

Did Government Benefits Help Israeli Households Avoid Hardship during COVID-19? Evidence from a National Survey

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Abstract: At the outset of the COVID-19 pandemic, the government of Israel quickly introduced aggressive social distancing measures to curb the virus spread and adapted its unemployment insurance program in response to rising unemployment rates. This study examines the relationship between household income and the experience of material hardship during the COVID-19 pandemic in Israel, and investigates how the receipt of unemployment benefits moderated the relationship between income and material hardship. Using data from a household survey, we find a negative association between household income and the experience of material hardship. Moreover, middle-income households receiving unemployment benefits were more likely to experience material hardship than those who did not receive government support. The difference was largely not observed for low- and high-income households. These trends were similar during the early and later months of the pandemic. This study informs the efforts of policymakers to improve existing social support programs to expedite economic recovery during and after the COVID-19 pandemic.

Key words: Material hardship; Unemployment insurance; Israel; COVID-19 pandemic

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INTRODUCTION

The COVID-19 pandemic led to the most acute economic downturn—and the most strenuous government response to that downturn—in recent history. The skyrocketing unemployment rates and radical shifts in consumer behaviors were accompanied by governments implementing an array of new programs (or expansions of existing programs) to help households weather the social and economic impacts of the pandemic. However, the extent to which households were actually able to avoid hardships during the pandemic, and the extent to which public policies helped buffer them against hardship risk, remains unclear. In this study, we draw on a national, multi-wave survey administered in Israel to examine the experience of material hardships—such as food insecurity, missed housing payments, and missed essential bill payments—over the first year of the pandemic. We then explore how access to unemployment insurance (UI) benefits, a key pillar in Israel’s economic stabilization efforts during the pandemic, moderated the relationship between household income and material hardships.

The experience of material hardship can have serious, lasting impacts on the household’s well-being. Research shows that skipped rent payments and housing insecurity are associated with worse physical (Cutts et al., 2011) and mental health outcomes, especially among children (Gilman et al., 2003).¹ Food insecurity has also been shown to be closely related to problems in childhood development (Rose-Jacobs et al., 2008) and is negatively associated with health outcomes across the life-cycle (Gundersen & Ziliak, 2015). Oftentimes, a household’s experience of material hardship is preceded by an unexpected financial shock (e.g., sudden loss in employment or income, a sharp increase in expenses) that makes it harder to afford necessities

¹ Research in this section is based on work conducted outside of Israel. While the relationships between financial shocks, hardship, and socio-economic status are expected to be relatively generalizable, the institutional and cultural factors may influence the strength of these relationships in the context of Israel.

like housing or food costs (Despard et al., 2018). Additional evidence demonstrates that households who experience financial shocks are more likely to struggle financially (Pew Charitable Trusts, 2015), miss essential bills (McKernan et al., 2009), report food insecurity (Bartfeld & Collins, 2017; Heflin, 2016; Leete & Bania, 2010), and experience housing hardship (Heflin, 2016).

Households have several options to reduce their hardship risk when faced with a financial shock. They can search for other jobs or sources of income, reduce spending on non-essential items, draw on existing financial resources such as emergency savings or other forms of liquidity, or access public benefits like UI. Though all households can potentially rely on each of these options, the experience of financial shocks and material hardship tends to occur disproportionately in households who lack the resources to adequately manage those shocks. Specifically, low-income households tend to experience relatively more expensive financial shocks than households with higher incomes (Pew Charitable Trusts, 2015), and the prevalence of material hardship tends to decrease monotonically for higher income quintiles (Sullivan et al., 2008). Additional research indicates that low-income households may be less equipped to face financial shocks and may therefore experience hardship at higher rates. Several studies have found that liquid savings can serve as a buffer against hardship in the face of financial shocks (Gjertson, 2016; Grinstein-Weiss et al., 2016; McKernan et al., 2009). Perhaps unsurprisingly, certain households are less equipped than others to build the savings that can buffer against hardship. Low-income households also tend to have their budgets dominated by necessity spending (Collins & Gjertson, 2013), making it relatively difficult to set aside money for savings prior to a shock or to reduce spending on non-essential items after the shock, thus making them more vulnerable to hardship risks.

Outside of individual strategies to buffer against hardship risk in the face of financial shocks, governments often provide an array of public programs to help households smooth their consumption and avoid hardship. These programs can take many forms including unemployment benefits that provide income to households during periods of unemployment and other cash transfer programs (sometimes involving spending restrictions) that help households meet consumption needs when other income is insufficient. Evidence consistently shows that the receipt of social transfer programs can help households cope with financial instability and hardship, especially among economically vulnerable groups (Hardy, 2017; Ratcliffe et al., 2011). At the same time, access to these programs often depends on complicated eligibility criteria such as means testing or a household's ability to navigate the bureaucratic procedures of resource-constrained agencies (Hamilton et al., 2015; Moynihan & Herd, 2010; Roll & Grinstein-Weiss, 2020).

Though research has documented the relationships between income, access to government benefits, and material hardship risk, the vast majority of this work takes place in the context of relatively stable economic conditions and focuses on household-level, rather than system-level, economic shocks. The COVID-19 pandemic thus offers an opportunity to observe these relationships during a time of both massive economic upheaval and assertive government responses, and Israel—generally considered to have among the best public responses to the pandemic—offers an interesting test case for understanding the extent to which both individual financial circumstances and public policies can help insure against hardship risk in a population. The specific research questions for this study are: (1) What was the relationship between pre-pandemic household income and the experience of material hardship during the COVID-19 pandemic in Israel? (2) To what extent did the receipt of unemployment benefits moderate the

relationship between household income and material hardship? (3) How did the relationship between household income and material hardship, as well as the moderating role of unemployment benefits differ during the earlier and later months of the pandemic? Using data from a unique, three-wave online household survey administered to a sample of Israeli households between June of 2020 and February of 2021, we find a negative association between household income and the experience of material hardship during the COVID-19 pandemic. Our results further suggest that government benefits may have been disproportional to household needs, as middle-income households receiving unemployment benefits in the early and later months of the pandemic reported greater levels of material hardship than those who did not receive government support—a trend that, with a single exception, was not observed for low- and high-income households. Overall, these results were consistent across earlier and later months of the pandemic.

While the experience of material hardship has been studied extensively in the context of the U.S., the issues of hardship received much less attention in research in Israel. Unlike relatively objective financial outcomes (e.g., income, debt, savings), the experience of hardship captures a household's financial situation in a more holistic way, and the instances of hardships are well-aligned with other government policy objectives concerning affordable housing, food security and nutrition, and health care. For these reasons, new evidence on the experience of material hardship can inform the design and implementation of more holistic and equitable social welfare programs—which is particularly relevant for the case of Israel, a country that has one of highest levels of poverty and income inequality among high-income nations (National Insurance Institute of Israel [NII], 2017; Organization for Economic Co-operation and Development [OECD], 2021a; 2021b). Findings from this research will also inform the efforts of Israel and

other governments in mitigating the consequences of the ongoing COVID-19 pandemic and preparing for similar outbreaks in the future. Given pre-existing high rates of poverty and the major financial burden caused by the pandemic, research findings will help Israeli policymakers develop more effective policy innovations and improve existing social support programs to expedite economic recovery during and after the COVID-19 crisis.

RESEARCH CONTEXT

Israel's Socio-Economic Background

Among developed countries, Israel has some of the highest levels of poverty and inequality: as of 2016, the incidence of poverty among families was 19%, and income inequality in Israel was substantially higher than the OECD average (NII, 2017). A high proportion of the poor includes working households (NII, 2017). While evidence also points to relatively high prevalence of material hardship in Israel, research on predictors of material hardship is limited (e.g., Lewin & Stier, 2017, 2018). For example, Lewin & Stier (2017) indicate that 17% of their sample reported skipping a meal due to financial difficulties and 11% could not afford a daily hot meal.

Furthermore, 41% of respondents reported not being able to cool or heat their homes due to financial strain, 25% could not fully cover their bills, and 9% had their utilities disconnected.

The experience of material hardship was disproportionately experienced across religious/ethnic groups. Other studies indicate high levels of food insecurity among Israeli households. For example, 19% of Israelis were found to be food insecure (9.4% severely food insecure) in 2011-2012 (Endeweld & Silber, 2017), and nearly one in five Israelis (18.9%) reported food insecurity (8.6% severe food insecurity) in 2014 (Endeweld et al., 2014).

Unemployment Benefits in Israel

The Israeli government provides a wide array of social security programs to support households across the income spectrum (see Gal, 2017). Of particular interest to this study is the provision of unemployment benefits to the unemployed. The UI program was adopted by the parliament in 1972, becoming an integral part of the Israeli social security system and the main support to the unemployed (Rosenhek, 2004). The original motives for designing the UI program were twofold. First, the UI program aimed to ensure that those who have become involuntarily unemployed—i.e., individuals who could not find employment when they were ready to work and to accept a suitable job offered to them—had access to alternative income during the period of unemployment. While the benefits were intended as a substitute for wage incomes, the income replacement rate in the original UI program was higher for the unemployed with previous low incomes and lower for the unemployed with higher previous incomes. Second, the UI program worked as a policy tool to increase worker mobility by supporting workers during the job search process and to help stimulate economy after economic downturns.

In the three decades since its adoption, the UI program has undergone numerous changes that restricted the program eligibility and reduced unemployment benefits (Doron, 2001; Koreh et al., in press), with most changes implemented due to fiscal reasons. Shortly after the UI program implementation during the 1970s and with the growth of unemployment during the 1980s recession, the government made several policy amendments to limit the entitlement to the UI program—introducing the requirement to accept any job offer and thereby making it more difficult for the unemployed to qualify for and receive unemployment benefits. The amendments also resulted in more rigid administrative practices in paying out unemployment benefits, which in many cases led to increased rates of denying access to the benefits (Doron, 2001). Additional changes through the 1990s aimed to further tighten the eligibility criteria, reduce the level of

unemployment benefits, and shorten the duration of receiving the benefits. For example, unemployed workers under the age of 35 were required to accept any job even if it did not fit their occupation or the level of educational training, and UI recipients had to take a job even if the wages were lower than the unemployment benefit payments to which they were entitled. In addition, the effective replacement rate of the benefit levels for middle- and high-income recipients has been lowered. The amendment of 2007 continued to restrict access to benefits, particularly for younger workers, lengthening the qualification period and requiring individuals under the age of 28 to accept any job offered; shortening the entitlement period for individuals under 25; and reducing the generosity of unemployment benefits for individuals under the age of 28 (Koreh et al., in press).

As a result of gradual reductions in eligibility and benefit amounts, the Israeli UI program was among the less generous among the high-income countries. Prior to the COVID-19 outbreak, the UI program accounted for just four percent of all national insurance benefit spending (NII, 2018), and the Israeli government spending on social insurance policies was lower than the OECD average (Bendalak, 2020).

The COVID-19 Pandemic in Israel

As the COVID-19 pandemic was spreading around the globe, the government of Israel was quick to react by closing its borders and introducing aggressive social distancing measures in March of 2020, and enforcing a complete lockdown in April of 2020 to curb the virus spread. New requirements to limit the number of workers present at the workplace (to 10 workers or 30% of the personnel, whichever was greater) resulted in a permanent or temporary dismissal of employees (Albin & Mundlak, 2020). Employers in the private sector—and to a lesser degree those in the public sector—were allowed to force their employees to take unpaid leave: as of

May, out of more than 800,000 who were furloughed in the middle of March, only about 70,000 employees returned to the labor force.

More generally, within a short time period, unemployment and furlough rates surged from a record low in February of 2020 to a record high by April 2020 (Central Bureau of Statistics [CBS], 2020a). The combined rate of unemployment and furlough due to COVID-19 was 3.4% in the beginning of February, spiking to 36.7% in the beginning of April and dropping to 10.5% in the beginning of June, as seen in Figure 1. Consistent with increased unemployment rates, the number of recipients of UI skyrocketed from a monthly average of 77,700 in February of 2020 to 894,550 in May of 2020 (NII, 2020). As of the end of June, about 675,000 workers received unemployment benefits, approximately 100,000 individuals received income support benefits, and approximately 75,000 were rejected due to non-compliance with eligibility terms and conditions (Ilan, 2020a). Unemployment and furlough rates remained consistently high after June, before spiking again in the end of September 2020 (17.1%) and the beginning of October 2020 (20.7%) and in the month of January 2021 (over 14%) (Figure 1). Both of these surges in unemployment and furlough rates roughly coincided with the second and third national lockdowns imposed by the Israeli government in in September and January. The high rates of unemployment also meant that a non-negligible share of the population were eligible for and received UI benefits.

To help families cope with the effects of job loss and mitigate the risks of hardship during the COVID-19 pandemic, the Israeli government had to come up with additional budgets to fund its social insurance programs and offer Israeli households additional financial supports. The government assistance package was designed to ensure income support for households of salaried employees, small businesses, and the self-employed persons who have lost their main

source of income. The specific financial assistance included, for example, expanded unemployment benefits, income supplements for the lowest-income households, grants and discounted loans for businesses and self-employed workers, and stimulus payments in April and August of 2020. Israeli households could also qualify for additional benefits like the postponement of foreclosure actions, flexibility on bill payments, deferrals on loan payments, deferrals on taxes, and facilitated access to credit (Gal and Madhala, 2020).

Notably, in response to rising unemployment rates, the Israeli government adapted its guidelines of the UI program, for example, extending the timeline for receiving unemployment benefits,² shortening the qualification period for receiving unemployment benefits, extending the period for receiving a combination of unemployment benefits and other means-tested programs, and extending unemployment support to elderly workers and some groups of self-employed workers and freelancers. These COVID-19-related modifications to the UI program were expected to slow down an increase in poverty rates (Andelblad et al., 2020). As of June 2020, the total assistance package totaled approximately 7.2% of the country's gross domestic product (Ministry of Finance, 2020). Notably, all COVID-19 eligibility and benefit extensions in the UI program are set to expire on June 30, 2021.

Study Hypotheses

Our study examines the extent to which Israeli households' pre-pandemic incomes and access to UI in Israel predict the experience of material hardships over the course of the COVID-19 pandemic. We develop several study hypotheses about the relationship between household income, experience of material hardship, and the receipt of unemployment benefits during the

² As of November of 2020, approximately a quarter of a million of workers were considered long-term unemployed (i.e., they were unemployed before the pandemic) (Ilan, 2020b). Extensions of the timeline to receive unemployment benefits allowed these individuals to qualify for unemployment benefits beyond the standard period of eligibility.

COVID-19 pandemic. First, we expect a negative relationship between pre-pandemic household income and household hardship, with low-income households expected to be at a greater risk of facing different types of material hardships. Second, while households with lower incomes and worse financial conditions may be likely to experience material hardship, we hypothesize that the receipt of government benefits can help households across the income spectrum mitigate the experience of hardship. Third, given the severity of the pandemic and the aggressive public health and economic response of the Israeli government to the viral spread during the early months of the pandemic, we anticipate that each of these relationships will be stronger during the early months of the pandemic and less pronounced in the later months of the COVID-19 outbreak.

METHODS

Data and Sample

Data for this paper come from a multi-wave online survey fielded by Washington University in St. Louis to a national sample of Israeli respondents in three-month intervals during the COVID-19 pandemic. The first wave of the survey was fielded between June 4 and July 1, 2020 (with a median respondent completing the survey on June 11), the second wave was fielded between September 13 and October 21, 2020 (with a median survey completion date of September 22), and the third wave was administered between December 29, 2020 and February 7, 2021 (with a median respondent finishing the survey on January 11). As seen in Figure 1, the first wave of the household survey was fielded shortly after Israel saw the lowest rate of new COVID-19 cases and immediately before the rate of new cases started to increase considerably in July. The second and third waves of the survey coincided with two spikes in COVID-19 cases and two lockdowns imposed by the government in mid-September and end-December of 2020.

[FIGURE 1 ABOUT HERE]

The survey was administered to the online survey panel of Israeli adults (aged 18 and over) by a local research firm. We applied four demographic quotas (gender, age, income, and religiosity) to sample Jewish respondents to ensure that our sample resembled the Jewish adult population. Since the differences in internet use among Arab Israelis (e.g., by age) make it difficult to apply pre-determined quotas to an online sample of Arab Israelis, no sampling criteria were applied for Arab Israeli respondents. The survey collected detailed information on household demographic characteristics, employment situation, debt holding, asset ownership, experience of hardships, health status, the receipt of government benefits, exposure to COVID-19, and perspectives on the pandemic.

The survey collected data on approximately 2,300 respondents in each wave and each wave consisted of cross-sectional and panel components. We used data from the first wave of the survey to study household experiences of material hardship during the early months of the pandemic. In Wave 1 of the survey, of 18,843 respondents who were invited to participate in the survey, 3,084 agreed to participate (a 16.4% response rate), and 2,635 accessed the online survey link. After dropping non-consenting and non-completing respondents, as well as respondents under the age of 18, the sample was reduced to 2,301 respondents. Following the listwise deletion of missing data on key demographic and financial characteristics, our final analytical sample for analyses that incorporated only the first survey wave included 1,889 observations.

Further, we relied on data from the second and third waves of the survey to examine the trends in household hardship during the later period of the pandemic. In Waves 2 and 3, we prioritized sampling panel respondents who appeared in the first survey wave, which resulted in a high response rates across the waves (78.6% of individuals who participated in Wave 1 of the

survey also completed Wave 2, and 65.4% completed all three survey waves). For the analysis that focused on the second and third waves of the survey, we used pooled cross-sectional data, which included 3,835 observations (1,885 in Wave 2 and 1,950 in Wave 3) after the listwise deletion of missing data.

Measures

Dependent Variables

We used three survey questions to measure material hardship experienced by survey respondents during the COVID-19 pandemic. These measures of hardships reflect (i) the difficulty of making housing payments, (ii) the incidence of skipping bills or paying bills late, and (iii) the inability to afford adequate food. The survey question on housing hardship asked respondents whether within the past three months of taking the survey, their household did not pay the full amount of the rent or mortgage because they could not afford it. The question on bill paying hardship asked survey participants whether within the past three months of the survey, their household skipped paying a bill or paid a bill late due to not having enough money. The measure of food insecurity was based on a survey question that asked whether in the past three months of the survey, respondents' household could not afford the type or amount of food needed. The three material hardship measures were similar to those used in other surveys and studies (Danziger et al., 2000; Despard et al., 2018; Heflin et al., 2009; Rector et al., 1999; Urban Institute, 2018). Each outcome variable was represented by a dichotomous variable where the variable took a value of one if a household experienced hardship, and zero otherwise. Survey questions inquiring about household hardship were identical across the survey waves.

Independent, Moderating, and Control Variables

The independent variable of interest is household income. Household income corresponds to self-reported household gross monthly income before COVID-19. In each wave of the survey, the survey question read as follows: “Before the COVID-19 pandemic, what was the total pre-tax monthly income your household received from all sources, such as wages, government benefits, pensions, or side jobs?” We classified households into three groups based on their pre-pandemic income. We define low-income households as those with average household gross monthly incomes of NIS 8,000 or less (USD 2,279 or less), middle-income households as those with incomes between NIS 8,001 and NIS 17,000 (USD 2,279 and USD 4,843), and high-income households as those with incomes of NIS 17,001 and above (USD 4,844 and above).³ Selected income thresholds roughly correspond to the second and fifth deciles of the household gross monthly income based on 2018 data from Israel’s Central Bureau of Statistics.

A moderating variable identifies a household’s receipt of unemployment benefits within three months of the survey. To obtain the measure of a household’s receipt of unemployment benefits, we first asked respondents whether they or anyone in your household was receiving unemployment benefits. Those who responded that their households were not currently receiving unemployment benefits, were further inquired whether their households received unemployment benefits in the past three months. The survey questions were identical across the survey waves. The variable was measured as a dichotomous variable, where households receiving unemployment benefits within the past three months were coded as one and households that did not receive unemployment benefits were coded as zero.

Remaining control variables include an array of demographic and financial characteristics, such as respondent’s gender, age, age squared, religion/ethnicity, marital status,

³ Exchange rates correspond to June 1, 2020.

highest educational attainment, housing status, current employment status, district of residence, the number of adults and children in a household, household's receipt of income support or income supplement,⁴ and the amount of a one-time COVID-19 (in NIS 1,000) relief payment households received during the pandemic. This one-time COVID-19 payment includes a stimulus payment delivered to qualifying families in April of 2020 (in the first wave) or in August of 2020 (in the second and third waves).⁵ Finally, regressions that used data for Waves 2 and 3 of the survey also controlled for survey wave.

Empirical Method

The analysis proceeds in two stages. To examine the relationship between pre-pandemic household income and material hardship during the pandemic, we conducted a logistic regression analysis, where dependent variables correspond to the experience of housing hardship, bill paying hardship, and food insecurity. We estimated the following regression model for each outcome:

$$\text{logit}(P) = \log\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 I_i + \mathbf{X}_i \beta_2 + \varepsilon_i \quad (1)$$

where $P = \text{Pr}(Y_i = 1 | I_i, X_i)$. Here, Y_i describes whether household i experienced each material hardship within past three months of the survey, I_i represents household gross monthly income before COVID-19, and \mathbf{X}_i includes a vector of demographic and financial characteristics described above. To differentiate between the early and later periods of the COVID-19 pandemic, we estimated Equation 1 separately using data only from Wave 1 of the survey (to focus on the early months of the pandemic) and using a combined sample of respondents who

⁴ The income support or supplement is a means-tested government benefit provided to the low-income households.

⁵ In April of 2020, the amount of a one-time payment was relatively small, as each household received NIS 500 (USD 148) per child, and small payments were provided to old-age pension recipients, income support beneficiaries, and people with disabilities. In August of 2020, the Israeli government provided a nearly universal grant (which excluded high-income earners) in the amount of NIS 750 to each adult over the age of 18. Couples with children received additional funds per child, and those eligible for certain government benefits also received higher benefits.

completed Waves 2 or 3 of the survey (to focus on the later months of the pandemic). Models that relied on data from the second and third survey waves were treated as pooled cross-sections, even though they included a large number of panel respondents. For these analyses, we clustered standard errors by individuals to account for the fact that a given individual could take the survey multiple times at different waves.

Next, to examine the extent to which the receipt of unemployment benefits moderated the relationship between household income and material hardship, we estimated additional logistic regression models. The experience of each type of material hardship was regressed on the interaction between the average household income before COVID-19 and the receipt of unemployment benefits during the first three months of the COVID-19 pandemic, as follows:

$$\text{logit}(P) = \log\left(\frac{P}{1-P}\right) = \alpha_0 + \alpha_1 G_i * I_i + \alpha_3 G_i + \alpha_4 I_i + \mathbf{X}_i \alpha_4 + \varepsilon_i \quad (2)$$

where Y , I , and \mathbf{X} are described as above, G_i reflects household's receipt of unemployment benefits in the past three months, and $G_i * I_i$ corresponds to the interaction of household income and the receipt of unemployment benefits. The inclusion of the interaction term allows us to investigate the degree to which the association between household income and material hardship was moderated by the receipt of unemployment benefits. Similar to the analysis above, we distinguished between the early and later months of the pandemic by estimating Equation 2 on a sample of respondents who participated only in the first survey wave, as well as those who completed the second or third waves of the survey. When estimating regression models for Waves 2 and 3, we again clustered standard errors by individuals.

For ease of interpretation, we report average marginal effects or predicted probabilities of the dependent variable based on the logistic regression estimates.

Descriptive Statistics

Table 1 presents descriptive characteristics for our analytical sample. The average respondent was roughly 43 years old. The majority of respondents (56%) were women. A vast majority of survey takers—nearly three-fourths—were Jewish (excluding Ultra-Orthodox Jews),⁶ 8% were Ultra-Orthodox Jews, 15.5% were Arab Israelis, and the remaining 3% were other religion/ethnicity. Over two-thirds of respondents were married or lived with a partner, and nearly half of the sample had at least one child in the household. Most households had two adults living in a household. Sixty-nine percent of respondents earned at least a post-secondary degree (e.g., teaching or engineering certificate) or a Bachelor’s degree. Over 60% of respondents owned their homes—either with or without a mortgage—nearly a quarter were renters, and the remaining 13% neither rented nor owned their homes. As of June 2020, 50.5% of respondents were employed or self-employed full-time, 17% worked part-time, 13% were unemployed or furloughed, and 19% had other employment status (e.g., retired). Nearly a quarter of respondents came from low-income households (pre-pandemic monthly household incomes of less than NIS 8,000), 44% were from middle-income households (pre-pandemic monthly household incomes between NIS 8,001 and NIS 17,000), and 32% from high-income households (monthly household incomes over NIS 17,000). The most commonly received government benefit in the three months prior to the survey was one-time COVID-19 relief payments (49.4% of households). In the three months prior to the survey, 35% of households also received unemployment benefits and 9% received an income support or supplement. When considering the receipt of unemployment benefits over time, Figure 2 further shows that the proportion of households receiving unemployment benefits was highest at the time of the first survey wave (34.5%) and dropped to 31.0% in Wave 2 and 29.7% in Wave 3.

⁶ This group includes Secular, Traditional, and Religious Jews.

[TABLE 1 ABOUT HERE]

Lastly, with respect to material hardship at the time of Wave 1, 10% of households reported experiencing housing hardship, 18% of households said they experienced bill payment hardship, and 22.5% reported experiencing food insecurity in the three months prior to the survey. Figure 3 further illustrates the changes in the experience of hardship within the past three months. The self-reported housing hardship was highest in Wave 1 (10.1%), dropping in Waves 2 and 3 (7.5% and 6.6%, respectively). The incidence of bill paying hardship was similar in Waves 1 and 2 (18.0% and 17.7%, respectively) and reduced to 13.8% in the third wave of the survey. Similarly, the proportion of households reporting food insecurity was similar in Waves 1 and 2 (22.5% and 21.9%, respectively), decreasing to 17.6% in Wave 3.

[FIGURE 2 ABOUT HERE]

[FIGURE 3 ABOUT HERE]

RESULTS

Key Demographic and Financial Predictors of Material Hardship

Table 2 presents findings from a logistic regression model showing the relationship between key demographic and financial characteristics and the experience of material hardship during COVID-19 pandemic. Each model reports average marginal effects from logistic regression models, based on Equation 1, and corresponds to different types of material hardship reported within the past three months—housing hardship (Models 1 and 4), bill paying hardship (Models 2 and 5), and food insecurity (Models 3 and 6). Models 1-3 focus on the early period of the pandemic and include data from Wave 1, while Models 4-6 capture later months of the pandemic and include data from Waves 2 and 3. We use a threshold of 0.05 to identify statistical significance of regression results.

Findings from the logistic regression analysis indicate that the experience of hardship was significantly and negatively associated with household income after accounting for key demographic and financial factors. The negative association holds both for the early and later periods of the pandemic. During the early months of the pandemic (Models 1-3), compared to low-income households, middle-income households, on average, reported lower incidence of housing hardship (by 4.3 percentage points, $p < 0.05$), bill paying hardship (by 6.3 percentage points, $p < 0.01$) and food insecurity (by 7.7 percentage points, $p < 0.01$). The differences were more substantial when considering high-income households. High-income households reported lower rates of housing hardship (by 8.0 percentage points, $p < 0.001$), bill paying hardship (by 14.1 percentage points, $p < 0.001$), and food insecurity (by 18.6 percentage points, $p < 0.001$) relative to low-income households. The magnitude of coefficients remained similar during the later months of the pandemic (Models 4-6), with the exception of bill paying hardship. The experience of bill paying hardship was statistically similar for low- and middle-income households, while higher income households were less likely to experience this type of material hardship, all else equal.

The association between the receipt of unemployment benefits and material hardship varied depending on the period of the pandemic. After accounting for a wide array of demographic and financial covariates, we find that during the early period of the pandemic, households who received unemployment benefits were more likely to experience housing hardship (by 2.8 percentage points, $p < 0.05$) and food insecurity (by 4.5 percentage points, $p < 0.05$) relative to households who did not receive unemployment benefits (Models 1-3). These trends were further observed during the later period of the pandemic: households who benefited from UI were more likely to experience housing hardship (by 2.7 percentage points, $p < 0.01$), bill

paying hardship (by 4.3 percentage points, $p < 0.01$), and food insecurity (by 4.2 percentage points, $p < 0.01$) (Models 4-6).

[TABLE 2 ABOUT HERE]

In Models 1-6, we also find a consistently positive association between the receipt of income supplement or income support and material hardship; results suggest a positive correlation between the amount of a one-time stimulus payment and bill paying hardship during the early months of the pandemic. On average, renters, as well as families who owned their homes with mortgages, faced a greater probability of hardship relative to homeowners without a mortgage. While no statistically significant differences in the incidence of material hardship were detected among Ultra-Orthodox Jewish households relative to non-Ultra-Orthodox Jewish households, Arab Israelis tended to report a greater prevalence of material hardship even after accounting for household income. Families with three or more children experienced higher rates of material hardship (with an exception of food insecurity in the later period of the pandemic), while households in which respondents had higher levels of education reported a lower likelihood of experiencing material hardship.

In a set of supplemental analyses, we also examined the relationship between the receipt of unemployment benefits and key demographic and financial household characteristics. By far the strongest predictor of a household's receipt of unemployment benefits during both early and later months of the pandemic was a respondent's job loss or furlough.⁷ In addition, descriptive analysis from Wave 1 reveals that 74.8% of households in which a respondent faced a temporary or permanent loss of employment within three months of the survey also reported receiving

⁷ Results from these analyses are available upon request. Notably, relative to low-income households, middle-income households were more likely to receive unemployment benefits, while the difference between low- and high-income households was not statistically significant.

unemployment benefits during the same period. Similarly, in households where a respondent's employment situation had changed since the start of COVID-19 pandemic, 64.3% received unemployment benefits in Wave 2 and 65.1% received unemployment benefits in Wave 3. These findings illustrate a high level of correlation between the receipt of household benefits and a respondent's loss of employment during the period of observation, suggesting that a household's receipt of unemployment benefits is a relatively good proxy for the experience of an employment shock.

Moderating Relationship of Unemployment Benefits

Findings from the previous analysis show that households with higher household income were less likely to report material hardship during the pandemic. To examine the degree to which the receipt of unemployment benefits moderated the relationship between household income and material hardship, Tables 3 and 4 and Figures 4-9 show the results from logistic regression models that include an interaction between unemployment receipt and household income, based on Equation 2. We report findings for both the early months of the pandemic (Table 3 and Figures 4-6) and the later months of the pandemic (Table 4 and Figures 7-9). Each figure displays predicted probabilities of each type of hardship for different levels of income and benefit receipt, reporting 95% confidence intervals. We highlight four key findings from our analysis.

[TABLE 3 ABOUT HERE]

[TABLE 4 ABOUT HERE]

First, for each type of household hardship, we observe relatively similar trends in the relationship between household hardship, income, and unemployment benefits between the early and later months of the COVID-19 pandemic. While we describe the findings in more detail

below, the overall similarity in observed trends indicates that, with a few exceptions, the association between the key variables of interest remained relatively consistent throughout the pandemic.

Second, our findings suggest that for each type of hardship, households with the lowest incomes who received unemployment benefits reported comparable levels of hardship as those not receiving this government support. We also find that that low-income households receiving unemployment benefits experienced, on average, similar levels of material hardship as those in the middle-income group who received government support. This pattern holds for material hardship during the early and later months of the pandemic, even after adjusting for the experience of unemployment shock. The only exception is the experience of food insecurity in Waves 2 and 3, as low-income households receiving unemployment benefits were more likely to experience food insecurity than middle-income households with unemployment benefits (by 8.2 percentage points, $p < 0.05$, Figure 9). While the exact reasons for these results are unclear, these results potentially speak to the importance of unemployment benefits in alleviating hardship and moderating the relationship between household income and hardship for low-income households. That is, one interpretation for these findings could be that unemployment benefits have shielded low-income households from additional adversity during the pandemic and helped cover their housing and food expenses. An alternative explanation could be that low-income households may be more resilient to various employment and income shocks, while income and unemployment volatility may have been relatively more severe for middle-income households, in relative terms.

[FIGURES 4-6 ABOUT HERE]

Second, we find that in general, middle-income households with unemployment benefits, on average, fared worse than those without unemployment benefits. In particular, compared to middle-income households who did not receive unemployment benefits, those who received government support tended to report higher levels of housing hardship (by 5.4 percentage points in Wave 1, $p < 0.01$ (Figure 4), and by 4.8 percentage points in Waves 2 and 3, $p < 0.001$ (Figure 7), bill paying hardship (by 8.9 percentage points in Wave 1, $p < 0.001$ (Figure 5) and 6.4 percentage points in Waves 2 and 3, $p < 0.1$ (Figure 8), and food insecurity (by 10.7 percentage points in Wave 1, $p < 0.001$ (Figure 6). The only statistically insignificant result among middle-income households is observed for food insecurity in Waves 2 and 3. The overall pattern of statistically significant differences between those receiving and not receiving unemployment benefits may potentially indicate a disconnect between the financial needs of middle-income households during the COVID-19 pandemic and the amount of unemployment benefits these households received.

Third, we find no statistically significant differences in material hardship between recipients and non-recipients of unemployment benefits among high-income households. At the same time, middle-income households who obtained government support, on average, reported consistently greater hardship than high-income households receiving unemployment benefits. This was true for all types of material hardship, after accounting for the experience of unemployment shock, and the pattern held for both early and later periods during the COVID-19 pandemic. While the results may signify greater hardship in the middle-income group, these trends may also point to differences in households' ability to cope with financial shocks: as higher-income households may have a greater financial cushion to weather the crisis, the amount

of unemployment benefits received by the middle-income group may be insufficient to protect these households from hardships during the pandemic.

[FIGURES 7-9 ABOUT HERE]

Taken together, our findings suggest that certain households did not receive unemployment benefits that were proportional to their needs. While low-income households may have received an appropriate amount relative to their income, and high-income households may have had enough of a financial cushion to offset the negative impacts of the crisis (in conjunction with some government support), unemployment benefits to middle-income households may have been relatively insufficient to offset pandemic-related risks. Indeed, additional exploration of these data showed that while there were no statistically significant differences in the likelihood to receive unemployment benefits by income groups, the amount of received unemployment benefits was relatively higher in low-income families. In particular, at the time of the survey in Wave 1, a median low-income household reported receiving NIS 3,000, a median middle-income household was receiving NIS 3,700, and a median high-income household reported NIS 5,000 in unemployment payments. Similarly, median amounts of unemployment benefits in Waves 2 and 3 were NIS 3,000, NIS 3,900, and 4,900 for low-, middle-, and high-income households, respectively.⁸

DISCUSSION AND CONCLUSION

Alongside the effect of COVID-19 on the health of individuals across the globe, its impact on economies and labor markets has been dramatic, and the consequential effect on the livelihoods and standards of living of citizens has been devastating. Even in developed economies, the pandemic not only detrimentally affected people's physical and mental health and caused

⁸ Results from these analyses are available upon request.

widespread mortality but, as seen from the findings of this study, it caused hardships for households by undermining their capacity to ensure adequate access to food and housing. In addition to efforts to ensure public health and the medical needs of citizens, social welfare systems have been a major tool employed to mitigate the economic and social consequences of COVID-19. In more economically well-off, industrialized nations, policy-makers drew upon existing social security programs—particularly UI programs—expanded them and adopted new programs, to an extent unprecedented since the establishment of welfare states (International Labor Organization, 2020a; 2020b; International Monetary Fund, 2020).

This article draws upon a household survey of Israeli households to explore the efforts by the Israeli government to address the negative consequences of COVID-19 on its citizens. While prior to the crisis, the Israeli UI program was particularly stringent and offered sufficient support to only a small proportion of the unemployed, with the onset of the pandemic, UI was adopted as the prime policy tool to deal with the impact of the pandemic. Indeed, UI served as a means to buffer the sudden loss of income that affected a quarter of the Israeli workforce in the initial months after the outbreak of COVID-19. The elevenfold increase in the number of UI benefit recipients reflected the dramatic growth in unemployment but also policy decisions, critically the significant expansion of the scope of eligibility for this benefit to include furloughed employees and additional changes, intended to boost the effectiveness of this program.

The two research questions in this study related to the relationship between household income and the experience of material hardship during the first three months of the COVID-19 pandemic in Israel, and the extent to which receipt of unemployment benefits moderated the relationship between income and material hardship. The findings from the study underscore the severe material hardship, as reflected in an inability to ensure access to adequate food and to pay

rents or mortgage and other bills, suffered by Israeli households due to the unemployment caused by the pandemic. Not surprisingly, the hardship was greatest for households with the lowest incomes and those who suffered from loss of income due to unemployment. The rapid expansion of access to UI (alongside additional one-off steps to provide financial assistance to households) aimed to mitigate the income loss caused by unemployment and enable Israeli families to weather the crisis. While unemployment benefits were provided to households across the income spectrum, the findings revealed that low-income households who received unemployment benefits seemed to fare better—in relative terms—than middle-income households receiving this government support. As such, at least for low- and middle-income recipients, this reflects the progressive logic of the benefit, which is also evidenced by the program structure (NII, 2021).

The study reveals meaningful differences in the resilience that UI afforded households. These would appear to reflect both the financial capacities of the households and the structuring of the UI program. Though UI is intended to serve a wage-replacement function and offers benefits that reflect, to a degree, the previous income of an employee, the Israeli program offers a higher replacement rate to the unemployed with lower incomes. UI benefits seem to have been particularly effective in shielding low-income households from additional adversity during the pandemic and helping to cover their housing and food expenses. However, individuals with middle and high incomes prior to the pandemic suffered a proportionally greater cut in their income. Our findings indicate that though this may not have increased levels of hardship in households with higher incomes, it did so in the case of middle-income households—as reflected in the fact that middle-income households receiving unemployment benefits in the early months of the pandemic reported greater levels of material hardship than those who did not receive this government support. While high-income households may have had a sufficient financial cushion

to offset the negative impacts of the crisis, the combination of unemployment benefits and accumulated savings may have been relatively insufficient to offset pandemic-related risks in middle-income households.

Given expectations that the consequences of unemployment during the COVID-19 pandemic may persist in the foreseeable future, more action might be needed to provide households with an appropriate buffer to ensure that they do not fall further behind after the pandemic. This may require the Israeli government to maintain the improved access and coverage of the UI program beyond the current crisis, as well as increase the relative generosity of the UI program for middle-income households, without lowering the level of other government supports and without reducing the amount of unemployment benefits available to low-income households. The lack of timely and equitable government response may have long-lasting, negative consequences for the economic and social well-being of many households for years to come.

While this analysis provides importance evidence on the experience of hardship during the COVID-19 pandemic in Israel, our study has several limitations. The current study focuses on the experience of hardship during the early months of the pandemic characterized by a strict lockdown and a sharp increase in the number of unemployed and furloughed workers, as well as the later months of the pandemic, which saw additional government lockdowns and spikes in unemployment. Findings from this work cannot be generalized to the most recent months of the pandemic or the post-pandemic period. Furthermore, while our findings describe the overall experience of material hardship, our work does not examine whether the differences in the rates of hardship across income groups reflect pre-existing disparities, if they emerged during the COVID-19 pandemic, or if the pandemic exacerbated pre-existing differences. The

generalizability of our findings may also be limited for the Arab Israeli population: while we applied several quotas to sample Jewish respondents to ensure that the sample resembled the Jewish adult population, no sampling criteria were applied for Arab respondents. Lastly, while our findings report the association between household income, government support, and household hardship, further analysis is needed to rigorously assess the causal effects of government support on material hardship.

We expect that the findings of this study will have relevance beyond the specific case of Israel. The COVID-19 pandemic has tested the government capacity to address the impact of a sudden and widespread health and economic crisis on its citizens. With differing degrees of success, social welfare programs have been mobilized to an extraordinary extent to deal with the hardships caused by this crisis, and the UI programs have been central to this effort across the globe. This study helps enhance our understanding as to how effective UI may be in addressing the impact of such a crisis. The findings will contribute to efforts of policymakers to ensure that the lessons taken from this crisis will help structure UI programs so that they are effective in dealing with future crises and changes in labor markets.

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TABLES

Table 1. Sample Characteristics (Wave 1)

Characteristic	Sample Mean	Adult Population ^a
Age (years)	43.0	
Male (%)	43.7	
Religion/Ethnicity (%)		
Jew (excluding Ultra-Orthodox)	74.0	67.5 (2018)
Ultra-Orthodox Jew	7.9	8.2 (2018)
Arab Israeli	15.5	18.9 (2018)
Other	2.6	5.4 (2018)
Married or lives with partner (%)	67.1	
Any children in household (%)	47.4	
Number of adults in household (%)		
1	13.3	
2	52.3	
3+	34.4	
Educational attainment (%)		
High school degree or less	31.2	
Post-secondary or Bachelor's degree	52.1	
Master's degree or higher	16.7	
Housing arrangement (%)		
Own home	62.3	
Pay rent	25.2	
Neither own home nor pay rent	12.5	
Employment before COVID-19 (%)		
Full-time	50.5	
Part-time	17.2	
Unemployed/furloughed	13.4	
Other	19.3	
Average household gross monthly income before COVID-19 (%)		
Low-income (NIS 0–8,000)	23.9	
Middle-income (NIS 8,001–17,000)	44.3	
High-income (NIS 17,001+)	31.8	
Government benefit receipt (%)		
Income support or supplement (past 3 mo)	8.7	
One-time COVID-19 relief payment	49.4	
Unemployment benefits (past 3 mo)	34.6	
Material hardship (past 3 mo) (%)		
Skipped a mortgage or rent payment	10.1	
Skipped a bill or late bill	18.0	
Reported food insecurity	22.5	

Observations

1,889

Notes: Exchange rates correspond to June 1, 2020 (USD 1 = NIS 3.51). ^aSource: Authors' calculations based on data from CBS.

Table 2: Demographic and Financial Predictors of Material Hardship, Logistic Regression

	Wave 1			Waves 2 and 3		
	Housing hardship (1)	Bill paying hardship (2)	Food insecurity (3)	Housing hardship (4)	Bill paying hardship (5)	Food insecurity (6)
<i>Financial characteristics</i>						
HH gross monthly income, pre-COVID-19 (ref.= NIS 0-8,000)						
NIS 8,001-17,000	-0.043* (0.019)	-0.063** (0.024)	-0.076** (0.027)	-0.049*** (0.013)	0.001 (0.016)	-0.079*** (0.019)
NIS 17,001+	- 0.080*** (0.020)	- -0.141*** (0.026)	- -0.186*** (0.028)	- -0.072*** (0.014)	- -0.088*** (0.017)	- -0.174*** (0.021)
Housing status (ref.=Owns without a mortgage)						
Owns with a mortgage	0.080*** (0.018)	0.083*** (0.021)	0.095*** (0.024)	0.069*** (0.012)	0.083*** (0.015)	0.104*** (0.018)
Rents	0.119*** (0.019)	0.179*** (0.025)	0.174*** (0.027)	0.078*** (0.013)	0.166*** (0.019)	0.137*** (0.020)
Neither owns nor rents	-0.017 (0.013)	-0.013 (0.022)	0.032 (0.030)	0.003 (0.010)	0.061** (0.019)	0.076** (0.024)
<i>Government benefits</i>						
Unemployment benefits (past 3 mo)	0.028* (0.013)	0.029 (0.017)	0.045* (0.019)	0.027** (0.009)	0.043** (0.013)	0.042** (0.015)
Income support or supplement (past 3 mo)	0.078*** (0.018)	0.073** (0.024)	0.127*** (0.028)	0.053*** (0.012)	0.059** (0.019)	0.105*** (0.021)
One-time COVID-19 payment (NIS 1,000)	-0.011 (0.007)	0.013* (0.005)	0.002 (0.007)	-0.000 (0.003)	-0.003 (0.005)	-0.004 (0.006)
<i>Demographic characteristics</i>						
Male (ref.=Female)	-0.018 (0.014)	-0.046** (0.017)	-0.078*** (0.019)	0.003 (0.009)	-0.015 (0.013)	-0.025 (0.015)
Age	-0.001 (0.003)	0.010* (0.004)	0.008* (0.004)	0.002 (0.002)	0.009** (0.003)	0.015*** (0.003)
Age squared	0.000 (0.000)	-0.000* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000* (0.000)	-0.000*** (0.000)
Religion/ethnicity (ref.=Jew, excluding Ultra-Orthodox)						
Ultra-Orthodox Jew	0.011 (0.021)	0.011 (0.026)	0.005 (0.031)	-0.005 (0.012)	0.021 (0.021)	0.026 (0.026)
Arab Israeli	0.098*** (0.025)	0.208*** (0.031)	0.167*** (0.033)	0.079*** (0.017)	0.246*** (0.025)	0.113*** (0.025)
Married or living with a partner (ref.=Single)	-0.009 (0.019)	0.008 (0.024)	-0.023 (0.026)	-0.016 (0.013)	-0.042* (0.019)	-0.031 (0.020)
Highest educational attainment (ref.=High school degree or less)						
Post-secondary or Bachelor's degree	-0.040* (0.016)	-0.066*** (0.019)	-0.058** (0.021)	-0.021* (0.011)	-0.055*** (0.015)	-0.032* (0.016)
Master's degree or higher	- 0.067***	- -0.095***	- -0.095**	- -0.031*	- -0.094***	- -0.058*

	(0.020)	(0.026)	(0.029)	(0.015)	(0.020)	(0.023)
Number of children in HH (ref.=None)						
1 child	0.014 (0.018)	0.039 (0.023)	0.043 (0.027)	0.013 (0.012)	0.052** (0.018)	0.024 (0.020)
2 children	0.034 (0.020)	0.067** (0.025)	0.047 (0.028)	0.020 (0.014)	0.044* (0.019)	0.014 (0.023)
3 or more children	0.096*** (0.027)	0.118*** (0.030)	0.130*** (0.034)	0.030* (0.014)	0.064** (0.022)	0.034 (0.025)
Current employment (ref.=Full-time)						
Part-time	0.014 (0.018)	0.017 (0.023)	-0.009 (0.025)	-0.001 (0.012)	0.026 (0.018)	0.029 (0.020)
Unemployed or furloughed	0.065** (0.022)	0.047 (0.025)	0.059* (0.029)	0.003 (0.012)	0.038* (0.018)	0.063** (0.021)
Other	0.004 (0.020)	-0.026 (0.025)	-0.024 (0.028)	-0.011 (0.014)	-0.005 (0.019)	0.037 (0.023)
Wave 3				-0.007 (0.007)	-0.034*** (0.009)	-0.042*** (0.010)
Pseudo R-squared	0.2059	0.2113	0.1490	0.1517	0.1816	0.1153
Observations	1,889	1,889	1,889	3,835	3,835	3,835

Notes: Coefficients correspond to average marginal effects of each independent variable obtained from a logistic regression model. Clustered standard errors in parentheses. Statistical significance: ***p<0.001, **p<0.01, *p<0.05. Each regression controls for the district of residence, the number of adults in a household, and “Other” religion/ethnicity.

Table 3: Predicted Probabilities of Household Hardship, by Income and Unemployment Benefits (Wave 1)

HH gross monthly income, pre-COVID-19	Unemployment benefits (past 3 mo)	Housing hardship (1)		Bill paying hardship (2)		Food insecurity (3)	
		Predictive Margin	St. Err.	Predictive Margin	St. Err.	Predictive Margin	St. Err.
NIS 0-8,000	No	0.132	0.019	0.271	0.026	0.333	0.028
NIS 0-8,000	Yes	0.150	0.024	0.217	0.028	0.284	0.034
NIS 8,001-17,000	No	0.075	0.011	0.149	0.015	0.197	0.017
NIS 8,001-17,000	Yes	0.129**	0.017	0.238***	0.021	0.304***	0.025
NIS 17,001+	No	0.062	0.015	0.105	0.017	0.116	0.018
NIS 17,001+	Yes	0.057	0.016	0.110	0.021	0.145	0.025
Observations		1,889		1,889		1,889	

Notes: Table reports predicted probabilities for each type of household hardship based on logistic regression models. Comparison of predicted probabilities between households who received unemployment benefits within three months of the survey and households who did not receive unemployment benefits (by household income). Statistical significance: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

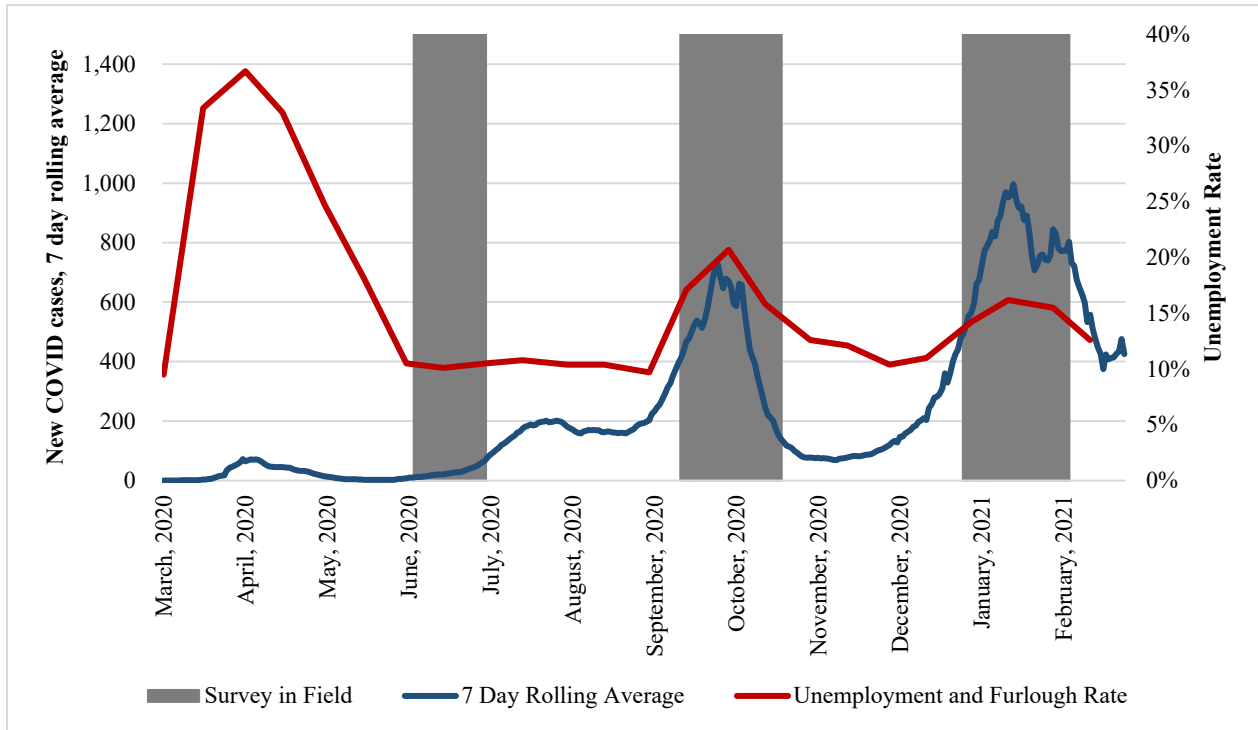
Table 4: Predicted Probabilities of Household Hardship, by Income and Unemployment Benefits (Waves 2 and 3)

HH gross monthly income, pre-COVID-19	Unemployment benefits (past 3 mo)	Housing hardship (1)		Bill paying hardship (2)		Food insecurity (3)	
		Predictive Margin	St. Err.	Predictive Margin	St. Err.	Predictive Margin	St. Err.
NIS 0-8,000	No	0.108	0.014	0.172	0.016	0.268	0.020
NIS 0-8,000	Yes	0.124	0.019	0.197	0.023	0.315	0.028
NIS 8,001-17,000	No	0.046	0.007	0.159	0.011	0.190	0.013
NIS 8,001-17,000	Yes	0.094***	0.013	0.223**	0.017	0.233	0.019
NIS 17,001+	No	0.038	0.008	0.080	0.011	0.095	0.012
NIS 17,001+	Yes	0.047	0.012	0.113	0.018	0.138	0.019

Notes: Table reports predicted probabilities for each type of household hardship based on logistic regression models. Comparison of predicted probabilities between households who received unemployment benefits within three months of the survey and households who did not receive unemployment benefits (by household income). Statistical significance: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

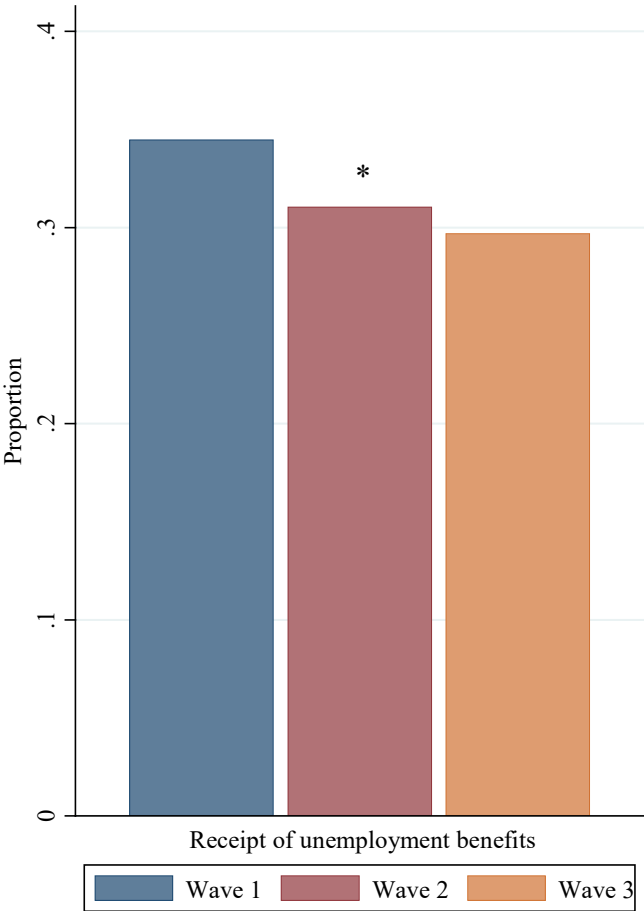
FIGURES

Figure 1: New COVID-19 Cases in Israel, per Million People (March–July)



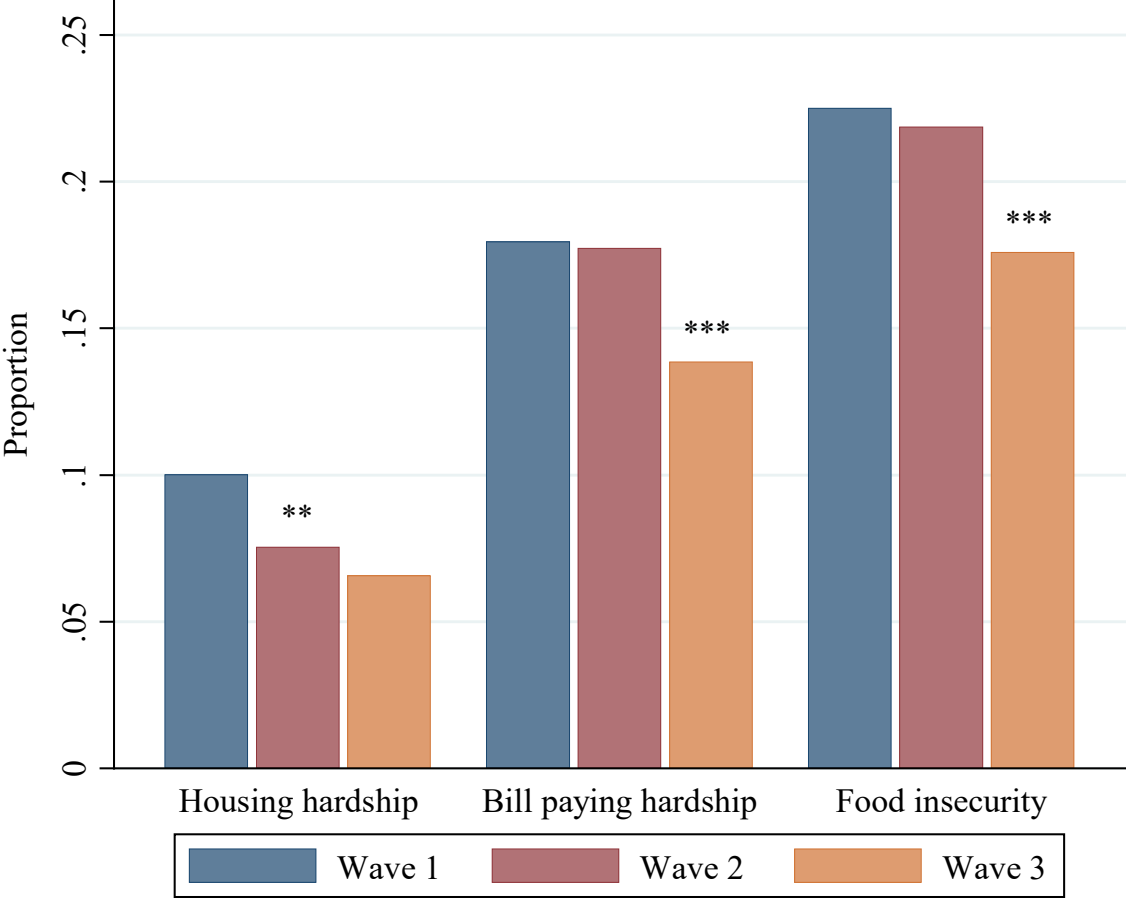
Source: Roser et al. (2021); Central Bureau of Statistics (2021).

Figure 2: Receipt of Unemployment Benefits, by Wave



Notes: n(Wave 1)=1,889, n(Wave 2)=1,885; n(Wave 3)=1,950. Statistical significance: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Comparison of proportions is made against the previous wave.

Figure 3: Experience of Material Hardship, by Wave



Notes: n(Wave 1)=1,889, n(Wave 2)=1,885; n(Wave 3)=1,950. Statistical significance: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Comparison of proportions is made against the previous wave.

Figure 4: Predicted Probabilities of Housing Hardship, by Income and Unemployment Benefits (Wave 1)

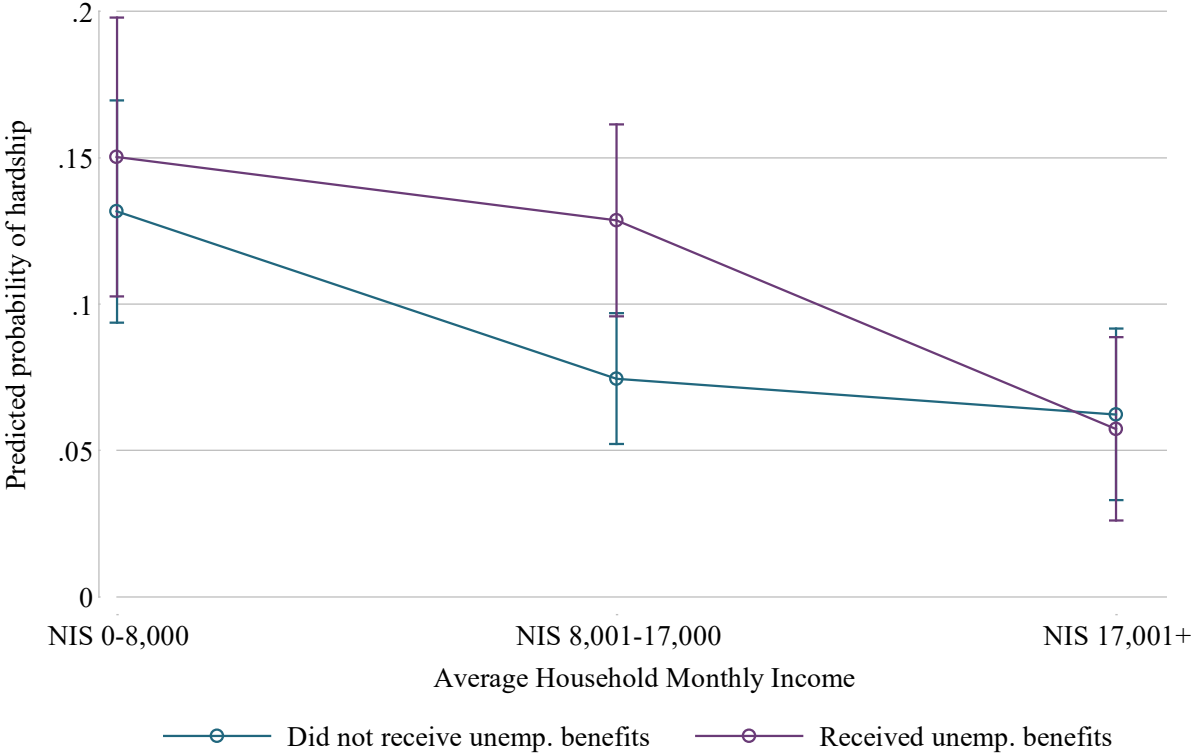


Figure 5: Predicted Probabilities of Bill Paying Hardship, by Income and Unemployment Benefits (Wave 1)

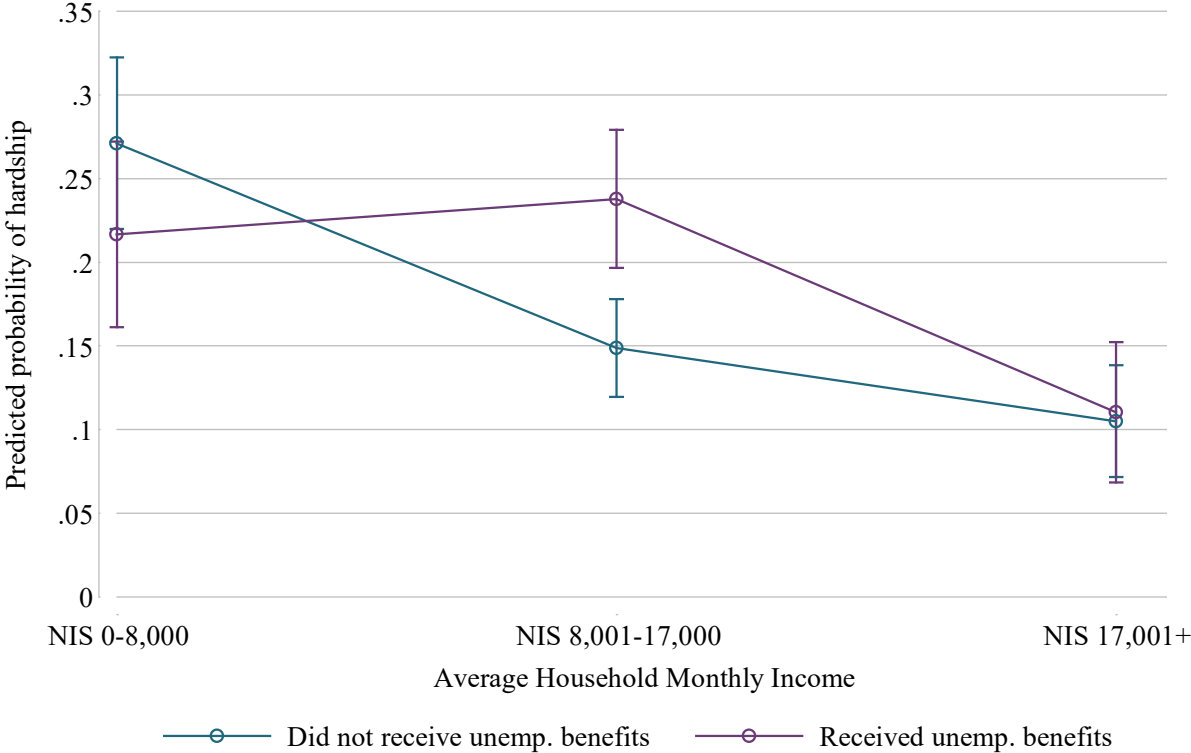


Figure 6: Predicted Probabilities of Food Insecurity, by Income and Unemployment Benefits (Wave 1)

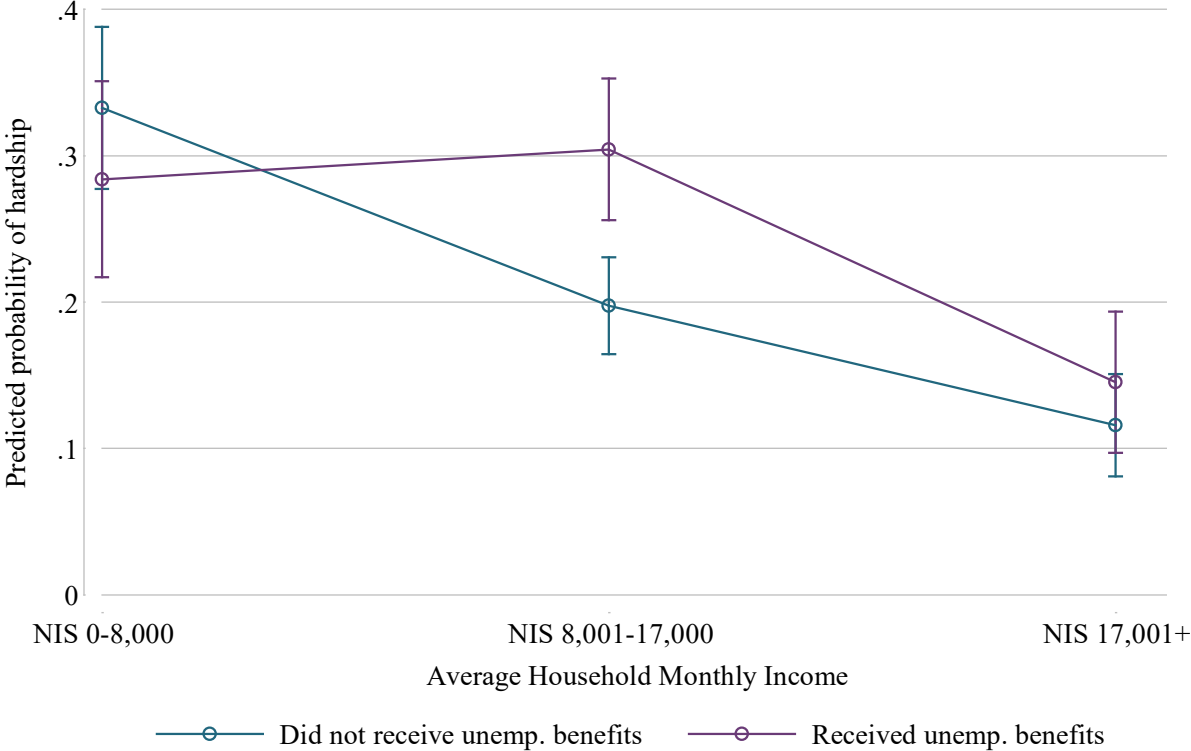
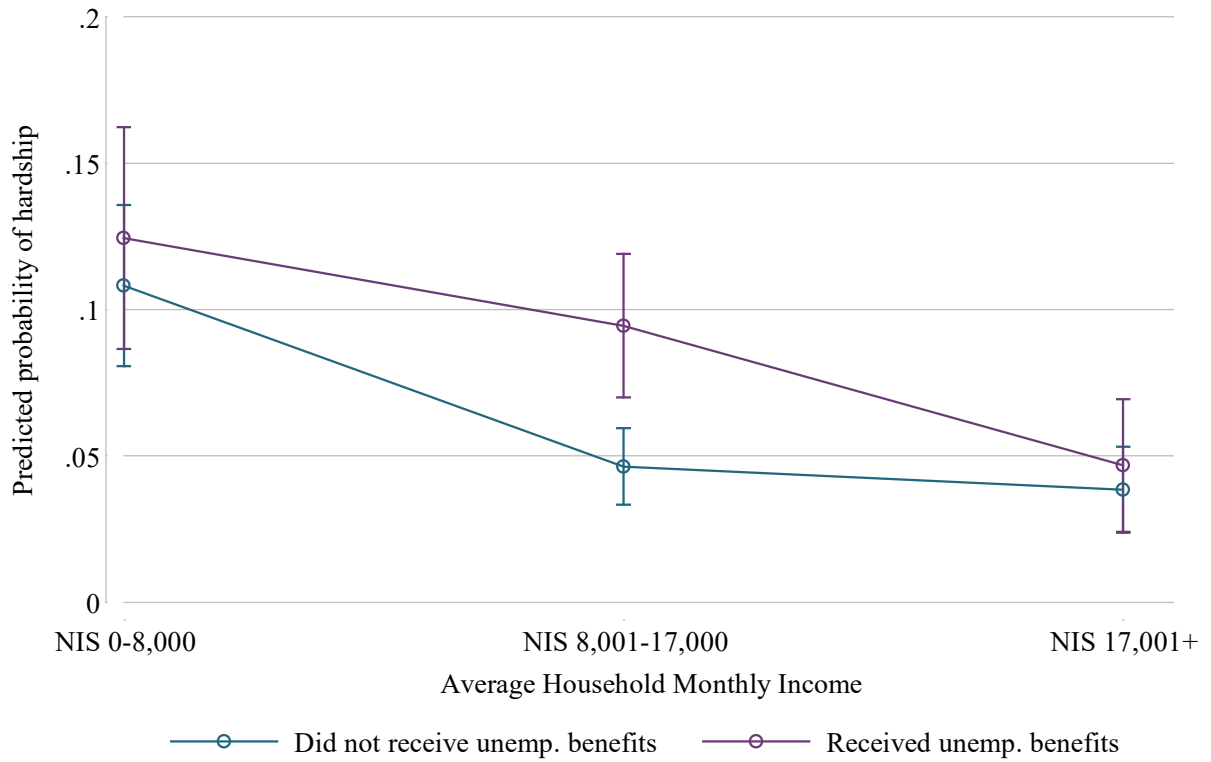
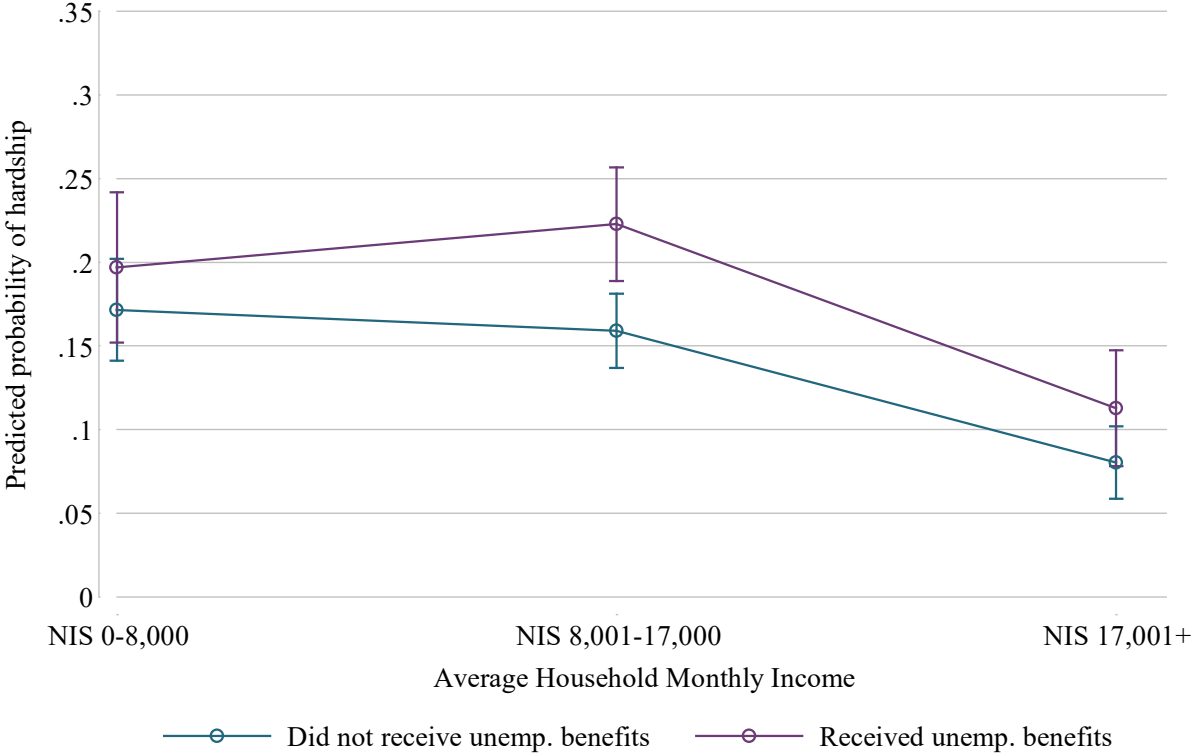


Figure 7: Predicted Probabilities of Housing Hardship, by Income and Unemployment Benefits (Waves 2 and 3)



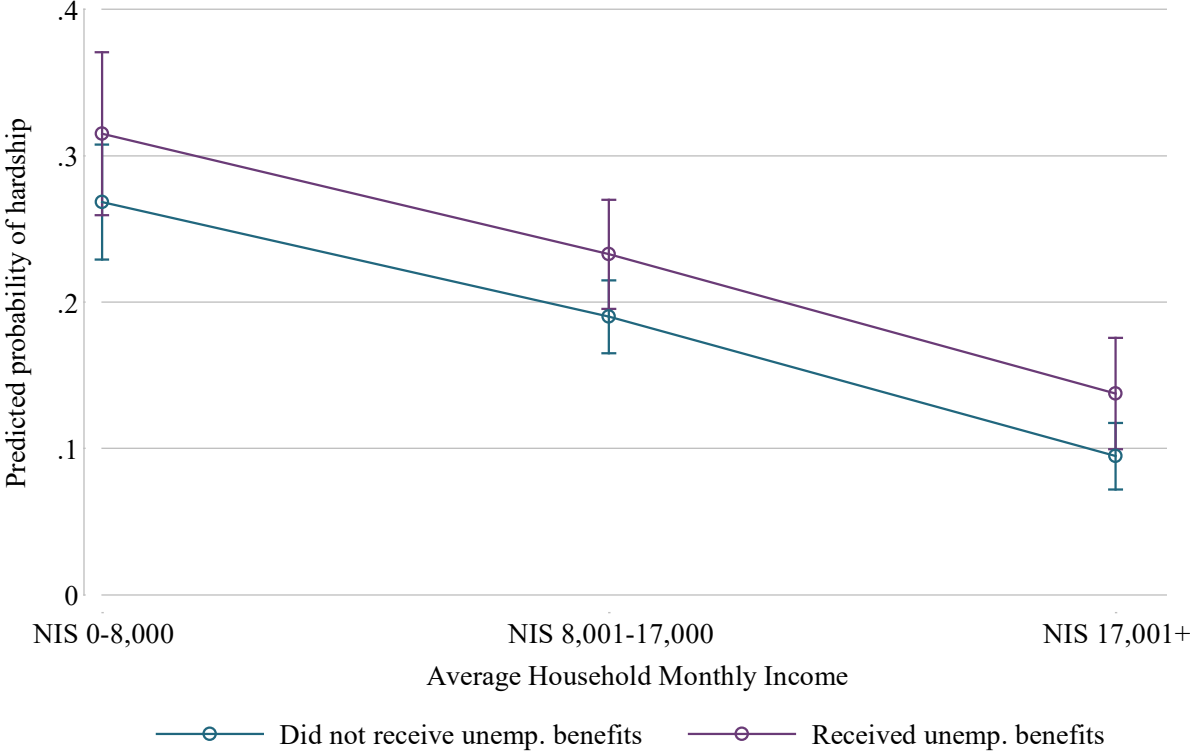
Notes: Vertical lines correspond to 95% confidence intervals.

Figure 8: Predicted Probabilities of Bill Paying Hardship, by Income and Unemployment Benefits (Waves 2 and 3)



Notes: Vertical lines correspond to 95% confidence intervals.

Figure 9: Predicted Probabilities of Food Insecurity, by Income and Unemployment Benefits (Waves 2 and 3)



Notes: Vertical lines correspond to 95% confidence intervals.