
RM x D	-0.02	-0.02	-0.01	-0.01
	(0.02431)	(0.02366)	(0.016855)	(0.016369)
Constant	0.51***	0.73***	0.53***	0.76***
	(0.01419)	(0.01939)	(0.007498)	(0.011671)
Observations	8250	8250	14239	14239
R-squared adjusted	0.019	0.072	0.018	0.074

Robust standard errors in parentheses. ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.

The treatment effect of interest in this specification, the coefficient of the treatment indicator D interacted with the treatment group (RM x D), shows that, although the expected sign is obtained, the difference in average occupational status in the Metropolitan Region relative to the central macro-zone (Regions of Valparaíso, O'Higgins, Maule) lockdown policy is insignificant. If all regions of Chile are taken as the treatment group, the D-in-D treatment effect of interest (RM x D) remains statistically insignificant in all specifications.

Overall, the results of the D-in-D model show that the COVID-19 effect through the lockdown policy to decrease its spread in the population is insignificant for the level of employment in the Chilean labour market. However, this could be explained by how the employment status of people

living in Chile is classified. According to the Chilean National Institute of Statistics, the general definition of unemployed is that a worker must be temporarily laid off from a job or have no job but be actively looking for work in a period before the reference period. In the context of the COVID-19 crisis, there is a substantial increase in inactivity, i.e., people who are not looking for work. Inactive persons are not counted as unemployed but are considered "out of the labour force". Therefore, the official unemployment rate understates the depth of the recession and the economic difficulties the country is experiencing. Because it is so difficult to find work, many laid-off workers have become discouraged with their futile job-seeking activity, have left the labour market to devote themselves to family responsibilities and are no longer counted as unemployed. If this "army of hidden unemployed" is added to the pool of unemployed workers, the unemployment problem is significantly worse than official statistics suggest (Gómez & Montero, 2020).

5 Discussion and conclusions

Chile's labour market experiences after the COVID-19 crisis provide a natural experiment to assess the effect of the lockdown policy on workers' employment opportunities. Men and women lost employment during the crisis at roughly the same rate of 30%. However, this study shows that the lockdown policy had no significant effect on workers' employment. Four alternative specifications are shown to test the robustness of this conclusion. None of the alternatives shows a negative effect on employment.

One possible explanation is the measure implemented by the Government of Chile through the "Employment Protection Law". The law, which came into effect on Monday, 5 April 2020, sought to safeguard workers' income and employment relationships and was part of the emergency plan presented by the Government of Chile for the Covid-19 pandemic. The measure allowed workers and employers to agree on the temporary suspension of the labour contract so that employees could access the "Unemployment Insurance Funds" to address the health emergency without losing their relationship with the company. It seems that the situation would have been much worse as, without the "Employment Protection Act", employers who made use of it would have had to lay off their employees, and there would have been many more redundancies during the COVID-19 crisis, so there were fewer people unemployed, to begin with, but more research is needed.

Although the Chilean government has promoted policies for the labour market's recovery, the lag in labour market recovery has been more significant in the case of low-skilled workers and women so far. According to the " Social Survey COVID-19" data, for those who lost or resigned from their job, 62% of men remained in the labour market, either because they were working in another job (7.7%) or were looking for one (54.7%). However, the same was valid only for 41% of women: 6% had a new job, and 35% were looking for one. Thus, women are more likely to lose their jobs because they are mainly responsible for family care tasks, in addition to the fact that women concentrate their employment mainly in the service sector, the operation of which has been more affected. Consequently, female-headed households have been particularly affected. As a result, these households, which have historically been in positions of greater vulnerability, will face greater difficulties during the recovery.

While the crisis has affected all households, it is consistently observed that lower-income households have been hit hardest by the pandemic: in terms of job losses, falling incomes and the effects on household living conditions, greater attention must be paid to the most vulnerable population. The " Social Survey COVID-19" reports that, in order to cope with the health and economic crisis, households have had to reduce their expenditure on food (54.6%) and interrupt the payment of essential services such as water, gas, electricity, telephone, among others (44.1%). On the other hand, 65% of low-income households perceive that their income is insufficient, 40% reduced the number of employed people during the pandemic, and 40% had no employed people in July 2020. Households that are less educated or female-headed will be more affected by the pandemic because of the greater probability of job loss and consequently will see a drop in income. As a result, it is possible to anticipate that the coronavirus pandemic will perpetuate existing inequalities, deepen them in the medium term, and generate new vulnerabilities. Although social distancing is effective in containing Covid-19, the experience differs from country to country and taking the virus without due precaution has serious consequences (Mossa, 2020). According to figures from the Central Bank of Chile, in July, economic activity fell by 10.7% compared to the same month of the previous year due to the economic blockade. The indicator had been in negative territory since March. In an effort to support the citizenry, like many countries, Chile has pushed through fiscal stimulus packages; however, due to the magnitude of the health/economic crisis, the fiscal limit has been abruptly lowered. The Eurozone case shows that the state-dependent fiscal limit is on average 58.4% of the debt-to-GDP ratio (Hürtgen, 2021). Policymakers are therefore

faced with the situation of prioritising resources for those who need them most. In times of emergency, the state's role is crucial to prevent or reverse reversals, especially for the most vulnerable.

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Appendix

Table 1: Definition of Variables

Employment	**Binary outcome variable: 1 if employed full-time or part-time, 0 otherwise**
RM	**Treatment Group: 1 if the person lives in the Metropolitan Region, 0 otherwise.**
Woman	1 for female, and 0 otherwise
Primary Education	1 if highest qualification is a tertiary degree, 0 otherwise
Secondary Education	1 if highest qualification is year 12
Higher Education	1 if highest qualification is bachelor/postgraduate (ref. category)
Home with Elders	1 if the person lives in a household where elders are present, 0 otherwise
Home with Children	1 if the person lives in a household where children are present, 0 otherwise
Home: Low Poverty	1 if the person lives in a commune with a low poverty level, 0 otherwise (ref. category)
Home: Medium Poverty	1 if the person lives in a commune with a medium poverty level, 0 otherwise
Home: High Poverty	1 if the person lives in a commune with a high poverty level, 0 otherwise

Table 2: Descriptive statistics of the variables included in the estimations of Employment

	Full Sample		Treatment Group		Control Group (Central Macro-zone)	
	Mean	**Sd**	**Mean**	**Sd**	**Mean**	**Sd**
Women	0.52	0.499	0.53	0.499	0.52	0.499
Home with Elders	0.55	0.498	0.47	0.499	0.54	0.498
Home with Children	0.48	0.495	0.55	0.497	0.48	0.499
Home: Low Poverty	0.73	0.442	0.99	0.095	0.55	0.498
Home: Medium Poverty	0.24	0.426	0.01	0.095	0.40	0.491
Home: High Poverty	0.03	0.167	0	0	0.05	0.216
Primary Education	0.20	0.402	0.13	0.338	0.25	0.435
Secondary Education	0.42	0.494	0.42	0.494	0.42	0.494
Higher Education	0.35	0.477	0.43	0.495	0.30	0.457
Number of observations	**17998**		**7530**		**10468**	

Table 3: Employment/Unemployment Rates of Individuals in Metropolitan Region and Comparison National Level

Panel A	Treatment					
	Full Sample		Pre-Lockdown		Post-Lockdown	
	Mean	Sd	Mean	Sd	Mean	Sd
Employment	0.49	0.500	0.56	0.497	0.42	0.494
Unemployment	0.48	0.499	0.44	0.497	0.51	0.500
Number of observations	7530		3765		3765	

Panel B	Control					
	Full Sample		Pre-Lockdown		Post-Lockdown	
	Mean	Sd	Mean	Sd	Mean	Sd
Employment	0.47	0.499	0.53	0.499	0.40	0.490
Unemployment	0.51	0.500	0.47	0.499	0.54	0.498
Number of observations	10468		5234		5234	