



The effects of fiscal policy on households during the COVID-19 pandemic: Evidence from Thailand and Vietnam

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ABSTRACT

The economic crisis created by the COVID-19 pandemic induced many governments to provide financial assistance to households. Using representative consumer surveys conducted during the pandemic in 2020, we examine the effects of this fiscal policy instrument on households in two emerging economies, Thailand and Vietnam. Our paper contributes to the literature by studying how consumer sentiment and durable spending relate to receiving government financial support and the underlying transmission channels for these responses. We find that financial support to households is related to more positive consumer sentiment and increases in actual and planned durable spending, while also being correlated with a more optimistic macroeconomic outlook, higher trust in the government, and higher personal well-being.

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1. Introduction

As a response to the economic crisis created by the COVID-19 pandemic, many governments provided financial support to households. In light of the substantial public funds involved in this endeavor, it is important to assess its effectiveness. Indeed, a growing literature studies the effect of government financial support on consumer spending, including, among others, (Baker, Farrokhnia, Meyer, Pagel, & Yannelis, 2020; Bayer, Born, Luetticke, & Müller, 2020; Christelis, Georgarakos, Jappelli, & Kenny, 2020; Coibion, Gorodnichenko, & Weber, 2020a; Karger & Rajan, 2020). Our paper contributes to this literature by studying consumer sentiment and durable spending responses to government financial support. Consumer sentiment measures economic optimism or pessimism. Durables spending likely is postponed in times of economic hardship, but also has particularly large effects on aggregate demand and,

thereby, business cycle dynamics. In addition to analyzing the direct effects of financial assistance on sentiment and household spending, we also evaluate the underlying transmission channels. In particular, we focus on transmission via macroeconomic expectations, trust in the government in dealing with the pandemic, and household concerns due to the pandemic.

As an important part of the fiscal policy package aimed at reducing economic damage caused by the COVID-19 pandemic, the governments of Vietnam and Thailand provided financial support, mainly in the form of cash transfers, to qualifying households for a period of up to three months, typically from April to June 2020 (Gentilini, Almenfi, Orton, & Dale, 2020). The aid targeted individuals whose jobs/incomes were affected by the pandemic as well as the poor more generally (in Vietnam) and farmers (in Thailand).¹ Each eligible individual received financial assistance ranging from

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¹ Note that in our samples, receiving financial assistance is significantly correlated with dummy variables measuring whether a person in the household lost his or her job or experienced income losses due to the pandemic, but not with household income per capita. Section 2 contains a detailed description of the fiscal spending programs in both countries.

\$34 to \$241 (U.S. dollars in purchasing power parity (PPP) in 2020) per month in Vietnam and up to \$405 (U.S. dollars in PPP in 2020) per month in Thailand. This fiscal policy response was unprecedented in both countries.

To assess the impact of financial support on households, our study uses two novel internet-based consumer surveys conducted in Vietnam and Thailand in May and December 2020. For each country and wave, the surveys include about 1,000 respondents aged 18–60. Our analysis focuses on the second wave, as it contains information about government cash transfers received by individuals. We also use the first wave to evaluate how the key variables describing receivers and non-receivers of financial support changed in the second wave. According to our survey, about 30% and 60% of Vietnamese and Thai respondents, respectively, benefited from pandemic-related financial support from the government.

Our analysis suggests that pandemic-related government financial assistance correlates with household spending decisions. The statistically significant and economically substantial effects suggest that respondents who received this type of financial support report a 9% and 13% increase in consumer sentiment in December 2020 in the Vietnamese and Thai samples, respectively. The likelihood that respondents bought durable goods between May and December 2020 is estimated to be higher by 24 and 11 percentage points (pp), respectively. Financial assistance recipients in the Vietnamese sample are significantly more likely to state that they will certainly buy more durable goods in the next 12 months. Moreover, we find that receiving financial support correlates with individuals' mental well-being over time, as recipients of financial assistance report, for example, that they feel more calm or less nervous and that they are more satisfied with life.

Our analysis suggests several possible channels through which government financial support may be related with more positive consumer sentiment and an increase in durable spending. First, financial assistance recipients express more optimistic macroeconomic expectations, such as higher expected economic growth. Second, they have more trust in the government's ability to mitigate the effects of social distancing on the economy. 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. Finally, government financial support is related to weaker (pandemic-induced) concerns about health, job security, personal financial situation, and the economy in general. Most of these effects are significant not just in the December 2020 cross-section of recipients and non-recipients, but also when comparing differences between the May and December waves. Using mediation analysis, we discover that all these channels affect consumer sentiment and durable spending in a significantly positive way. In both countries, the largest indirect effect on consumer sentiment is due to people's assessment of government policies being supportive of firms and households affected by the pandemic.

Our paper makes two important contributions to the literature on the effect of fiscal policy on household consumption during the pandemic (Baker et al., 2020; Bayer et al., 2020; Christelis et al., 2020; Coibion et al., 2020a; Karger & Rajan, 2020). First, we shed light on the mechanisms underlying the consumption response to government cash transfers, particularly the transmission effect via macroeconomic expectations, trust in the government's ability to deal with the pandemic, and household concerns due to the pandemic. By doing so, we also add to the literature studying the pandemic's direct effect on aggregate expectations (Binder, 2020; Coibion, Gorodnichenko, & Weber, 2020b), trust in government (Devine, Gaskell, Jennings, & Stoker, 2020; Sibley et al., 2020), and household concerns (Binder, 2020; Christelis et al., 2020).

Second, we provide empirical evidence on the effect of cash transfers during the COVID-19 pandemic in Thailand and Vietnam, two emerging economies in Asia, whereas the current literature

focuses on industrialized economies. For instance, in the United States, a burgeoning literature studies the effect of the one-time cash transfers from the CARES Act in response to the COVID-19 pandemic. Karger and Rajan (2020) and Baker et al., 2020 report that this policy increased recipients' spending immediately upon receiving the cash payments and (Bayer et al., 2020) show positive output multipliers for both unconditional and conditional cash payments. Braun and Ikeda (2020) discuss how the fiscal stimulus in the United States and Japan reduced cross-sectional variation in consumption spending. In addition, Baker et al. (2020) and Coibion et al. (2020a) provide evidence that consumers spend more on nondurable goods and less on durables compared to what occurred under the economic stimulus in 2008. Christelis et al. (2020) survey consumers in the six largest economies of the euro area and find that pandemic-related concerns reduce households' consumption.

This paper focuses on individual consumer sentiment and durable spending. The individual index of consumer sentiment is based on responses to the same questions used to calculate the aggregate consumer sentiment index in the University of Michigan Surveys of Consumers (Bui, Dräger, Hayo, & Nghiem, 2021): consumers' current and expected financial situation, their macroeconomic expectations, and their readiness to purchase durable goods. Regarding durable spending, we measure not only respondents' actual spending, but also their plans to buy durable goods in the next 12 months. We focus on durable consumption, as nondurable goods consumption is dominated by less elastic expenditure categories, such as food and clothing. In addition, effects on durable spending can be expected to have larger spillovers to aggregate demand and, hence, have a bigger impact on national economic recovery.

Our paper is related to other studies on emerging or developing countries' responses to the COVID-19 pandemic. At the beginning of the pandemic, Fetzer et al. (2020) conducted a large-scale cross-country survey that included 58 countries and more than 100,000 respondents. The authors find that perceiving the government's response to be inadequate is associated with decreased mental well-being. Similarly, in a meta study of 38 studies, McGuire, Kaiser, and Bach-Mortensen (2020) report that cash transfer policies improve mental health and subjective well-being in low- and middle-income countries. Moreover, Van Bavel et al. (2020) analyze a large-scale survey of 67 countries and almost 50,000 participants and show a positive link between national identification and engaging in public health measures. However, the authors also report a weak negative correlation between right-wing political beliefs and support for public health measures. Focusing on a universal basic income experiment in Kenya during the pandemic, Banerjee, Faye, Krueger, Niehaus, and Suri (2020) find modest effects on poor households' well-being in terms of food security as well as in regard to physical and mental health.

Our paper is also more generally related to a large body of literature that studies the impact of cash transfers on households in emerging economies before the pandemic, such as the effect on reducing poverty, improving health conditions, and fostering economic autonomy (for a review, see Bastagli et al., 2016). For Kenya, Egger, Haushofer, Miguel, Niehaus, and Walker (2019) show large positive effects of cash transfers on household income and consumption in rural areas and Haushofer and Shapiro (2016) find a strong consumption response to unconditional cash transfers at the village and household levels. Moreover, lump-sum transfers are more likely to be spent on durables, a finding that motivated us to focus our study on durables. Moving beyond consumption, Haushofer and Shapiro (2016) report an increase in psychological well-being (happiness, life satisfaction, reduction in stress and depression), which is consistent with research conducted by Lund et al. (2011), who demonstrate that conditional cash transfer

and asset promotion programs have positive mental health benefits. Finally, [Evans, Holtemeyer, and Kosec \(2019\)](#) show, for Tanzania, that cash transfers significantly enhance trust in elected leaders.

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

2. Data

To study the impact of fiscal assistance during the COVID-19 pandemic on the working-age population (i.e., those between 18 and 60 years of age), we ran two waves of online surveys during May and December 2020 in Vietnam and Thailand. In Vietnam (Thailand), 3,300 respondents (2,200 respondents) were surveyed over the period May 4–9, 2020 (May 4–10, 2020). We conducted 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 RUN-SYSTEM, one of the largest private market research and public opinion survey companies in South-East Asia. The company has a large number of registered participants who are familiar with online surveys. All participants who complete the survey receive “reward points,” which can be exchanged for gifts.

In the second wave, we asked respondents whether they had received any financial support from the government due to the pandemic, their durable spending between the two waves, and their planned spending for the next 12 months. This is a unique dataset because it combines consumer sentiment indicators, actual and planned durables spending, macroeconomic expectations, trust in the government, household concerns related to the pandemic, and subjective well-being. Our analyses, thus, focus on the samples collected from the second wave to estimate the association between receiving financial support from the government with other key mentioned variables. Furthermore, we utilize data from wave 1 to calculate the changes from wave 1 to wave 2 in our key variables of interest.

To ensure the representativeness of our samples, we construct population weights based on the respective national distributions of age, education, and share of people living in an urban area and employ these throughout our empirical analysis. [Table A1](#) in the Appendix reports the means of the main demographic variables for the weighted and unweighted samples. The unweighted online sample is biased toward the younger, better educated, and more urban population. However, the mean characteristics for the weighted samples are close to the official population statistics.

Our study focuses on Thailand and Vietnam because these two countries share some features, but diverge in other ways. Both countries are geographically close to China and were among the first to report COVID-19 cases outside of China.² Population size and number of provinces in both countries are reasonably comparable (Thailand: 67 million people across 77 provinces, Vietnam: 97 million people across 63 provinces). Both countries are ruled by unitary entities, a communist party in Vietnam and a military-government in Thailand. However, while the political situation in Vietnam has been very stable in the past decades, there has been ongoing political unrest in Thailand since the military coup in 2014. In economic terms, the Thai economy has developed faster than the Vietnamese one, resulting in roughly twice the GDP per capita as in Vietnam and a higher rank in the Human Development

Index. Nevertheless, Vietnam experienced higher real growth rates prior to the pandemic.³

Regarding the COVID-19 pandemic, both countries experienced relatively low numbers of infected cases and deaths, particularly during the first two waves of infection.⁴ Vietnam experienced a substantially lower number of cases (both in terms of absolute and per capita numbers) than Thailand, due to its proactive and timely containment measures ([Huynh, 2020](#); [Bui et al., 2020](#); [Tran, Le, Nguyen, & Hoang, 2020](#)). Later, similar measures were implemented in Thailand ([Oxford Policy Management & United Nations, 2020](#); [World Health Organization, 2020](#)). The Vietnamese government's early success in containing the pandemic increased public approval of and trust in the government. In contrast, after the spring 2020 lockdown, there were several protests in Thailand against the long-lasting state of emergency, severe economic restrictions, and corruption scandals related to COVID-19.

In an effort to accelerate economic recovery and provide social protection from the economic effects of the pandemic, both governments implemented unprecedented financial assistance, particularly in the form of cash-based transfers. In Thailand, between April and December 2020, there were six cash-transfer programs, with a total authorized amount of 555 billion bath (3.3% GDP). These programs targeted informal off-farm workers, farmers, entrepreneurs, overseas workers returning to Thailand, and other vulnerable population groups, and ranged in amount from 500 to 5,000 bath per month for three months (see [Table A8](#) in the Appendix).⁵ According to [Ariyaprichya et al. \(2021\)](#), around 310 billion bath, that is, 58% of the 555 billion bath fiscal package, was disbursed by December 2020. In contrast, the financial assistance program in Vietnam was much smaller, only worth 62 trillion VND, which is approximately 1% of GDP, with payments ranging from 250,000 to 1,800,000 VND per month for up to three months (April to June).⁶ The Vietnamese beneficiaries included informal workers, self-employed people, those who lost their jobs due to business closure, and recipients of social welfare programs (see [Table A9](#) in the Appendix). Disbursement of funds in Vietnam was quite slow. As of 25 December 2020, VND 12.8 trillion had been disbursed to roughly 13 million people and 31,000 household businesses ([Ngan Anh, 2021](#)). The main reason for this delay is that Vietnam's authority overestimated the number of affected people. Thanks to the effective COVID-19 containment policy in 2020, many people received support only for April 2020 ([Hong Chieu-Le Tuyet, 2021](#)).

2.1. Key variables of interest

Our main explanatory variable is a dummy from the December 2020 wave indicating whether respondents and/or other household members received financial support from the government due to the COVID-19 crisis (*fin_support*). We study the relation of government financial support with various outcome variables. First, we employ the measure of individual consumer sentiment proposed by [Bui et al. \(2021\)](#), which is a simple average of answers to the following five questions: (i) perceptions about the household's financial situation in the past 12 months, (ii) expectations about the household's financial situation in the next 12 months, (iii) expectations about national business conditions in the next 12 months, (iv) expectations about the national economic situation in the next five years, and (v) current readiness to spend on durables. Thus, individual consumer sentiment ranges from 1 to 5, with higher values denoting more optimistic sentiment. Note that

² The first positive case was detected on January 13 and 23, 2020 in Thailand and Vietnam, respectively.

³ According to the World Bank Database, GDP per capita of Vietnam and Thailand in 2020 are 8,650 and 18,236 U.S. dollars in PPP in 2020, respectively. Thailand ranks 79 while Vietnam stands at 117 position in the Human Development Index [United Nations Development Programme \(2021\)](#).

⁴ As of December 18, 2020 (the first day of our second survey), the number of deaths (and infected cases) reported was 35 (1,410) and 60 (4,331) in Vietnam and Thailand, respectively.

⁵ The transfers are equivalent to \$41 to \$405 (U.S. dollars in PPP in 2020).

⁶ The transfers are equivalent to \$34 to \$241 (U.S. dollars in PPP in 2020).

these five questions are used in the University of Michigan Surveys of Consumers to calculate an aggregate consumer sentiment index. In addition, we inquire whether respondents purchased durable goods between May and December 2020 (*purchased_durable*) and ask them about their plans to buy durable goods in the next 12 months (*plans_to_buy_durables*).

Other key variables of interest include subjective well-being (measured by feeling calm or nervous, and life satisfaction), macroeconomic expectations (with respect to inflation, unemployment, economic growth), assessment of the government's support of firms (*govt_support_firm*) and households (*govt_support_household*) affected by the pandemic, trust in the government to mitigate the pandemic's negative effects on the economy (*govt_trust_econ*), and household concerns due to COVID-19 (with respect to health, job security, financial situation, and the economy in general). In the Appendix, Table A2 sets forth summary statistics for all variables of interest as well as changes in the variables that we collected in both waves. Section A.3 of the Appendix contains the exact wording of the underlying questions.

In the baseline analysis, we exclude respondents who do not know the answer to or do not voice an opinion on the following topics: macroeconomic expectations, assessment of and trust in government, personal concerns, and consumer sentiment. Our baseline samples consist of 833 Vietnamese and 705 Thai respondents participated in wave 2 between the ages of 18 and 60. As a robustness check, we follow the approach taken by the University of Michigan Surveys of Consumers and assume that respondents who state that they do not know the answer or do not form opinions are expressing a neutral position (e.g., expecting "no change" or viewing policies as "neither good nor bad" or being "not concerned at all").⁷ We re-estimate our baseline results with these extended samples from wave 2, which include 1,002 observations for Vietnam and 1,178 observations for Thailand (see Appendix A.2).

2.2. Stylized facts

Our data show that the COVID-19 pandemic has had severe negative effects on Vietnamese and Thai consumers. Fig. 1 presents the impact of COVID-19 on our respondents' economic situation and concerns. First, a majority of households in both countries, 57% in Vietnam and 73% in Thailand, lost their jobs or suffered a reduction in working hours. This and other factors contribute to a situation in which the vast majority of households in both countries (approximately 80%) report income losses. Although these numbers are similar to those of other surveys conducted in the same countries during the COVID-19 pandemic (Morgan & Trinh, 2020; MDRI & UNDP, 2020),⁸ they are considerably higher than those reported in industrialized countries (Parker, Minkin, & Bennett, 2020; Major, Eyles, & Machin, 2020).⁹ Second, consumers in both countries have similar concerns about health, job security,

⁷ The aggregate consumer sentiment index in the University of Michigan Surveys of Consumers is calculated by evaluating the difference in shares of positive and negative answers. All other answers (including missing values) are implicitly treated as neutral. This approach is also taken by Statistics Netherlands to calculate the aggregate consumer confidence index.

⁸ Conducting population surveys in eight South-East Asian countries during May and July 2020, Morgan and Trinh (2020) show that about 50% of households in Thailand and Vietnam experienced job losses and/or a reduced workload and two-thirds of respondents in Vietnam and three-quarters in Thailand report income losses. Another survey in Vietnam conducted during September 2020 finds that 65% of respondents report income losses due to the pandemic (MDRI & UNDP, 2020).

⁹ During the COVID-19 pandemic (Parker et al., 2020), find that 25% of U.S. adults report that they or their household members lost a job or were laid off, and 32% of U.S. adults say that they or their household members had to reduce working hours or take a pay cut as of mid-August 2020. Major et al. (2020) document in their September/October 2020 survey that 12.7% of U.K. respondents experienced a job loss or zero working hours and that 45% of U.K. respondents suffered earning losses.

and personal finances, as well as about the whole economy. Only a minority of respondents have no concern about these topics, with a range of 8–14% and 3–5% in Vietnam and Thailand, respectively. Consumers worry most about the effects of COVID-19 on their household's financial situation and the whole economy (Vietnam: 49% and 50% somewhat worried, 41% and 44% very worried; Thailand: 42% and 34% somewhat worried, 55% and 61% very worried). These results correspond to the worldwide personal anxiety due to COVID-19 shown in other surveys (Fetzer, Hensel, Hermle, & Roth, 2020).

Despite these similarities, Thai and Vietnamese respondents have opposite views of their government's efforts to mitigate the negative economic effects of the pandemic, as shown in Fig. 2 (similar results are also reported in Dölitzsch, 2020; Fetzer et al., 2020c; & Bui et al., 2021).¹⁰ Although almost 60% of our Thai respondents state that they or someone in their household received financial assistance, they are neither content with their government's support to individuals and households (46% answer that the government does a "poor job"; 42% answer "fair job"; only 12% say "good job") nor with its support to firms (47% say "poor job"; 41% say "fair job"; only 12% state "good job"). In light of this assessment, they have little trust in the government's ability to return the economy to pre-pandemic levels (about 50% have no trust, 30% have a neutral view, and only 20% 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 16% say "poor job," 30% answer "fair job," and 54% state "good job") as well as in its support to firms (only 15% say "poor job," 37% answer "fair job," and 50% state "good job"). Moreover, they firmly trust that their government will revive the economy (about 5% have no trust, 26% have a neutral view, and 69% have at least some trust). These results are astonishing in light of the fact that less than one-third (31%) of Vietnamese respondents actually benefited from government financial assistance by December 2020. The divergent results for the two countries can be linked to pre-crisis government assessments, which were much more positive in Vietnam (68% respondents say "good job") than in Thailand (13% respondents say "good job"). This suggests that government trust is to some extent deep-rooted and only partially influenced by current government policy.

The difference between the two countries in terms of agreement with and trust in government policies also affects other variables of interest. As shown in Table A2 in the Appendix, the Thai respondents are, on average, less optimistic in terms of consumer sentiment and expect higher unemployment and lower GDP growth than do their Vietnamese counterparts. They also report lower life satisfaction and somewhat stronger personal concerns related to the pandemic. Note that the variables in the Thai sample have much higher standard deviations (with the exception of variables measuring personal concerns and well-being), thus demonstrating that the Thai respondents disagree relatively more about macroeconomic outcomes and government policies.

¹⁰ In March 2020, Dölitzsch (2020) surveyed citizens from 45 countries and finds that Thailand had the highest share of respondents who believe that their government responds too little to the pandemic, whereas Vietnam had the highest share of respondents who think that their government responds appropriately. In March/April 2020, Fetzer et al. (2020c) surveyed citizens from 58 countries and reported that only 5% of Vietnamese citizens think their government's responses are insufficient, whereas the corresponding number in Thailand is 56%. In the first wave of our survey in May 2020, we find similar disagreement between Thai and Vietnamese respondents about their respective government's reactions.

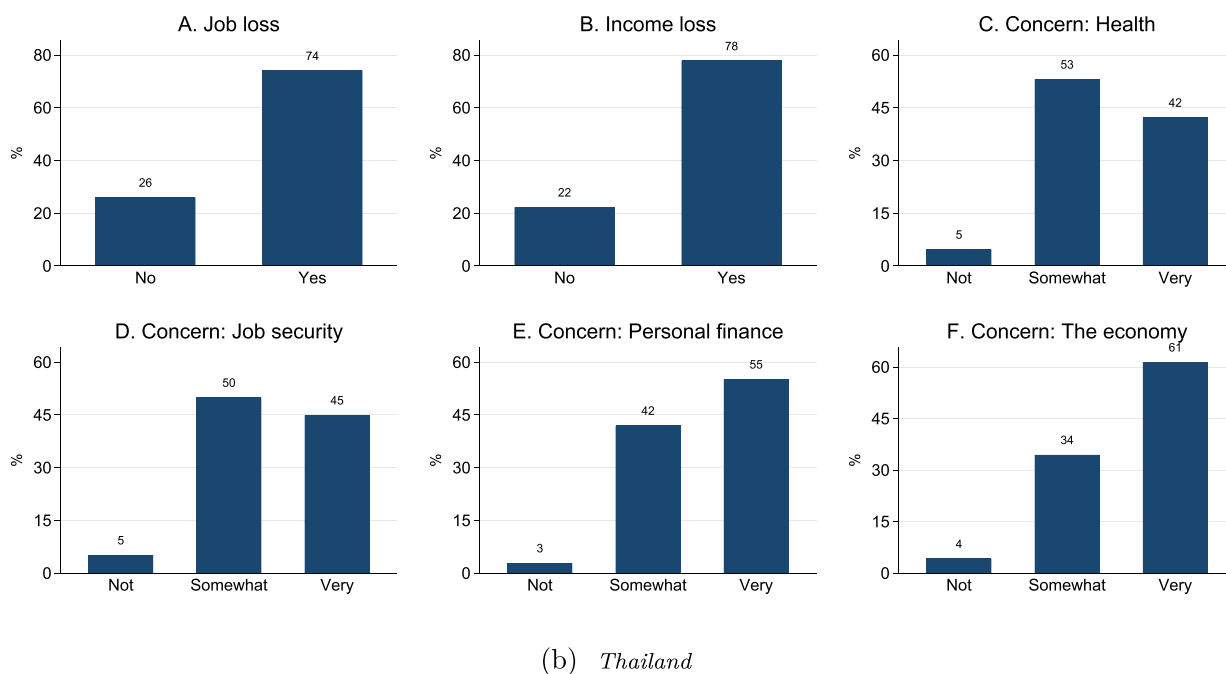
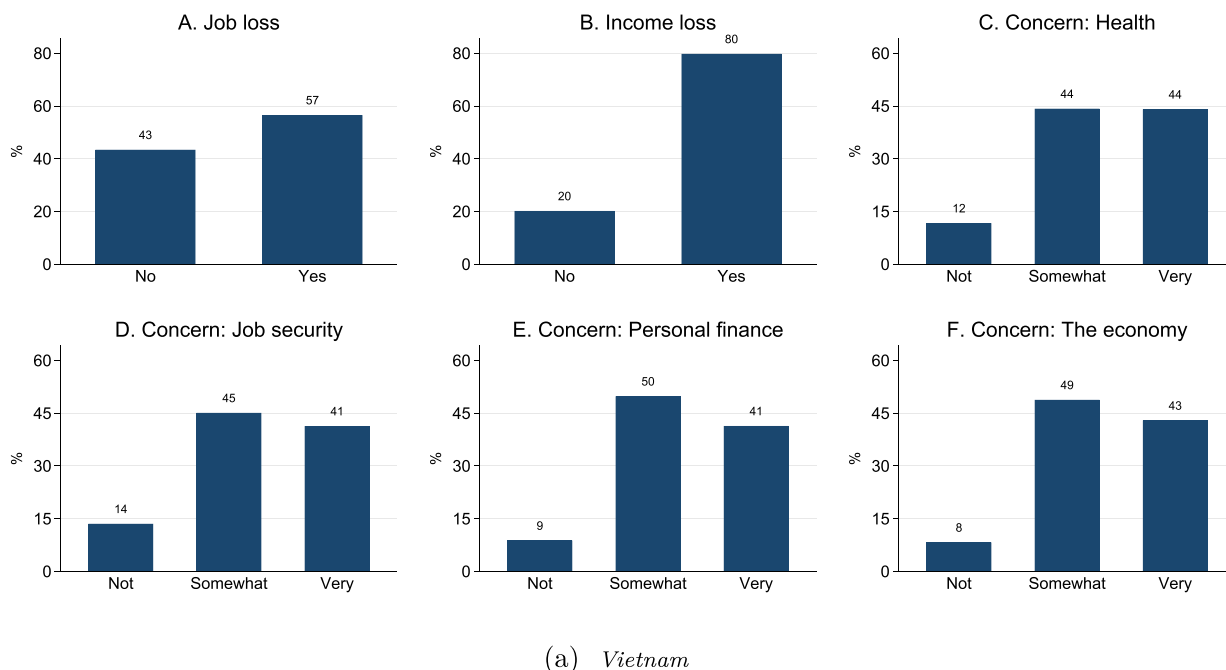


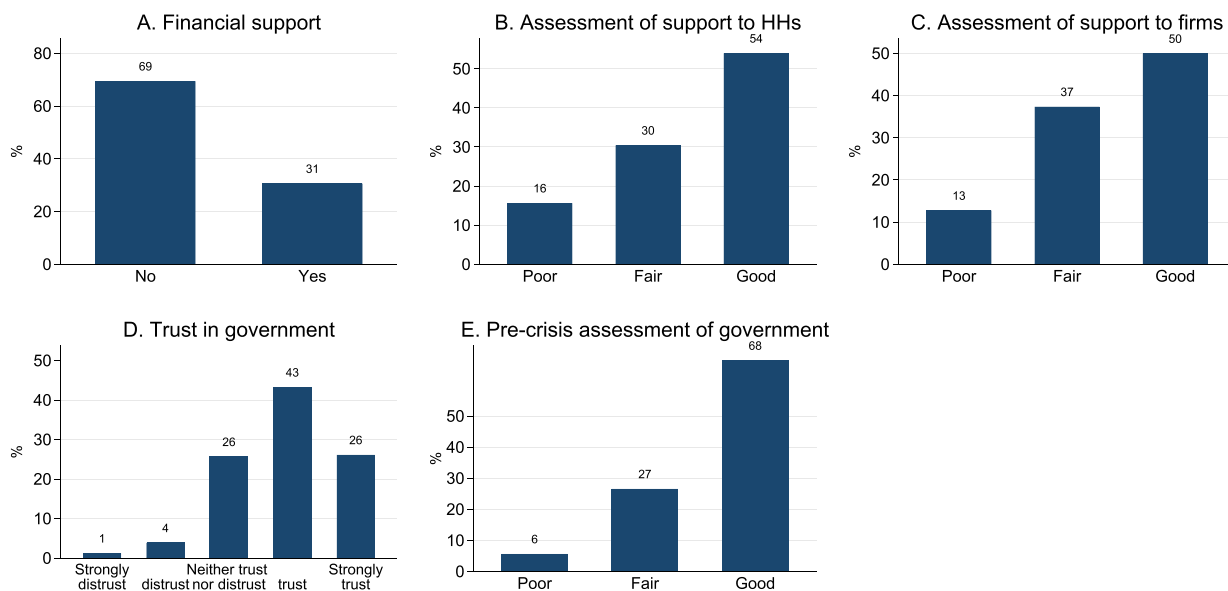
Fig. 1. The Impact of COVID-19 on Households. Note: The survey questions for each panel are the following. Panel A: ‘Since May 2020, did you or anyone else in your household lose their job or have to work less because of COVID-19?’ Panel B: ‘Since May 2020, did you or anyone else in your household experience income losses because of COVID-19?’ Panels C/D/E/F: ‘How concerned are you about the effects that COVID-19 might have on your health or the health of other members of your household/your job security or that of other members of your household/the financial situation of your household/ the economy.’

3. Results

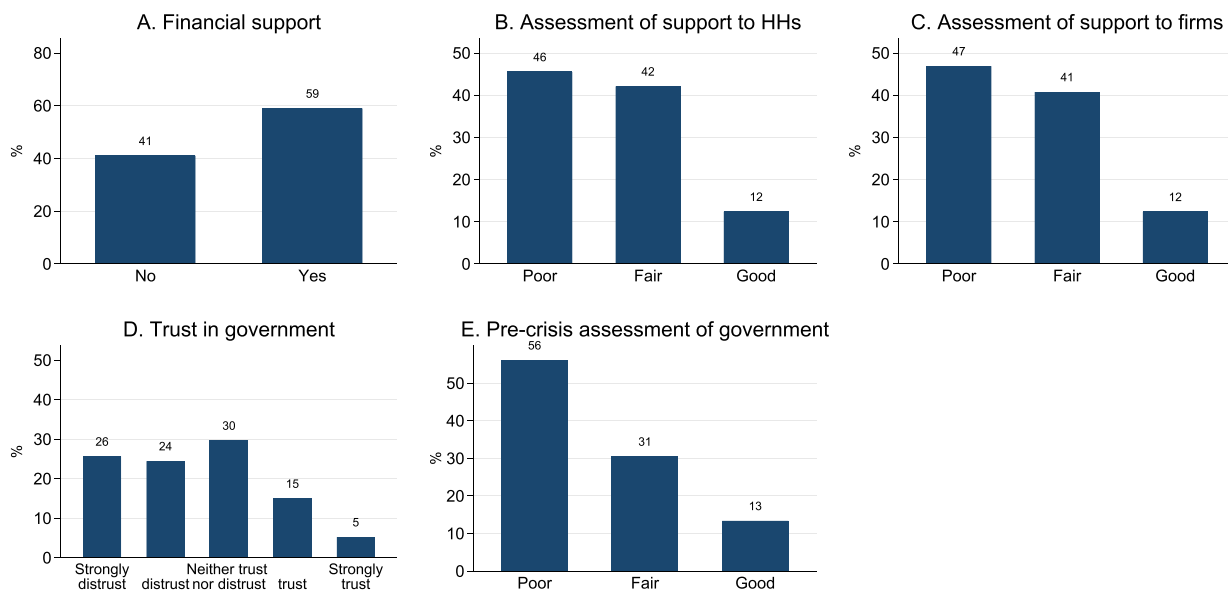
We estimate the relation of COVID-19-related government financial support reported in the December 2020 wave with our dependent variables of interest using the following equation:

$$Y_i^{Dec20} = \alpha + \beta fin_support_i^{Dec20} + \gamma X_i^{Dec20} + \epsilon_i, \tag{1}$$

where Y is the outcome of interest, that is, household consumption indicators (consumer sentiment, purchased durables, plans to buy durables), subjective well-being (mental health and life satisfaction), macroeconomic expectations (with respect to inflation, unemployment, GDP growth), trust in the government in dealing with the pandemic, and personal concerns due to COVID-19 (health, job security, financial situation, the general economy); $fin_support$ is



(a) Vietnam



(b) Thailand

Fig. 2. Financial Support and the Assessment of Government Reaction. Note: The survey questions for each panel are the following. Panel A: ‘Did you or anyone else in your household receive financial support from the government due to COVID-19?’ Panel B: ‘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?’ Panel C: ‘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?’ Panel D: ‘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?’ Panel E: ‘As to the macroeconomic policy of the government before the COVID-19 outbreak we mean steps taken to fight inflation or unemployment would you say the government was doing a good job, fair job, or a poor job?’

a dummy variable indicating whether household i received financial support from the government due to COVID-19; X is a vector of control variables and includes gender, age, age-squared, a dummy for living in an urban or rural area, education, marital status, household size, the number of old people in the household, a dummy measur-

ing whether any household members experienced job loss due to the pandemic, and province fixed effects to account for regional factors. β is our coefficient of interest.

To account for the dynamics between the two survey waves, we evaluate the effect of reporting financial support in December 2020

on individual change in sentiment and the transmission variables over time. This allows us to compare the changes between the recipients and the non-recipients of financial support:

$$\Delta Y_i^{Dec20-May20} = \alpha + \beta fin_support_i^{Dec20} + \gamma X_i^{Dec20} + \epsilon_i, \quad (2)$$

3.1. The Effect of Financial Support on Consumption and Subjective Well-being

Table 1 shows that financial support is significantly and positively correlated with consumer sentiment and durables spending. Compared to the sample averages, receiving financial support corresponds to a 9% and 13% increase in consumer sentiment in Vietnam and Thailand, respectively (see Columns 1 and 2). These effects amount to a moderate change of about 0.6 standard deviations in Vietnam and 0.4 standard deviations in the Thai consumer sentiment index. Columns 3 and 4 show that Vietnamese and Thai beneficiaries are 24 pp and 11 pp, respectively, more likely to report that they bought durable goods between May and December 2020. These effects are not only highly statistically significant, but also economically meaningful, suggesting that government financial support plays an important role in stimulating household consumption during the pandemic. Moreover, recipients in Vietnam are significantly more likely to indicate that they will certainly buy durable goods in the next 12 months, even though, at 9 pp, the effect is smaller. In addition to measuring cross-sectional effects in our second, December 2020 wave, we also evaluate the difference in consumer sentiment between both waves when receiving financial support.¹¹ We find that Thai households who received financial support by December 2020 report significantly more optimistic sentiment about the economy in the period between the two waves compared to households who did not receive any support. This result is particularly striking since, on average, Thai respondents reported more pessimistic consumer sentiment in the second wave.

As the COVID-19-related government programs aim at both stimulating the economy and improving social protection, we study the effect of financial support on subjective well-being outcomes such as mental health (feeling calm or nervous) and overall life satisfaction. Table 2 sets out the results. For both countries, we find that receiving financial support correlates positively with mental health measures and life satisfaction. Vietnamese beneficiaries show a 3 pp lower likelihood of reporting that they strongly agree with the statement that they are nervous when thinking about their current situation. We find a 3 pp and 2 pp higher probability in Vietnam and Thailand, respectively, that beneficiaries strongly agree with the statements that they are calm and relaxed. Vietnamese and Thai respondents who received financial support show an increased likelihood of 6 pp and 2 pp, respectively, of answering that they are totally satisfied with their life as a whole. Most effects remain significant when evaluating individual changes in well-being between the two waves. Overall, the magnitude of these effects is small, but the effects nevertheless corroborate our previous results that receiving financial support positively correlates with individuals' consumer sentiment and their willingness to spend on durables.

3.2. Transmission Channels of Financial Support

We now investigate three channels that have the potential to explain how government cash transfers relate to economic outcomes at the household level, that is, consumer sentiment and dur-

able spending. Do consumers spend more because they (i) are more optimistic about the future macroeconomic development, (ii) believe the government has been doing a good job in terms of mitigating the negative effects of the pandemic on the economy, or (iii) are less concerned about the effect of the pandemic on their health, job security, financial situation, and the economy in general?

(i) Macroeconomic Expectations: Table 3 shows the correlation of receiving government support with individuals' macroeconomic expectations about inflation, unemployment, and economic growth (GDP). Vietnamese recipients of financial support are about 7 pp less likely to state that they expect inflation to increase. Both countries show a negative correlation between receiving financial support and unemployment expectations, but the relationship is statistically insignificant. In both countries, receiving financial support is associated with a roughly 3–4 pp higher likelihood of expecting higher GDP growth. Evaluating the changes in (qualitative) macroeconomic expectations between the waves, we also find that Thai recipients of financial support become more optimistic regarding GDP growth expectations than their non-recipient counterparts. In contrast, Vietnamese respondents become less optimistic about GDP growth between the waves. However, the negative correlation is statistically significant only at the 10% level and turns out to be insignificant in our extended sample (see Table A5 in the Appendix). Thus, our results suggest that, at least in Thailand, receiving financial support in times of crisis may help substantially brighten people's macroeconomic outlook.

(ii) Assessment of and Trust in the Government Reaction: Table 4 shows that financial support is significantly positively correlated with the assessment of and trust in the government in dealing with the pandemic's negative spillovers to the economy. The likelihood that beneficiaries state that the government has been doing a good job to support firms and households affected by the pandemic increases by about 27 pp in the Vietnamese sample and by 11–12 pp in the Thai sample. Moreover, beneficiaries in Vietnam and Thailand have a 9 pp and 3 pp higher probability, respectively, of stating that they strongly trust the government to mitigate the social distancing's negative effects on the economy. With the pandemic continuing between our two survey waves, average trust in the government to deal with its economic effects fell in both countries. In contrast, Thai recipients of financial support show a significantly stronger increase in trust than those households who did not receive any support.¹² Again, this suggests that the fiscal policy instrument had particularly strong effects on the Thai population, among which there was a large degree of disagreement about the government and macroeconomic outcomes. Our results remain generally unchanged when we additionally control for assessment of the government's macroeconomic policies before the pandemic.

(iii) Households' Concerns Due to the Pandemic: The results set out in Table 5 show that, in both countries, receiving government financial support correlates negatively with various household concerns due to the pandemic. Vietnamese beneficiaries are less likely to answer that, because of the pandemic, they are very concerned about their health (21 pp), their job security (23 pp), their financial situation (22 pp), and the economy in general (16 pp). In the December 2020 cross-section sample in Thailand, receiving financial support is not significantly related to household concerns about health, job security, and personal finance, but receiving support correlates with somewhat lower stated concerns about the general economy (8 pp). Evaluating how concerns changed between May and December 2020, we find that both Viet-

¹¹ Note that actual and planned durables purchases were measured only in the second wave in December 2020.

¹² Note that we measured respondents' assessment of government support to firms and households only in the second wave, as most support schemes were initiated after the first wave.

Table 1
Marginal Effects of Financial Support on Consumer Sentiment and Durable Spending.

	<i>consumer_sentiment</i>		<i>purchased_durables</i>		<i>plans_to_buy_durables</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL
<i>fin_support</i>	0.30*** (0.06)	0.34*** (0.09)	0.24*** (0.05)	0.11*** (0.04)	0.087*** (0.03)	0.024 (0.01)
Pseudo R ²			0.132	0.153	0.108	0.099
N observations	833	705	797	693	833	705
	<i>Δconsumer_sentiment</i>					
	(1) VN	(2) TL				
<i>fin_support</i>	0.10 (0.06)	0.53*** (0.12)				
R ²	0.270	0.202				
N observations	833	705				

Note: Demographic controls include job loss, province fixed effects, urban/rural area, age, age squared, education, gender, marital status, the number of the old in the house, and household size. We use population weights and report coefficients from OLS estimations (Columns 1 & 2), marginal effects of probit estimations (Columns 3 & 4), and marginal effects for choosing the highest answer category from ordered probit estimations (Columns 5 & 6). Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

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Table 2
Marginal Effects of Financial Support on Subjective Well-Being.

	<i>nervous</i>		<i>calm</i>		<i>life_satisfaction</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL
<i>fin_support</i>	-0.03*** (0.01)	0.001 (0.02)	0.03* (0.01)	0.02*** (0.01)	0.06*** (0.02)	0.02** (0.01)
Pseudo R ²	0.103	0.092	0.090	0.082	0.116	0.093
N observations	833	705	833	705	833	705
	<i>Δnervous</i>		<i>Δcalm</i>		<i>Δlife_satisfaction</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL
<i>fin_support</i>	-0.3* (0.15)	-0.02 (0.10)	0.07 (0.17)	0.3*** (0.11)	0.2* (0.10)	0.2** (0.11)
R ²	0.179	0.234	0.198	0.205	0.231	0.243
N observations	833	705	833	705	833	705

Note: Demographic controls include job loss, province fixed effects, urban/rural area, age, age squared, education, gender, marital status, the number of the old in the house, and household size. We use population weights and report marginal effects for choosing the highest answer category from ordered probit estimations in the upper panel and from OLS regressions in the lower panel. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3
Marginal Effects of Financial Support on Macroeconomic Expectations.

	<i>expected_inflation</i>		<i>expected_unemployment</i>		<i>expected_gdp</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL
<i>fin_support</i>	-0.072*** (0.02)	-0.014 (0.03)	-0.013 (0.01)	-0.055 (0.04)	0.031* (0.02)	0.040*** (0.01)
Pseudo R ²	0.110	0.069	0.094	0.072	0.097	0.070
N observations	833	705	833	705	833	705
	Δ <i>expected_inflation</i>		Δ <i>expected_unemployment</i>		Δ <i>expected_gdp</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL
<i>fin_support</i>	-0.031 (0.13)	0.058 (0.15)	0.14 (0.15)	-0.32 (0.20)	-0.23* (0.13)	0.91*** (0.18)
R ²	0.178	0.187	0.206	0.174	0.172	0.199
N observations	833	705	833	705	833	705

Note: Demographic controls include job loss, province fixed effects, urban/rural area, age, age squared, education, gender, marital status, the number of the old in the house, and household size. We use population weights and report marginal effects for choosing the highest answer category from ordered probit estimations in the upper panel and from OLS regressions in the lower panel. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

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Table 4
Marginal Effects of Financial Support on Trust in Government in Dealing with COVID-19.

	<i>govt_support_firms</i>		<i>govt_support_households</i>		<i>govt_trust_econ</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL
<i>fin_support</i>	0.27*** (0.05)	0.12*** (0.02)	0.27*** (0.05)	0.11*** (0.02)	0.086** (0.04)	0.033*** (0.01)
Pseudo R ²	0.153	0.140	0.150	0.133	0.116	0.098
N observations	833	705	833	705	833	705
					Δ <i>govt_trust_econ</i>	
					(5) VN	(6) TL
<i>fin_support</i>					-0.12 (0.09)	0.56*** (0.19)
R ²					0.223	0.226
N observations					833	705

Note: Demographic controls include job loss, province fixed effects, urban/rural area, age, age squared, education, gender, marital status, the number of the old in the house, and household size. We use population weights and report marginal effects for choosing the highest answer category from ordered probit estimations in the upper panel and from OLS regressions in the lower panel. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5
Marginal Effects of Financial Support on Household Concerns Due to COVID-19.

	<i>concern_health</i>		<i>concern_job</i>		<i>concern_finance</i>		<i>concern_economy</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL	(7) VN	(8) TL
<i>fin_support</i>	-0.21*** (0.05)	-0.029 (0.05)	-0.23*** (0.06)	-0.064 (0.05)	-0.22*** (0.05)	-0.056 (0.05)	-0.16*** (0.05)	-0.084* (0.05)
Pseudo R ²	0.113	0.127	0.186	0.133	0.175	0.138	0.142	0.156
N observations	833	705	833	705	833	705	833	705

	Δ <i>concern_health</i>		Δ <i>concern_job</i>		Δ <i>concern_finance</i>		Δ <i>concern_economy</i>	
	(1) VN	(2) TL	(3) VN	(4) TL	(5) VN	(6) TL	(7) VN	(8) TL
<i>fin_support</i>	-0.013 (0.08)	-0.22** (0.09)	-0.17** (0.08)	-0.17* (0.10)	-0.15* (0.08)	-0.20** (0.09)	-0.17** (0.09)	-0.18** (0.08)
R ²	0.153	0.235	0.182	0.219	0.167	0.223	0.212	0.229
N observations	833	705	833	705	833	705	833	705

Note: Demographic controls include job loss, province fixed effects, urban/rural area, age, age squared, education, gender, marital status, the number of the old in the house, and household size. We use population weights and report marginal effects for choosing the highest answer category from ordered probit estimations in the upper panel and from OLS regressions in the lower panel. Standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

names and Thai recipients of financial support are significantly less worried across all categories in the second wave. Thus, financial support appears to play an important role in mitigating household distress during the pandemic.

(iv) Mediation Analysis: We conduct a mediation analysis to measure how macroeconomic expectations, trust in the government, and household concerns affect the impact of financial support on consumer sentiment and durables spending. Following Imai, Keele, and Tingley (2010), we estimate the indirect effect of financial support through each of these factors. To facilitate the implementation of the mediation analysis using ordinary least squares, we assume that our outcome variables, which proxy the three transmission channels, are continuous. Fig. 3 shows the relative influence (in percent) of the indirect effects on the total effect of financial support on consumer sentiment and durables spending. For both countries, the results show that variables from all three channels mediate the relation between financial support and consumer sentiment or plans to buy durables at a 10% level of significance.¹³ The estimated mediation effects are often found to be larger in the Thai sample but are also subject to considerably higher uncertainty. The estimates suggest that in both countries, the effect of financial assistance on sentiment or durables spending is mediated most strongly via consumers' assessment of government support and, in the Thai sample, their GDP growth expectations.

4. Conclusion

In this paper, we study the relationship between government financial support programs during the COVID-19 pandemic and households' consumer sentiment as well as durables spending in Vietnam and Thailand. We utilize two waves of representative population surveys conducted in May and December 2020 in these two emerging countries of South-East Asia. We discover that by December 2020, government financial support had reached about 30% of citizens in Vietnam and 60% in Thailand. In our survey, we find that financial support is significantly related to indicators of future economic activity, such as consumer sentiment or households' durables spending. Moreover, the estimated correlations are sizable from an economic perspective. For instance, Vietnamese and Thai respondents who received COVID-19-related cash transfers show a 9% and 13% higher consumer sentiment, respectively,

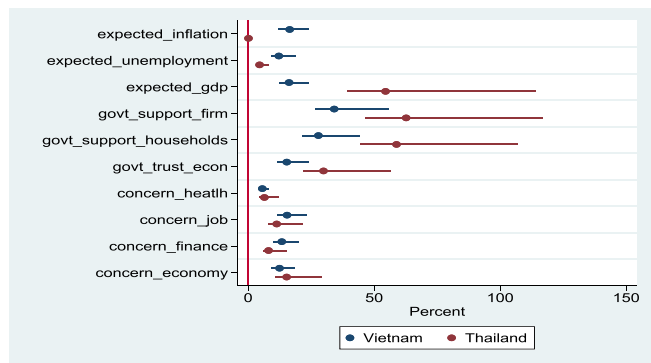
in the December 2020 wave, compared to consumers whose households did not receive any transfers. The probability that they purchased durable goods in the period between May and December 2020 increased by 24 and 11 pp in Vietnam and Thailand, respectively. Vietnamese respondents who received financial support are even more likely to state that they will certainly increase durables spending in the next 12 months. Moreover, the positive relationship between financial support and consumer spending is robust over time: on average, respondents in both countries become significantly more optimistic about the economy across the two survey waves if they receive financial support. Furthermore, we find that benefiting from government financial support programs correlates with higher mental well-being and life satisfaction.

We identify three channels through which these effects may manifest. First, respondents receiving financial assistance from the government express more optimism about the macroeconomic outlook, such as higher expected economic growth. Second, these respondents have more trust in the government's ability to deal with the negative effects of COVID-19 on the economy, for example, employment and income losses. Moreover, recipients of cash transfers show 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, government cash transfers appear to alleviate various concerns arising from the crisis, such as concerns about health, job security, financial situation, and the general economic situation. Most of these effects are not only significant when comparing treated and non-treated households in the December 2020 survey wave, but also when comparing individual changes between recipients and non-recipients of financial support across time.

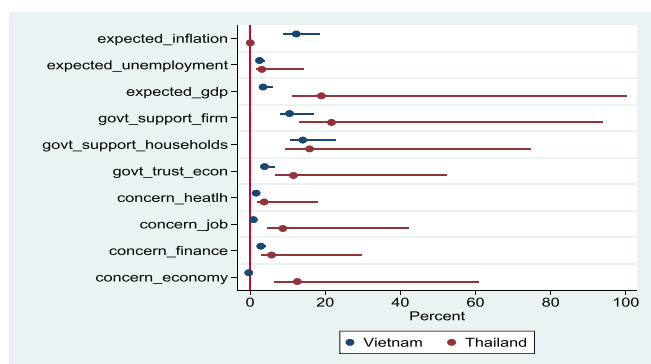
Our mediation analysis demonstrates that all these channels play a significantly positive role in influencing consumer sentiment and durables spending. The analysis also reveals that the largest individual indirect effect of financial support on consumer sentiment is via people's assessment of and trust in the government in supporting firms and households affected by the pandemic, with GDP growth expectations also playing an important role.

To summarize, our results suggest that government financial support is effective in stimulating current and planned durables consumption spending and, thereby, aggregate demand. Another important finding is that financial assistance during a crisis appears to have a number of effects that go beyond a direct consumption response. First, such support is associated with stronger optimism about both the macroeconomic outlook and the recipi-

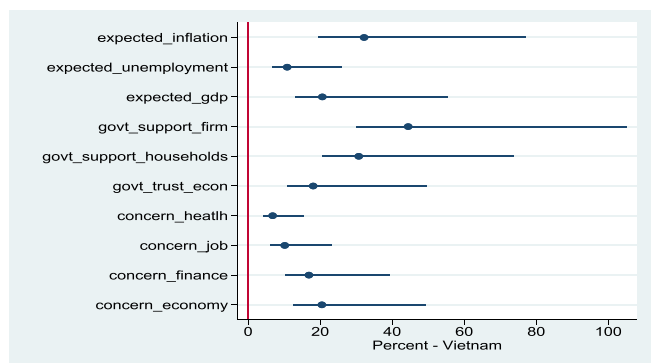
¹³ Note that we do not estimate mediation effects on planned durables spending in Thailand, because the effect of financial support on planned spending was insignificant.



(a) Consumer sentiment



(b) Purchased durables



(c) Plans to buy durables

Fig. 3. The Proportion of Indirect Effects in the Total Effect of Financial Support on Consumer Sentiment and Durable Spending. Note: This figure reports point estimates and the 90% confidence interval of the proportion of indirect effects to total effects of government financial support on consumer sentiment and durable spending through different channels. Demographic controls include job loss, province fixed effects, urban/rural area, age, age squared, education, gender, marital status, the number of the old in the house, and household size. All estimations use population weights.

ent’s personal future economic situation. Second, financial assistance bolsters trust in the government, which may be important when a country experiences a prolonged lockdown and other severe policy measures. Third, psychological pressure due to the crisis is lessened, leading to improvement in subjective well-being and life satisfaction. Thus, when designing fiscal policy in the form of cash transfers, governments are well advised to consider these additional positive spillovers.

CRedit authorship contribution statement

Dzung Bui: Conceptualization, Methodology, Software, Formal analysis, Investigation, Data curation, Writing - original draft, Writing - review & editing, Visualization. **Lena Dräger:** Conceptualization, Methodology, Resources, Writing - original draft, Writing - review & editing, Supervision, Project administration, Funding acquisition. **Bernd Hayo:** Conceptualization, Methodology, Resources, Writing - original draft, Writing - review & editing, Supervision, Project administration, Funding acquisition. **Giang Nghiem:** Conceptualization, Methodology, Software, Formal analysis, Investigation, Data curation, Writing - original draft, Writing - review & editing, Visualization.

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.worlddev.2022.105828>.

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