Turning Vietnam's COVID-19 Containment Success into Economic Recovery: A Job-Focused Analysis of Individual Assessment on Their Financial and the Economy

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Abstract

The COVID-19 pandemic has resulted in income and employment loss in many countries around the world. Yet, hardly any formal study exists on household finance and future economic expectations in poorer countries. To fill in this gap, we implemented and analyzed a new web-based rapid assessment survey immediately after the removal of lockdown measures in Vietnam—a poorer country that has received widespread recognition for its successful fight against the pandemic. We find that having a job is strongly and positively associated with better finance and more income and savings, as well as more optimism about the resilience of the economy. Further disaggregating employment into different types of jobs such as self-employment and jobs with permanent and short-term contracts, we find those with permanent job contracts to have fewer job worries and better assessments for the economy. Individuals with good health tend to have more positive evaluations for their current and future finance, but there is mixed evidence for those with higher educational levels. These findings are relevant for post-outbreak economic policies, especially regarding the labor market in a developing country context.

JEL: I1, I3, J01, J08, O1

Key words: COVID-19, recession, labor market, wage work, household finance, Vietnam

I. Introduction

The COVID-19 outbreak has resulted in income and employment loss in many rich and poor countries around the world. For instance, as much as 18 percent and 15 percent of the respondents in a recent survey report losing their job in late March-early April, 2020 in the U.S. and the U.K. respectively (Belot *et al.*, 2020). This could result in lower expectations about one's future economic prospects. Indeed, individuals in the U.S. are concerned about the effects of COVID-19 on the economy, their health, and their personal finances (Binder, 2020; Fetzer *et al.*, 2020). Households living in counties that went into lockdown earlier expect the unemployment rate over the next twelve months to be 13 percentage points higher and continue to expect higher unemployment at horizons of three to five years (Coibion *et al.*, 2020). On average, an individual's perceived probability of losing her job within the next months reaches 35 percent and 31 percent respectively in the U.S. and the U.K. (Adams-Prassl *et al.*, 2020).

We offer a new study on the short-term impacts of COVID-19-induced lockdown measures on household financial situations and expectations for the future in Vietnam, a poorer country. We investigate the following key policy questions: For individuals who are affected by the pandemic lockdown measures, what is the relationship between their employment (and other) characteristics and their finance, income, and savings? What are the expectations for their finance after the outbreak is over? Do those with job security worry less about their financial situation in the future? What are their expectations for the general economy? Would those with job security have higher expectations? Are they also more optimistic about the economy's ability to recover? These questions have much relevance for post-outbreak economic policies, especially regarding the labor market in a developing country context.

Vietnam offers a remarkable case study that has successfully fought against COVID-19. As yet, despite a population of about 97 million people and its shared border with China—the epicenter of the pandemic—Vietnam has recorded fewer than 10,000 infected cases and 55

deaths (Our World in Data, 2021). The country's successful measures, such as prompt responses and aggressive testing and quarantining, have been widely discussed both in the academic literature (Huynh, 2020; La *et al.*, 2020; Trevisan *et al.*, 2020) and the international media including the *Financial Times* (Reed and Chung, 2020), the *Wall Street Journal* (Mandhana and Le, 2020), and the *Project Syndicate* (Nguyen, 2020). Like most countries around the world, however, Vietnam also suffers from lockdown measures that negatively impact its economy, particularly the labor market (Dang and Nguyen, 2020; NEU, 2020). One key challenge is thus for the country to build on this success to help the economy recover and continue its pre-outbreak economic growth.

Analyzing just-in-time data from a web-based rapid assessment survey that we implemented immediately after the removal of lockdown measures in Vietnam in late April-early May 2020, we find that having a job is positively and statistically significantly associated with better finance and more income and savings. Having a job is, unsurprisingly, negatively associated with worries about job loss in the future and positively associated with more optimism about the resilience of the economy. Further disaggregating employment into different types of jobs such as self-employment and working for wages (i.e., having a permanent job contract vs. having a short-term job contract), we find these job types to exhibit differential and interesting relationships with the financial outcomes. In particular, being self-employed is less strongly associated with reduced job worries than working for wages. Individuals with a permanent job contract have fewer job worries and also have more positive assessments for the economy. Individuals in good health tend to have more positive evaluations for their current and future finance. There is mixed evidence for those with higher educational levels.

We add to the barely existent literature on the impacts of COVID-19 on individual economic expectations in a poorer country context.[1] The effects of the outbreak can vary significantly between richer and poorer countries because of their systematic differences in labor market institutions. Yet, despite a growing literature on this topic for richer countries, hardly any study exists on household finance and economic expectations for the future in the latter group of countries. To our best knowledge, Bui *et al.* (2021) is the single study that analyzes the effects of providing information on others' beliefs on respondents' own beliefs and consumer sentiment in a randomized control trial setting in Thailand and Vietnam. They find that the information treatments positively affect consumer sentiment only in Vietnam, especially when the information goes against respondents' prior beliefs.

This paper consists of four sections. We discuss the survey data and the analytical framework in the next section before offering the estimation results on the profiles of individuals and factors that are associated with their current and expected finance situations in Section III. We offer further discussion of our results and finally conclude in Section IV.

II. Data and Analytical Framework

II.1. Data

We conducted a new web-based survey immediately after Vietnam relaxed its lockdown measure during the two weeks of April 26- May 9, 2020.[2] The survey consists of four sections with 46 questions, which collect data on individual characteristics (such as age, sex, job, education, and health status), their household financial situation, their expectations and

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[1] Some limited survey evidence for poorer countries have emerged, but mostly from NGOs (e.g., BRAC (2020)) or private consulting firms such as McKinsey & Company (Ho *et al.*, 2020). See also Bloom *et al.* (2020) and Brodeur *et al.* (2020) for reviews of recent studies on the general impacts of the pandemic.

[2] We obtained approval to implement the survey from the Institutional Review Board (IRB) at the Institute of Social and Medical Studies (ISMS), which is registered with the Office for Human Research Protections of the U.S. Department of Health (IRB No.IORG0006663; FWA 00016762). On the first page of the online questionnaire, we provided a consent form for the respondents. This form explicitly indicates that the respondent responds to the questions with willingness and they could stop or exit the survey any time. This survey is implemented in collaboration with a research team at ISMS in Hanoi, Vietnam.

concerns about work, household finance, and the national economy, and their evaluations about the effectiveness of the government's policies against COVID-19. We focus in this paper on the data related to jobs and economic outcomes, and we provide in Appendix A the English translation of the part of the survey questionnaire that we analyze. To our knowledge, this is the first survey that rapidly collects data on Vietnamese individuals' finance and economic expectations after the country first lifted its pandemic-induced lockdown measures.

We employed the snowball sampling method and invited individuals in our network to participate in the survey. We contacted these individuals through institutional and personal emails and through popular social media platforms in Vietnam such as Facebook and Zalo. We received 677 respondents to our survey in total. After checking the data, however, we removed 24 respondents due to their incomplete answers to the survey questionnaire. This results in the final sample for analysis of 653 respondents. We acknowledge that, given the nature of a rapid assessment survey, our survey might not fully cover all the different population groups in Vietnam. Consequently, to address potential sampling bias, we reweight the survey using the gender and age variables according to the Labor Force Survey (LFS) in 2020. The LFS is annually conducted by Vietnam's General Statistical Office and offers nationally representative data on (un)employment characteristics for the country.[3]

Table 1 provides the descriptive statistics of all the variables. The age of the individuals in our sample averages 42 and ranges from 18 to 68. Roughly half of them are female (51 percent), married (76 percent), live in urban areas (89 percent), and follow no religion (77 percent). In terms of education achievement, 32 percent of individuals have a college degree while 61 percent have a graduate degree (i.e., master degree or higher levels). Around 56 percent of all individuals have a permanent job contract, and 15 percent have a short-term job contract (i.e., one that is less than 3 years). Only 11 percent of the survey respondents are self-employed.

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[3] We apply the reweighting procedures described in Pacifico (2014).

Worries about job loss after the COVID-19 pandemic are prominent in our sample, with an average score of 1.95 out of the maximal value of 3. About one-fourth (25 percent) of survey individuals report not worrying about their jobs; out of those (75 percent) that are worried about their jobs, 21 percent are very worried (calculations not shown). These figures are consistent with the finding in a recent study that economic anxiety rises up globally after the arrival of the COVID-19 outbreak (Fetzer *et al.*, 2020). Eighty-three percent of the survey respondents have a job at the interview time, and almost all (86 percent) of those who work are wage earners (calculations not shown).

Regarding changes in current household finance, roughly two-thirds of survey respondents report either less income (66 percent) or less savings (61 percent) because of the impacts of COVID-19. These are represented by the dark blue sections in the two bars in Figure 1. Less than one percent of surveyed individuals could report an increase in income, while around 10 percent report more savings, perhaps in preparation for negative effects of the pandemic in the future.[4] These changes are represented by the light green sections in the bars (Figure 1).

Surveyed respondents, however, are more optimistic about the future. Approximately 35 percent expect their financial situation to improve in the next 3 months, while 28 percent expect the opposite, and the remaining respondents expect no change (Figure 2).

II.2. Analytical Framework

We estimate the following equation

$$y_i = \alpha + \beta' job_i + \gamma' x_i + \varepsilon_i, \qquad (1)$$

where y_i include three sets of outcome variables for individual *i*, for *i= 1,…, N*. The first set of outcome variables consists of the self-reported financial situation and changes to one's income and saving that individuals attribute to the effects of COVID-19. The (self-reported) financial

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[4] Using transaction-level household financial data in the U.S., Baker *et al*. (2020) also document that household spending sharply declined after some initial increase as the outbreak was spreading.

situation variable has five values ranging from 1 to 5, which respectively correspond to "*very bad*", "*bad*", "*average*", "*good*", and "*very good*". The variables for the changes to one's income and saving have three values ranging from 1 to 3, indicating whether these changes result in situations that are "*worse*", "*the same*", or "*better*".

The second set includes expectations about one's financial situation in the next 3 months and worries about one's job. The variable expectations about one's financial situation in the next 3 months also has five values, which correspond to "*much worse*", "*worse*", "*no change*", "*better*", and "*much better*". The variable worries about one's job has three values: "*no worries*", "*somewhat*", and "*a lot*".

The third set includes expectations about the economy's resilience after the COVID-19 outbreak, expectations about changes to the economy in the next 3 months, and the expected duration of impacts for COVID-19. Both variables on the expectations about the economy's resilience and its expected changes in the next 3 months have three values, which correspond respectively to "*pessimistic*", "*average*", and "*optimistic*" for the first variable and "*worse*", "*no change*", and "*better*" for the second variable. The variable on the expected duration of impacts consists of the following five values: "*under 3 months*", "*3 to less than 6 months*", "*6 months to less than 1 year*", "*1 to less than 2 years*" and "*2 years or more*". For all these outcome variables except for worries about one's job and the expected duration of impacts, a higher value indicate a better financial status or a higher level of expectation.

The vector job_i indicates whether an individual has a job, or whether this individual is self-employed, has a permanent contract or a short-term contract. The key parameters of interest are β, which capture the relationship of these employment variables with the individual's financial welfare and expectations about the economy. The ability to find (and hold) a job may be correlated with individual unobserved characteristics such as innate ability or interpersonal skills, which can also correlate with the outcome variables. Consequently, we interpret β as

representing an associational rather than a causal relationship. The vector of control variables (x_i) include age, gender, education level, ethnicity, health status, marital status, religion, and urban/ rural residence. We offer heteroskedasticity-robust variance estimates of the error term ε_i.

For easier interpretation of estimation results, we estimate Equation (1) with OLS method. But we also offer an alternative modelling option such as the ordered probit model that can better address discrete variables for robustness check purposes.[5]

III. Estimation Results

III.1. Profiling of Survey Respondents and Their Current Finance

We provide the estimation results using Equation (1) for the first set of the outcome variables in Table 2.[6] Having a job is positively associated with better finance and more income and savings, and this relationship is strongly statistically significant (the reference group is "having no job"). An individual with a job scores 0.4 points higher on their finance evaluation (on a 1-to-5 scale) and 0.2 points higher on their income or savings evaluations (on a 1-to-3 scale) (Table 2, Models 1 to 3). These results highlight the importance of employment in having higher living standards.

To gain further insights into the relationship between different types of job and one's current finance, we subsequently disaggregate employment into self-employment, having a permanent job contract, and have a short-term job contract. All these three types of job are

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[5] The ordered probit model is defined as follows $y_i^* = \delta'job_i + \theta'x_i + \tau_{it}$, where $y_i = j$ if $\mu_{j-1} < y_i^* < \mu_j$, for $j = 0,1,..., J$ and $\mu_{h,h<0} = -\infty$, $\mu_0 = 0$, and $\mu_J = +\infty$. In this model, each value of j represents a discrete value of the outcome variable. For example, the three values of the variable worries about one's job "*a lot*", "*somewhat*", and "*no worries*" respectively correspond to $j= 0, j= 1$, and $j= 2$. The probability of falling into category j is then $P(y_i = j|job_i, x_i) = \Phi(\mu_j - \delta'job_i - \theta'x_i) - \Phi(\mu_{j-1} - \delta'job_i - \theta'x_i)$, where $\Phi(.)$ is the cdf of the normal distribution. See also Greene (2019) for a textbook treatment of discrete choice models.
[6] For robustness check, we provide in Table B.3 the estimates for Equation (1) using the ordered probit model. Estimation results are qualitatively similar to those shown in Table 2. Estimates using the ordered probit model for Tables 3 and 4 are also qualitatively similar (not shown).

positively and strongly statistically significantly associated with one's financial situation, compared with the reference group of having no contract. Table 2 (Model 4) shows that self-employment is most strongly associated with better finance (0.7 points), followed by having a permanent contract (0.4 points) and having a short-term contract (0.3 points).

Notably, the estimated coefficient for being self-employed is positive and statistically significant for all the three outcomes, while those for the other two types of contract are also positive but have different statistical significance levels. Having a permanent contract is positively associated with more income, but the estimated coefficient is only marginally statistically significant at the 10 percent level. On the other hand, having a short-term contract is strongly associated with more savings, which is perhaps due to the fact that wage-workers with less job security might save more.

Turning to the other independent variables, those with good health or higher educational levels have positive self-assessments on all the three outcome variables. An individual having good health or having a college degree would score 0.4 to 0.5 points higher when evaluating their current finance, which is roughly the same magnitude shown by an individual who has a job (Table 2, Model 1). Having a graduate degree shows a slightly stronger estimated coefficient at 0.8 points higher than other groups. Older individuals unsurprisingly have better finance, with one age older being strongly statistically associated with 0.02 points higher (Table 2, Models 1 and 4). Married respondents show lower levels of saving, which can perhaps be caused by a strong need for a higher living standard, but the estimated coefficient is marginally significant at the 10 percent level (Table 2, Models 3 and 6). Ethnicity, religion, and urban/rural residence do not have a statistically significantly relationship with one's current finance or changes to income and savings.

III.2. Expectations for the Future

Table 3 provides estimates for the respondents' expectations about their own financial situations and job prospects in the next 3 months. We only show job-related variables in this table for a more focused discussion; the full regression results are provided in Appendix B, Table B.1. While individuals with a job tend to have lower expectations for their future finance (Table 3, Model 1), they have fewer worries about their job (Table 3, Model 2). But note that only the latter result is statistically significant. This latter result holds for both types of wage workers, regardless of the type of contract, but is not statistically significant for the self-employed (Table 3, Model 4). Understandably, those with a job contract can be far less worried about their job prospects than those who have no job contract (or who are self-employed), scoring 0.3 to 0.4 points less worried (on a 1-to-3 scale). Given the stable nature of their job contracts, the former group of workers are well protected under Vietnam's current labor code and social insurance law. Self-employed individuals are somewhat more optimistic about their future finance, but this is not statistically significant (Table 3, Model 3).

In Table 4, we further examine individuals' expectations about the resilience of the economy, the economy prospects in the next 3 months, as well as the expected duration of the outbreak impacts. (Full regression results are shown in Appendix B, Table B.2). Having a job is statistically significantly and positively correlated with better assessments for the economy resilience, but has no statistically significantly relationship with assessments of the economy prospects in the next 3 months, or the expected duration of the outbreak impacts (Table 4, Models 1 to 3). These results generally hold for all the three types of employment (Table 4, Models 4 to 6). The only exception is that those with a permanent contract expect the pandemic impacts to last longer, but the estimated coefficient is marginally statistically significant at the 10 percent level (Table 4, Model 6).[7]

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[7] Regarding other characteristics, older individuals and individuals in the Kinh ethnic major group tend to have less optimistic assessments for their financial situation in the next 3 months, while married individuals tend to have more job worries (Appendix B, Table B.1). The finding that women in Vietnam tend to have more pessimistic expectations for their future financial situations is consistent with recent evidence for other richer countries (Dang

IV. Further Discussion and Conclusion

We implement the first web-based rapid assessment survey in Vietnam to collect data on individuals' assessments of their current and future financial situations and the general economy immediately after the country relaxed its lockdown policy near the end of April 2020. We find that having a job is strongly and positively associated with better finance and more income and savings, and more optimism about the resilience of the economy. Further disaggregating employment into different types of jobs such as self-employment and jobs with permanent and short-term contracts, we find those with permanent job contracts to have fewer job worries and better assessments for the economy. Individuals with good health tend to have more positive evaluations for their current and future finance, but there are mixed results for those with higher education levels.

Our results highlight the importance of jobs, and job security, in improving individuals' current finance and evaluations of their future finance and the economy. This is consistent with recent evidence that creating formal and decent jobs is a first-best employment policy (World Bank, 2019; International Labor Organization, 2020). Furthermore, since consumer confidence can boost consumption spending and help build a stronger economy (Caroll, Fuhrer, and Wilcox, 1994; Roth and Wohlfart, 2019), our findings suggest that policies that create good jobs can have multiple layers of positive effects for the post-outbreak period. For those that are self-employed, it appears that policies that can provide access to business opportunities (which can help reduce their work worries) may be more important.

We find that those with higher education achievements have more positive assessments of their current finance, which concurs with recent evidence for the US and the UK (Adams-Prassl

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and Nguyen, 2021), but the estimated coefficient is marginally statistically significant in our case. Older and more educated individuals appear to be less confident about the economy resilience and expect the COVID-19 pandemic impacts to last longer, while those in good health or in the Kinh ethnic major group are more optimistic (Table B.2).

et al., 2020; Beland, Brodeur, and Wright, 2020). While we also find that more educated individuals appear less optimistic about the future, this result does not detract from the values of education in securing a better financial position. As such, besides job policies, education policies can also take an important role in shielding individuals against the harmful financial effects of COVID-19. On the other hand, it perhaps does not come as a surprise that individuals in good health are found to have more positive evaluations for their current and future finance.

Our findings also suggest that those who are more vulnerable (such as people with lower educational levels, in worse health, or without a labor contract) might be more affected by the COVID-19 pandemic. In particular, workers in the informal sector, including migrant workers, usually have no labor contract and have unstable jobs without social protection benefits. Under the COVID-19-induced lockdown, these individuals were likely to have suffered more income loss given the nature of their work.

We acknowledge that given the nature of an online rapid assessment survey, our survey sample could be biased. Yet, we corrected for potential sampling bias by reweighting the survey using the Labor Force Survey (LFS) in 2020 – the official source for labor statistics in the country. Our estimation results point to little gender difference in the pandemic impacts, which is reassuringly corroborated by similar results based on in-depth analysis of multiple rounds of the LFS (Dang and Nguyen, 2020).

A promising direction for future research is thus to collect data on these informal workers, which can provide useful inputs into social protection policies. Other fruitful directions are to collect more disaggregate data on different occupation sectors and geographical regions that can help us better disentangle potential heterogeneous effects across these categories.

References

Adams-Prassl, Abi, Teodora Boneva, Marta Golin, and Christopher Rauh. (2020). "Inequality in the impact of the coronavirus shock: Evidence from real time surveys." *Journal of Public Economics,* 189: 104245.

Alfaro, Laura, Anusha Chari, Andrew Greenland, and Peter Schott. (2020). "Aggregate and firm-level stock returns during pandemics in real time." *National Bureau of Economic Research Working Paper No.* 26950.

Baker, Scott R., R.A. Farrokhnia, Steffen Meyer, Michaela Pagel, and Constantine Yannelis. (2020). "How does household spending respond to an epidemic? Consumption during the 2020 COVID-19 pandemic." *National Bureau of Economic Research Working Paper No.* 26949.

Béland, Louis-Philippe, Abel Brodeur, and Taylor Wright. (2020). "The Short-Term Economic Consequences of COVID-19: Exposure to Disease, Remote Work and Government Response." *IZA Discussion Paper No.* 13159.

Belot, Michèle, Syngjoo Choi, Julian C. Jamison, Nicholas W. Papageorge, Egon Tripodi, and Eline van den Broek-Altenburg. (2020). "Six-Country Survey on COVID-19." *IZA Discussion Paper No.* 13230.

Bloom, D. E., Kuhn, M., & Prettner, K. (2020). Modern Infectious Diseases: Macroeconomic Impacts and Policy Responses. *Journal of Economic Literature.*

Brodeur, A., Gray, D., Islam, A., & Bhuiyan, S. J. (2020). A Literature Review of the Economics of COVID-19. *GLO Discusison Paper No. 601.*

Bui, Dzung, Bernd Hayo, Giang Nghiem, and Lena Dräger. (2021). "Consumer Sentiment During the COVID-19 Pandemic: The Role of Others' Beliefs." *CESifo Working Paper No*. 9010.

BRAC. (2020). "Rapid Perception Survey On COVID19 Awareness and Economic Impact". URL: https://reliefweb.int/report/bangladesh/rapid-perception-survey-covid19-awareness-and-economic-impact-final-draft (accessed: 20 May 2020)

Carroll, Christopher D., Jeffrey C. Fuhrer, and David W. Wilcox. (1994). "Does consumer sentiment forecast household spending? If so, why?" *American Economic Review,* 84(5): 1397-1408.

Dang, Hai-Anh, and Cuong Viet Nguyen. (2020). "Did a Successful Fight against the COVID-19 Pandemic Come at a Cost? Impacts of the Outbreak on Employment Outcomes in Vietnam." *IZA Discussion Paper No.* 13958.

---. (2021). "Gender inequality during the COVID-19 pandemic: Income, expenditure, savings, and job loss." *World Development*, 140: 105296.

Fetzer, Thiemo, Lukas Hensel, Johannes Hermle, and Chris Roth. (2020). "Coronavirus Perceptions and Economic Anxiety." *Review of Economics and Statistics*. Doi: https://doi.org/10.1162/rest_a_00946

Greene, William H. (2019). *Econometric Analysis, 8th Edition*. Pearson Education Canada.

Ho, Johnny, Aimee Kim, and Naomi Yamakawa. (2020). "Survey: Asian Consumer Sentiment during the COVID-19 Crisis". McKinsey & Company report. URL: https://www.mckinsey.com/featured-insights/asia-pacific/survey-asian-consumer-sentiment-during-the-covid-19-crisis (accessed on May 20 2020).

Huynh, Toan Luu Duc. (2020). "The COVID-19 containment in Vietnam: What are we doing?" *Journal of Global Health*, 10(1): 010338

International Labor Organization. (2020). *Decent Work*. https://www.ilo.org/global/topics/decent-work/lang--en/index.htm (accessed on May 25 2020)

La, Viet-Phuong, Thanh-Hang Pham, Manh-Toan Ho, Minh-Hoang Nguyen, Khanh-Linh P Nguyen, Thu-Trang Vuong, Trung Tran, Quy Khuc, Manh-Tung Ho, and Quan-Hoang Vuong. (2020). "Policy Response, Social Media and Science Journalism for the Sustainability of the Public Health System amid the COVID-19-19 Outbreak: The Vietnam Lessons." *Sustainability*, 12(7): 2931.

Mandhana, Niharika and Lam Le. (2020). "Some Countries Are Squashing the Coronavirus Curve. Vietnam Is One." *Wall Street Journal*, April 27, 2020.

Nguyen, Hong Kong. (2020). "Vietnam's Low-Cost COVID-19 Strategy". *Project Syndicate*, April 8, 2020.

National Economics University (NEU). (2020). "*Report on the Impacts of the COVID-19 Pandemic on the Economy and Policy Response Recommendations*" (in Vietnamese). Hanoi: National Economics University.

Our World in Data. (2021). *Vietnam: Coronavirus Pandemic Country Profile*. Accessed on June 11, 2021 at https://ourworldindata.org/coronavirus/country/vietnam#citation

Pacifico, Daniele. (2014). "sreweight: A Stata command to reweight survey data to external totals." *Stata Journal*, 14(1): 4-21.

Reed, John and Pham Hai Chung. (2020). "Vietnam's coronavirus offensive wins praise for low-cost model". *Financial Times*, March 23, 2020.

Roth, Christopher, and Johannes Wohlfart. (2019). "How do expectations about the macroeconomy affect personal expectations and behavior?" *Review of Economics and Statistics*: 1-45.

Trevisan, M., Le, L. C., & Le, A. V. (2020). The COVID-19 Pandemic: A View from Vietnam. *American Journal of Public Health*, 110(8): 1152–1153.

World Bank. (2019). *World Development Report 2019: The changing nature of work.* Washington DC: World Bank.

Table 1: Descriptive Statistics

Table 1.1: Descriptive Statistics, Vietnam 2020

	No. of observations	Mean	Sta... dev...
Self-assessment on COVID-19 impact			
Current financial situation	653	3.14	
Income change	653	1.36	
Saving change	653	1.49	
Expected financial situation during next 3 months	653	3.05	
Worry about own job	653	1.95	
Expected resilience of the economy after the current COVID-19 outbreak	653	2.10	
Expected changes to the economy during next 3 months	653	2.39	
Expected duration of impacts for the current COVID-19 outbreak	653	3.42	1
Individual characteristics			
Have a job	653	0.83	
Self-employed	653	0.11	
Have a permanent job contract	653	0.56	
Have a short-term job contract	653	0.15	
Good health	653	0.64	
Age	653	41.59	1
Female	653	0.51	
Kinh	653	0.98	
Have a college education	653	0.32	
Have a graduate education	653	0.61	
Married	653	0.76	
Follow no religion	653	0.77	
Urban	653	0.89	

Note: A higher value for one's finance or the economy indicate a better situation. We reweight the survey according t...
Source: Own calculations from the survey data.

Table 2: Characteristics of Individuals that Were Impacted by COVID-19, Vietnam 2020

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Current finance	Income change	Saving change	Current finance	Income change	Saving change
Have a job	0.440***	0.187**	0.223***			
	(0.13)	(0.08)	(0.08)			
Self-employed				0.687***	0.299**	0.459***
				(0.22)	(0.12)	(0.17)
Have a permanent contract				0.422***	0.162*	0.141
				(0.14)	(0.08)	(0.09)
Have a short-term contract				0.305**	0.163	0.235**
				(0.13)	(0.11)	(0.11)
Good health	0.436***	0.005	0.158*	0.436***	0.007	0.168**
	(0.10)	(0.06)	(0.08)	(0.10)	(0.06)	(0.08)
Age	0.018***	-0.004	-0.003	0.016***	-0.004	-0.004
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)
Female	-0.088	-0.045	-0.023	-0.065	-0.038	-0.014
	(0.10)	(0.06)	(0.08)	(0.10)	(0.06)	(0.08)
Kinh	-0.75	-0.434	0.088	-0.739	-0.434*	0.08
	(0.54)	(0.26)	(0.21)	(0.51)	(0.25)	(0.23)
Have a college education	0.522**	-0.016	-0.096	0.589**	0.011	-0.047
	(0.25)	(0.11)	(0.15)	(0.26)	(0.11)	(0.15)
Have a graduate education	0.770***	0.136	0.061	0.861***	0.177	0.147
	(0.26)	(0.12)	(0.15)	(0.27)	(0.12)	(0.17)
Married	-0.137	-0.111	-0.185*	-0.156	-0.112	-0.172*
	(0.10)	(0.07)	(0.10)	(0.11)	(0.07)	(0.10)
Follow no religion	0.036	0.019	-0.054	0.064	0.029	-0.038
	(0.12)	(0.07)	(0.10)	(0.12)	(0.07)	(0.09)
Urban	-0.187	-0.07	0.154	-0.203	-0.071	0.162
	(0.16)	(0.09)	(0.10)	(0.17)	(0.09)	(0.10)
Constant	2.152***	1.857***	1.291***	2.126***	1.845***	1.265***
	(0.64)	(0.31)	(0.24)	(0.60)	(0.29)	(0.27)
σ	0.776	0.493	0.652	0.771	0.492	0.647
Adjusted R2	0.233	0.056	0.053	0.241	0.059	0.07
N	653	653	653	653	653	653

Note: *p<0 .1, **p<0.05, ***p<0.01. Robust standard errors are in parentheses.
Source: Own calculations from the survey data.

Table 3: Expectations about Own Financial Situation for Next 3 Months, Vietnam 2020

	Model 1	Model 2	Model 3	Model 4
	Expected finance	Job worry	Expected finance	Job worry
Have a job	-0.134	-0.313***		
	(0.15)	(0.11)		
Self-employed			0.364	-0.101
			(0.22)	(0.17)
Have a permanent contract			-0.229	-0.381***
			(0.16)	(0.12)
Have a short-term contract			-0.277	-0.315***
			(0.18)	(0.12)
σ	0.884	0.634	0.867	0.63
Adjusted R2	0.056	0.119	0.092	0.131
N	653	653	653	653

Note: *p<0 .1, **p<0.05, ***p<0.01. Robust standard errors are in parentheses. Other control variables are not shown to save space. The full regression results are provided in Appendix B, Table B.1.

Source: Own calculations from the survey data.

Table 4: Expectations about the Economy, Vietnam 2020

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Economy resilience	**Economy during next 3 months**	**Expected duration of impacts**	**Economy resilience**	**Economy during next 3 months**	**Expected duration of impacts**
Have a job	0.353***	0.037	0.302			
	(0.10)	(0.12)	(0.21)			
Self-employed				0.376**	-0.012	0.466
				(0.17)	(0.22)	(0.30)
Have a permanent contract				0.353***	0.11	0.398*
				(0.11)	(0.14)	(0.22)
Have a short-term contract				0.337**	-0.082	-0.015
				(0.14)	(0.15)	(0.22)
σ	0.664	0.783	1.046	0.665	0.781	1.038
Adjusted R2	0.073	0.024	0.062	0.07	0.029	0.077
N	653	653	653	653	653	653

Note: *p<0 .1, **p<0.05, ***p<0.01. Robust standard errors are in parentheses. Other control variables are not shown to save space. The full regression results are provided in Appendix B, Table B.2.

Source: Own calculations from the survey data.

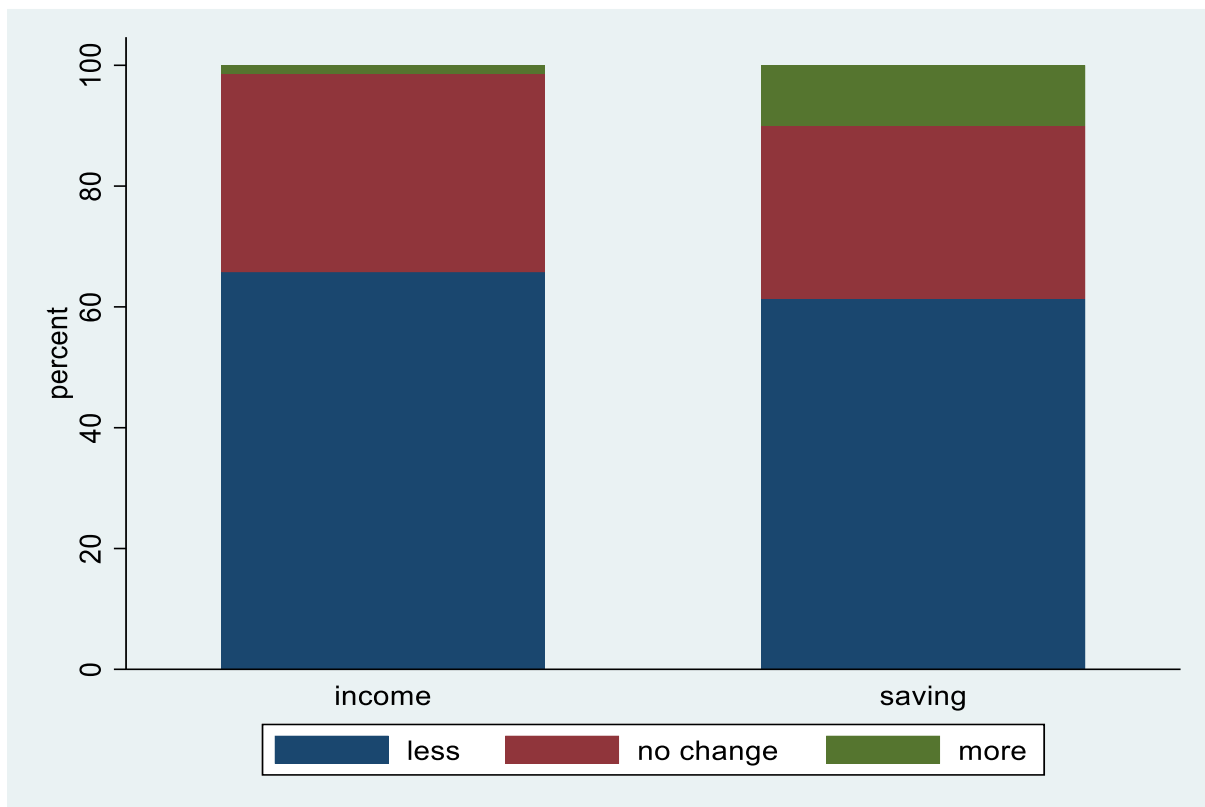**Figure 1: Changes in Households' Income and Savings Due to COVID-19, Vietnam 2020**

Source: Own calculations from the survey data.

Figure 2: Households' Expected Financial Situation for Next 3 Months, Vietnam 2020
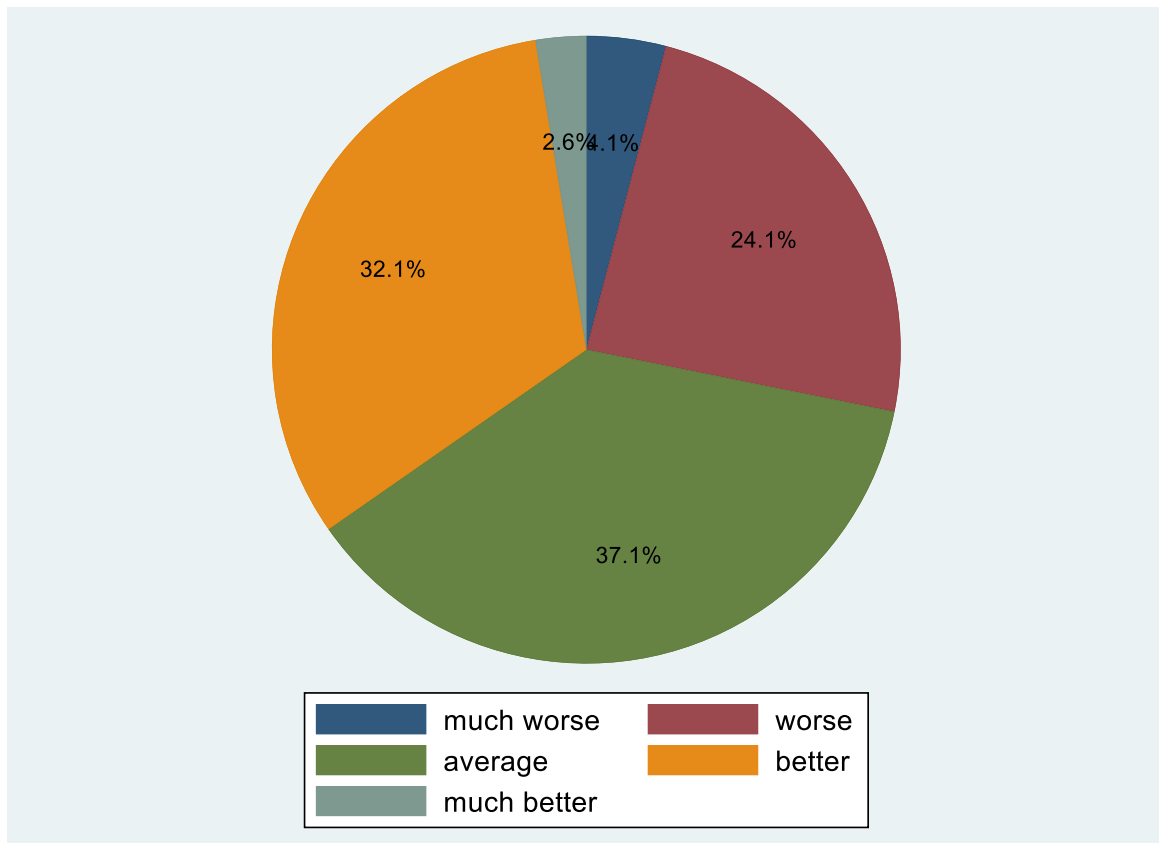
Source: Own calculations from the survey data.

Appendix A: Part of the Web-based Rapid Assessment Survey Questionnaire Related to Jobs, Finance, and Expectations

A	**PERSONAL INFORMATION**		
1	Year of birth		
2	Sex		
		Male	1
		Female	2
3	Ethnicity		
		Kinh	1
		Other (detail)_____	99
4	Permanent living place (for more than 6 months in the past 12 months)		
		Urban	1
		Rural	2
5	Highest educational level		
		Never go to school	1
		Incomplete primary school	2
		Complete primary school	3
		Complete secondary school	4
		Complete upper-secondary school	5
		College / University	6
		Postgraduate (Master, PhD)	7
		Other (detail)_____	99
6	Marital status		
		Currently married	1
		Never married	2
		Separated	3
		Divorced	4
		Widow	5
7	Are you the household head?		
		Yes	1
		No	2
8	Religion		
		No religion	0
		Buddhism	1
		Christian	2
		Protestant	3
		Hoa Hao	4
		Cao Dai	5
		Islamic	6
		Other (detail)_____	99
9	Did you work during the past 14 days?		
		Yes	1
		No	2	Skipped to A12
10	If yes, your work position was…		
		Business owner	1	Skipped to A13
		Self-employed	2
		Family business worker	3

21

	Cooperative's member	4
	Wage worker	5

11 What is the type of your work contract?

Labor contract of 3 months or less	1
Labor contract of 3 months to less than 12 months	2
Labor contract of 1 year to 3 years	3
Permanent labor contract	4
Project-based labor contract	5
By verbal agreement	6
No labor contract	7

12 What are the reasons that you do not have work now?

Have not found a job yet	1
Waiting for a new job	2
Due to business closures under COVID-19	3
Due to recent health problems	4
Due to personal / family matter	5
Other (detail)_____	99

13 What is your household's poverty status?

Non-poor	1
Poor or near-poor	2

14 Do you currently participate in a social insurance scheme?

Yes, mandatory	1
Yes, voluntary	2
No	3

19 In the past 14 days, how did you feel about your health?

Good	1
Normal	2
Not good	3

B SELF-ASSESSMENT OF COVID-19'S IMPACTS ON SOCIO-ECONOMIC LIFE

1 What do you think about our economy's resilience after COVID-19?

Optimistic	1
Normal	2
Pessimistic	3

2 What do you think about the current status of the economy?

Good	1
Normal	2
Bad	3

3 What do you expect the economy to be in the next 3 month?

Better than now	1
Unchanged, compared to now	2
Worse than now	3

4 In your opinion, how long will the COVID-19's impacts on the economy last?

Less than 3 months	1
3 months to less than 6 months	2
6 months to less than 12 months	3

	1 year to less than 2 years	4
	2 years or more	5

5   What is your assessment of your household's current financial situation?

	Good	1
	Fairly good	2
	Normal	3
	Fairly bad	4
	Bad	5

6   How would you expect your household's financial situation to change in the next 3 months?

	Much better	1
	A little better	2
	Unchanged	3
	A little worse	4
	Much worse	5

7   How did your household's income change due to COVID-19**?**

	Increased	1
	Unchanged	2
	Decreased	3

8   How did your household's expenditure change due to COVID-19?

	Increased	1
	Unchanged	2
	Decreased	3

9   How did your household's savings change due to COVID-19?

	Increased	1
	Unchanged	2
	Decreased	3

10   How do you worry about your job because of COVID-19?

	Very worried	1
	A little worried	2
	No worried	3

Appendix B: Additional Tables

Table B.1: Expectations about Own Financial Situation for Next 3 Months, Vietnam 2020

	Model 1	Model 2	Model 3	Model 4
	Expected finance	Job worry	Expected finance	Job worry
Have a job	-0.134	-0.313***		
	(0.15)	(0.11)		
Self-employed			0.364	-0.101
			(0.22)	(0.17)
Have a permanent contract			-0.229	-0.381***
			(0.16)	(0.12)
Have a short-term contract			-0.277	-0.315***
			(0.18)	(0.12)
Good health	0.083	-0.098	0.092	-0.09
	(0.12)	(0.09)	(0.11)	(0.09)
Age	-0.012**	-0.010**	-0.015***	-0.011**
	(0.01)	(0.00)	(0.01)	(0.00)
Female	-0.183*	-0.141*	-0.148	-0.132*
	(0.11)	(0.08)	(0.11)	(0.08)
Kinh	-0.807**	0.162	-0.802***	0.156
	(0.32)	(0.34)	(0.28)	(0.37)
Have a college education	0.291	-0.037	0.412	0.008
	(0.28)	(0.23)	(0.29)	(0.21)
Have a graduate education	0.164	-0.263	0.348	-0.185
	(0.28)	(0.24)	(0.29)	(0.23)
Married	0.199	0.144*	0.189	0.153*
	(0.16)	(0.08)	(0.15)	(0.09)
Follow no religion	-0.087	0.04	-0.041	0.055
	(0.14)	(0.10)	(0.13)	(0.10)
Urban	-0.08	-0.046	-0.092	-0.041
	(0.18)	(0.13)	(0.18)	(0.13)
Constant	4.278***	2.662***	4.224***	2.639***
	(0.41)	(0.40)	(0.36)	(0.44)
σ	0.884	0.634	0.867	0.63
Adjusted R2	0.056	0.119	0.092	0.131
N	653	653	653	653

Note: *p<0 .1, **p<0.05, ***p<0.01. Robust standard errors are in parentheses.

Table B.2: Expectations about the Economy, Vietnam 2020

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Economy's resilience	Economy during next 3 months	Expected duration of impacts	Economy's resilience	Economy during next 3 months	Expected duration of impacts
Have a job	0.353***	0.037	0.302			
	(0.10)	(0.12)	(0.21)			
Self-employed				0.376**	-0.012	0.466
				(0.17)	(0.22)	(0.30)
Have a permanent contract				0.353***	0.11	0.398*
				(0.11)	(0.14)	(0.22)
Have a short-term contract				0.337**	-0.082	-0.015
				(0.14)	(0.15)	(0.22)
Good health	0.164**	0.282***	-0.175	0.164*	0.271**	-0.192
	(0.08)	(0.11)	(0.15)	(0.08)	(0.11)	(0.15)
Age	-0.006	-0.003	0.015**	-0.006	-0.003	0.014**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Female	0.114	0.182*	-0.083	0.116	0.191*	-0.045
	(0.08)	(0.10)	(0.13)	(0.08)	(0.10)	(0.13)
Kinh	0.359**	0.137	-0.151	0.360**	0.155	-0.113
	(0.15)	(0.32)	(0.54)	(0.16)	(0.31)	(0.51)
Have a college education	-0.458***	-0.174	0.541	-0.452***	-0.172	0.609*
	(0.15)	(0.19)	(0.34)	(0.15)	(0.19)	(0.34)
Have a graduate education	-0.590***	-0.204	0.353	-0.581***	-0.221	0.416
	(0.15)	(0.19)	(0.37)	(0.15)	(0.20)	(0.36)
Married	0.163	0.057	0.103	0.161	0.028	0.04
	(0.11)	(0.12)	(0.16)	(0.11)	(0.13)	(0.16)
Follow no religion	0.136	-0.096	-0.005	0.139	-0.09	0.032
	(0.10)	(0.12)	(0.17)	(0.10)	(0.13)	(0.17)
Urban	0.017	0.06	0.085	0.015	0.039	0.036
	(0.11)	(0.14)	(0.23)	(0.11)	(0.14)	(0.22)
Constant	1.809***	2.233***	2.288***	1.807***	2.240***	2.274***
	(0.21)	(0.41)	(0.65)	(0.22)	(0.39)	(0.61)
σ	0.664	0.783	1.046	0.665	0.781	1.038
Adjusted R2	0.073	0.024	0.062	0.07	0.029	0.077
N	653	653	653	653	653	653

Note: *p<0 .1, **p<0.05, ***p<0.01. Robust standard errors are in parentheses.

Table B.3: Characteristics of Individuals that Were Impacted by COVID-19 Using an Ordered Probit Model, Vietnam 2020

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Current finance	Income change	Saving change	Current finance	Income change	Saving change
Have a job	0.655***	0.729***	0.459***			
	(0.19)	(0.186)	(0.155)			
Self-employed				0.629**	0.784***	0.348
				(0.256)	(0.266)	(0.227)
Have a permanent contract				0.579***	0.760***	0.387**
				(0.159)	(0.190)	(0.161)
Have a short-term contract				0.470***	0.632***	0.693***
				(0.176)	(0.219)	(0.189)
Good health	0.630***	0.059	0.293***	0.543***	0.061	0.293***
	(0.15)	(0.112)	(0.106)	(0.103)	(0.111)	(0.107)
Age	0.025***	-0.012*	-0.002	0.017***	-0.013*	0.000
	(0.01)	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)
Female	-0.084	-0.019	0.080	-0.053	-0.015	0.070
	(0.14)	(0.114)	(0.103)	(0.109)	(0.113)	(0.102)
Kinh	-1.025	-0.456	-0.209	-0.075	-0.446	-0.244
	(0.72)	(0.414)	(0.400)	(0.551)	(0.412)	(0.406)
Have a college education	0.794**	0.135	0.204	0.538**	0.146	0.186
	(0.36)	(0.268)	(0.282)	(0.232)	(0.266)	(0.289)
Have a graduate education	1.194***	0.481*	0.327	0.859***	0.487*	0.324
	(0.37)	(0.276)	(0.289)	(0.242)	(0.273)	(0.298)
Married	-0.218	-0.318**	-0.364***	-0.154	-0.335**	-0.328**
	(0.15)	(0.136)	(0.127)	(0.127)	(0.138)	(0.129)
Follow no religion	0.041	-0.057	-0.070	-0.027	-0.048	-0.089
	(0.16)	(0.121)	(0.117)	(0.110)	(0.122)	(0.116)
Urban	-0.268	-0.162	0.274	-0.122	-0.171	0.294
	(0.24)	(0.200)	(0.193)	(0.163)	(0.200)	(0.196)
μ_1		0.031	0.816*	-0.348	0.017	0.851*
	-0.659	(0.561)	(0.439)	(0.652)	(0.557)	(0.450)
μ_2	-0.867	2.115***	1.817***	0.729	2.105***	1.859***
	0.397	(0.599)	(0.440)	(0.650)	(0.592)	(0.451)
μ_3	-0.87			2.820***		
	2.406***			(0.664)		
μ_4	-0.886			3.500***		
	3.081***			(0.675)		
Log likelihood	-0.898	-434.33	-574.64	-653.31	-433.94	-572.09
Chi2	-686.39	37.737	36.693	89.214	38.658	40.826
N	74.522	653	653	653	653	653

Note: *p<0 .1, **p<0.05, ***p<0.01. Robust standard errors are in parentheses. Estimates are obtained using an ordered probit model.