

Bui, Dzung; Dräger, Lena; Hayo, Bernd; Nghiem, Giang

Conference Paper

The Effects of Fiscal Policy on Households during the COVID-19 Pandemic

Beiträge zur Jahrestagung des Vereins für Socialpolitik 2021: Climate Economics

Provided in Cooperation with:

Verein für Socialpolitik / German Economic Association

Suggested Citation: Bui, Dzung; Dräger, Lena; Hayo, Bernd; Nghiem, Giang (2021) : The Effects of Fiscal Policy on Households during the COVID-19 Pandemic, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2021: Climate Economics, ZBW - Leibniz Information Centre for Economics, Kiel, Hamburg

This Version is available at:

<https://hdl.handle.net/10419/242464>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

The Effects of Fiscal Policy on Households during the COVID-19 Pandemic

Dzung Bui*, Lena Dräger†,
Bernd Hayo‡, Giang Nghiem§

March 1, 2021

PRELIMINARY DRAFT, PLEASE DO NOT CITE!

Abstract

In response to the spillovers of the COVID-19 pandemic on the economy, many governments paid cash transfers to households. We examine the effect of this fiscal policy instrument on households in two emerging economies, Vietnam and Thailand. Our analysis is based representative population surveys conducted in these countries during the pandemic in 2020. We find that government financial support improves consumer sentiment and increases the likelihood of durable spending. Possibly channels through which financial support affects consumer sentiment are creating more optimism about macroeconomic expectations, raising trust in the government's ability to deal with the pandemic's effect on the economy, lowering general concerns about the impacts of the crisis. We also find that the financial support improves individuals' mental health and life satisfaction. Our results suggest that financial support not only helps stimulate the economy but also enhances people's well-being more generally.

Keywords: Fiscal policy; Cash transfer; Consumer sentiment; Expectations; Government Trust; COVID-19; Thailand; Vietnam.

*University of Marburg, Email: buid@wiwi.uni-marburg.de

†Leibniz University of Hannover, Email: draeger@gif.uni-hannover.de

‡University of Marburg, Email: hayo@wiwi.uni-marburg.de

§Leibniz University of Hannover, Email: nghiem@gif.uni-hannover.de

1 Introduction

In response to the spillovers of the COVID-19 pandemic on the economy, many governments paid cash transfers to households. In light of the substantial amount of public money involved, it is important to assess the effectiveness of this fiscal policy instrument. Therefore, a growing literature studies the effect of cash transfers on households' consumption spending, including, among others, [Baker et al. \(2020\)](#), [Bayer et al. \(2020\)](#), [Christelis et al. \(2020\)](#), [Coibion et al. \(2020\)](#), and [Karger and Rajan \(2020\)](#). Our paper contributes to this literature by studying not only the response of consumer sentiment and durable spending to the government cash transfer but also the underlying channels of the response, in particular, macroeconomic expectations, trust in the government in dealing with the pandemic, and households concerns due to the pandemic.

To soften the economic damage caused by the COVID-19 pandemic, the governments of Vietnam and Thailand provide cash transfers to qualifying household up to a period of 3 months, typically from April to June 2020. This aid is targeted to individuals whose jobs were affected by the pandemic as well as poor households more generally (in Vietnam) and farmers (in Thailand). As a consequence of these programs, each eligible individual receives a cash transfer ranging from \$35 to \$240 per month in Vietnam and amounting to \$412 per month in Thailand (U.S. dollar in PPP in 2019). Historically, this is an unprecedented fiscal response in both of these countries.

To assess the impact of these cash transfers on households in the two countries, our study uses two novel representative Internet-based surveys conducted in Vietnam and Thailand in May and December 2020. For each country, the surveys include about 1,000 respondents aged 18 or older. Our analysis focuses on the second wave as it contained information about government cash transfer, whereas the first wave is mainly employed for robustness checks. According to our survey, about 30% and 60% of Vietnamese and Thai respondents, respectively, benefited from pandemic-related financial support from the government. Our survey combines a various measures of expectations, an indicator for trust in the government, miscellaneous household concerns, and subjective well-being, which makes it possible to study not only the effect of cash transfers on consumer sentiment but also the underlying mechanisms.

Our main findings suggest that these cash transfers have statistically significant and economically substantial effects. Respondents who received financial support from the government due to the pandemic show a 6% and 16% increase in the average value of the consumer sentiment index in Vietnam and Thailand, respectively. The likelihood that they bought durable goods in the period from May to December 2020 rises by 30 and 10 percentage points, respectively. Regarding future consumption, financial assistance receivers indicate an increase in the probability that they will certainly buy durable goods in the next 12 months by 6 percentage points in Vietnam and 5 percentage points in Thailand.

Further analysis suggests several possible channels through which the financial support from the government leads to an increase in consumer sentiment and durable spending. First, financial assistance receivers show more optimism about macroeconomic expectations, such as lower expected inflation and unemployment rates as well as higher expected economic growth. Second, they trust more in the government’s ability to mitigate the side effect of social distancing on the economy, such as an increase in unemployment or a fall in production. They are also more likely to state that the government has been doing a good job in terms of supporting households and firms affected by the pandemic. Third, the government financial support reduces respondents’ concerns due to the pandemic about their health, job security, financial situation, and the economy in general. Finally, the cash transfers increase individuals’ mental well-being, such as feeling calm and less nervous, and their overall life satisfaction. Using mediation analysis, we find that all these channels play significantly positive roles. However, the largest indirect effect of financial support on consumer sentiment is the trust in the government in dealing with the negative effect of the pandemic on the economy (for Vietnamese sample, accounting for 15% of the overall effect) and GDP expectations (for Thai sample, accounting for 39% of the overall effect).

Our results control for a large number of socio-demographic and economic variables, which ensures that the effects of government financial support on consumer sentiment, durable spending, as well as the transmission channels mentioned above are not explained by any of these control factors. Although our first wave survey conducted in May 2020 did not ask whether respondents’ household members received government financial support due to the pandemic, we use the information from this survey to additionally control for lagged values of our left-hand side variables in the baseline models. These robustness checks show that our results remain mostly unchanged, which implies that government financial support also affects the change in our variables of interest within households.

Our paper makes two main contributions to the current literature on the effect of fiscal policy on households during the pandemic, for instance, [Baker et al. \(2020\)](#), [Bayer et al. \(2020\)](#), [Christelis et al. \(2020\)](#), [Coibion et al. \(2020\)](#), and [Karger and Rajan \(2020\)](#), among others. First, we provide new empirical evidence on the effect of cash transfer on households’ consumption in Vietnam and Thailand. The main measures describing households’ consumption patterns in the extant literature are total household consumption, spending, and different subcategories, such as durable and non-durable goods consumption. We extend this perspective by employing a new measure in the form of a consumer sentiment index, which was introduced by [Bui et al. \(2020\)](#). This index is based on the responses to the same questions that are used to calculate the aggregate consumer sentiment index in the University of Michigan survey: consumers’ current and expected financial situation, several macroeconomic expectations, and their readiness to spend on durable goods. Regarding durable spending, we measure not only respondents’ actual spending but also their plan to buy durable goods in the next 12 months. Moreover, the current literature

focuses on industrialized economies, especially the United States (Baker et al. (2020), Bayer et al. (2020), Coibion et al. (2020), Karger and Rajan (2020)) and European countries (Christelis et al., 2020), whereas we analyze two emerging countries from the same region in Asia.

Second, we shed light on the mechanisms underlying the consumption response to the government cash transfer, particularly macroeconomic expectations, trust in the government in dealing with the pandemic, and households' concerns due to the pandemic. To the best of our knowledge, this paper is one of the first attempts to consider such a variety of possible channels. Therefore, we also add to the literature studying the determinants of aggregate expectations, which are a key factor in many macroeconomic models. The paper also increases our understanding of important pandemic-related drivers of trust in the government as well as of household concerns.

An important policy implication of our findings is that government cash transfers have various effects over and above a direct consumption response. They significantly affect households' economic expectations, trust in the government, personal concerns, as well as subjective well-being.

The rest of this paper is organized as follows. Section 2 presents the data, Section 3 shows the results and robustness checks, and Section 4 concludes.

2 Data

In May and December 2020, we conducted two waves of online surveys on consumers in both Vietnam and Thailand to study the impact of COVID-19 on households' well-being and economic situation. The first wave was conducted in Vietnam May 4-9, 2020 based on 3,300 respondents and in Thailand May 4-10, 2020 based on 2,200 respondents. We ran a second wave over the period December 18-27, 2020, and re-interviewed 1,016 Vietnamese and 1,189 Thai respondents from the first wave. Our surveys were conducted by GMO-Z.com RUNSYSTEM, one of the largest private market research and public opinion survey companies in South-East Asia. The survey company has a large number of registered participants who are familiar with online surveys. All participants who complete the survey receive "reward points", which are redeemable into gifts.

The analysis of this paper mainly uses the second wave, where we additionally asked respondents whether they received any financial support from the government due to the pandemic. This is a unique dataset, because it combines a large number of measures of consumer sentiment, durable spending, macroeconomic expectations, trust in the government, household concerns, and subjective well-being. However, in both countries, our Internet-based survey' samples are overweighted by young, highly educated, and urban respondents. Among these population characteristics, the representativeness of our samples is mainly violated by age. Therefore, we construct population weights based on the official age distribution and employ these throughout our empirical analysis.

2.1 Key variables of interest

Our surveys start with a large set of socio-demographic and economic characteristics of individuals and households, such as urban/rural area, age, gender, marital status, education, the number of children, and the number of old people in the household, subjective health assessment, household income, employment status, dummies whether any household members experience job loss or income loss due to the pandemic. We then ask various questions about macroeconomic expectations, assessment of and trust in the government in dealing with the pandemic, household concerns due to COVID-19, subjective well-being, as well as a set of questions used to calculate our consumer sentiment index (see [Bui et al. \(2020\)](#) for detailed information about the survey).

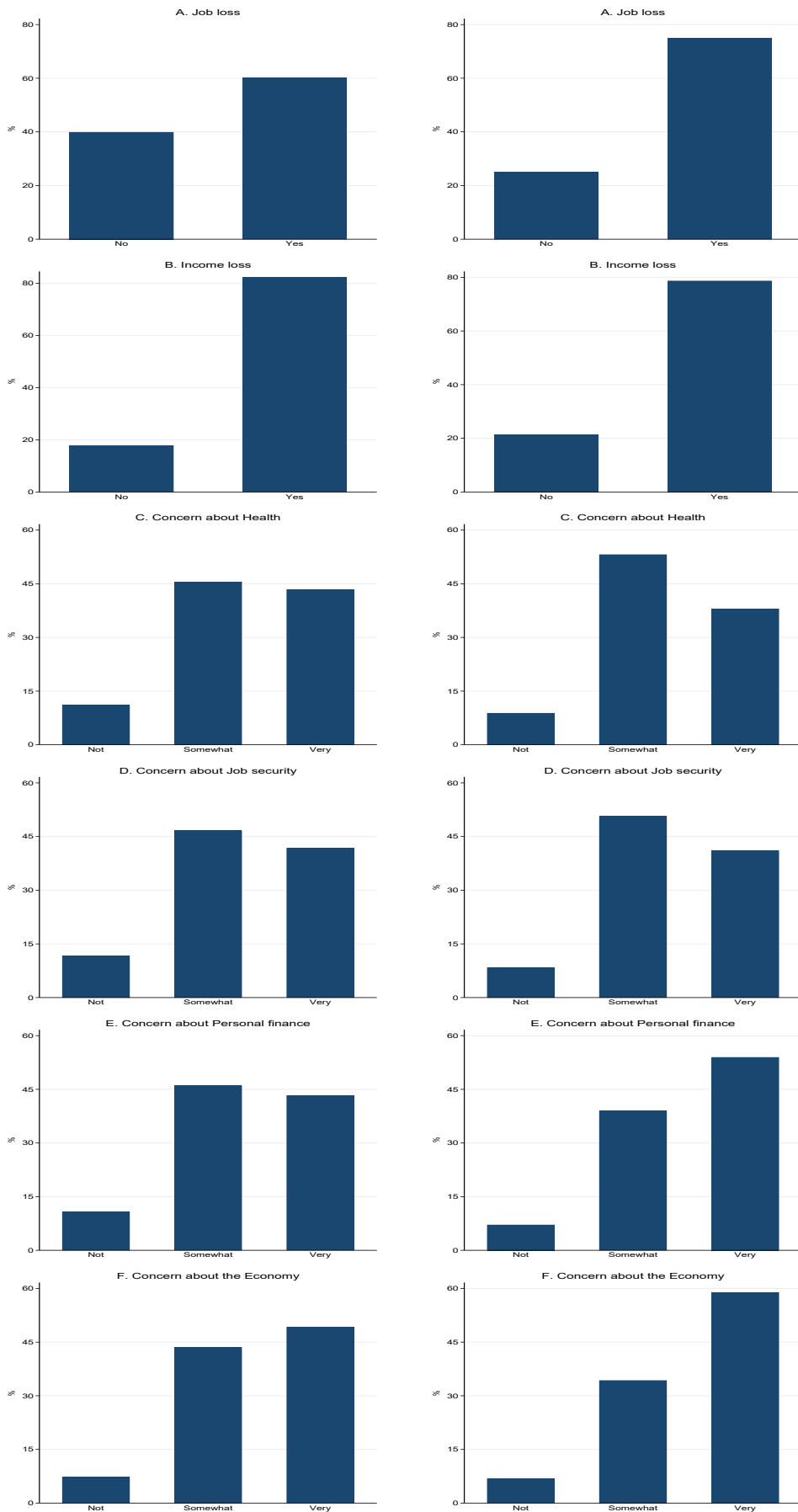
In the second wave conducted in December 2020, we added a question on whether respondents and/or their household members receive financial support from the government due to COVID-19 (*fin_support*), which is our main explanatory variable. To acquire more information about our respondents' perspective on economic policies supporting the private sector during the pandemic, we ask separately about the assessment of policies for (i) individuals and households (*gouv_assess_hh*) and (ii) firms (*gouv_assess_firm*). In addition, we enquire about respondents' actual durable goods purchases after the first wave (*Purchased durable*) and their plans to buy durable goods in the next 12 months (*Plans to buy durables*). Throughout this paper, we exclude respondents who do not know the answer and who do not form opinions about the survey questions. In the Appendix, we show summary statistics of all our variables of interest (Table A1) as well as the exact wording of the underlying questions.

2.2 Stylized Facts about the Impact of COVID-19 on Households and Assessment of Government Reaction

Our analysis reveals that the COVID-19 pandemic has severe negative effects on Vietnamese and Thai consumers. Figure 1 shows our survey results concerning the impact of COVID-19 on the respondents' economic situation and concerns. First, many households from both countries are exposed to job loss or reduction in work hours (60% in Vietnam and 75% in Thailand). This and other factors contribute to a situation where the vast majority of households report income losses (approximately 80% of households in both countries). Second, the pandemic raises concerns about people's mental health. More generally, in both countries, consumers have quite similar concerns about health, job security, personal finances, as well as the whole economy. On average, only 10% of respondents do not have any concerns about these topics, with an underlying range from 7-12% and 7-9% in Vietnam and Thailand, respectively. Among the four topics, consumers worry most about the effects of COVID-19 on the whole economy (Vietnam: 44% somewhat worried, and 49% very worried; Thailand: 34% somewhat worried, and 59% very worried).

In contrast to these similarities, Thai and Vietnamese respondents report opposite views on their governments' effort to mitigate the negative effects of the pandemic on the economy. Although about 60% of Thai respondents already received the cash transfer, they are neither content with their government's support to individuals and households (47% answer that the government does a "poor job", 39% answer "fair job", and only 14% say "good job") nor with its support to firms (50% say "poor job", 39% say "fair job", and only 11% state "good job"). In light of this assessment, they put little trust in their government's ability to bring back the economy to pre-pandemic levels (about 52% have no trust, 30% have a neutral view, and only 19% have at least some trust). In contrast, most Vietnamese people believe that their government does well in terms of support to individuals and households (only 18% say "poor job", 61% answer "fair job", and 51% state "good job") as well as support to firms (only 16% say "poor job", 38% answer "fair job", and 46% state "good job"). Moreover, they firmly trust that their government will revive the economy (about 5% have no trust, 27% have a neutral view, and 68% have at least some trust). These results are astonishing in light of the fact that less than one-third (29%) of Vietnamese respondents actually benefited from the cash transfer. These diverging results between the two countries can be linked to the pre-crisis level of government assessment, which was much higher in Vietnam (73% respondents say "good job") than in Thailand (16% respondents say "good job"). This suggests that government trust appears to be deep-rooted and only partially influenced by actual government policy.

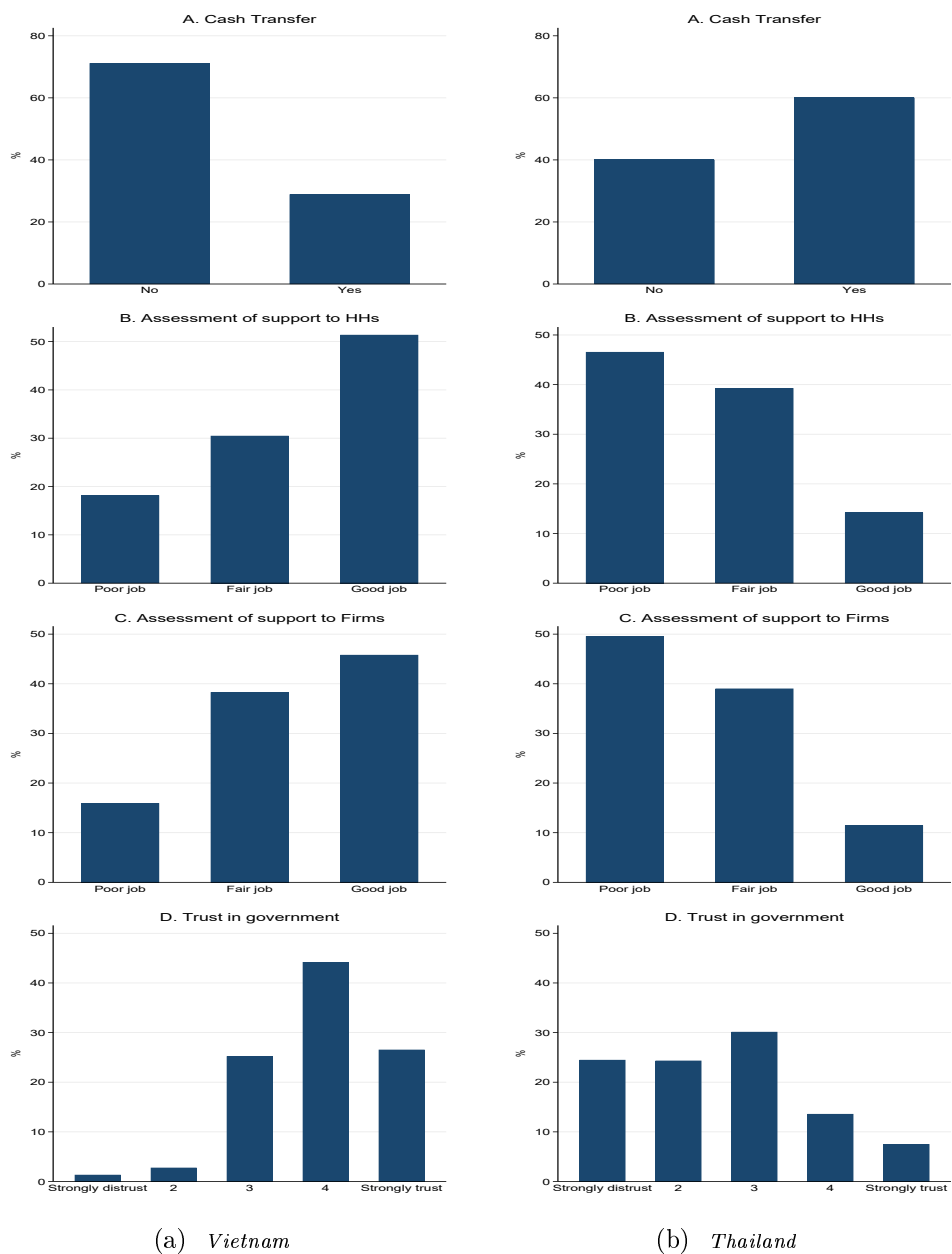
Figure 1: The impact of COVID-19 on Households



(a) Vietnam

(b) Thailand

Figure 2: Cash transfer and the Assessment of Government Reaction



3 Results

We estimate the effect of financial support from the government due to the pandemic using the following equation:

$$Y_{it} = \alpha + \beta fin_support_{it} + \gamma X_{it} + \epsilon_{it}, \quad (1)$$

where Y_{it} is the outcome of interest, that is, households' consumption indicators (consumer sentiment, purchased durables, plans to buy durables), macroeconomic expectations, trust in the government in dealing with the pandemic, personal concerns due to COVID-19 (health, job security, financial situation, the general economy), and subjective well-being (mental health and life satisfaction); $fin_support_{it}$ is a dummy variable indicating whether household i received financial support from the government due to COVID-19; X_{it} is a vector of control variables and includes household income per capita, employment status, dummies whether any household members experience job loss or income loss due to the pandemic, subjective health assessment, as well as various demographics, including urban/rural area, age, age squared, education, gender, marital status, the number of children, and the number of old people in the household. β is our coefficient of interest.

3.1 Main Results

The effect of cash transfer on consumer sentiment and durable spending: Table 1 shows the results. Receiving financial support increases consumer sentiment by 0.2 and 0.4 points, which corresponds to a 6% and 16% increase in the average consumer sentiment index in Vietnam and Thailand, respectively. These effects amount to a change of about 0.5 standard deviations in the consumer sentiment index of the two countries. Vietnamese and Thai beneficiaries are 30 percentage points and 10 percentage points more likely to report that they bought durable goods from May to December 2020, respectively. Regarding future consumption, financial assistance receivers indicate an increase in the probability that they will certainly buy durable goods in the next 12 months by 6 percentage points in Vietnam and 5 percentage points in Thailand. These effects are not only highly statistically significant but also economically meaningful, suggesting that government financial support plays an important role in stimulating households' consumption expenditure during the pandemic.

What are the mechanisms? In this step, we investigate potential channels explaining how government cash transfers affect economic outcomes at the household level, that is, consumer sentiment and durable spending. Do consumers spend more because they are more optimistic about future macroeconomic development? Or do they believe the government has been doing a good job in terms of mitigating the negative effects of the pandemic on the economy? Or do they spend more, because they are less concerned

Table 1: Marginal Effects of Fiscal Policy on Consumer Sentiment and Durable Spending

	Consumer Sentiment		Purchased Durables		Plans to Buy Durables	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	0.2*** (0.06)	0.4*** (0.07)	0.3*** (0.05)	0.1*** (0.04)	0.06** (0.03)	0.05*** (0.01)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.204	0.105				
Pseudo R ²			0.159	0.037	0.063	0.028
N observations	935	908	1016	1188	991	1078

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report coefficients from OLS estimations (column 1 & 2) and marginal effects of probit estimations (column 3 & 4) and marginal effects for choosing the highest answer category from ordered probit estimations (column 5 & 6) based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

about the effect of the pandemic on their health, job security, financial situation, and the economy in general?

(i) Macroeconomic expectations: Table 2 shows the effect on macroeconomic expectations, including inflation, unemployment, and economic growth (GDP). In both countries, we find that those who received financial support have lower expectations about the inflation rate and the unemployment rate and higher expectations about economic growth in the next 12 months. The likelihood that beneficiaries of cash transfers state that inflation and unemployment will increase significantly declines by 8 percentage points and 5 percentage points for Vietnamese and by 2 percentage points and 10 percentage points for Thai respondents, respectively. Moreover, the probability of answering that GDP will increase significantly increases by 3 percentage points in Vietnam and 4 percentage points in Thailand. All the estimated effects are statistically significant at conventional levels, except for the effect on inflation expectations in the Thai sample. While the effects on expected unemployment and economic growth are economically intuitive, the negative effect of government financial support on inflation is somewhat surprising, as an increase in government spending should raise inflation. A possible explanation for this result could be that those who received financial support trust the government more to manage the economy, which includes keeping the inflation rate under control. This interpretation is consistent with our results from studying government trust.

(ii) Assessment of and Trust in the Government Reaction: Table 3 shows significantly positive effects of financial support on the assessment of and trust in government in dealing with the negative spillover of the pandemic on the economy. The likelihood that beneficiaries state that the government has been doing a good job to support households and firms affected by the pandemic increases by 30 percentage points in the Vietnamese sample and 10 percentage points in the Thai sample. Moreover, beneficiaries in Vietnam

Table 2: Marginal Effects of Government Financial Support on Macroeconomic Expectations

	Inflation Exp.		Unemployment Exp.		GDP Exp.	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	-0.08*** (0.02)	-0.02 (0.03)	-0.05*** (0.01)	-0.1*** (0.03)	0.03* (0.02)	0.04*** (0.01)
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.035	0.014	0.028	0.021	0.044	0.023
N observations	981	976	986	999	970	921

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

and Thailand have a 10 percentage points and 5 percentage points, respectively, higher probability of saying that they strongly trust the government to mitigate the negative side-effects of social distancing on the economy, such as an increase in unemployment and a fall in production.

Table 3: Marginal Effects of Government Financial Support on the Assessment of and Trust in Government in Dealing with COVID-19

	govt_assess_hh		govt_assess_firm		govt_trust_econ	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	0.3*** (0.05)	0.1*** (0.02)	0.3*** (0.05)	0.1*** (0.02)	0.10*** (0.04)	0.05*** (0.01)
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.076	0.059	0.067	0.064	0.041	0.034
N observations	999	1073	1006	1084	1006	1107

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

(iii) Households' concerns due to the pandemic: Moving beyond pure economic responses, Table 4 shows that government financial support significantly reduces households' concerns due to the pandemic in both countries. The Vietnamese beneficiaries are 20 percentage points less likely to answer that they are very concerned about their health, job security, and the economy in general, and 10 percentage points less likely to be concerned about their financial situation. In Thailand, the cash transfer reduces the likelihood that respondents report that they are very concerned about their job security,

financial situation, and the economy in general by 10 percentage points and by 6 percentage points that they are very concerned about their health. These results suggest an important role of financial support in mitigating the distress of households during the pandemic.

Table 4: Marginal Effects of Government Financial Support on Household Concerns Due to COVID-19

	Health		Job		Finance		Economy	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	VN	TL	VN	TL	VN	TL	VN	TL
fin_support	-0.2*** (0.05)	-0.06* (0.03)	-0.2*** (0.05)	-0.1*** (0.03)	-0.10* (0.05)	-0.1*** (0.03)	-0.2*** (0.06)	-0.1*** (0.04)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.042	0.032	0.104	0.044	0.093	0.091	0.036	0.058
N observations	1006	1145	1004	1131	1004	1140	979	1135

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

We conduct a mediation analysis to test whether macroeconomic expectations, trust in the government, and households' concerns affect the impact of financial support on consumer sentiment. Bui et al (2020) show that consumer sentiment is influenced by GDP expectations, trust in the government in dealing with the negative effect of the pandemic, and financial concerns due to the pandemic. Reflecting these findings, we estimate the indirect effect of financial support through each of these factors on consumer sentiment. To facilitate the implementation of the mediation analysis using OLS regression, we assume that all our outcome variables (channels) are continuous. Table 5 shows the relative influence (in percent) of the indirect effects on the total effect of financial support on consumer sentiment. In both countries, we find that all these channels play significantly positive roles in mediating the effect of financial support on consumer sentiment. In Vietnam, trust in the government in dealing with the negative effect of the pandemic on the economy accounts for the largest share among the indirect effects (15%), followed by GDP expectations (13%), and financial concerns (7%). In the Thai sample, these indirect effects are even larger, with GDP expectations showing the highest share (39%), followed by trust in the government (23%), and financial concerns (20%). These results suggest that macroeconomic expectations, trust in the government, as well as household concerns are possible channels through which government financial support affects consumer sentiment. Note that the relative importance of these channels differs between the two countries, they are two to three times more influential in Thailand.

What are the heterogeneous effects of cash transfer? Employing our first survey wave in May 2020, we examine the heterogeneous effect of cash transfers on consumer sentiment across several socio-demographic and economic characteristics, in particular job loss due to the pandemic, financial concerns, expenditure vs. income of the household, income quartiles, and net asset position. The reason for why we use the households' characteristics measured in May is that government financial support in both countries was initiated based on the households' conditions during the early phase of the pandemic and most of the financial support in the two countries was provided between April and June 2020. To study these heterogeneous effects, we regress consumer sentiment on each of the above characteristics and these variables interacted with the dummy capturing receipt of financial support from the government.

Figure 3 presents marginal effects and their 90% confidence intervals of cash transfers on various aspects of consumer sentiment. In general, we find that the estimated point effects are more or less different across categories, suggesting heterogeneous responses. However, none of these differences are actually statistically significant and, thus, we would conclude that the effects are quite homogeneous in both countries.

3.2 Robustness Checks and Additional Result

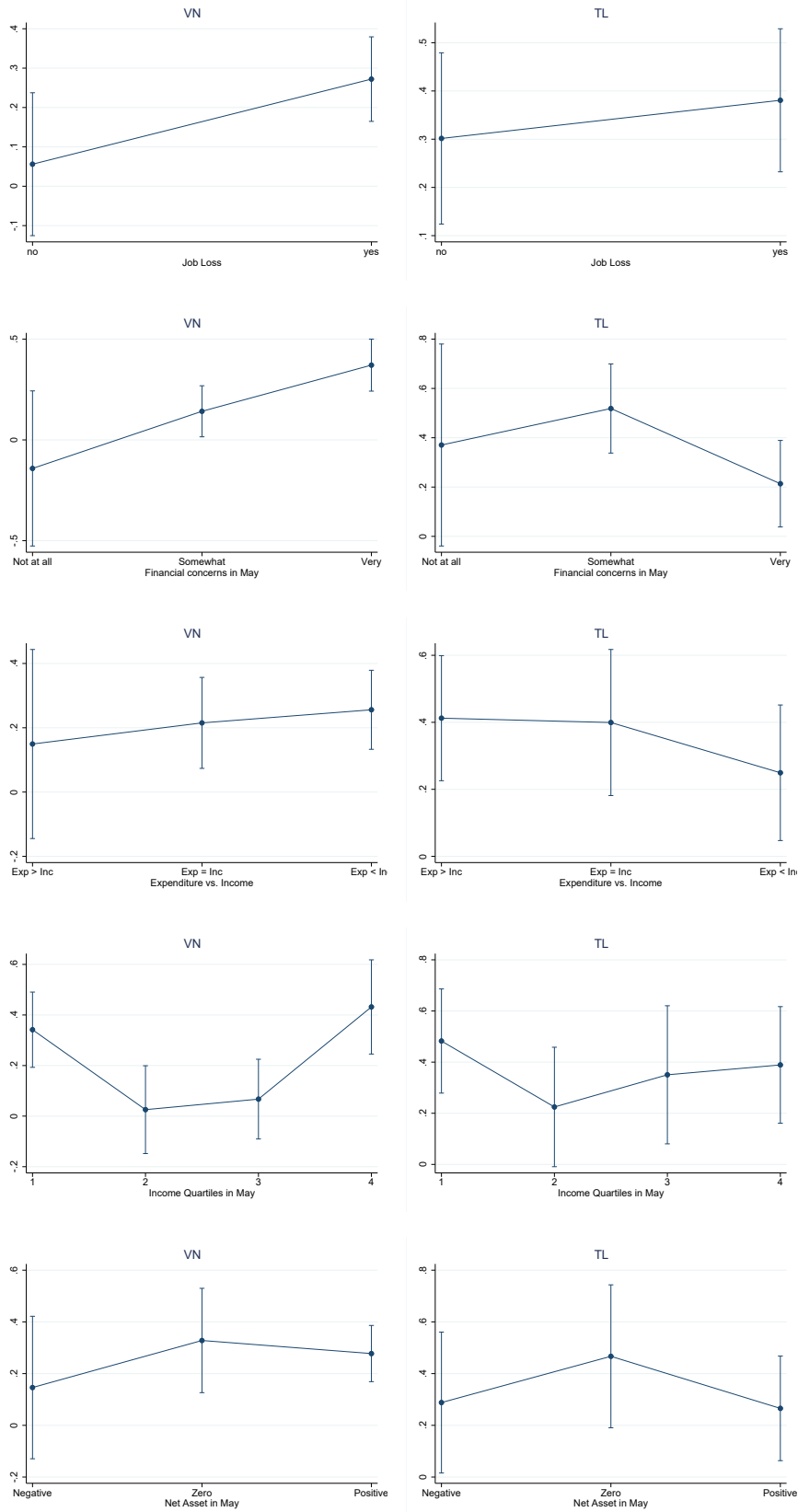
So far, our regressions controlled for household income per capita, employment status, dummies whether any household members experience job loss or income loss due to the pandemic, subjective health assessment, and various demographics, including urban/rural area, age, age squared, education, gender, marital status, the number of children, and the number of old people in the household, implying that our results are not explained by any of these characteristics. It might be still possible that omitted variables, which our controls do not fully capture, affect both the probability of getting government financial support and consumer sentiment, such as social status. However, in our view, these omitted variables are more likely to make our estimated results downward biased. For instance, those who have lower social status or are less well-off, due to the design of the program, are more likely to get financial support from the government. However, this group of people is typically less optimistic about their future, that is, express lower consumer sentiment or worse macroeconomic expectations, as shown by [Das et al. \(2020\)](#). This implies that the true effects might be even larger than our results suggest. Moreover, as the fiscal programs in both countries targeted to specific groups, we check our results using Heckman selection models, where in the first-step selection regression we regress *fin_support* on a set of demographic control variables from our first survey wave conducted in May 2020. Tables A2-5 in the Appendix show the second-step regression. We find that our baseline results remain unchanged, which suggests that our conclusions do not suffer from a selection bias.

Table 5: Mediation Analysis: The Effect of Government Financial Support on Consumer Sentiment through Different Channels

Channels	Vietnam			Thailand		
	Direct	Indirect	Total	Direct	Indirect	Total
<i>GDP Expectations</i>	0.2177	0.0315	0.2493	0.228	0.1471	0.3751
			(8.68-21.32%)			(29.26-62.20%)
<i>govt_ trust_ econ</i>	0.2005	0.0356	0.2361	0.2857	0.0858	0.3716
			(10.11-27.62%)			(16.55-37.73%)
<i>Financial Concerns</i>	0.2162	0.0174	0.2337	0.294	0.0723	0.3663
			(4.73-12.12%)			(13.49-30.19%)

Note: 95% confidence intervals are in parentheses. Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. All estimations use population weights.

Figure 3: The Heterogeneous Effects of Govt Financial Support on Consumer Sentiment with 90% Confidence Intervals



To further improve our understanding of the effects of government cash transfers by capturing possible autoregressive behavior of our variables of interest, we use information from our first survey. Equation 2 illustrates that our model now contains dynamic effects in the form of lagged dependent variables:

$$Y_{it} = \alpha + \beta fin_support_{it} + \eta Y_{i,t-1} + \gamma X_{it} + \epsilon_{it}, \quad (2)$$

Controlling for the lagged of dependent variables also partly captures the heterogeneous unobservable fixed characteristics of individuals that could affect both the likelihood of receiving financial support and the dependent variables. Note that some outcome variables in the baseline models were not asked in the first wave, such as durable spending measures and assessment of government response to support households and firms affected by the pandemic. Tables A6-9 in the Appendix show that estimating Equation 2 barely influences our previous conclusions. Moreover, the finding that our results are robust to any persistency in the dependent variables suggests that government financial support has positive dynamic effects on the change in our variables of interest within households over the two waves.

Finally, using Equation 1, we study the influence of government cash transfers on non-economic variables, such as mental health (feeling calm or nervous) and overall life satisfaction. Table 6 sets out the results. For both countries, we find that financial support positively affects mental health and life satisfaction. Vietnamese beneficiaries have a 3 percentage points lower likelihood of reporting that they strongly agree to the statement that they are nervous. In the case of Thailand, we find a 2 percentage points higher probability that beneficiaries strongly agree to the statement that they are calm and relaxed when thinking about their current situation. Furthermore, for Vietnamese and Thai respondents who received financial support, the likelihood of answering that they are totally satisfied with their life as a whole increases by 4 percentage points and 2 percentage points, respectively. These results remain robust when we use Heckman selection models or additionally control for the lagged of dependent variables (see Table A10-11 in the Appendix). These results corroborate our previous results that financial support makes individuals more optimistic with respect to consumer sentiment and macroeconomic expectations, lead to higher trust in the government, and fewer concerns about the pandemic more generally.

4 Conclusion

In this paper, we study the reaction of consumers in Vietnam and Thailand to their respective government’s financial support programs during the COVID-19 pandemic. We utilize two waves of representative population surveys conducted in May and December 2020 in these two emerging countries from Southeast Asia. We discover that government

Table 6: Marginal Effects of Govt Financial Support on Subjective Well-Being

	Nervous		Calm		Satisfaction	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	-0.03** (0.02)	-0.007 (0.01)	0.004 (0.02)	0.02*** (0.01)	0.04*** (0.01)	0.02** (0.01)
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.025	0.012	0.046	0.016	0.096	0.038
N observations	1016	1188	1016	1188	1016	1188

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

financial support has reached about 30% of citizens in Vietnam and 60% in Thailand. In our survey, we find that cash transfers have statistically significant and economically notable effects on indicators of future economic activity as well as indicators of people’s well-being. For instance, Vietnamese and Thai respondents who received cash transfers from the government due to the pandemic show a 6% and 16% increase in the average value of the consumer sentiment index, respectively. The probability that they purchased durable goods in the period from May to December 2020 rises by 30 and 10 percentage points in Vietnam and Thailand, respectively. Regarding future consumption, for those who benefited from government financial assistance we estimate an increase in the likelihood that they will certainly buy durable goods in the next 12 months. With 6 percentage points in Vietnam and 5 percentage points in Thailand, the magnitude of the effect is moderate but similar across the two countries.

We identify four main channels through which these effects may come about. First, respondents receiving financial assistance from the government express more optimism about macroeconomic expectations, such as lower expected inflation and unemployment rates as well as higher expected economic growth. Second, they are characterized by a higher degree of government trust with respect to controlling the negative side effects of COVID-19-related policies on the economy, for example, employment and income losses. Moreover, recipients of cash transfers have a greater probability of answering that the government has been doing a good job in terms of supporting households and firms affected by the pandemic. Third, the government cash transfers appear to alleviate citizens’ concerns arising from the crisis in terms of their health, job security, financial situation, and the general economic situation. Fourth, benefitting from government financial support programs increases individuals’ mental well-being, expressed through feeling calm and less nervous, and a higher stated value of life satisfaction.

With the help of mediation analysis, we demonstrate that all these channels play a significantly positive role. The analysis also reveals that the largest individual indirect effect of financial support on consumer sentiment is people’s trust in the government in terms of dealing with the negative effect of the pandemic on the economy (for the Vietnamese sample, accounting for 15% of the overall effect) and GDP expectations (for the Thai sample, accounting for 39% of the overall effect). In our study, we control for many socio-demographic and economic variables. Thus, the impact of government financial support on consumer sentiment, durable spending, as well as the transmission channels mentioned above are not due to these control. Moreover, we use a Heckman approach to control for the non-randomness in terms of those individuals who received government financial support. Finally, we use the information from the two survey waves in each of the countries to additionally control for lagged values of our left-hand side variables. Our conclusions are robust to all of these extension.

The core finding of our investigation is that is that government cash transfers during a crisis appear to have a number of effects that go beyond a direct consumption response. First, they make people more optimistic with regard to their future personal economic situation as well as the aggregate economic situation. Second, they help sustain trust in the government, which may be important when a country has to go through a prolonged phase of lockdowns and other severe measures. Third, the psychological pressure due to personal concerns goes down and this also coincides with an improvement in subjective well-being. Thus, when deciding about the use of fiscal policy in the form of cash transfers, governments are well advised to factor in these additional positive spillovers in their decision-making process.

References

- Baker, S. R., R. Farrokhnia, S. Meyer, M. Pagel, and C. Yannelis (2020). How Does Household Spending Respond to an Epidemic? Consumption During the 2020 COVID-19 Pandemic. Covid Economics (18).
- Bayer, C., B. Born, R. Luetticke, and G. Müller (2020). The Coronavirus Stimulus Package: How Large is the Transfer Multiplier? CEPR Discussion Paper (14600).
- Bui, D., L. Dräger, B. Hayo, and G. Nghiem (2020). Consumer Sentiment during the COVID-19 Pandemic. Hannover Economic Papers (HEP) (680).
- Christelis, D., D. Georgarakos, T. Jappelli, and G. Kenny (2020). The Covid-19 Crisis and Consumption: Survey Evidence From Six EU Countries. ECB Working Paper (2507).
- Coibion, O., Y. Gorodnichenko, and M. Weber (2020). How Did U.S. Consumers Use Their Stimulus Payments? NBER Working Paper (27693).

Das, S., C. Kuhnen, and S. Nagel (2020). Socioeconomic Status and Macroeconomic Expectations. Review of Financial Studies 33(1), 395–432.

Karger, E. and A. Rajan (2020). Heterogeneity in the Marginal Propensity to Consume: Evidence from Covid-19 Stimulus Payments. Federal Reserve Bank of Chicago Working Paper (15).

A Appendix

A.1 Summary statistics

Table A1: Summary Statistics of Key variables

Variable	Vietnam			Thailand		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
Financial support	1016	0.32	0.47	1189	0.61	0.49
Consumer Sentiment	935	3.44	0.57	908	2.60	0.93
Purchased Durables	1016	0.65	0.48	1189	0.43	0.50
Plans to Buy Durables	991	2.94	0.73	1079	2.25	0.96
Inflation Expectation	981	3.49	1.04	977	3.61	1.09
GDP growth Expectation	970	3.54	1.03	922	2.64	1.25
Unemployment Expectation	986	2.83	1.16	1000	3.66	1.34
Trust in Government to Deal with the Negative Effects of Social Distancing	1006	3.87	0.85	1108	2.49	1.14
Assessment of Government Policies to Support Households	1006	2.35	0.75	1085	1.69	0.70
Assessment of Government Policies to Support Firms	999	2.32	0.71	1074	1.64	0.68
Concern about Personal Health due to COVID-19	1006	2.41	0.66	1146	2.34	0.59
Concern about Personal Job Security due to COVID-19	1004	2.37	0.65	1132	2.37	0.59
Concern about Personal Finance due to COVID-19	1004	2.41	0.63	1141	2.51	0.59
Concern about the Economy due to COVID-19	979	2.39	0.62	1136	2.55	0.58
I feel calm and relaxed when I think about the current situation	1016	3.37	1.08	1189	2.97	1.06
I feel nervous when I think about the current situation	1016	3.10	1.12	1189	2.42	1.10
Subjective life satisfaction	1016	3.37	0.84	1189	2.98	1.06

A.2 Robustness Checks

A.2.1 Heckman Selection Models

Table A2: Marginal Effects of Government Financial Support on Consumer Sentiment and Durable Spending: Heckman Selection Models

	Consumer Sentiment		Purchased Durables		Plans to Buy Durables	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	0.2*** (0.06)	0.4*** (0.07)	0.2*** (0.05)	0.1*** (0.04)	0.06* (0.03)	0.05*** (0.02)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.207	0.105				
Pseudo R ²			0.162	0.038	0.064	0.028
N observations	935	908	1016	1188	991	1078

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report coefficients from OLS estimations (column 1 & 2) and marginal effects of probit estimations (column 3 & 4) and marginal effects for choosing the highest answer category from ordered probit estimations (column 5 & 6) based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Marginal Effects of Government Financial Support on Macroeconomic Expectations: Heckman Selection Models

	Inflation Exp.		Unemployment Exp.		GDP Exp.	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	-0.08*** (0.02)	-0.02 (0.03)	-0.05*** (0.01)	-0.1*** (0.03)	0.03* (0.02)	0.04*** (0.01)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.035	0.014	0.028	0.021	0.044	0.023
N observations	981	976	986	999	970	921

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Marginal Effects of Government Financial Support on Trust in Government in Dealing with COVID-19: Heckman Selection Models

	govt_assess_hh		govt_assess_firm		govt_trust_econ	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	0.3*** (0.05)	0.1*** (0.02)	0.2*** (0.05)	0.1*** (0.02)	0.08** (0.04)	0.05*** (0.01)
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.077	0.059	0.072	0.064	0.046	0.034
N observations	999	1073	1006	1084	1006	1107

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Marginal Effects of Govt Financial Support on Concerns Due to COVID-19: Heckman Selection Models

	Health		Job		Finance		Economy	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	VN	TL	VN	TL	VN	TL	VN	TL
fin_support	-0.2*** (0.05)	-0.06* (0.03)	-0.2*** (0.05)	-0.1*** (0.03)	-0.09* (0.05)	-0.1*** (0.03)	-0.1*** (0.06)	-0.1*** (0.04)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.043	0.032	0.104	0.044	0.093	0.091	0.038	0.058
N observations	1006	1145	1004	1131	1004	1140	979	1135

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.2.2 Additional Control for the Lagged of Dependent Variables

Table A6: Marginal Effects of Government Financial Support on Consumer Sentiment: Lagged control

	(1)	(2)
	VN	TL
fin_support	0.2*** (0.05)	0.3*** (0.08)
Demographic Controls	Yes	Yes
R ²	0.311	0.099
N observations	880	684

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects of the OLS estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Marginal Effects of Government Financial Support on Macroeconomic Expectations: Lagged control

	Inflation Exp.		Unemployment Exp.		GDP Exp.	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	-0.05*** (0.02)	-0.02 (0.03)	-0.03** (0.01)	-0.1*** (0.04)	0.03 (0.02)	0.03** (0.01)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.082	0.015	0.064	0.024	0.096	0.027
N observations	946	852	958	870	942	757

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: Marginal Effects of Government Financial Support on Trust in Government in Dealing with COVID-19: Lagged control

	govt_trust_covid_econ	
	(1)	(2)
	VN	TL
fin_support	0.04 (0.04)	0.05*** (0.01)
Demographic Controls	Yes	Yes
Pseudo R ²	0.122	0.036
N observations	1001	1051

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A9: Marginal Effects of Government Financial Support on Concerns Due to COVID-19: Lagged control

	Health		Job		Finance		Economy	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	VN	TL	VN	TL	VN	TL	VN	TL
fin_support	-0.1** (0.05)	-0.07* (0.03)	-0.2*** (0.05)	-0.1*** (0.04)	-0.1** (0.05)	-0.1*** (0.04)	-0.2*** (0.06)	-0.1*** (0.04)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.087	0.031	0.192	0.041	0.148	0.094	0.099	0.058
N observations	1004	1084	998	1064	988	1062	952	1064

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.2.3 Additional Robustness Checks

Table A10: Marginal Effects of Government Financial Support on Subjective Well-Being: Laaged control

	Nervous		Calm		Satisfaction	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_support	-0.03** (0.01)	-0.007 (0.01)	0.003 (0.02)	0.02*** (0.01)	0.03*** (0.01)	0.02** (0.01)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.049	0.012	0.047	0.018	0.148	0.038
N observations	1016	1188	1016	1188	1016	1188

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11: Marginal Effects of Govt Financial Support on Subjective Well-Being: Heckman Selection Models

	Nervous		Calm		Satisfaction	
	(1)	(2)	(3)	(4)	(5)	(6)
	VN	TL	VN	TL	VN	TL
fin_suport	-0.03** (0.02)	-0.005 (0.01)	0.001 (0.02)	0.02*** (0.01)	0.04*** (0.01)	0.02*** (0.01)
Demo. Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.025	0.013	0.048	0.017	0.099	0.038
N observations	1016	1188	1016	1188	1016	1188

Note: Demographic controls include job loss, income loss, the log of household income per capita, employment status, urban/rural area, age, age squared, education, gender, marital status, number of children, number of the old, and subjective health assessment. We report marginal effects for choosing the highest answer category from ordered probit estimations based on population weights. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.3 Survey Questions

Financial support

- *fin_support*: Did you or anyone else in your household receive financial support from the government due to COVID-19? [Yes, No]

Consumer sentiment index Following the construction of the aggregate index of consumer sentiment by the University of Michigan (Surveys of Consumers), we calculate this index for each respondent as a simple average of the following five questions:

- Did the current financial situation of your household get better or worse over the past 12 months? [Got much worse, Got a bit worse, Stayed the same, Got a bit better, Got much better, Don't know]
- How do you think the financial situation of your household will develop over the next 12 months? [Get much worse, Get a bit worse, Stayed the same, Get a bit better, Get much better, Don't know]
- How do you think the national business conditions will develop over the next 12 months? [Get much worse, Get a bit worse, Stayed the same, Get a bit better, Get much better, Don't know]
- How do you think the national economic situation will develop over the next 5 years? [Get much worse, Get a bit worse, Stayed the same, Get a bit better, Get much better, Don't know]
- Generally speaking, do you think now is a good or bad time for people to buy major household items, such as furniture, a refrigerator, stove, television, and things like that? [Very bad, Bad, Neither good or bad, Good, Very good, Don't know]

Durable goods purchase

- *Purchased durables*: Since May 2020, did your household buy major household items, such as furniture, refrigerator, stove, television, and things like that? [Yes, No]
- *Plans to buy durables*: Is your household planning to buy major household items, such as furniture, refrigerator, stove, television, and things like that in the next 12 months? [Yes, certainly; Yes, perhaps; Probably not; Certainly not; Don't know]

Macroeconomic expectations

- *Inflation Exp.:* How do you think prices in general (which are used to measure the inflation rate) will develop over the next 12 months compared to the previous 12 months? They will [Decrease a lot, Decrease a little, Stay about the same, Increase a little, Increase a lot, I do not form opinions about future general price level, Don't know.]
- *Unemployment Exp.:* How do you think unemployment will develop over the next 12 months compared to the previous 12 months? It will [Decrease a lot, Decrease a little, Stay about the same, Increase a little, Increase a lot, I do not form opinions about future unemployment, Don't know]
- *GDP Exp.:* How do you think national economic growth (GDP growth) will develop over the next 12 months compared to the previous 12 months? It will [Decrease a lot, Decrease a little, Stay about the same, Increase a little, Increase a lot, I do not form opinions about future economic growth, Don't know]

Assessment of and trust in the government

- *govt_assess_hh:* Please think about the economic policies initiated by the government to support individuals and households affected by the COVID-19 pandemic. Would you say the government has been doing a good job, fair job, or a poor job? [Poor job, Fair job, Good job , Don't know]
- *govt_assess_firm:* Now think about the economic policies initiated by the government to support firms affected by the COVID-19 pandemic. Would you say the government has been doing a good job, fair job, or a poor job? [Poor job, Fair job, Good job , Don't know]
- *govt_trust_econ:* How much do you trust the government to mitigate the negative side-effects of social distancing on the economy, such as an increase in unemployment and a fall in production? [Strongly distrust, Somewhat distrust, Neither trust nor distrust, Somewhat trust, Strongly trust, I don't know]

Personal concerns due to COVID-19

- *concern_health:* How concerned are you about the effects that COVID-19 might have on your health or the health of other members of your household [Not at all concerned, Somewhat concerned, Very concerned, Don't know]
- *concern_job:* How concerned are you about the effects that COVID-19 might have on your job security or the job security of other members of your household [Not at all concerned, Somewhat concerned, Very concerned, Don't know]

- *concern_finance*: How concerned are you about the effects that COVID-19 might have on the financial situation of your household [Not at all concerned, Somewhat concerned, Very concerned, Don't know]
- *concern_econ*: How concerned are you about the effects that COVID-19 might have on the economy [Not at all concerned, Somewhat concerned, Very concerned, Don't know]

Subjective well-being

- *Nervous*: To which extent do the following statement apply to you right now? I am nervous when I think about the current situation [Strongly disagree, Moderately disagree, Neither agree nor disagree, Moderately agree, Strongly agree]
- *Calm*: To which extent do the following statement apply to you right now? I am calm and relaxed when I think about the current situation. [Strongly disagree, Moderately disagree, Neither agree nor disagree, Moderately agree, Strongly agree]
- *Life satisfaction*: All things considered, how satisfied are you with your life as a whole? [Totally dissatisfied, Partly dissatisfied, Neither dissatisfied nor satisfied, Partly satisfied, Totally satisfied]