

DISCUSSION PAPER SERIES

IZA DP No. 13716

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## ABSTRACT

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# How Is the COVID-19 Crisis Exacerbating Socioeconomic Inequality among Palestinians in Israel?\*

The paper gives us a first look on the unique effects of the crisis on the Arab minority in Israel. It contributes to our understanding on how economic and epidemic crises affect marginalized ethnic minorities and informs decision makers while formulating policies to deal with the crisis's consequences. The results of the paper show significant differences between how this minority group was affected by the crisis compared to the majority-Jewish population. Two months into the crisis, there was no significant difference between the employment rate of low and middle-paid Arab workers, who both suffered employment decreases, but in similar rates. This result is contrary to Jewish workers, where the more workers were paid before the crisis, the more likely they were to remain employed. The research is based on a unique survey conducted during the months of April and May, intended the first wave of a panel survey conducted every 3 months during the coming two years.

**JEL Classification:** I14, J15, J21, J64

**Keywords:** COVID-19, inequality, minorities

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## **HOW IS THE COVID-19 CRISIS EXACERBATING SOCIOECONOMIC INEQUALITY AMONG PALESTINIANS IN ISRAEL?**

Social scientists around the world have acknowledged that the COVID-19 pandemic has unequal effects on different socio-economic groups, potentially deepening existing inequalities between groups. COVID-19 exposes and reinforces existing socioeconomic inequality in terms of employment opportunities and earnings, especially among women and ethnic minorities. In this paper, we provide some preliminary analyses of how the pandemic-induced economic downturn have had different effects on Palestinian men and women and different effects on religious subgroups within the Palestinian community residing in Israel.

The Palestinian Arab society in Israel constitutes over one-fifth of the Israeli population. The Palestinian community consists of a Muslim majority (about 84%) and a Christian and Druze minority (each comprising 8%). These groups differ in their social and economic characteristics (such as average education attainment and employment rates), their attitudes towards women's status in society, and recent rates of urbanization.

The Palestinian community among Israel has seen massive social change in the last decades. A particularly significant change is that educational attainment among the Palestinian community in Israel has increased significantly, among both men and women. This increase in educational attainment has led to a rise in the number of Palestinian men entering professional and managerial occupations. Between 2011 and 2016, the proportion of Palestinian men in such positions increased from 15.2% to 20% (CBS; 2011, 2016). Concurrently, the rate of women's participation in the formal employment sector doubled from 10% in 1970 and 20% in 2010 (Khattab and Miaari, 2013) and increased to 34% in 2018 (CBS, 2018). Employment rates are relatively higher among female college graduates, most of whom work in female-dominated occupations such as teaching, nursing, and social welfare (Yonai & Kraus, 2017). The increasing engagement of Palestinian women in the Israeli labour market is particularly note-worthy given the historically low rates of female labour force participation among this community. Nevertheless, female employment rates

remain substantially lower than that of Palestinian men and Israeli-Jewish women which stand at 65% and 64% respectively in 2018 (Israel Central Bureau of Statistics, 2018).

The socioeconomic and demographic changes in Palestinian society in Israel discussed above - the expanding opportunities for education and employment accompanied by structural changes in Israel's economy - has led to a rise of a new Palestinian middle class in recent years (Haidar, 2019). Recent economic data shows that 23% to 28% of Palestinian households in Israel can be considered "middle class", 3% can be considered "upper class", while the remaining are in the "low class". Despite the burgeoning middle class in Palestinian society, most Palestinians in Israel have limited opportunities in the labour market. This is particularly the case for women. The main driver of this socioeconomic disadvantage is segregation between ethnic groups in towns and villages that lack resources and well-built infrastructure, as well as institutional discrimination and outright prejudice against Palestinians. The relative economic disadvantage among Palestinian society is demonstrated by the fact that almost 60% of Palestinian men are employed in low-status and lower-skill jobs compared to 27% among Jewish men (CBS, 2015).

### **Coronavirus among Palestinians in Israel**

The coronavirus started spreading in Israel at the end of February 2020. Since then, the number of confirmed cases has risen to 16,314 and the number of deaths due to COVID-19 stands at 239 (data from May 6, 2020). In order to contain the spread of the virus, Israel closed its borders and locked down its economic, instigating a strict quarantine rule. By April 9, the country was in complete lockdown. To avoid high unemployment rate, the Israeli government adopted a unique policy. Employers in the private sector and, to a lesser degree, employers in the public sector were allowed to force their employees to take unpaid leave. As result of this policy, more than 800,000 workers were laid off unpaid in the middle of March. Only about 70,000 of these employees returned to the labour force after the economy resumed full operation (in the last week of April).

Although COVID-19 spread within Palestinian localities much later and at a slower rate, the economic effects of the pandemic-induced economic slowdown have hit the Palestinian community much more adversely than the Jewish community.<sup>1</sup> According to data from the

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<sup>1</sup> As of March 27, there were only 38 confirmed cases of COVID-19 among Palestinians in Israel.

Employment Services in March and April, about 175,000 of the unemployed and those on leave were Muslims, Christians, and Druze. This means that 32% of total Palestinian employees in 2019 are out of work due to the pandemic-induced economic slowdown.<sup>2</sup> The figure is significantly lower among the Jewish population at 23% (Miaari et al., 2020). Furthermore, rates of poverty have increased among Palestinian society since the start of the pandemic. According to the National Insurance Institute, the number of families in Palestinian society that are considered poor increased from 45.3% before the crisis to 48.9% in the middle of May (Endeweld et al., 2020).

## **Data**

In this analysis, we use data based on the first wave of a longitudinal survey of 2,040 Israeli men and women above 18 years old who were employed or self-employed in the first week of March before the lockdown of the economy. Within this sample, 324 respondents were Palestinian citizens of Israel. The data was collected in collaboration with the survey company Panel4All and the survey was conducted between April 23 and May 4. This online research company holds an internet panel of tens of thousands of Israeli panelists, representing the adult population of Israel. The survey is not a probability sample of the population as only those registered with the panel can be sampled. However, it is a random sample of the panelists, stratified by age, gender, geographical region, and religiosity. Internet surveys, such as the one we use here, are a widespread practice nowadays in Social Science research and were used extensively in the last three election campaigns in Israel, with quite accurate predictions.

This wave of the survey includes information on employment and job characteristics of Israeli households in the first week of March (before the economic downturn) and in the last week of April (after the economy was shut down, but before it was reopened). The current analysis focuses only on Palestinian wage employees who are citizens of Israel, who worked as wage employees in

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<sup>2</sup> The lockdown was imposed at the beginning of Ramadan (April 24, 2020). Local shops and stores were asked to shorten their workday while the Israeli economy began to resume full operation. Following several government negotiations, this closure on Arab shops was lifted on May 10.

March 2020, excluding respondents with missing data. Our final subsample consists of 285 respondents.

We present summary statistics for the sample in Table 1. Based on their wage in March, respondents are concentrated in the three middle-wage quintiles of the general population. They are under-represented in the top and bottom quintiles of the wage distribution. The under-representation in the top quintile is in line with what existing studies that document the Jewish-Arab ethnic wage gap and the under-representation of Arabs in high-paid jobs (Miaari & Khattab, 2013). Table 1 shows that the sample consists of more women than men. Nevertheless, the subsample sizes for men and women are sufficiently large and representative to allow for a comparison between genders.

Table 1: Summary statistics for the sample

<i>Variable</i>	<i>Observations</i>	<i>Mean</i>	<i>Std. Dev.</i>
<b>Wage quintile (based on March wage)</b>			
Lowest quintile	285	0.11	0.32
2nd	285	0.22	0.42
3rd	285	0.29	0.45
4th	285	0.28	0.45
Top quintile	285	0.09	0.29
<b>Demographic variables</b>			
<b>Gender</b>			
Men	291	0.34	0.48
Women	291	0.66	0.48
<b>Religion</b>			
Muslim	291	0.74	0.44
Christian	291	0.14	0.34
Druze	291	0.12	0.33
<b>Location</b>			
North	291	0.18	0.38
Triangle	291	0.08	0.27
Other areas	291	0.74	0.44

## Empirical Strategy

The goal of this paper is to summarize preliminary findings from the first wave of the longitudinal survey. We use descriptive statistics to illustrate how the economic lockdown affected Palestinians employment and income by gender, religion, place of residence, and wage quintile.<sup>3</sup> We focus on four employment and income indicators:

<sup>3</sup> The small sample size prevents us from using wage deciles

- (1) whether the respondent was still in paid employment in April, was unemployed or on leave.
- (2) whether the respondent reported a decrease in personal income (earnings plus unemployment insurance).
- (3) whether a respondent working in April reported a decrease in earnings from working.
- (4) whether a respondent working in April reported a decrease in working hours.

We use a t-test (for gender) and a one-way ANOVA test (for all other variables) to examine whether the difference between groups is statistically significant at a confidence level of at least 95%.

In addition to descriptive statistics, we also estimate a probit model to predict the probability that a given Palestinian worker is not employed in April, conditional on gender, religion, place of residence, and wage quintile. Our probit model can be written as follows:

$$(1) Pr(Work_i^{April} = 0|X) = \Phi(X_i\beta)$$

$$X_i\beta = \beta_0 + \beta_1gender_i + \beta_2religion_i + \beta_3area_i + \beta_4quintile_i$$

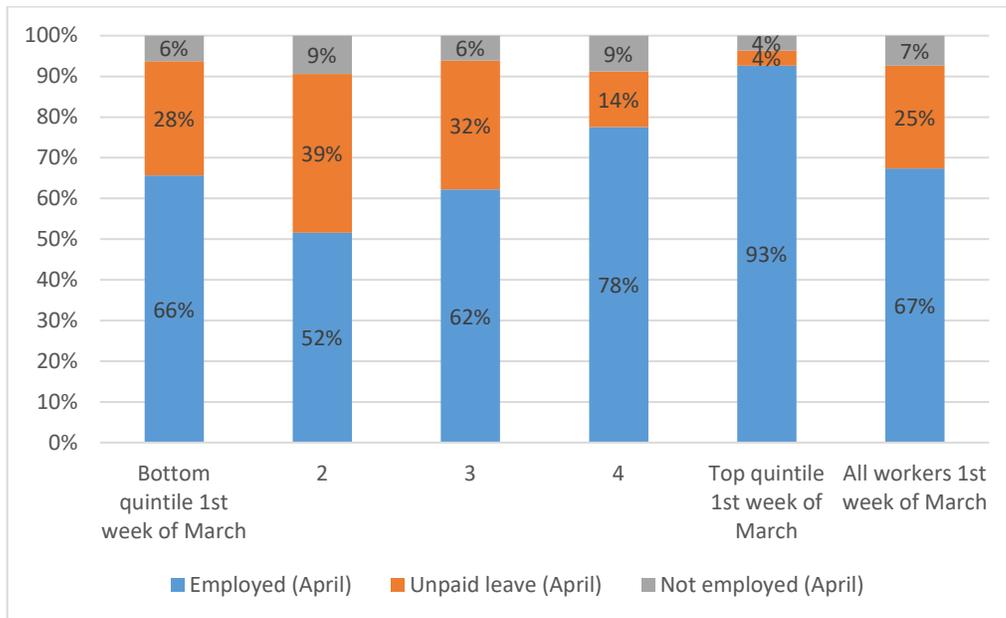
In the model, *gender* is a dummy variable equal to one for women and zero for men. The vector *religion* consists of two dummy variables for Christian and Druze respondents, with Muslims as the base category. The vector *residence* consists of two dummy variables for where the respondent lives: one dummy for the Northern district and one dummy for the "Triangle" area. The base category is "other areas." Lastly, the vector *quintile* consists of dummy variables representing the respondent's wage quintile. The base category is the bottom quintile.

## Results

### *Changes in employment, earnings, and hours worked*

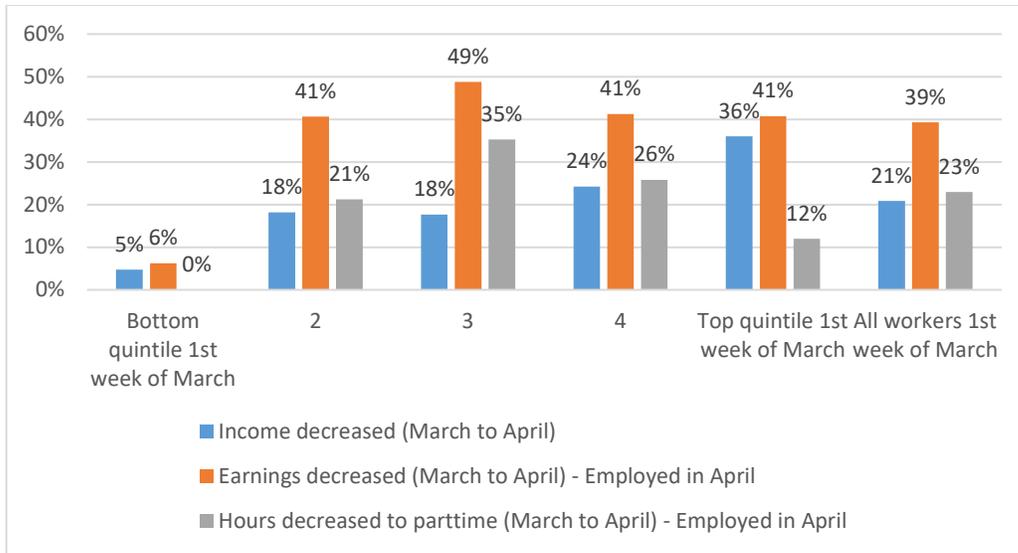
The proportion of Arab workers still employed in April was similar to the proportion still employed in the general population: 67% of Arabs who worked in March were still employed in April (Figure

1). The most significant difference between Arabs and the general population can be detected at the bottom wage quintile. 66% of the Arabs in this quintile were still employed in April, compared to about 41% of the general population in this quintile (Kristal and Yaish, 2020). The difference in the probability of not working is statistically significant across wage quintile groups (P-value = 0.0004).



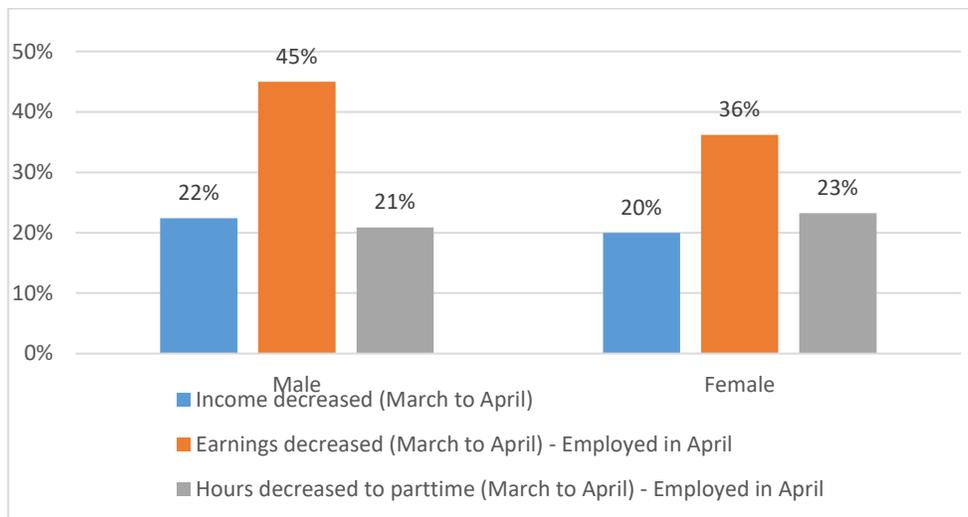
*Figure 1: Change in employment status, by wage quintiles, due to the economic downturn following the coronavirus outbreak.*

In contrast, the share of Arabs who still worked in April but reported a decrease in incomes or earnings was higher in the upper wage quintiles. The difference in the reported rates was statistically significant only for income (P-value = 0.0011). The share of workers reporting working hour decrease was significantly different across quintiles (P-value = 0.012). As demonstrated by the grey bars in Figure 2, no workers at the bottom quintile reported a reduction in working hours. As we go up the wage quintiles, the proportion of workers reporting a reduction in hours increases, peaking in the third quintile, and then decreasing again.



*Figure 2: Worker who faced a decrease in income (earnings plus unemployment insurance) or earnings and hours of work from March to April, by wage quintiles*

The pattern of unemployment and layoffs in our sample is similar across gender and between workers in the private and public sectors. One notable difference that does exist is regarding earning decreases: men appear to have experienced a larger decrease in earnings (Figure 3), however, this difference is not statistically significant. All other gender-specific differences that we tested for are also statistically insignificant.



*Figure 3: Workers who faced a decrease in income (earnings plus unemployment insurance) or earnings and hours of work from March to April, by gender*

The layoffs did not have an identical impact on the subgroups within Arab society. Three-quarters of Druze employed in March still worked in April, compared to 67% and 63% of Muslims and Christians respectively (Figure 4). This difference across religious groups within the Arab community is not statistically significant. The Druze workers who were still employed also reported far fewer hours decreases, but this difference was also statistically insignificant. Differences in earnings or personal income losses between religious groups were small and insignificant (Figure 5).

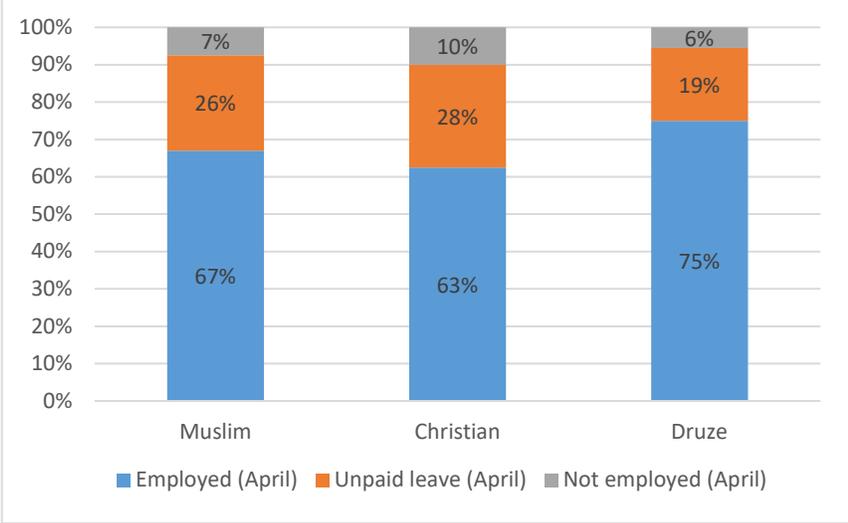


Figure 4: Change in employment status, by religion

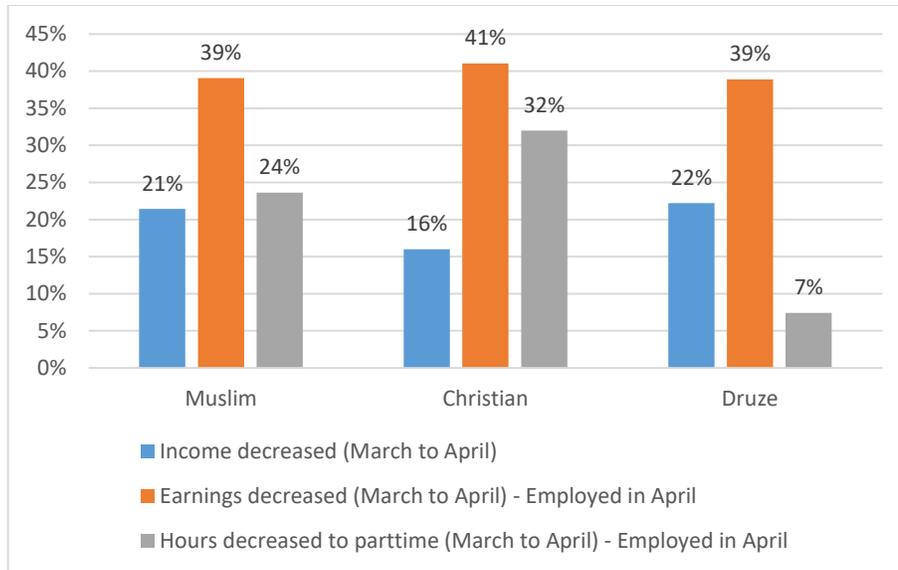


Figure 5: Workers who faced a decrease in income (earnings plus unemployment insurance) or earnings and hours of work from March to April, by religion

Another difference can be detected between Arab workers living in the "Triangle" area, where only 52% of which were still employed in April, and Arabs living in the North, where this share was 69% (Figure 6). Triangle residents who remained employed had a higher share of working hours loss but a lower share of income loss (Figure 7). All differences across regions were statistically insignificant.

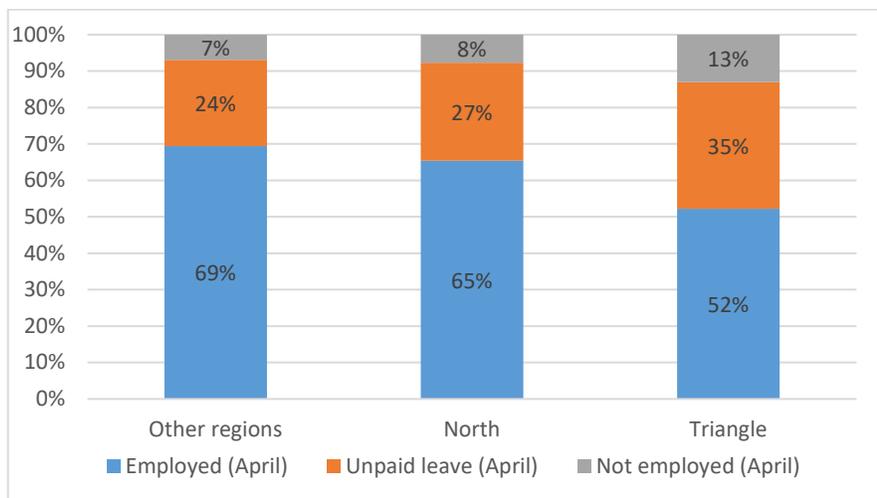
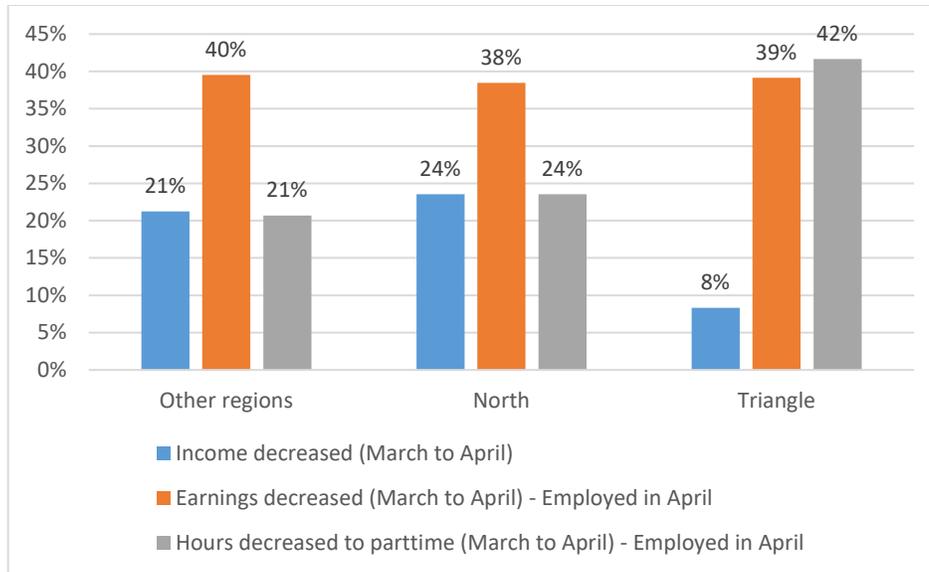


Figure 6: Change in employment status, by region, due to the economic downturn following the coronavirus outbreak



*Figure 7: Workers who faced a decrease in income (earnings plus unemployment insurance) or earnings and hours of work from March to April, by region*

### ***Probit Model Estimates***

We present our probit model results in Table 2. Our dependent variable is an indicator for being out of work in April. Our independent variables can be seen in the first column of the table. The only indicator significant at the 95% level is for the top wage quintile. However, the top wage quintile represents the change in probability to not work for top quintile workers, compared to workers on the lowest quintile. Therefore, for ease of interpretation, we use the coefficients from Table 2 to predict the likelihood that a representative person in each group doesn't work in April.

Table 2: Probit model results

<i>Independent Variables</i>	<i>Dependent variable: Not working in April</i>
Women	-0.332* (0.185)
<b>Wage quintile:</b>	
Lowest	Base category
2nd	0.359 (0.286)
3rd	-0.00616 (0.278)
4th	-0.533* (0.295)
Top	-1.365*** (0.459)
<b>Area of residence:</b>	
Other areas	Base category
North	0.168 (0.201)
Triangle	0.562* (0.299)
<b>Religion:</b>	
Muslim	Base category
Christian	0.355 (0.244)
Druze	0.0388 (0.257)
Constant	-0.221 (0.295)
Pseudo R-squared	0.085
Observations	285
Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1	

The predicted likelihood of not working in April is present in Figure 8. The estimates demonstrate that the likelihood of not working in April is around 40% for the lowest and third quintile, around 50% for the 2<sup>nd</sup> quintile, and around 20% for the 4<sup>th</sup> and less than 20% for the top quintile. The differences between the lower quintiles, however, are within the margin of error. Further figures in the appendix (Figures A1-A3) show that the estimated probability of working in April across gender, region, and religion are entirely within the margin of error and therefore not statistically different.

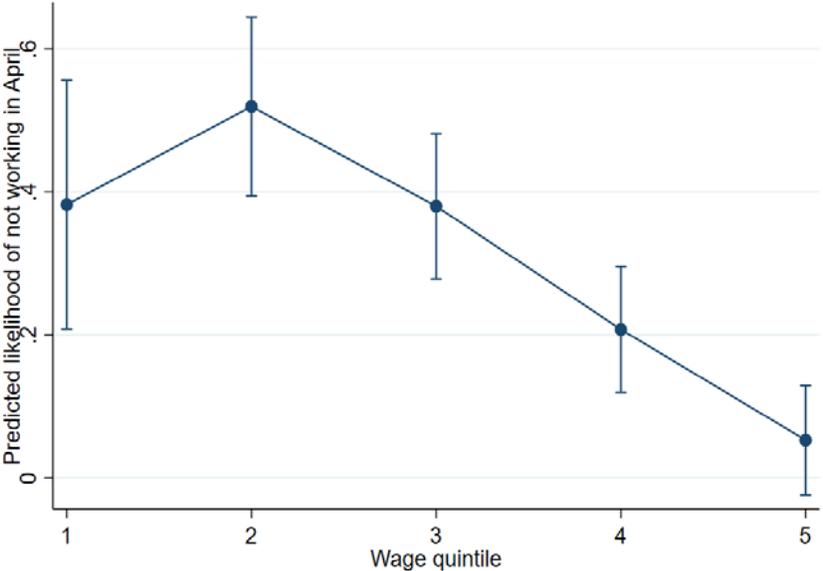


Figure 8: the relationship between April employment status and wage quintile

**Discussion**

Many of the differences found across subgroups within our sample were statistically insignificant. The only significant differences were across the wage distribution. We would have expected such a result if the wage quintile was a strong predictor of the employment status<sup>4</sup>. However, the correlations between wage quintiles and other variables are not particularly strong as demonstrated in Table A1 in the appendix. A second possible reason for the lack of statistical significance in these differences is that our sample is relatively small.

<sup>4</sup> Or the three other explained variables we tested, for that matter.

The main predictor for whether Palestinian workers were still employed in April is which quintile of the wage distribution they fell into based on their wages in March. In the general Israeli population, workers who earned higher wages in March were much more likely to be employed in April (Kristal and Yaish, 2020), suggesting that better remunerated jobs are better protected in this pandemic. Palestinians in Israel in the top of the wage distribution are more likely to be still employed compared to other Palestinian workers, but the picture is less clear for the bottom end of the wage distribution. A higher share of Palestinian workers in the bottom quintile reported being employed, compared to the second and third quintiles. This result might be because of the difference between the occupations common among Palestinians compared to Jews. While Jews in the bottom of the income distribution are more likely to work in the service industry, Arabs at the bottom of the distribution are more likely to work in occupations less vulnerable to pandemic-induced lockdown measures, such as construction and agriculture (Miaari et al., 2020).

Another departure from the general Israeli population is the absence of gender differences. Among the general Israeli population, female workers saw larger changes in employment prospects compared to men (Kristal and Yaish, 2020). Among Palestinians, however, women saw smaller changes in employment compared to men. One possible reason for this is that the employment rate of Palestinian women is relatively low (Miaari, Khattab, and Sabbah-Karkabi, 2020) and only the women with high human capital were likely employed. The fact that Palestinian women workers tend to be concentrated in higher skills sectors may help cushion the impact of gender norms and discrimination that might be driving the gender difference reported for the general Israeli population by Kristal and Yaish (2020).

## **Concluding remarks**

In this report, we presented novel evidence on how the Israeli Palestinian population was affected by the COVID-19 crisis. We have found significant differences between how this minority group was affected compared to the majority-Jewish population. Our findings strengthen recent observations and predictions based on labour market data (Miaari et al., 2020). The findings are also in line with policy recommendations made in light of observations on the labor market:

focusing on the employment of Arab women and providing modern skillsets to Palestinian workers in low-skilled occupations.

## References

- Endeweld Miri, Oren Heller, Lahav Karady, and Daniel Gottlieb (2020). *The consequences of the economic recession following the corona crisis for poverty, inequality and standard of living. Brief. Research and planning division, National Insurance Institute.* <https://www.btl.gov.il/Publications/corona/Pages/mitun.aspx>. Downloaded on May 7.
- Haidar, A. (2019). *The Growth of the Arab middle class in Israel*. The Van Leer Jerusalem Institute.
- Israel Central Bureau of Statistics Jerusalem. (2011, 2015, 2016, 2018). Statistical abstract of Israel.
- Khattab, N., & Miaari, S. H. (2013). *The occupational mismatch amongst Palestinians and Jews in Israel: A new evidence from the LFS 2000–2010*. Research in Social Stratification and Mobility. Volume 34, December 2013, Pages 1-13.
- Kristal, T., & Yaish, M. (2020). *Does the Coronavirus Pandemic Level Gender Inequality Curve? (It Doesn't)*. Coronavirus and inequality brief No. 202005\_01. Haifa: University of Haifa.
- Miaari, S. H., Khattab, N., & Sabbah-Karkabi, M. (2020). *Obstacles to Labour Market Participation among Arab Women in Israel*. Working Paper.
- Miaari, S. H., Somech, S., Tirosh, O., Keshet, N., Masterman, E., Abu Harfa, N., Hassan, S. (2020). *Employment in Israeli Arab Society in the shadow of the Corona crisis: Challenges, opportunities and room for impact*. Jerusalem: Myers-JDC-Brookdale Institute (Hebrew).
- Miaari, S., & Khattab, N. (2013). The persistent wage gaps between Palestinians and Jews in Israel, 1997–2009. In S. Miaari, & N. Khattab, *Palestinians in the Israeli Labor Market* (pp. 61-84). New York: Palgrave Macmillan.
- Yonay, Y., & Kraus, V. (2017) The role of the state and the pliability of tradition: Israeli Palestinian and Middle-Eastern Jewish women in the labor force. *Research in Social Stratification and Mobility*, 50, 29-39.

# Appendix

Figure 17: relationship between April employment status and gender

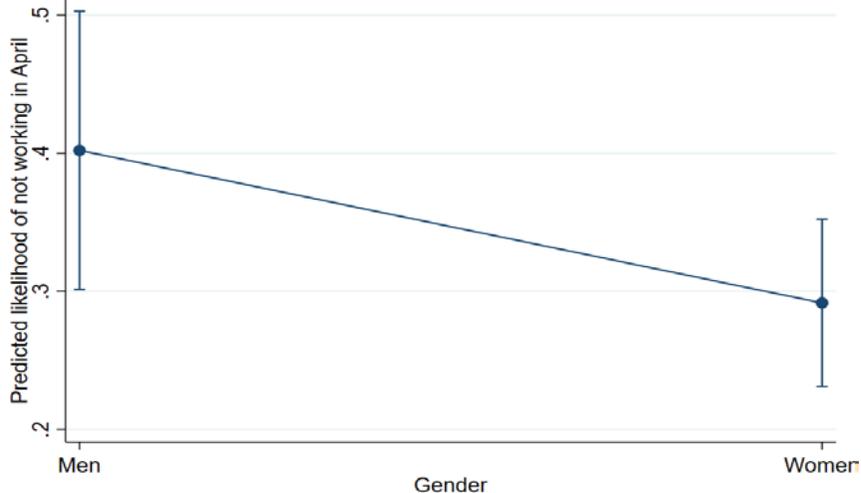


Figure A1: the relationship between April employment status and gender

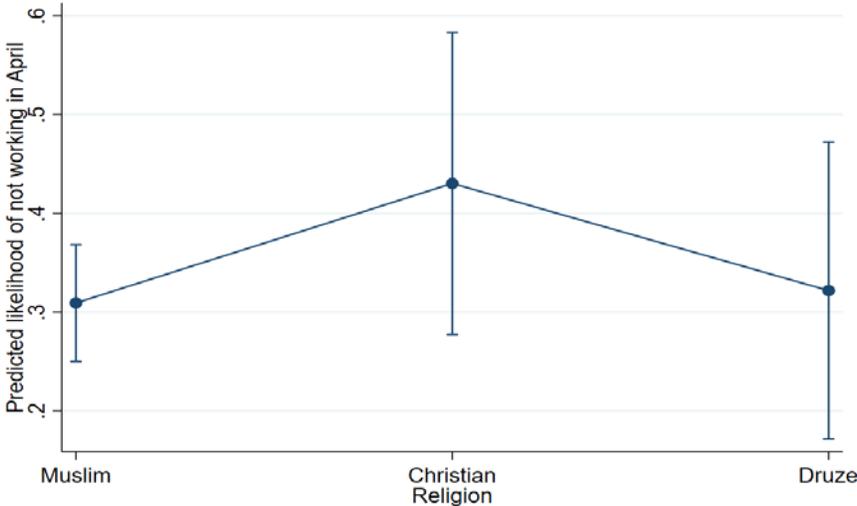


Figure A2: the relationship between April employment status and religion

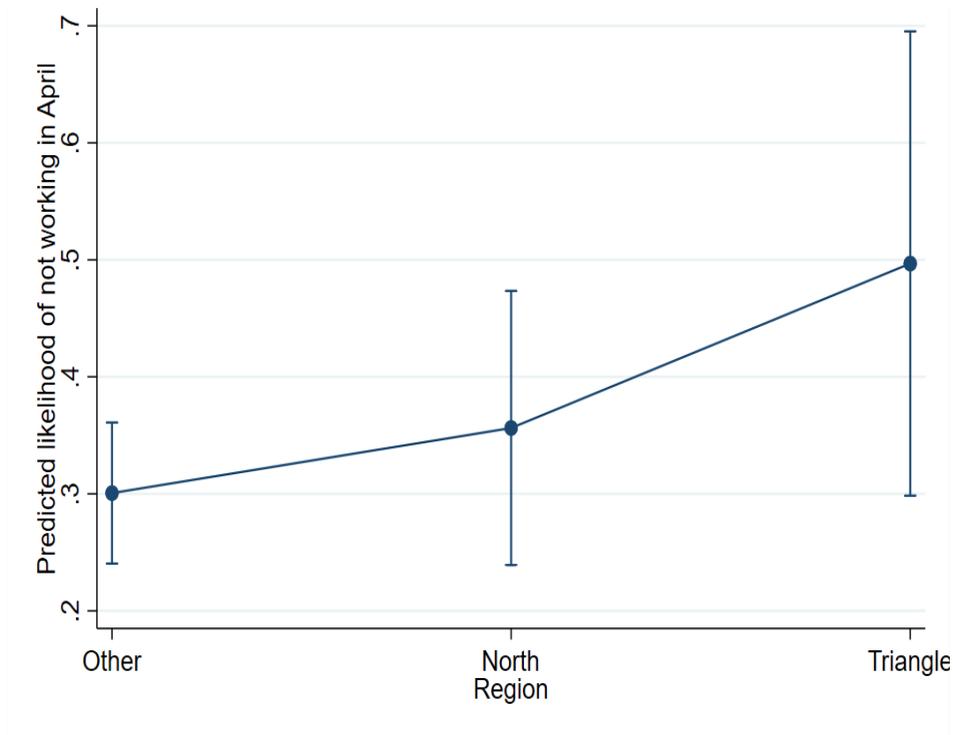


Figure A3: the relationship between April employment status and area of residence

Table A1: Correlations between variables

	<i>Other areas</i>	<i>North</i>	<i>Triangle</i>	<i>Muslim</i>	<i>Christian</i>	<i>Druze</i>	<i>Lowest quintile</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	<i>Top quintile</i>	<i>Women</i>
<i>Other areas</i>	1											
<i>North</i>	-0.7905	1										
<i>Triangle</i>	-0.4958	-0.14	1									
<i>Muslim</i>	-0.14	0.0347	0.1771	1								
<i>Christian</i>	0.0757	-0.0031	-0.118	-0.6663	1							
<i>Druze</i>	0.1073	-0.0429	-0.1127	-0.6363	-0.1514	1						
<i>Lowest quintile</i>	0.0106	0.0046	-0.0238	0.0106	-0.0446	0.032	1					
<i>2nd</i>	0.0543	-0.0801	0.0258	0.1306	-0.0919	-0.0781	-0.1914	1				
<i>3rd</i>	0.0278	0.0208	-0.0745	0.063	0.0176	-0.1017	-0.226	-0.342	1			
<i>4th</i>	-0.07	0.0284	0.0729	-0.1055	0.0466	0.0915	-0.2222	-0.3362	-0.397	1		
<i>Top quintile</i>	-0.0243	0.0333	-0.0079	-0.1332	0.0804	0.0934	-0.1151	-0.1741	-0.2056	-0.2021	1	
<i>Women</i>	0.1116	-0.0715	-0.0791	-0.022	0.0146	0.014	0.1683	0.2195	-0.0199	-0.1134	-0.2894	1