



A YEAR DEFERRED – EARLY EXPERIENCES AND LESSONS FROM COVID-19 IN VIETNAM



A YEAR DEFERRED – EARLY EXPERIENCES AND LESSONS FROM COVID-19 IN VIETNAM

Acknowledgements

This report was prepared by a team from the Equitable Growth, Finance and Institutions Practice Group (EFI) who implemented the World Bank COVID-19 monitoring surveys of households and formal firms in Vietnam including the following team members:

- Poverty & Equity (report task leader): Judy Yang (Senior Economist) and Matthew Wai-Poi (Lead Economist), England Rhys Can (Consultant), Philomena Panagoulias (Consultant), and Cuong Nguyen (Consultant).
- Finance, Competitiveness, and Innovation: Shawn W. Tan (Senior Economist), Trang Thu Tran (Senior Economist), and Ngoc Phan (Consultant).

The report would not be complete without important contributions provided by a cross-sectoral World Bank team consisting of the following:

- Agriculture: Hardwick Tchale (Senior Agriculture Economist)
- Development Economics, Indicators and Data Services: Daniel G. Mahler (Economist)
- Education: Nguyet Thi Anh Tran (ET Consultant)
- Gender: Daniel Halim (Economist)
- Governance: Maham Faisal Khan (Consultant)
- Health: Christoph Lemiere (HD Practice Leader), Huong Lan Dao (Senior Health Specialist), and Anh Thuy Nguyen (Senior Operations Officer)
- Macroeconomics, Trade, and Investment: Hoang The Nguyen (ET Consultant)
- Social Protection and Jobs: Nga Nguyet Nguyen (Senior Economist), Nga Thi Nguyen (Senior Economist), Harry Moroz (Economist), and Bao Ha Pham (Consultant)

Additional comments and review were provided by:

- Dr. Thang Nguyen (Director, The Centre for Analysis and Forecast, Vietnam Academy of Social Sciences);
- Professor Edmund Malesky (Political Science Department, Duke University);
- Sailesh Tiwari (Senior Economist, Poverty & Equity, the World Bank); and
- Jacques Morisset (Lead Economist, Macroeconomics, Trade, and Investment, the World Bank).

Report guidance was provided by:

- Hassan Zaman (Regional Director, East Asia and Pacific, EFI);
- Carolyn Turk (Country Director, Vietnam);
- Rinku Murgai (Practice Manager, East Asia and Pacific, Poverty & Equity Global Practice); and
- Zafer Mustafaoglu (Practice Manager, East Asia and Pacific, Finance, Competitiveness, and Innovation Global Practice).

The report was edited by Honora Mara. The report design was produced by Saengkeo Touttavong.

Data collection of the World Bank COVID-19 household and firm monitoring surveys is partially funded by grants from the Australia–World Bank Strategic Partnership for Vietnam and the World Bank Trust Fund for Statistical Capacity Building (TFSCB). Data collection was conducted by the Mekong Development Research Institute and the Vietnam General Statistics Office.

Information on the World Bank COVID-19 household and firm monitoring surveys in Vietnam can be found here: <https://www.worldbank.org/en/country/vietnam/brief/monitoring-households-and-firms-in-vietnam-during-covid-19>.

Cover image: Aerial photography of rooftops and architecture Ho Chi Minh City Vietnam © Paul/Adobe Stock

Table of Contents

Overview.....	x
Notes	xiv
References	xiv
Chapter 1. Vietnam's early COVID-19 context.....	1
References	8
Chapter 2. Impacts on households and businesses: a year deferred.....	9
A year of adverse shocks	10
What are the disruptive COVID-19 impact channels?.....	15
What were the total impacts on household incomes?.....	33
Notes	39
References	39
Chapter 3. Coping: A reliance on self-insurance and personal networks	40
Coping strategies	41
Household self-insuring and borrowing strategies.....	42
Business adjustment strategies	47
Notes	54
References	54
Chapter 4. Policies: a call to strengthen amid heightening risks.....	55
The health response: start and finish strong.....	56
The relief response: learning from experience	67
Notes	81
References	81
Chapter 5. Impact on poverty in 2020: progress stalled but not reversed	82
A micro-macro simulation approach	83
Poverty Impacts	89
Notes	92
Reference	92
Chapter 6. Longer-term impacts: Will COVID-19 lead to widening inequality?	93
Unequal experiences during COVID-19.....	94
Future plans are affected	103
Distribution-sensitive poverty projections—longer-term simulation	106
Notes	112
References	112

Chapter 7. Policy Considerations	114
Learn from implementation challenges early on during the COVID-19 pandemic.....	115
Improve the design and implementation of household and firm support during the fourth wave.....	116
Strengthen resilience and protection systems for the future.....	118
Be observant of existing and widening monetary and nonmonetary gaps.....	120
Note	121
References	121
Appendices	122
Appendix A. Household demographic background	123
References	125
Appendix B. Household Income Background	126
Appendix C. Measuring Gender Impacts From the World Bank COVID-19 household monitoring surveys	129
Reference	130
Appendix D. Chapter 2 figures.....	131
Appendix E. World Bank COVID-19 Household Monitoring Surveys.....	133
Sampling Procedure.....	133
Panel Sample.....	134
Weighting.....	134
Questionnaires.....	134
Data Access.....	134
Notes	135
Appendix F. World Bank COVID-19 Business Pulse Surveys.....	136
Appendix G. Vietnam Labor Force Surveys.....	137
Appendix H. Chapter 3 figures	138
Appendix I. Micro-Macro Simulation Technical Information	139
Data.....	139
Macro-growth assumptions	139
Occupation choice.....	139
Mincer regressions	140
Social assistance.....	140
Estimating poverty	140
References	140
Appendix J. Distribution-sensitive poverty projections technical information.....	141
References	142

Figure Lists

Figure 1.1	Vietnam's poverty rates declined significantly over the last decade.....	2
Figure 1.2	Vietnam led the Southeast Asia region early on with the lowest numbers of COVID-19 cases an deaths.....	3
Figure 1.3	Only China and Vietnam are projected to resume strong growth in 2021.....	4
Map 1.1	Vietnam's fiscal response was not as multidimensional as responses of a number of other countries in the East Asia and Pacific region.....	5
Figure 1.4	Framework of the report	7
Figure 2.1	Concordance between World Bank COVID-19 household monitoring survey dates and Vietnam pandemic outbreaks.....	11
Figure 2.2	Self-reporting of shocks is correlated to the timing of outbreaks and lockdowns in Vietnam.....	12
Figure 2.3	Channels of disruptive impacts to household earnings during COVID-19, Vietnam.....	16
Figure 2.4	Over time, fewer Vietnamese households are experiencing new cases of employment loss	17
Figure 2.5	Transitions of economic activity in Vietnam, population aged 15 years and older	18
Figure 2.6	The population of people aged 15 and older who were not working increased in 2020, Vietnam.....	19
Figure 2.7	Share of unemployed in Q1 who remained unemployed in Q4, by year, Vietnam.....	19
Figure 2.8	Fewer Vietnamese households are experiencing labor income declines over time.....	20
Figure 2.9	Large initial employment drop, with a small recovery in late 2020, Vietnam	21
Figure 2.10	Most of Vietnam's employment changes happened in medium and large firms.....	21
Figure B2.2.1	Share of workers in Vietnam's hotel and restaurant sector in multiple quarters, by year	22
Figure B2.2.2	Transitions of Vietnamese hotel and restaurant workers from Q1 of 2020 into new sectors (Q2 or Q4)	22
Figure B2.3.1	Among Vietnam's wage workers, female main respondents reported worse outcomes during the pandemic.....	23
Figure B2.3.2	Work participation of male and female respondents in COVID-19 monitoring survey, June 2020 vs. February 2020	24
Figure 2.11	About 7 percent of Vietnamese households reported fewer adults working in March 2021 than in January 2020.....	27
Figure 2.12	Declines in income due to farming-related factors were more common among the poor and those in more rural regions of Vietnam.....	28
Figure 2.13	Farming operations and disruptions during COVID-19, Vietnam.....	29
Figure 2.14	Crop prices in Vietnam compared to the previous year	30
Figure 2.15	Family business performance in Vietnam	31
Figure 2.16	Reduced family business income was more common than family business closures, Vietnam	31
Figure 2.17	Family business outcomes by male and female respondents engagement, Vietnam.....	32
Figure 2.18	Under a longer timeline, more Vietnamese households still have lower incomes	34
Figure 2.19	Divergent recovery in an income index, Vietnam	36
Figure 2.20	Vietnamese households without any formal labor market income sources have a lower income index.....	37
Figure 2.21	Changes in the household income index varied by region, Vietnam	38

Figure Lists

Figure 3.1	Vietnamese households were more likely to use informal and self-coping strategies.....	42
Figure 3.2	Wealthier Vietnamese households that experienced a shock or income decline were more able to afford to reduce food and nonfood consumption	43
Figure 3.3	Poor Vietnamese households are more likely to consume homemade goods.....	44
Figure 3.4	Wealthier Vietnamese households are more able to rely on savings	46
Figure 3.6	Indicators of financial access, Vietnam	46
Figure 3.5	Vietnamese households are saving less than before	46
Figure 3.7	Types of borrowing by Vietnamese households during COVID-19	47
Figure 3.8	Different employment adjustments by firms in Vietnam	48
Figure 3.9	Part-time workers were the most likely to be laid off, Vietnam.....	48
Figure 3.10	Firms in Vietnam are becoming less likely to lay off workers in response to drops in sales	49
Figure 3.11	Small firms are more likely to opt for adjustments along intensive margins.....	49
Figure 3.12	Vietnamese firms faced liquidity issues in June and October 2020, but the situation improved in January 2021.....	50
Figure 3.13	External finance can double the time before firms experience cash flow shortages.....	50
Figure 3.14	Many Vietnamese firms have already fallen into arrears or expected to do so in the next six months	51
Figure 3.15	Increasing shares of Vietnamese firms are restructuring their debt	51
Figure 3.16	Many Vietnamese firms started or increased their use of digital platforms during the pandemic	52
Figure 3.17	More Vietnamese firms are selling on e-commerce platforms and social networks	52
Figure 3.18	More Vietnamese firms are receiving and making orders on e-commerce platforms and social networks.....	52
Figure 3.19	Digital platforms increased e-commerce sales, but not overall sales	53
Figure 4.1	Vietnam led the Southeast Asia region early on with the lowest numbers of COVID-19 cases and deaths.....	56
Figure 4.2	Near unanimous approval of government response in Vietnam.....	57
Figure 4.3	Mask wearing in Vietnam eased after the first outbreak in April 2020.....	58
Figure 4.4	Oxford Stringency Index trends in Southeast Asia	59
Figure B4.1.1	Google Mobility Trends, Vietnam	60
Figure B4.1.2	Google Mobility, workplace visit trends	61
Figure B4.1.3	Comparing Facebook Mobility data by province and case counts.....	63
Figure 4.5	COVID-19 vaccination trends in Southeast Asia	64
Figure 4.6	Health workers, children, and senior citizens are most often chosen as vaccination priority groups among survey respondents in Vietnam.....	65
Figure 4.7	Vietnam has one of the lowest testing rates in the region.....	66
Figure 4.8	Incidence of Vietnamese households by policy target groups	69
Figure B4.3.1	Vietnam had the second-largest relative gap between household losses and support, East Asia and Pacific	71
Figure B4.3.2	Vietnam spent much more on other forms of public spending than on income support.....	71
Figure 4.9	Perceptions of government response to COVID-19, Vietnam	73
Figure 4.10	About half of Vietnamese households view COVID-19 as a substantial threat to their finances	74
Figure 4.11	Poorer Vietnamese households are less likely to be optimistic during the pandemic	74
Figure 4.12	Vietnamese firms' access to government assistance has almost doubled since June 2020	77

Figure Lists

Figure 4.13	Implementation of Vietnam's support measures has improved, but barriers to access remain	78
Figure 4.14	Gaps in Vietnam's policy support widened, but targeting has not improved.....	79
Figure 4.15	Policy considerations for recovery	80
Figure 5.1	Illustration of model parameters to estimate welfare	84
Figure 5.2	Sector concentrations, by province	85
Figure 5.3	Growth actuals in 2020 were much lower than pre-COVID-19 forecasts	85
Figure 5.4	Distribution of Vietnamese households receiving benefits, by region and scenario.....	88
Figure 5.5	The characteristics of Vietnam's new poor differ, by poverty line.....	90
Figure 5.6	In a crisis scenario, the proportion of Vietnam's poor in services is higher	91
Figure 6.1	Continuity of education varied across Vietnam's regions and by household socioeconomic groups ...	95
Figure 6.2	An additional 2 million Vietnamese households began shopping online between February 2020 and January 2021.....	97
Figure 6.3	Facebook is the most popular digital business-to-consumer platform, Vietnam.....	97
Figure 6.4	Wealthier Vietnamese households are more likely to know someone who is engaged in the digital economy	98
Figure 6.5	Family businesses from wealthier households are more likely to have digital sales, Vietnam.....	99
Figure 6.6	Higher shares of large firms in Vietnam are using digital platforms	99
Figure 6.7	Large firms in Vietnam are using digital platforms for more sophisticated business functions.....	99
Figure 6.8	Small Vietnamese businesses have been the slowest to recover from closures.....	100
Figure 6.9	Negative effects on sales have lingered longest for small Vietnamese businesses.....	100
Figure 6.10	Ethnic minority and poor households in Vietnam are more likely to worry about food	101
Figure 6.11	Fewer Vietnamese households are eating less, but gaps remain across socioeconomic groups.....	102
Figure 6.12	Distribution of household members who stopped work or reduced work hours to take on childcare	103
Figure 6.13	Vietnamese households changed plans because of income declines, by income quintile	104
Figure 6.14	Poorer Vietnamese households were more likely to forgo investments into education.....	105
Figure 6.15	The pandemic disrupted the investment plans of most Vietnamese firms, especially agricultural businesses	105
Figure 6.16	With improving business outlooks in January 2021, fewer Vietnamese firms expect to reduce investments	105
Figure 6.17	Business expectations of Vietnamese firms reached the lowest level in October 2020 but have since recovered.....	106
Figure 6.18	In Vietnam, business expectations for the next six months are more positive for firms with higher sales growth in the past month.....	106
Figure 6.19	Inequality has been stable in Vietnam, but redistribution has not contributed to poverty reduction in recent periods ..	108
Figure 6.20	Growth incidence curves, selected periods, Vietnam.....	109
Figure 6.21	Distribution-sensitive poverty projections for Vietnam, 2018–23	110
Figure 6.22	Small changes in inequality can have large impacts on poverty in Vietnam, 2020	110
Figure 6.23	Inequality impacts can accumulate over time, Vietnam, 2020–23	111
Figure 7.1	Fiscal response, by type, selected countries.....	116
Figure A.1	Sixty percent of Vietnamese households have children	123
Figure A.2	Ethnic minorities comprise a small share of Vietnamese households	124
Figure A.3	Population distribution by region	124

Figure Lists

Figure A.4	The maximum level of education in half of Vietnamese households is less than completed upper secondary	124
Figure A.5	Fifty-six percent of households have a head that is 50 y/o or higher.....	125
Figure A.6	Agriculture is still the most common economic activity among households.....	125
Figure B.1	The prevalence of income sources varies across households, Vietnam.....	126
Figure B.2	Business and wage incomes are much higher than other income sources, Vietnam.....	127
Figure B.3	A high share of Vietnamese households receives income from multiple source	128
Figure B.4	Vietnamese households relying on only one income source	128
Figure B.5	Primary income source in Vietnam, by decile	128
Figure D.1	Vietnamese households reporting lower income at the time of interview compared to last month ...	131
Figure D.2	Vietnamese households reporting lower income at the time of interview compared to last year	132
Figure G.1	Panel data structure of Vietnam Labor Force Survey	137
Figure H.1	Vietnam has the second-lowest price level among economies in the East Asia and Pacific region....	138
Figure H.2	Most Vietnamese own their homes and have no large recurring expenses	138

Table Lists

Table 1.1	Most of Vietnam's economic indicators dampened in 2020	4
Table 1.2	Vietnam used fewer fiscal responses characterized by speed and affordability than did other countries in the region.....	6
Table 2.1	Correlates to Vietnamese households experiencing a negative shock	12
Table B2.1.1	World Bank COVID-19 household monitoring surveys, Vietnam	14
Table 2.2	Employment impacts across personal networks, Vietnam.....	17
Table B2.3.1	Female vs. male work stoppage rates, Vietnam	25
Table 2.3	Employment impacts across personal networks, Vietnam.....	26
Table 2.4	Mediators of female-specific experience of significant drop in business turnover, Vietnam	33
Table 4.1	Vietnam's household COVID-19 relief, planned vs. implementation.....	69
Table B4.3.1	Spending on social assistance before and during the COVID-19 outbreak.....	70
Table 4.2	Social assistance in Vietnam during COVID-19	72
Table 4.3	The highest share of recipients of COVID-19 benefits targeted to new applicants was located in the Northern and Coastal Central region of Vietnam.....	73
Table 5.1	Distribution of households by main economic sector of activity	84
Table 5.2	Employment elasticity in Vietnam, 2020.....	86
Table 5.3	Labor shares across scenarios, Vietnam	87
Table 5.4	Simulated cash transfer scenarios, Vietnam.....	88
Table 5.5	Summary of poverty rates in Vietnam, 2018 (actual) and 2020 (simulated).....	89
Table C.1	Household characteristics of female and male respondents in the World Bank Vietnam COVID-19 monitoring survey.....	129
Table C.2	Individual characteristics at baseline, Vietnam, 2018	130
Table E.1	Summary of five rounds of the World Bank Vietnam COVID-19 household monitoring surveys	133
Table E.2	The size of the panel sample across rounds of Vietnam COVID-19 monitoring survey	135
Table F.1	Summary of three rounds of the World Bank Vietnam COVID-19 Business Pulse Surveys.....	136

Box Lists

Box 2.1	The World Bank COVID-19 household monitoring surveys	14
Box 2.2	Workers in Vietnam's hotels and restaurants.....	21
Box. 2.3	Employment impacts by gender	23
Box 4.1	Insights from mobility and movement data	60
Box 4.2	National COVID-19 relief policies for workers and households in Vietnam.....	68
Box 4.3	COVID-19 relief packages to households, Vietnam vs. East Asia and Pacific region.....	70
Box 7.1	Emergency household support during COVID-19 in the Philippines	119

A Year Deferred – Early Experiences and Lessons from COVID-19 in Vietnam

Overview

.....

This report documents and explores the early economic impacts of COVID-19 (coronavirus) on households and businesses in Vietnam, leveraging unique information collected by the World Bank COVID-19 household and firm monitoring phone surveys collected from June 2020 to March 2021. Using new survey data, microsimulation techniques, and administrative data, this report looks in each chapter at (1) the impact of the crisis on households and businesses, (2) how they coped, (3) how the government responded, (4) how the trajectory to poverty was affected in 2020, and (5) potential longer-term consequences, particularly consequences related to increasing inequality. The period covered by the report marks the first phase of the pandemic in Vietnam, a period when COVID-19 was successfully controlled, and before the large outbreak in April 2021 caused by the Delta variant. Although COVID-19 cases in Vietnam were among the lowest in the world throughout 2020 and early 2021, households still experienced lower incomes, job loss, and hardships. Inequalities, differences in abilities to cope, vulnerabilities, and policy implementation challenges found during this early phase are cautionary signs and offer relevant lessons to consider as Vietnam faces a much more challenging phase of COVID-19 ahead.

Chapter 1.

Vietnam's Early COVID-19 Context

COVID-19 erupted onto the world stage in early 2020, and Vietnam responded swiftly. The Vietnamese government was one of the first in the world to shut its international borders in late March 2020, followed by a nationwide lockdown for the full month of April. Its citizens were compliant and followed health protocols. The government's proactive and stringent actions resulted in some of the lowest numbers of COVID-19 cases in the world.

Vietnam's early health response helped it perform remarkably well economically compared to other countries in 2020. The global contraction in 2020 was the largest since World War II, and over 100 million people worldwide were estimated to fall into poverty. Vietnam was one of only about 10 economies in the world that maintained positive economic growth in 2020. Poverty is projected to still be on a downward trajectory in 2020 but at a slightly slower pace than without the emergence of COVID-19. The decline in Vietnam's gross domestic product (GDP) at the height of the crisis in 2020 was the smallest of any country in the East Asia and Pacific region. Exports grew as some manufacturing production relocated to Vietnam, and demand for some electronic goods increased as richer countries remained locked down and at home. Successful management of the crisis further attracted even more foreign direct investment throughout the year.

Despite the favorable economic outcomes in the international context, growth decelerated, and Vietnamese households and businesses reported experiencing adverse shocks affecting employment, incomes, and daily activities. GDP growth was 4 percentage points lower in 2020 than in 2019. Even sectors that managed to take advantage of the crisis grew at lower rates than in 2019. Exports had the smallest decline in growth, still growing at 5.0 percent in 2020 compared to 6.7 percent in 2019. Growth slowed more dramatically in other sectors. GDP growth in industry and services declined by nearly 5 percentage points each. Private consumption growth nearly flattened from 7.4 percent in 2019 to 0.6 percent in 2020. Deposits data also show household deposits growing at a lower rate.

The outbreak in April 2021 adds uncertainty to the full extent of COVID-19's impacts on households and firms. It is too early to conclude the full impact of COVID-19 on households and businesses. In late April 2021, Vietnam entered its largest outbreak to date (the fourth wave), with cases found in over 30 provinces within a month. A month into the outbreak, the number of cases was as high as over the entire past year, linked to a more transmissible Delta variant. Economic growth is at risk because the latest outbreak is clustered particularly in industrial zones where many growth-driving foreign-owned manufacturing companies are located. The services sector will also suffer yet another depressed summer and holiday season. Before the emergence of the latest outbreak in April 2021, Vietnam was the only country in the region other than China projected to enjoy a "V-shaped" economic recovery, with GDP projected to bounce back to pre-COVID-19 levels by the third quarter of 2021; but a rapid recovery is now less certain. In such a highly evolving context, what was observed through the World Bank monitoring surveys in 2020 and early 2021 tells only a partial story of COVID-19 in Vietnam.

Chapter 2.

Impacts on Households and Businesses: A Year Deferred

COVID-19 halted a period of rapid income and wage growth for workers and households in Vietnam.

Real household income per capita measured using the Vietnam Household Living Standard Surveys (VHLSS) in 2020 declined by 5 percent compared to 2019.¹ In comparison, real median household income was growing at an average of 7.2 percent per year from 2010 to 2018. Before the full onset of COVID-19, wages were 9 percent higher in the first quarter of 2020 than the same quarter the year before. However, for the remainder of 2020, wages were lower than in corresponding quarters in the previous year. Wage growth in 2020 is a significant reversal from historical trends. In a span of six years from 2012 to 2018, average real wages in industry/construction and services had grown by 71 and 65 percent respectively.²

These negative impacts were also echoed in the World Bank COVID-19 monitoring surveys³ that collected information on household and firm conditions.

Given the slowdowns in economic growth and activity, households and businesses were inevitably negatively affected and experienced job losses, lower incomes, lower business turnover, and business closures. Adverse impacts from COVID-19 managed to affect households across the entire welfare distribution. However, some groups were still more likely to report lower incomes after controlling for household economic activity and geographic locations. These groups include those without formal sources of income, women, and households with children. Ethnic minorities were somewhat insulated from the economic shock because they are much more likely to be working in the agricultural sector that was less directly impacted by social distancing, but they were more adversely affected in nonmonetary dimensions. Not to be overlooked, crises can occur simultaneously, and the Mekong Delta region was also afflicted by droughts in 2020.

Over a year after the onset of COVID-19, households and firms are still on the path to recovery. The rate of income loss lightened considerably over time, though it did not disappear completely. According to responses from the World Bank monitoring surveys, about 30 percent of households self-reported still having lower incomes in March 2021 than a year before. Official statistics reported that 9.1 million workers (12.8 percent of all workers) had either lost their jobs or had reduced wages in the first quarter of 2021, and average labor incomes were 2.3 percent lower compared to the previous year (Ha and Minh 2021). Firms started to recover, and almost all businesses were open by January 2021. Although sales remained lower than in previous years, the reductions in employment are smaller than at the start of the pandemic. But ongoing outbreaks will only further delay a full recovery.

Optimism about the impacts of COVID-19 improved over time, but households remained cautious.

Those at the bottom of the welfare distribution were more pessimistic than those at the top. These negative perceptions coincide with poorer households more commonly reporting negative income shocks or their lack of capabilities to cope through shocks. At the same time, perception of financial risk was elevated over the entire survey period for households across the entire distribution. Understanding how households and firms were affected by relatively milder shocks in 2020 and early 2021 is important for challenges ahead, because a year deferred may be prolonged into two amid heightening risks.

Chapter 3.

Coping: A Reliance on Self-Insurance and Personal Networks

During COVID-19, households in Vietnam primarily relied on self-coping strategies through reducing consumption and support from personal networks.

In contrast to those in developed countries, households and small businesses in many developing countries tend to rely on more informal coping strategies. In June 2020, over 50 percent of households reported reducing consumption, 16 percent borrowed from friends and family, and 5 percent borrowed from a financial institution. Although, arguably, the COVID-19 shocks in 2020 did not necessitate large interventions, both household and firm COVID-19-related relief programs faced challenges with implementation (discussed in more detail in chapter 4). The lack of utilization of formal channels (financial institution and government support) by households to cope also reflects low levels of financial inclusion for some vulnerable groups, a social protection system that requires modernization, and a highly informal labor force. Businesses had access to more formal coping mechanisms, such as through additional financing and adoption of remote work arrangements or new technologies to reach customers. However, small and informal businesses still tend to be more constrained. Many lacked adequate access to formal finance, and a large share of businesses had to downsize operations.

Chapter 4.

Policies: A Call to Strengthen amid Heightening Risks

Arguably no country in the world proactively managed challenges in 2020 better than Vietnam, but heightening risks from COVID-19 in 2021 call for stronger actions. Reflecting on the impacts and disruptions felt by households and firms from a relatively mild year of shocks in 2020 and early 2021 is important as risks and uncertainty increase. Will the COVID-19 story for Vietnam be one of success from start to finish, or one of early success but stalled progress as challenges and risks intensified?

Vietnam took early action to contain COVID-19 and managed health risks remarkably well, but it is now behind on vaccinations amid rising cases. Risks are increasing in 2021 as the fourth wave is the largest outbreak yet in Vietnam and more difficult to contain. Moreover, progress of vaccination rollouts in Vietnam is the slowest in the Southeast Asia region. In May 2021, only 0.02 percent of the population was fully vaccinated, far below averages in developing Southeast Asia region and worldwide. About half a billion people in the world were fully vaccinated in May 2021, or roughly 6 percent of the world population.

The government is accelerating in various strategies to tackle the most recent outbreak. It has taken measures to acquire vaccines faster and monitor data in a more useful way, and has enacted strict policies to minimize new cases. The government has set up a fund to facilitate the purchase of vaccines for a target 70 percent of the population. Information from the government-run Blue Zone contact tracing and self-reporting app will be more centralized to provide more useful data insights. By early June, the government has spent 8 trillion Vietnamese dong (VND; US\$347 million) on COVID-19 prevention and policies.

The government passed policies in early 2020 to provide relief to affected households, and it can learn from the experience if future relief packages are implemented. Compared to other countries in the region, Vietnam spent less on COVID-19-related social assistance. The amounts of disbursements were also lower than originally planned. Indeed, the impacts of COVID-19 early on were mild and perhaps relief was not as urgently needed as previously anticipated. However, there were clear implementation challenges that need to be addressed in case another response is needed in the face of more lockdowns. The experience also foreshadows longer-term challenges to the effective targeting and effectiveness of the social protection system if it is not modernized. Informal workers are out of the line of sight of government and were difficult to register as new social assistance beneficiaries. Many informal workers could not provide proof or employer verification of their economic activity or show that it had been affected by COVID-19. Other implementation challenges included a lack of clarity from complex criteria and procedures, lack of digital screening and verification tools, and under-resourced staff.

Relief options for formal firms were different but faced similar implementation challenges. Government support focused mainly on providing payment extensions and reductions (in corporate income taxes, land rents, and trade union fees) and low-interest-rate loans to small and medium enterprises. However, in June 2020, less than 20 percent of surveyed firms reported benefiting from these support programs, increasing to 36 percent by January 2021. The two support policies from which most firms benefited (corporate income tax reduction and tax payment deferrals) are those that do not require strong disbursement mechanisms. Most firms reported an initial lack of awareness of these programs in June, but subsequently more firms reported issues with application difficulties and ineligibility for the programs. By January 2021, a substantial share of firms (22 percent) still considered it too difficult to apply for support programs. Consistent with this finding, 35 percent would like simplification of eligibility conditions in the future, and 22 percent asked for improved practicality (such as lowered requirements for collaterals for loans).

Under the latest outbreak, households and businesses will be adversely affected again, which may necessitate another round of relief measures.

There are a host of reasons why the latest wave is concerning and may have more impact. Aside from the high transmissibility of the new strains, Vietnam is behind on vaccinations and does not have widespread routine and accessible testing. Data from 2020 and early 2021 show that, even under mild economic slowdowns, households and businesses were adversely affected. If a larger economic slowdown occurs, what would be the scale of impact?

Chapter 5.

Impact on Poverty in 2020: Progress Slowed Down but did not Reverse

Despite relatively good macroeconomic outcomes in a COVID-19 context, adverse impacts from the pandemic still permeated into daily lives and slowed the trajectory of poverty reduction. Household incomes declined following almost a decade of 6–7 percent annualized growth. Despite lower incomes in 2020 relative to 2019, household expenditures (the basis of poverty measurement) were still 13 percent higher in 2020 than in 2018.⁴ Poverty is not expected to increase, but the progress of poverty reduction has been delayed. Poverty is estimated to be slightly higher in a COVID-19 context than in the absence of it.⁵ At the lower-middle-income poverty line (\$3.20/day 2011PPP), the new poor⁶ is a small group and tends to be informal and in the agriculture sectors. Taken from a broader perspective, this is a small setback compared to increasing poverty experienced in other countries suffering from more serious impacts and disruptions. The welfare-improving impacts of the household relief packages in Vietnam were also small because of the ultimately small-scale rollout.

Chapter 6.

Longer-Term Impacts: will COVID-19 Lead to Widening Inequality?

Even as most households adapted throughout the pandemic, goals and ambitions may have been deferred; and those with more means were able to adapt better. Among households negatively affected, the poorest are more likely to defer education needs, and are still the least likely to use or adopt digital services and technologies. Some trends proliferated across regions, such as differences in education continuity during lockdowns. Other disparate outcomes during COVID-19 build on preexisting disparities in food, digital access, health care use, and education. Impacts to nonmonetary dimensions were also unevenly felt across certain population groups such as women respondents and ethnic minorities.

Consequently, existing disparities have widened and, left unchecked, will likely lead to widening inequality and slower growth in the long term. These examples illustrate the potential widening of existing monetary and nonmonetary gaps caused by COVID-19, even in a country that was able to manage extremely well compared to most others in the world. Moreover, these gaps have long-term consequences: lost education is unlikely to be recovered, with consequences for lifetime wages; sold assets cannot produce future incomes; and employment scarring is also associated with lower lifetime earnings. Minimizing future disparities will require forward-looking policies and improving existing support systems.

The impact from inequality on poverty reduction can be just as large or larger than historical growth impacts. Moving from a no-crisis to a crisis scenario increases poverty estimates by 0.3 percentage point in 2020 (from 5.4 percent to 5.7 percent). However, a 1 percent increase in the Gini index would increase poverty by a higher rate under both the no-crisis and the crisis scenarios (0.4 and 0.6 percentage point, respectively). Globally, it was found that a 1 percent decrease in the Gini index in every country would lower global poverty more than a 1-percentage-point increase in GDP per capita (Lakner et al. 2020). Simulations also show that rising monetary inequality would further delay poverty reduction.

Chapter 7.

Policy Recommendations

There is an opportunity to learn from early experiences to improve policy responses not only for the remainder of the COVID-19 (coronavirus) crisis but also to better guard against future shocks. The experiences captured by the World Bank COVID-19 monitoring surveys are an opportunity to understand the weakest links and who are the most exposed to shocks. Fortunately, before the fourth wave, the impacts from COVID-19 in Vietnam were mild relative to the rest of the world. Yet, experiences from the early waves of COVID-19 still highlighted existing inequities and revealed policy implementation challenges. The

differential experiences between different groups of households and firms illustrate their preexisting vulnerabilities and the different capabilities in coping between groups. Observing how households and firms were affected, even if by mild shocks; how they adapted; who received assistance; and who could not cope well offers information on existing gaps in access to services, the importance of building resilience, and the need for better safety nets to guard against poverty traps and business closures. There are lessons both for the short term—how to improve the household and firm response for the much more severe fourth wave—and for the long term—how to improve the broader social safety net for times of crisis and times of normalcy.

Key dates in the COVID-19 timeline in Vietnam

Period	Major events
2020	
January	23: First positive case confirmed in Vietnam
February	
March	22: International borders closed except to experts, repatriates, diplomats, and key businesspersons.
April	1: Nationwide lockdown for one month (first wave)
May	
June	
July	28: First domestic positive case detected since April 28: Da Nang lockdown and second wave begins 31: First domestic death
August	
September	
October	
November	
December	
2021	
January	28: Hai Duong outbreak and third wave begins
February	
March	8: Vaccinations commenced
April	30: Fourth wave begins
May	15: First domestic death since September 2020

Notes

- ¹ Vietnam's General Statistics Office reported a 2 percent decline in household income in *nominal* terms (<https://e.vnexpress.net/news/business/data-speaks/binh-duong-overtakes-major-cities-tops-per-capita-income-4282618.html>).
- ² Data from Havers Analytics.
- ³ This report primarily uses information from the World Bank COVID-19 *household monitoring* survey, which completed five rounds from June 2020 to March 2021. Three rounds of the World Bank COVID-19 *firm* monitoring surveys of formally registered firms were collected over the same period, and data collection is still ongoing.
- ⁴ Household income is measured annually in the VHLSS. Household expenditure, the basis of poverty measurement, is measured every two years on the even years in the VHLSS. Official estimates of household expenditure in 2019 is not available.
- ⁵ Poverty simulations in chapter 5 utilize the 2018 VHLSS dataset. Actual poverty rates using the VHLSS 2020 data set from the General Statistics Office were not yet available at the release time of this report.
- ⁶ The new poor are those who are estimated to fall into poverty during COVID-19, but would not have in its absence.

References

- Ha, Thi, and Anh Minh. 2021. "Citizens, Businesses Hurt as Rising Prices Raise Inflation Concerns." *VNExpress*, May 19, 2021. <https://e.vnexpress.net/news/business/economy/citizens-businesses-hurt-as-rising-prices-raise-inflation-concerns-4279567.html>.
- Lakner, Christoph, Daniel Gerszon Mahler, Mario Negre, and Espen Beer Prydz. 2020. "How Much Does Reducing Inequality Matter for Global Poverty?" Global Poverty Monitoring Technical Note 13, World Bank, Washington, DC.

Chapter 1.

VIETNAM'S EARLY COVID-19 CONTEXT

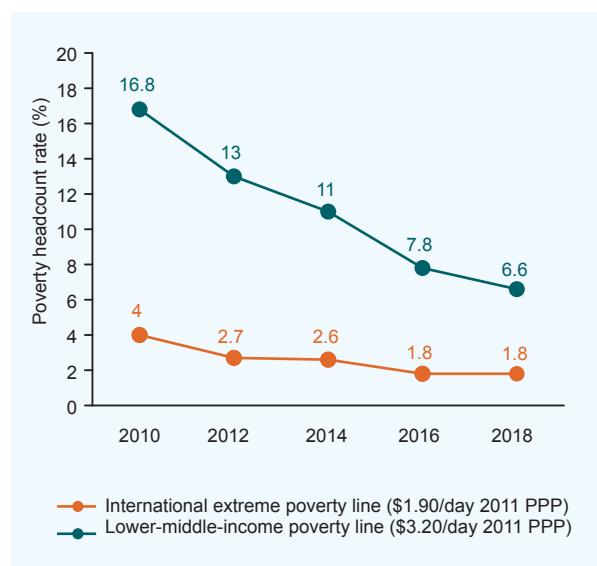
.....

COVID-19 erupted onto the world stage in early 2020, and Vietnam responded swiftly. The government's proactive and stringent actions resulted in some of the lowest numbers of COVID-19 cases in the world at the outset. Vietnam's early health response helped it perform remarkably well economically compared to other countries in 2020. The decline in Vietnam's gross domestic product (GDP) at the height of the crisis in 2020 was the smallest of any country in the East Asia and Pacific region. Despite the favorable economic outcomes in the international context, growth decelerated, and Vietnamese households and businesses reported experiencing adverse shocks affecting employment, incomes, and daily activities. In late April 2021, Vietnam entered its largest outbreak to date (the fourth wave), with cases found in over 30 provinces within a month. The latest outbreak adds uncertainty to the full extent of COVID-19's impacts on households and firms. In such a highly evolving context, what was observed through the World Bank monitoring surveys in 2020 and early 2021 tells only a partial story of COVID-19 in Vietnam.

.....

Vietnam has been extremely successful in reducing poverty over the last decade. According to the World Bank's lower-middle-income country poverty line, poverty dropped from 16.8 percent to 6.6 percent from 2010 to 2018 (figure 1.1). Perceptions match the dramatic declines in poverty. Today in the developing East Asia and Pacific region, the Vietnamese are among the most optimistic about their future. Data from 2018 Gallup Polls show 81 percent of Vietnamese said their standards of living were getting better, second only to China.

Figure 1.1 Vietnam's poverty rates declined significantly over the last decade



Source: World Bank staff estimates using VHLSS.

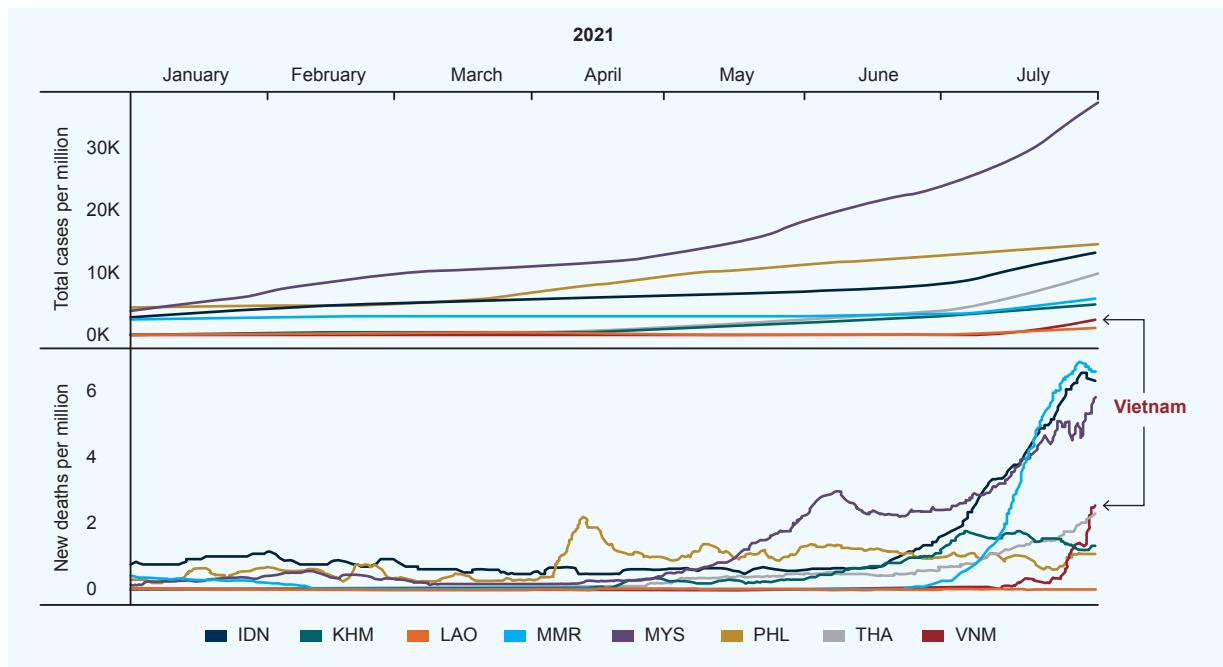
Note: PPP = purchasing power parity.

During the year 2020 and first quarter of 2021, arguably no country in the world proactively contained COVID-19 better than Vietnam. Although Vietnam did not pay sufficient attention to vaccination before April 2021, its initial response to contain COVID-19—during 2020 was exceptionally quick and tremendously successful. Over the course of the first year of the pandemic, Vietnam led the region with the fewest cases and deaths related to COVID-19; in figure 1.2, Vietnam is barely visible above the x-axis. As other countries were locked down, Vietnam remained open domestically.

Key health measures included closing international borders, strict containment policies, and a strong public health awareness campaign. International borders were closed in March 2020, and by early April 2020 the country had entered a nationwide lockdown. Even after the national lockdown ended, local mobility restrictions were quickly imposed when new cases were identified, including lockdowns of residential buildings, road blockages, and sometimes isolation of entire provinces. However, over time and with experience, the containment measures became more localized and thus had less economic impact. There was generally good compliance with these measures, and they were accompanied by a strong public health awareness campaign that focused on social distancing and healthy practices, communicated through various channels, including the news, popular songs, and direct text messaging. The public health response is explored further in chapter 4.

Vietnam's early health response helped it perform remarkably well economically in 2020. The global contraction in 2020 was the largest since World War II, and over 100 million people worldwide were estimated to fall into poverty. Vietnam was 1 of only about 10 economies in the world that maintained positive economic growth in 2020. Poverty is projected to still be on a downward trajectory in 2020 but at a slightly slower pace. The decline in Vietnam's gross domestic product (GDP) at the height of the crisis in 2020 was the smallest of any country in the East Asia and Pacific region. Exports grew as some business diverted to Vietnam, and demand for some electronic goods increased as richer countries remained locked down at home. Successful management of the crisis further attracted even more foreign direct investment throughout the year.

Figure 1.2 Vietnam led the Southeast Asia region early on with the lowest numbers of COVID-19 cases and deaths



Source: Mathieu et al. 2021, August 5, 2021 update.

Despite positive GDP growth in 2020, actual growth rates were still much lower than in previous years.

GDP growth was nearly 4 percentage points lower than forecasts made before the onset of COVID-19. Growth rates in the manufacturing and services sectors declined the most in percentage point terms. The decline in tourists and flights was severe, and the services-oriented tourism sector was one of the most affected sectors in 2020. An active domestic tourism sector prevented a complete fallout, but many accommodation and tourism businesses still closed. Between the first and second quarters of 2020, about 30 percent of hotel and restaurant workers left the sector, either losing work completely or moving to other sectors for employment. Agriculture, by contrast, performed better than before COVID-19, growing at 2.7 percent and surpassing services, the growth of which fell to 2.2 percent (table 1.1). However, looking at cumulative sectoral performance since 2018, services still outpaced agriculture by 4.7 percentage points.

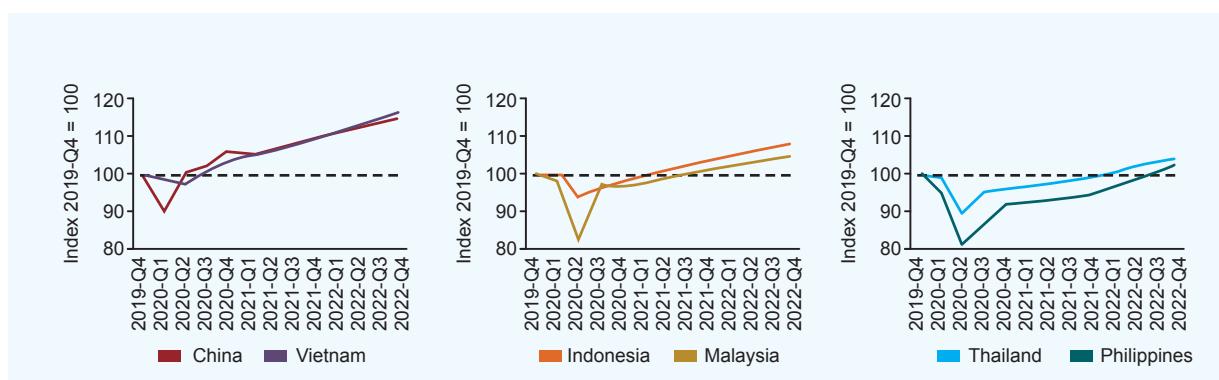
The latest outbreak adds uncertainty to the full extent of COVID-19's impacts on households and firms.

It is too early to conclude the full impact of COVID-19 on households and businesses (see chapter 2). In late April 2021, Vietnam entered its largest outbreak to date (the fourth wave), with cases found in over 30 provinces within a month. A month into the outbreak, the number of cases was as many as over the entire past year, linked to exposure from the more transmissible Delta variant. Economic growth is at risk because the latest outbreak is clustered particularly in industrial zones where many growth-driving foreign-owned manufacturing companies are located. The services sector will also suffer yet another depressed summer and holiday season. Before the emergence of the latest outbreak in April 2021, Vietnam was the only country other than China projected to enjoy a “V-shaped” economic recovery, with GDP projected to bounce back to pre-COVID-19 levels by the third quarter of 2021 (figure 1.3); but a rapid recovery is now less certain. In such a highly evolving context, what was observed through the World Bank monitoring surveys in 2020 and early 2021, described and summarized later in this report, tells only a partial story of COVID-19 in Vietnam.

Table 1.1 Most of Vietnam's economic indicators dampened in 2020

Real growth rates (%)	2018	2019	2020	2021
Real GDP	7.2	7.1	3.1	6.6
Agriculture	3.8	2.0	2.7	2.0
Industry	8.9	8.9	4.0	8.4
Services	7.0	7.3	2.4	6.6
Private consumption (% growth)	7.3	7.4	0.6	5.6
Exports, Goods and services	14.3	6.7	5.0	7.3
Imports, Goods and services	12.8	8.3	3.3	6.5
Other indicators				
International tourist arrivals (million)	15.5	18.0	3.8	
Change in the number of flights (passenger & commercial)			-23%	

Source: World Bank Macro Poverty Outlook; statistica.com; VNEpress.

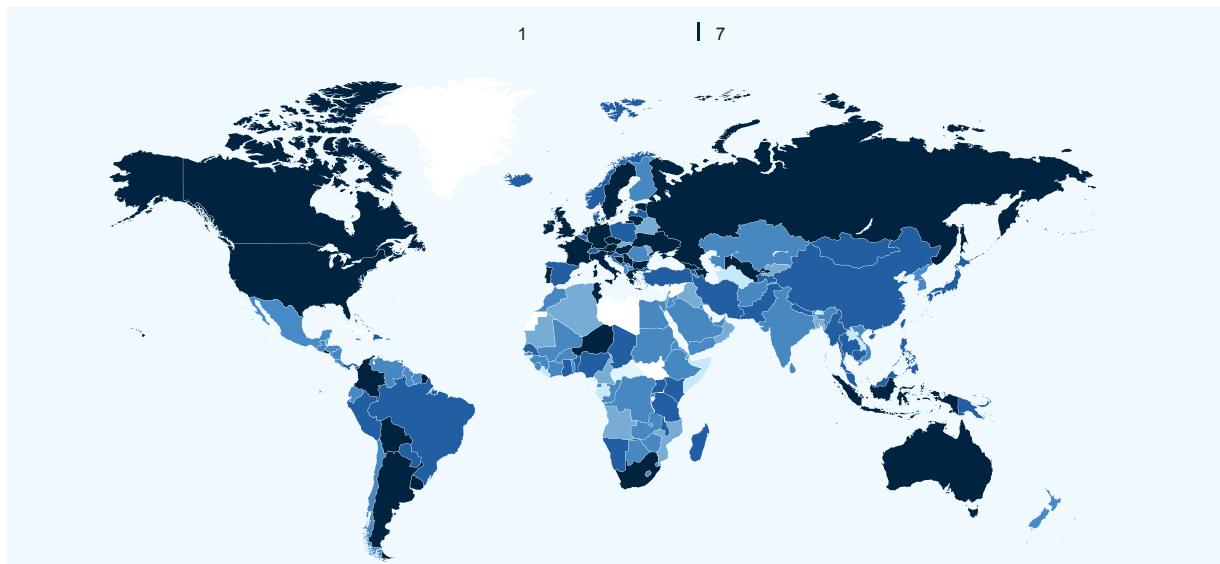
Figure 1.3 Only China and Vietnam are projected to resume strong growth in 2021

Source: World Bank 2021a, March 2021 version.

Vietnam's choice of fiscal response differed markedly from that of other countries in the region and did less to mitigate income losses. Vietnam relied much more heavily on public works, accelerated spending, and public investment than any other country in the region, spending twice as much on these responses than on direct income support to households and firms. China spent about the same on the two categories of responses and all other countries in the region spent much more on direct income support (see chapter 4). As a result, Vietnam has the second-largest relative gap between household income losses and support received, after the Philippines where greater support was received but income losses were the highest in the region.

When income support for firms and households was considered, the response was narrower and smaller than responses by other countries in the region. The World Bank's global database on fiscal responses to COVID-19 categorizes responses into seven categories (see note to map 1.1). Vietnam deployed five such categories, fewer than the six or seven in many other countries in the region. An emergency response for both firms and households was rolled out early on during the crisis, but was short in duration and limited in scope. The national level household COVID-19 relief rollout lasted for three months and was smaller than originally planned due to implementation issues. Support for firms was primarily in the form of tax and debt deferrals, but

Map 1.1 Vietnam's fiscal response was not as multidimensional as responses of a number of other countries in the East Asia and Pacific region



Source: Lacey, Massad, and Utz 2021.

Note: Seven categories are (1) revenue measures to protect businesses; (2) revenue measures to protect individuals/boost consumption and demand; (3) revenue measures to promote availability of medical items; (4) direct support to businesses; (5) expenditure measures for individuals; (6) health expenditure measures; and (7) preferential loans to firms and households.

these programs also faced implementation challenges and benefited smaller and informal firms less. Table 1.2 shows the characteristics of different fiscal responses for developing countries in East Asia as well as some of their characteristics. Of note is that Vietnam's response was faster but less able to be targeted to particular populations than the regional average, and was more focused on affordability and predictable cost control. Chapter 4 discusses Vietnam's household and firm fiscal support in more detail and the various implementation issues, despite their relative non-complexity.

Support was boosted to existing social protection beneficiaries and expanded to cover additional informal workers, but relief benefits were small and implementation issues limited their expansion. All beneficiaries who were already enrolled in an income support scheme received a top-up in addition to their standard benefits; the boost was smoothly implemented through existing distribution channels, although payments were largely still cash-based, a potential issue during a pandemic. The government also identified new target groups that were adversely affected by COVID-19,

primarily informal workers. However, difficulties in assessing eligibility limited total expansion. Moreover, the benefits were low and short in duration. Chapter 4 discusses Vietnam's household and firm fiscal support in more detail and the various implementation issues, despite their relative noncomplexity; chapter 5 quantifies the limited nature of their mitigating effect on increases in poverty.

Support to firms also suffered from implementation issues and tended to favor larger, more formal firms.

Policies were primarily in the form of tax deferments and credits, and were available for a longer period of time. Lack of awareness and other implementation issues existed, but the continuous availability of assistance to firms over time has meant increasing coverage; more than one-third of firms had taken advantage of some support by January 2021. However, large firms are much more likely to receive support than small and medium enterprises. The heavy reliance on tax reductions and deferrals favored formal (and larger) firms (see chapter 4 for a more detailed examination).

Table 1.2 Vietnam used fewer fiscal responses characterized by speed and affordability than did other countries in the region

	Count	Target	Speed	Abuse	Afford	Cost	Reverse	Scale	Admin
China	23	0.7	0.7	0.3	0.2	0.3	0.6	0.3	0.2
Indonesia	25	0.5	0.8	0.4	0.1	0.5	0.6	0.6	0.4
Cambodia	18	0.7	0.9	0.3	0.2	0.6	0.5	0.8	0.2
Lao PDR	0								
Myanmar	11	0.7	0.9	0.6	0.4	0.6	0.9	0.9	0.7
Mongolia	9	0.8	0.9	0.4	0.2	0.3	0.8	0.8	0.0
Malaysia	26	0.7	1.0	0.7	0.3	0.6	0.7	0.8	0.3
Philippines	21	0.9	1.0	0.7	0.1	0.5	0.9	0.8	0.2
Thailand	23	0.2	0.7	0.2	0.1	0.4	0.5	0.7	0.3
Timor-Leste	8	0.1	0.5	0.1	-0.1	0.5	0.6	0.5	0.8
Vietnam	10	0.6	0.9	0.5	0.4	0.8	0.8	0.8	0.7
Average	16	0.6	0.8	0.4	0.2	0.5	0.7	0.7	0.4

Source: Lacey, Massad, and Utz 2021.

Note: Policy dimensions were scored on a scale from 0 (does not meet the criterion) or 1 (meets the criterion). The eight dimensions are (1) targetability—the extent to which the instrument allows to directly target specific business or population groups or activities; (2) speed—the time elapsed between the adoption of the instrument and the desired impact; (3) abuse resistance—the ease with which abuse by eligible beneficiaries and other parties involved with the measure can be controlled; (4) affordability—the extent to which the use of the instrument affects fiscal stability (for example, instruments that provide support in the form of credits or through the deferral of payments will have lower cost implications than instruments in the form of outright grants and expenditure); (5) predictability and control of cost—the extent to which upper limits for the cost of a program can be established and the actual cost can be reasonably well predicted; (6) scalability—the extent to which the instrument can be expanded or replicated for additional groups of beneficiaries in accordance with needs; (7) reversibility—the ease with which the response can be withdrawn, without causing economic and behavioral distortions; (8) administrative ease—the extent to which the instrument can be implemented within existing administrative capabilities. The score for each country is the unweighted average over all fiscal responses, regardless of program size.

The rest of this report examines the impacts on households and firms through different channels, and discusses policy responses and the potential longer-term impacts on inequality (figure 1.4). The next chapter asks what shocks households and firms faced and how they were affected through different channels. Chapter 3 asks what coping strategies households adopted in the face of these shocks and impacts, and chapter 4 examines both the public health

and fiscal response to support both households and firms. Chapter 5 brings together the earlier sections to ask what the overall impact on household poverty is likely to have been. Chapter 6 is more forward looking and asks whether disparities in impact, coping, and response are likely to have longer-term consequences for inequality in Vietnam. Finally, chapter 7 summarizes policy recommendations.

Figure 1.4 Framework of the report



References

- Lacey, Eric, Joseph Massad, and Robert Utz. 2021. "A Review of Fiscal Policy Responses to COVID-19 (February)." World Bank, Washington, DC.
- Mathieu, E., H. Ritchie, E. Ortiz-Ospina, M. Roser, J. Hasell, C. Appel, C. Giattino, and L. Rodés-Guirao. 2021. "A Global Database of COVID-19 Vaccinations." *Nature Human Behavior* 5: 947–53. August 5, 2021, update.
- World Bank. 2021a. Uneven Recovery: World Bank East Asia and Pacific Economic Update (April). Washington, DC: World Bank.

Chapter 2.

IMPACTS ON HOUSEHOLDS AND BUSINESSES: A YEAR DEFERRED

.....

The COVID-19 (coronavirus) pandemic halted a period of rapid household income and wage growth in Vietnam as real household incomes and wages declined in 2020. Results from the World Bank COVID-19 monitoring surveys conducted between June 2020 and March 2021 echo the presence of adverse impacts. By March 2021, about 30 percent of households still self-reported that household incomes were lower than in March 2020. Despite a trend of steady recovery since the first lockdown, firm sales in January 2021 are still about 16 percent lower than pre-pandemic levels. In a rapidly changing context, impacts observed over the monitoring period are only a partial story of the household and business experience during COVID-19. In late April 2021, the largest outbreak to date broke through (the fourth wave). Understanding how households and firms were affected by relatively mild shocks in 2020 and early 2021 is important for challenges ahead, because a year deferred may be prolonged into two.

..... A YEAR OF ADVERSE SHOCKS

Across the world, countries experienced disruptive impacts from COVID-19 that ranged from short lockdowns to more dire battles of survival. COVID-19 adversely affected all aspects of life including employment, income security, mortality, health, service delivery, food security, learning, and general well-being. Vietnam fared better than most countries throughout the world both economically and health-wise. However, households were still adversely affected in 2020, a year deferred for some. There are risks that a year deferred will stretch closer to two. In late April 2021, Vietnam entered its largest outbreak yet, a high-risk evolving situation amid low vaccination rates.

The World Bank COVID-19 monitoring surveys of households were collected from June 2020 to March 2021, amid unpredictable episodes of outbreaks (see box 2.1 and appendix E for additional survey information).⁷ Survey rounds asking about experiences during outbreak waves naturally led to more adverse responses. In rounds 1, 3, and 5, respondents reported on conditions over a period that included an outbreak (figure 2.1). Rounds 2 and 4 did not reference conditions during an outbreak. However, responses to survey round 4 referenced a period very close to the end of the Da Nang wave. The Da Nang wave was prolonged and marked the country's first domestic death. Sporadic cases continued to occur throughout December 2020 and may have affected perceptions and responses. Alert was still heightened in the end of 2020, even though domestic transmission was low. The concordance between survey dates and outbreaks in Vietnam are especially important to highlight because Vietnam went in and out of outbreaks that caused time-specific shocks.

Over the course of 2020 and early 2021, the share of households that reported experiencing new negative shocks subsided dramatically after the first wave (figure 2.2).⁸ Almost 70 percent of households reported experiencing a negative shock⁹ between February and June 2020, which covers the duration of nationwide lockdowns in April 2020. Low responses to experiencing adverse shocks in round 2 align with a period with no local transmissions in Vietnam and when activities were relatively normal. Across the last three rounds of the surveys, the share of households reporting negative shocks was much lower at less than a third, but the trend did not improve. During the last three survey rounds, the country was frequently on alert related to COVID-19 outbreaks and containment.

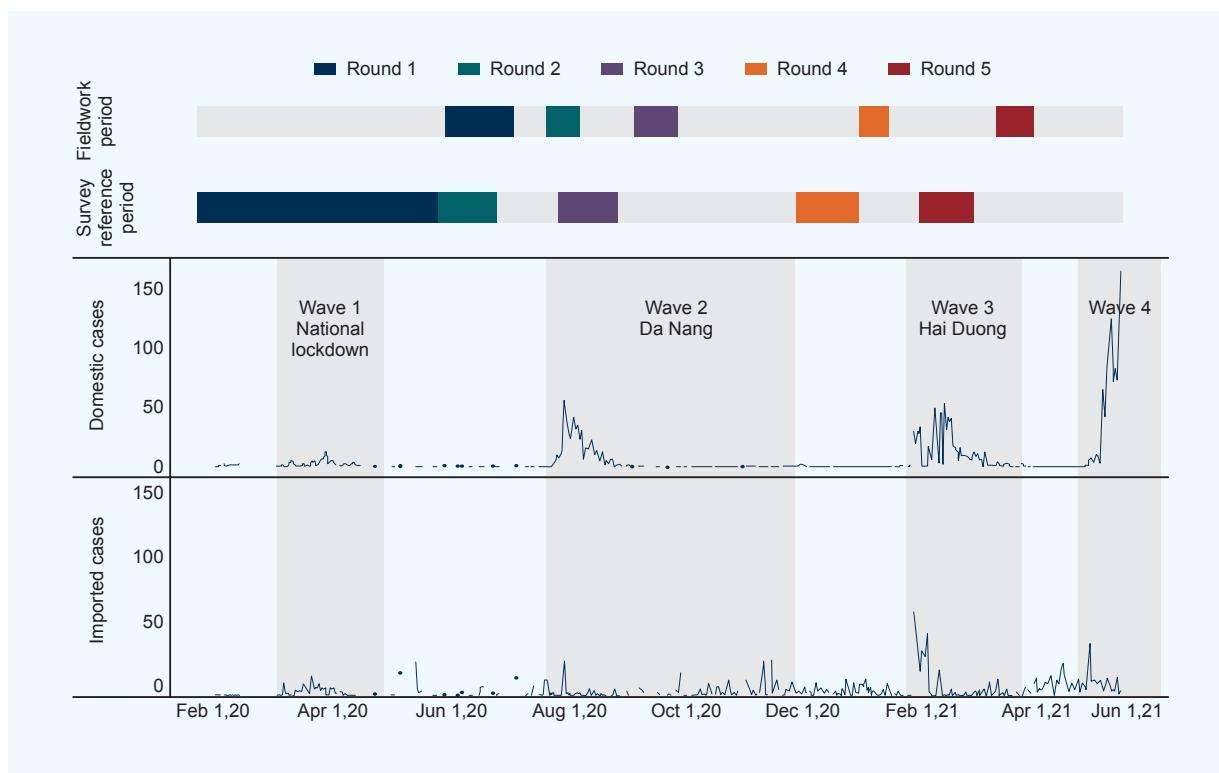
The crisis can affect households across the entire welfare distribution through a variety of channels in different ways. Wealthier households more likely experienced losses from family businesses, and poorer households experienced losses from farming activities. However, for poorer households, shocks can be poverty traps and thus more consequential to household welfare. In three out of five survey rounds, households in the top welfare quintile were less likely than the poorest to experience negative shocks (table 2.1). The bottom 20 percent reported significantly higher negative shocks than the rest of households in two out of five rounds.

Other household demographics correlate to the reporting of experiencing negative shocks. For example, households with children were more likely to report experiencing shocks in rounds 1 and 5, coinciding with occurrences of school closures. There is also a significant gender component across most rounds coinciding with outbreaks (all rounds except round 2), in which male respondents are less likely than female respondents to report that the household experienced a negative shock. These gender differences persist after controlling for a range of observable household characteristics, and are likely related to women's disproportionate burden of home care responsibilities.

Household economic activities are related to the likelihood of reporting negative shocks. All economic activities reported negative shocks in round 1. Across rounds, agriculture households were more likely to report shocks than nonagriculture households only in round 1, reflecting the impacts of droughts that severely affected farming in some regions. Family businesses reported experiencing shocks throughout the survey cycle. Lockdowns and a general depressed demand in 2020 directly affected businesses.

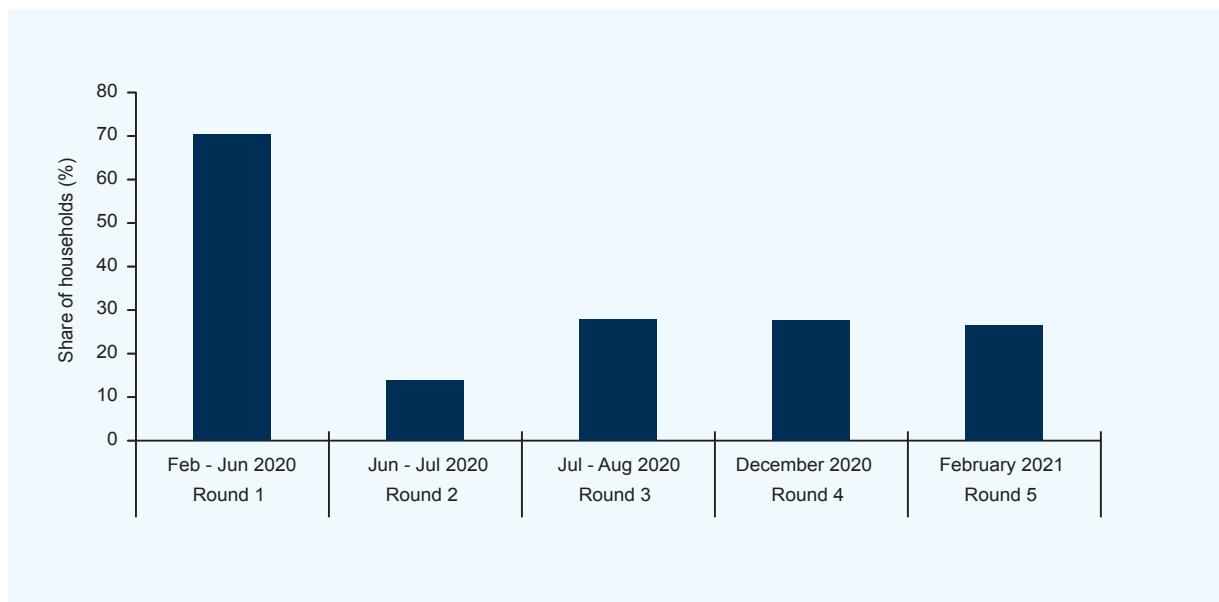
Reporting of negative shocks aligns with the timing and location of outbreak epicenters. In round 1, there was no strong differences in the regional dispersion of households experiencing negative shocks because round 1 coincided with the nationwide lockdown in April 2020 (see survey and outbreak concordance in figure 2.1). Households in the North and Central Coast region were more likely to report negative shocks in round 3 during the Da Nang outbreak, but effects were persistent, and households in this region were still more likely to report negative events in round 4, conducted several months later. By round 5, all other regions were less likely to report negative events relative to the reference region, the Red River Delta, where the center of the third outbreak wave—Hai Duong—was located.

Figure 2.1 Concordance between World Bank COVID-19 household monitoring survey dates and Vietnam pandemic outbreaks



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

Note: Reference period shown is for the “previous month.” Survey reference periods vary depending on the specific question. The fieldwork period for round 1 was the longest since the baseline sample had to be established. The baseline sample was also the largest to anticipate later attrition because subsequent rounds were mostly call-backs. Fieldwork for round 3 was also longer because an expansion sample was conducted in provinces affected by wave 2 of the pandemic.

Figure 2.2 Self-reporting of shocks is correlated to the timing of outbreaks and lockdowns in Vietnam

Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

Note: Dates shown are the survey reference period for each round. The reference period is typically the full month before the date of interview. The exception is round 1 for which the reference period is longer (from February to June 2020). The wording in round 1 was also slightly different, and asked if respondents experienced “income decline,” rather than a “negative shock.” In rounds in which field work spanned two months, the reference period also varied by date of interview.

Table 2.1 Correlates to Vietnamese households experiencing a negative shock

	(1) R1	(2) R1	(3) R2	(4) R2	(5) R3	(6) R3	(7) R4	(8) R4	(9) R5	(10) R5
Household characteristics										
Bottom 20	0.04 (0.04)		0.07 (0.07)		0.19** (0.06)		0.15* (0.06)		0.02 (0.06)	
Quintile 2		0.12+ (0.06)		-0.13 (0.09)		0.06 (0.08)		-0.11 (0.09)		-0.04 (0.09)
Quintile 3		0.09 (0.07)		-0.02 (0.11)		-0.12 (0.09)		-0.15 (0.10)		-0.01 (0.10)
Quintile 4		0.09 (0.07)		-0.18 (0.11)		-0.21* (0.09)		-0.26* (0.10)		-0.09 (0.10)
Quintile 5		-0.14* (0.07)		-0.26* (0.12)		-0.15 (0.10)		-0.23* (0.11)		-0.05 (0.11)
Kinh majority	0.21** (0.07)	0.19** (0.07)	-0.04 (0.12)	-0.02 (0.12)	0.05 (0.08)	0.04 (0.08)	0.22* (0.09)	0.24* (0.09)	0.15+ (0.09)	0.16+ (0.09)

Table 2.1 Continued.

	(1) R1	(2) R1	(3) R2	(4) R2	(5) R3	(6) R3	(7) R4	(8) R4	(9) R5	(10) R5
HH w/child	0.31** (0.04)	0.29** (0.04)	0.08 (0.08)	0.06 (0.07)	0.08 (0.06)	0.08 (0.06)	0.11 (0.07)	0.11 (0.07)	0.12+ (0.07)	0.12+ (0.07)
Male respondent	-0.12** (0.04)	-0.12** (0.04)	-0.06 (0.07)	-0.06 (0.07)	-0.19** (0.06)	-0.19** (0.06)	-0.17** (0.06)	-0.17** (0.06)	-0.19** (0.07)	-0.19** (0.06)
Economic activity										
Wage	0.30** (0.05)	0.29** (0.05)	-0.02 (0.08)	-0.01 (0.08)	0.01 (0.06)	0.01 (0.07)	0.02 (0.07)	0.02 (0.07)	0.05 (0.07)	0.05 (0.07)
Agriculture	0.13* (0.05)	0.11* (0.05)	-0.04 (0.08)	-0.05 (0.08)	-0.09 (0.07)	-0.09 (0.07)	0.03 (0.09)	0.03 (0.09)	-0.20* (0.08)	-0.21* (0.08)
Family business	0.77** (0.06)	0.78** (0.06)	0.19* (0.08)	0.20* (0.08)	0.12+ (0.07)	0.11 (0.07)	0.17* (0.08)	0.18* (0.08)	0.20** (0.07)	0.20** (0.07)
Geography										
Urban	-0.20** (0.05)	-0.18** (0.05)	-0.02 (0.08)	0.00 (0.08)	0.07 (0.07)	0.07 (0.07)	-0.10 (0.08)	-0.09 (0.08)	-0.22** (0.08)	-0.22** (0.08)
Midlands and North Mountains	-0.07 (0.07)	-0.07 (0.07)	0.03 (0.12)	0.01 (0.12)	-0.03 (0.09)	-0.03 (0.09)	0.11 (0.10)	0.10 (0.10)	-0.01 (0.10)	-0.01 (0.10)
North and Central Coast	0.00 (0.06)	-0.01 (0.06)	0.20+ (0.10)	0.18+ (0.10)	0.25** (0.08)	0.25** (0.08)	0.22* (0.09)	0.21* (0.09)	-0.15+ (0.09)	-0.15+ (0.09)
Central Highlands	-0.13 (0.08)	-0.13 (0.08)	-0.04 (0.14)	-0.06 (0.14)	0.14 (0.11)	0.14 (0.11)	-0.05 (0.12)	-0.06 (0.12)	-0.16 (0.12)	-0.16 (0.12)
Southeast	0.10 (0.08)	0.11 (0.08)	0.18 (0.14)	0.18 (0.14)	0.07 (0.11)	0.07 (0.11)	0.08 (0.13)	0.08 (0.13)	-0.15 (0.12)	-0.14 (0.12)
Mekong Delta	-0.10+ (0.06)	-0.12+ (0.06)	0.17 (0.11)	0.16 (0.11)	0.11 (0.08)	0.11 (0.08)	0.04 (0.09)	0.04 (0.09)	-0.17+ (0.10)	-0.17+ (0.10)
Constant	0.00 (0.10)	0.03 (0.10)	-1.22** (0.18)	-1.08** (0.17)	-0.74** (0.13)	-0.57** (0.13)	-0.93** (0.16)	-0.73** (0.16)	-0.49** (0.16)	-0.45** (0.15)
Observations	6,148	6,148	3,932	3,932	4,559	4,559	3,945	3,945	3,922	3,922

Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

Note: Household (HH) quintiles are based on the welfare distribution in 2018. Standard errors in parentheses, *** p<0.01, ** p<0.05, + p<0.1, errors clustered by region.

Box 2.1

.....

The World Bank COVID-19 household monitoring surveys

Five rounds of the World Bank COVID-19 household monitoring surveys were conducted from June 2020 to March 2021 in Vietnam. The surveys covered a range of topics from behaviors to health, education, employment, coping, income changes, perceptions, food insecurity, and vaccines. Some questions were asked in all rounds, others were not, and some were added or removed as the context demanded. The majority of questions pertain to the household condition, such as if the household was affected by school closures, or trends in total household incomes. Other questions reflected the views and conditions of the main respondent, such as aspects of that person's wage employment, and his or her opinions on vaccines and government policies.

Surveys were collected at varying intervals that influence trends and comparisons across rounds (table B2.1.1). Round 1 had the longest fieldwork period because a baseline sample had to be established, and because a larger sample was contacted for the baseline to anticipate attrition in follow-ups. Some questions also had longer reference periods because it was the first round. For some questions in round 1, respondents were asked about experiences since the emergence of the pandemic (February 2020) to the time of interview. In subsequent rounds, questions usually asked about the current situation only at time of interview or over the last month. Round 2 is the only round in which the reference period does not cover a period with local transmission.

Table B2.1.1 World Bank COVID-19 household monitoring surveys, Vietnam

Round	Field work dates	Special notes
1	June 5–July 8, 2020	Round 1 was planned to be a larger sample than the subsequent rounds. The reference period for some questions in Round 1 included Wave 1 and as early as February 2020.
2	July 27–Aug. 12, 2020	This is the only round where there were no domestic cases recorded during the survey reference period.
3	Sept. 9–Oct. 1, 2020	This round covered conditions during the 2d wave. The sample size in this round is larger since there was an expansion cover more households in the 2nd wave outbreak areas.
4	January 2–15, 2021	Conditions covered by Round 4 are near the end of the 2nd wave.
5	March 13–31, 2021	The final round asked about conditions during the period including the 3rd outbreak as well as Tet.

Source: World Bank

The fourth and largest outbreak to date in Vietnam emerged at the end of April 2021 but is outside the period of analysis. In a span of one month from April to May 2021, Vietnam recorded as many cases as it had in the entire previous year. In a rapidly evolving context, what was observed through the World Bank monitoring surveys in 2020 and early 2021 is only a partial story of COVID-19 in Vietnam. However, lessons can still be learned to better handle the emerging and more challenging risks ahead.

Additional information for the World Bank COVID-19 household monitoring surveys, World Bank Business Pulse Surveys, and the Vietnam Labor Force Surveys are provided in appendixes E–G.

WHAT ARE THE DISRUPTIVE COVID-19 IMPACT CHANNELS?

In the case of Vietnam, disruptive effects from COVID-19 were felt primarily through the labor market. Vietnam was extremely successful in the management of COVID-19 health risks, and the disruptive impacts of COVID-19 to households were primarily through declines in labor market earnings stemming from declining aggregate demand, supply disruptions, and the associated decrease in employment and/or the returns to productive activities. Impacts were felt first and foremost by those employed in vulnerable sectors, such as tourism and traditional services (for example, transportation and retail sales). Those employed in the informal sector or engaged in small-scale family business activities also proved more vulnerable. The World Bank monitoring surveys capture mostly household-level impact channels except for information on individual employment changes of the main respondent. Information on employment trends during COVID-19 is complemented by information from the Vietnam Labor Force Survey (LFS).¹⁰

Transfers did not have a large impact in offsetting changes to labor income. Indications from macroeconomic reporting show that international remittances increased by 3 percent in 2020. However, from a welfare perspective, remittances are most likely received by wealthier households, thus increases in remittances are unlikely to have off-set income losses for poorer households (see appendix B on household income sources). In aggregate, remittances are also a small share of total household income. The COVID-19 social assistance cash support was minimal and did not have large welfare implications, as will be discussed in chapters 3 and 4.

Price inflation did not materialize as an early risk, but that may be changing. Disruptions in the functioning of markets due to decline in international trade, foreign direct investment, and domestic economic activity could lead to price increases and/or rationing of basic consumption goods, including food (and production inputs). Although this disruptive channel was relevant in many other countries, it was less relevant in Vietnam

in 2020. Prices for rice remained competitive, whereas some other crops saw prices decline as global supply chains limited exports. However, in 2021, prices are showing signs of higher inflation as global demand begins increasing (Ha and Minh 2021).

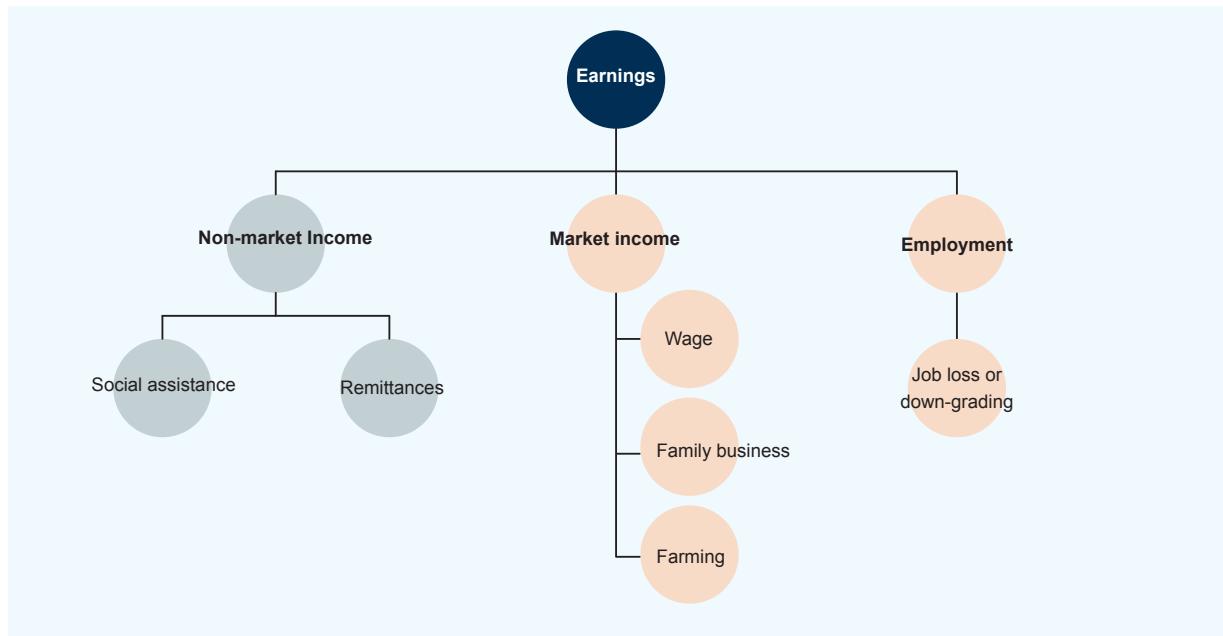
Public services largely operated normally. Disruptions to public service delivery, particularly health and education services, can negatively affect both physical and cognitive development, which may also affect mortality, morbidity, and a country's future productivity. Throughout the pandemic, the health system was not stressed and access to health was not affected, nor was public safety ever at risk. However, with the emergence of the fourth wave, a much wider spread, and some clusters emerging from within hospitals, hospital capacity may begin to be strained and access to routine services may become more challenging. School closures also occurred with inconsistent distance learning solutions. The nonmonetary impacts from COVID-19 will be discussed in chapter 6.

In the remainder of this chapter, the impacts on households through the earnings channel are described, following the categories shown in figure 2.3. In addition, trends in total household income throughout the survey period are discussed, with a highlight on differential impacts across groups. Appendixes A and B provide further background information on the demographics and income sources of Vietnamese households.

Employment

The share of households reporting job losses within the previous month(s) was at its highest point in the first two quarters (Q1 and Q2) of 2020, and reduced substantially in subsequent quarters (figure 2.4).¹¹ In the first round of the World Bank COVID-19 surveys with fieldwork conducted from late June to mid-July, about 30 percent of households reported losing employment between February and June 2020. In subsequent rounds, the reporting of job loss reduced substantially.¹²

Figure 2.3 Channels of disruptive impacts to household earnings during COVID-19, Vietnam



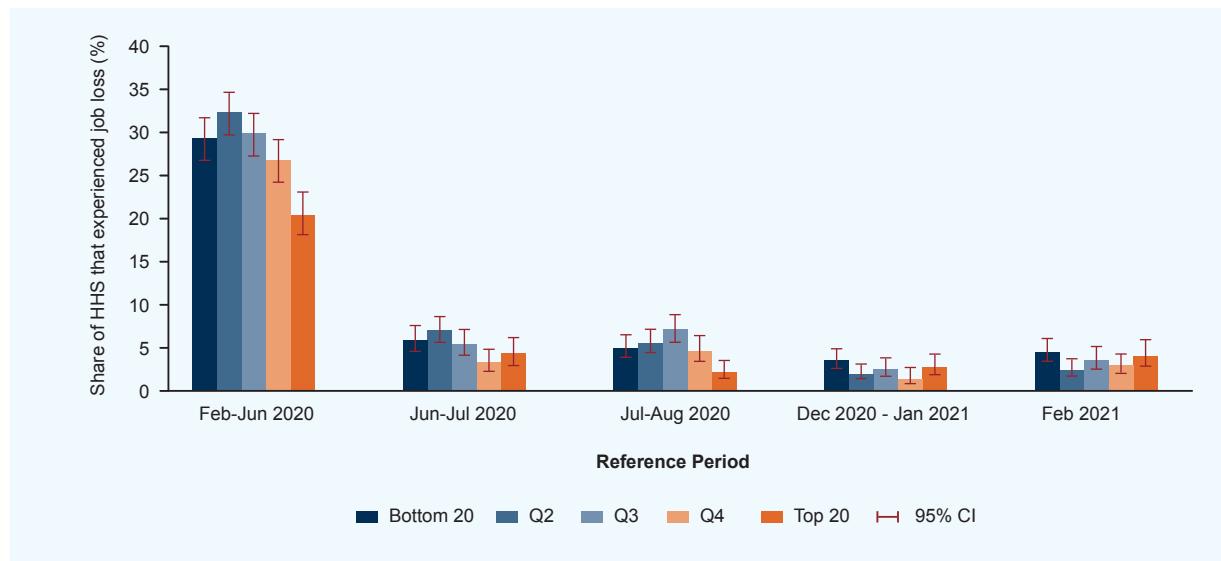
Source: World Bank

Note: Light orange indicates some adverse impacts were felt by households. Nonmarket income sources, highlighted in gray, are not discussed in detail in this chapter. The COVID-19 social assistance fiscal policy will be discussed in chapter 3. Information on remittance income was not captured in detail in the World Bank COVID-19 monitoring surveys.

Households in the lower end of the welfare distribution were more likely to experience job loss during the lockdowns in the first half of 2020. In regression analysis, households in the top quintile were significantly less likely to report job loss than other quintiles across all but the last round. Typically, the labor force in Vietnam experiences seasonal fluctuations, with the size of the labor force gradually increasing from Q1 to Q4. This trend was observed in the previous three years (2017–19). However, in 2020, the labor force was smaller in Q4 than in Q1, indicating that the usual seasonal job growth was derailed in 2020 (GSO 2021a). Sectors with employment that grew year on year Q4 of 2018 to Q4 of 2019, but contracted between Q4 2019 and 2020 were construction and trade.

Adverse labor impacts occurred broadly across different socioeconomic groups and geographic areas. A little less than one-third of all respondents knew someone who had lost a job or switched jobs since the beginning of the pandemic (table 2.2). Rates are lower among households in poorer provinces and among ethnic

minorities, who are more likely to be in agricultural self-employment. These differences reflect the dispersion of hard-hit sectors due to lower mobility, tourists, and general economic activity. Among the primary sectors, agriculture was the least affected in 2020 and grew at a higher rate in 2020 than in 2019. The Central Highlands, Midlands, and Northern Mountainous areas are poorer and more rural areas. The share of respondents who knew someone who had experienced job loss was highest in the Northern and Coastal Central region where Da Nang is located. However, other regions were not far behind in the share of households that knew someone experiencing job switching and job loss. Despite their high rates of poverty, ethnic minority groups reported lower rates of adverse employment impacts across their personal networks, likely because of their heavier reliance on agricultural self-employment and lower likelihood of working in the more exposed sectors such as services. However, they were more affected across nonmonetary dimensions with potential consequences for widening disparities in the longer-term, as will be discussed in chapter 6.

Figure 2.4 Over time, fewer Vietnamese households are experiencing new cases of employment loss

Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

Note: Dates shown are reference periods. In the first round, the reference period for questions on employment loss and wage declines referenced “Since February 2020,” thus the reference period is shown as “Feb – June 2020.” In subsequent rounds, questions refer to the “previous month” from the date of interview. Household (HH) quintiles (Q) are based on household consumption per capita in 2018.

Table 2.2 Employment impacts across personal networks, Vietnam

Share of households (%)	Reference period February 2020– March 2021	
	Do you know someone who lost their job?	Do you know someone who switched job?
All	33.9	29.3
Urban	34.2	30.4
Rural	33.8	28.7
Top 60	34.0	31.3
Bottom 40	33.7	25.8
Kinh	35.1	30.6
Ethnic minorities	27.0	21.6
Red River Delta	37.7	33.3
Midlands and Northern Mountainous areas	27.1	23.4
Northern and Coastal Central Region	40.7	32.0
Central Highlands	28.1	24.1
Southeastern Area	30.4	27.4
Mekong Delta	30.7	28.0

Source: World Bank Vietnam COVID-19 household surveys (round 5).

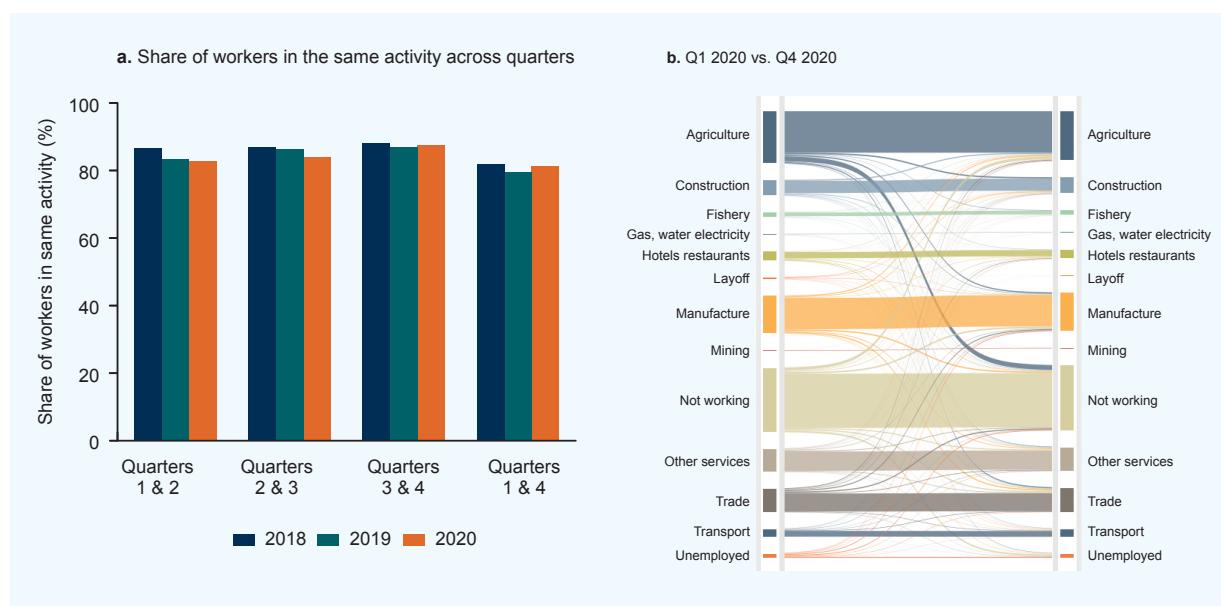
In 2020, about 17 percent of the population aged 15 and older changed sectors or economic activity between Q1 and Q4. In the first half of 2020, a slightly smaller share of workers held a job in the same sector in two consecutive quarters compared to previous years. For example, in 2020, 82.7 percent of workers held a job in the same sector in Q1 and Q2, compared to 83.8 percent in 2019 and 86.7 percent in 2018 (figure 2.5, panel a). Visualizations of workers' transitions show relatively stable distribution of workers across sectors (figure 2.5, panel b) and with intersectoral dynamics similar to those in 2019. However, these dynamics are visible only when jobs move across broad sectors, which is a significant move for workers. Job changes may be higher because dynamics within sectors are likely also occurring but are more difficult to trace in the LFS. Changes in sectors were particularly pronounced in hospitality (see box 2.2).

The number of people aged 15 years and older who were not working increased by 2.4 million in 2020 compared to 2019. In 2020, 19.9 million people aged 15 and older were laid off, unemployed, or not working, compared to 17.5 million in 2019 (figure 2.6). This increase is significantly larger than what was seen from 2018 to 2019. Workers experienced job loss most

severely in Q1 of 2020. Compared to previous years, more people in 2020 who were unemployed in the beginning of the year also remained unemployed at the end of the year (figure 2.7) at 24.0 percent compared to 17.6 and 12.2 percent, respectively, in 2018 and 2019. Employment levels across most sectors were quite stable, with the exceptions of decreasing agriculture and expanding manufacturing sectors. Given the small labor market impacts, the shedding of jobs in agriculture and the growth of jobs in manufacturing did not largely deviate from medium-term structural trends.

Although reports of new job loss have diminished substantially, not everyone who lost their job has been able to find comparable new employment. According to LFS data, most workers were able to transition into other employment. However, other indicators from the LFS suggest that there was not a full recovery in employment, with some people downgrading perhaps into less desirable jobs, being underemployed, or switching into informal work. By Q4 of 2020, about 830,000 people were estimated to be underemployed,¹³ with the highest rates among those in the agricultural sector. The informality rate at the end of 2020 was 56.2 percent, an uptick following a continuous decline in informality from 2016–19 (GSO 2021a).

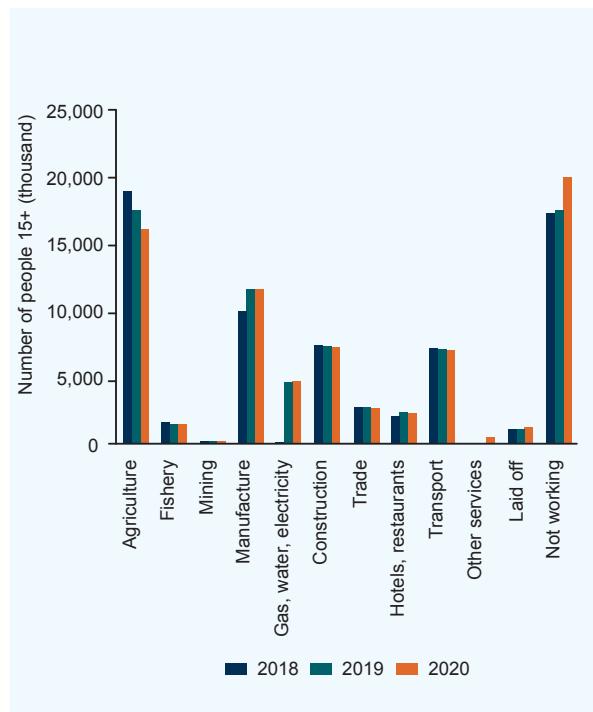
Figure 2.5 Transitions of economic activity in Vietnam, population aged 15 years and older



Source: Vietnam Labor Force Survey panel data, 2018, 2019, and 2020.

Note: The population of those aged 15 years and older was 75 million in 2020.

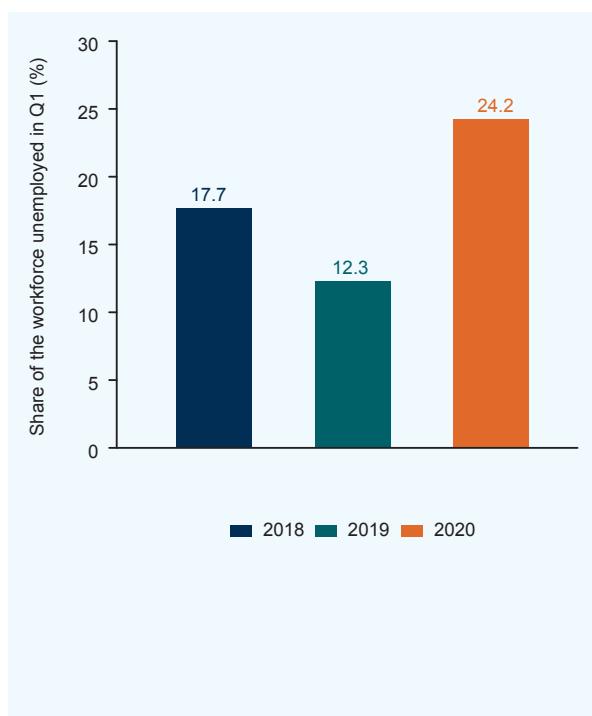
Figure 2.6 The population of people aged 15 and older who were not working increased in 2020, Vietnam



Source: Vietnam Labor Force Survey, 2018, 2019, and 2020.

Wage growth ground to a halt in 2020, in contrast to the high wage growth in earlier periods. Wage growth in Vietnam has been high over the last decade, particularly in sectors in which new jobs were being created. Data from Havers Analytics showed that in a span of six years from 2012 to 2018, average real wages in industry/construction and services grew by 71 and 65 percent, respectively. Wages remain depressed into 2021; average wages in the services sector in first quarter of 2021 were only 1.5 percent higher than in the previous year (GSO 2021b). Throughout the course of the survey collection period, about 10 percent of households reported experiencing a reduction in household income over the reference period (figure 2.8).

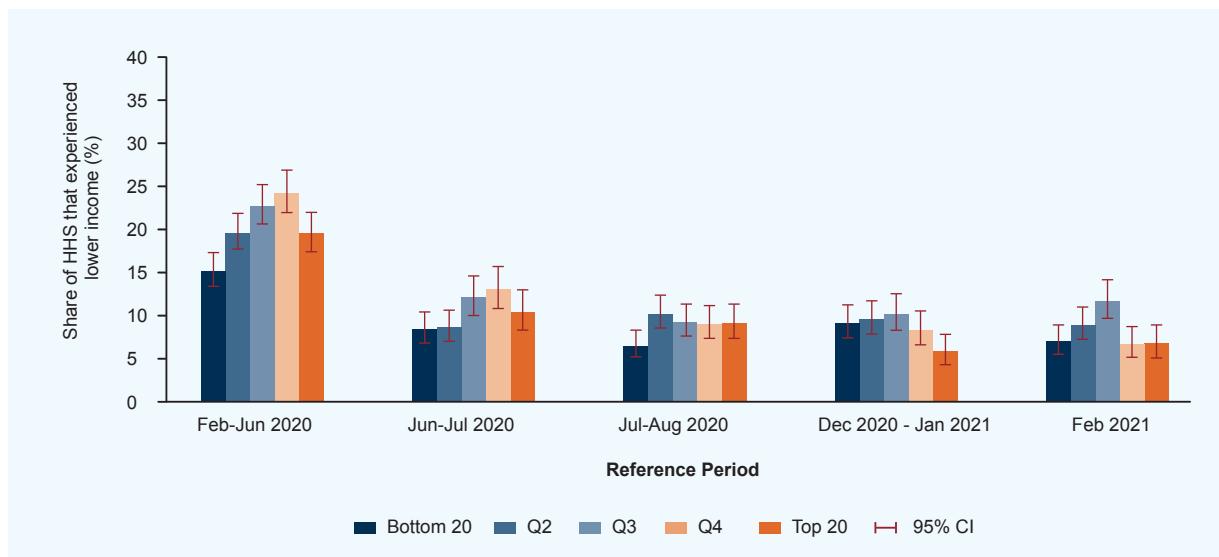
Figure 2.7 Share of unemployed in Q1 who remained unemployed in Q4, by year, Vietnam



Source: Vietnam Labor Force Survey, 2018, 2019, and 2020.

In Vietnam and across the developing world, women and young people were more likely to experience job loss. At a global level across 40 countries where World Bank COVID-19 household monitoring surveys were conducted, female, young, less educated, and urban workers were found to stop working at higher rates (Kugler et al. 2021). Gender differences in job loss are primarily driven by factors related to family care responsibilities but are also related to sectoral selection. Younger populations are more services oriented, and the less educated are more likely to be employed informally, both areas of employment that were hard hit. Younger populations are also those that are in transition from school to work and likely face a more unwelcoming labor market. The share of 15-to-20-year-olds working in Q1 of 2020 and 2019 was similar (34.9 percent and 35.6 percent, respectively). However, by Q4, the working shares of the young between 2020 and 2019 were 30 percent and 33 percent, respectively.

Figure 2.8 Fewer Vietnamese households are experiencing labor income declines over time



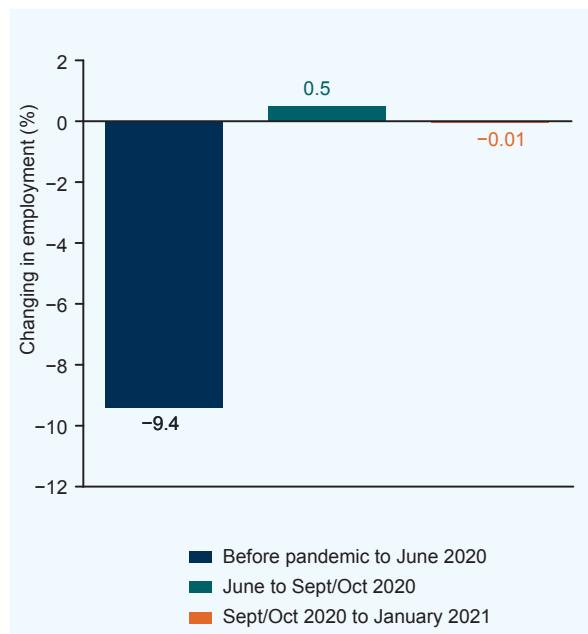
Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

Note: Dates shown are reference periods. In the first round, the reference period for questions on employment loss and wage declines referenced “Since February 2020,” thus the reference period is shown as “Feb – June 2020.” In subsequent rounds, questions refer to the “previous month” from the date of interview. Household (HH) quintiles (Q) are based on household consumption per capita in 2018.

As a result of social mobility restrictions and closures, especially in April 2020, many firms experienced large employment losses in June 2020 with a slight recovery in the second half of 2020. Surveyed formal firms suffered an aggregate employment loss of 9.4 percent from the period before the pandemic (that is, January 2020) to June 2020 (figure 2.9). The large drop in employment experienced by formal firms in the first period mirror trends in the entire labor market, however formal firms represent a small share of total employment. Only 9.3 percent of the workforce are employed in domestic formal firms (Cunningham, Pimhidzai, 2018). Despite a slight recovery in employment between June and October 2020 with an increase of 0.5 percent in employment, recovery stalled in early 2021 with little change in employment since. The reemergence of COVID-19 cases and subsequent, but

more localized, restrictions in mobility have damped the recovery. Employment changes may likely have worsened after January with the two recent waves in February and April 2021 that have resulted in more mobility restrictions and business closures. Among firms, the labor adjustment mostly happened in medium and large firms (figure 2.10). Small firms did not trim their workforce at the initial stage of the pandemic, unlike medium and large firms that reduced their employment collectively by 18 and 10 percent, respectively, in June 2020. Throughout the next six months, these firms slowly recovered and have increased their employment in January 2021. Nonetheless, on average, medium and large firms still lost 16 percent and 2 percent of their workforce, respectively, compared to pre-COVID-19 levels. The average employment loss is 3 percent for firms of all sizes.

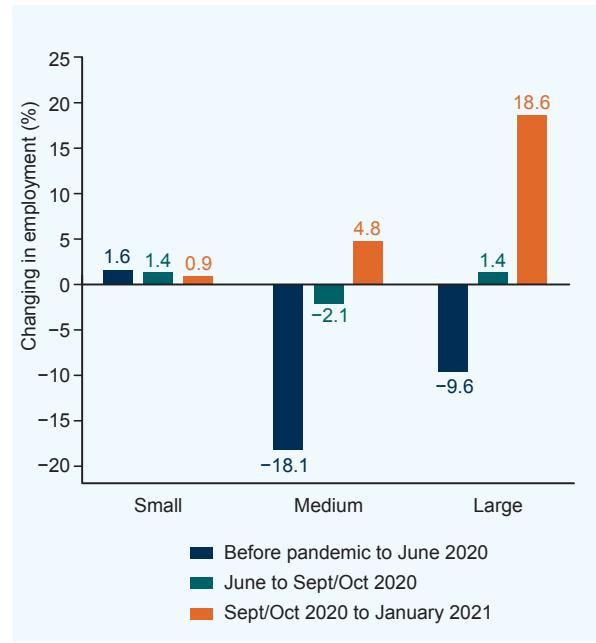
Figure 2.9 Large initial employment drop, with a small recovery in late 2020, Vietnam



Source: World Bank COVID-19 Business Pulse Surveys.

Note: Trends are robust to controlling for survey dates.

Figure 2.10 Most of Vietnam's employment changes happened in medium and large firms



Source: World Bank COVID-19 Business Pulse Surveys.

Note: Trends are robust to controlling for survey dates.

Box 2.2

.....

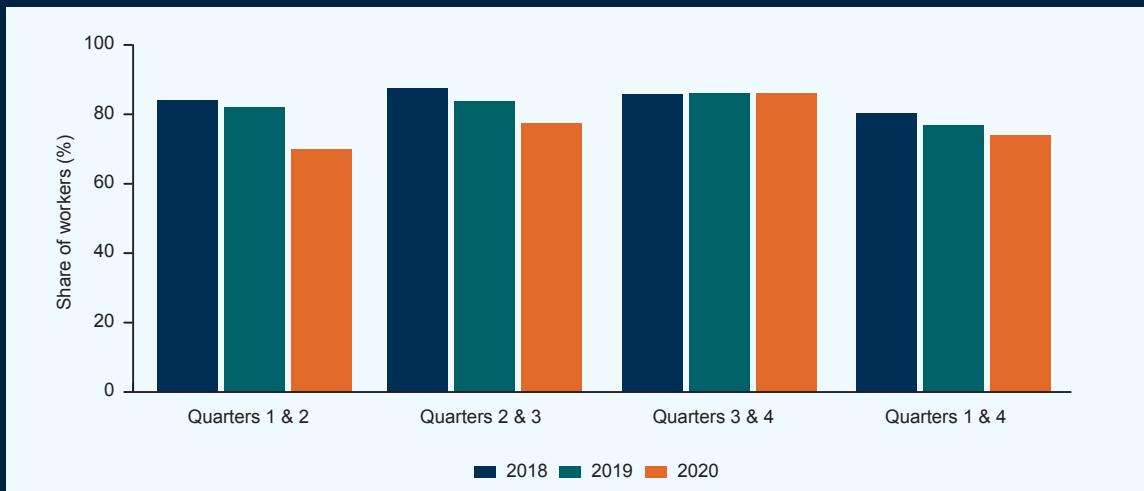
Workers in Vietnam's hotels and restaurants

Employment in tourism-related sectors was expected to be severely hit as Vietnam closed its international border to tourism starting in March 2020. Jobs in the hotel and restaurant sector were indeed less stable; fewer workers were able to stay in the sector consistently in 2020 compared to 2018 and 2019 (figure B2.2.1). However, the share of the labor force in this sector as a primary occupation is small, representing about 4.4 percent of total workers, or 3.74 percent of the population aged 15 years and older.



Box 2.2 - continued

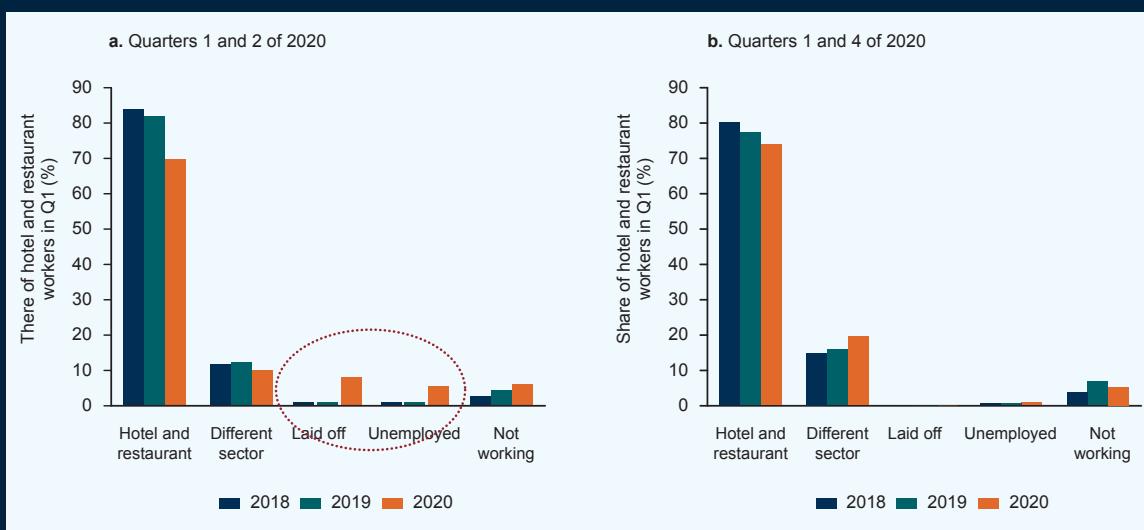
Figure B2.2.1 Share of workers in Vietnam's hotel and restaurant sector in multiple quarters, by year



Source: Vietnam Labor Force Survey panel data, 2018, 2019, and 2020.

Workers in the hotel and restaurant sector initially faced much higher rates of layoffs, but most were able to adapt and find other jobs by the end of the year. In the short run, workers in hotels and restaurants faced layoffs and job loss. The transition in the first two quarters of 2020 shows much higher layoff and unemployment rates than in other years. Of those workers laid off in the first quarter, 8.5 percent of hotel and restaurant workers were still laid off in the second quarter and had not found other work (figure B2.2.2, panel a). But, by the end of the year, the majority of hotel and restaurant workers were able to find employment in other sectors or regain work (figure B2.2.2, panel b). However, these jobs are not necessarily better jobs; as discussed earlier, rates of informality and underemployment have increased.

Figure B2.2.2 Transitions of Vietnamese hotel and restaurant workers from Q1 of 2020 into new sectors (Q2 or Q4)



Source: Vietnam Labor Force Survey panel data, 2018, 2019, and 2020.

Note: Based on broad sector classifications.

Box 2.3

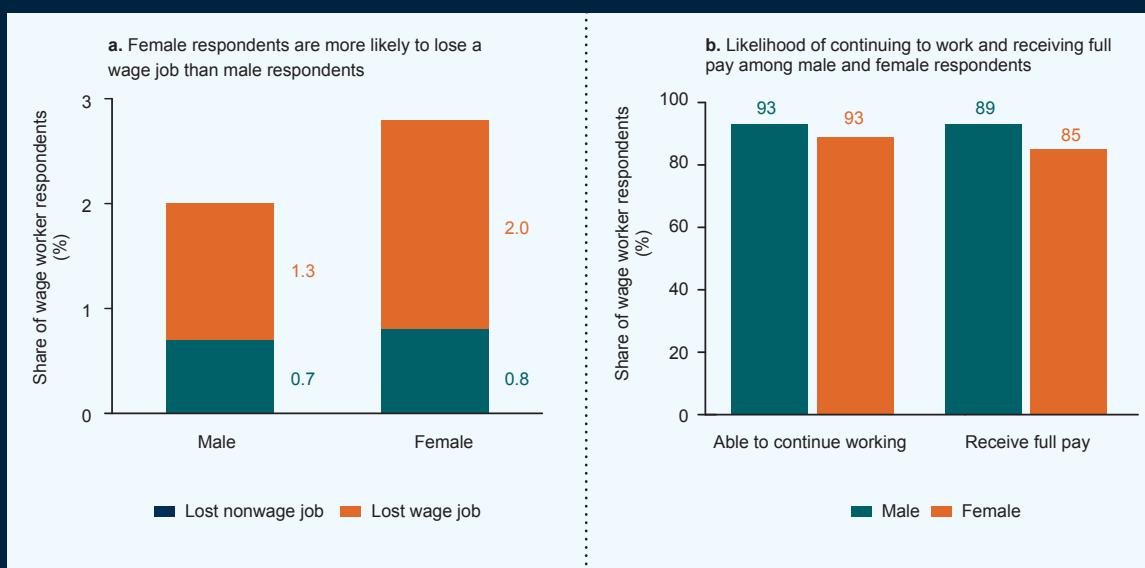
.....

Employment impacts by gender

See appendix F for more information on measuring gender impacts, including potential sample selection bias.

Women were more likely to report losing a wage job early in the pandemic. Among main respondents who are wage workers, female respondents in the World Bank Vietnam COVID-19 household monitoring survey reported worse outcomes (figure B2.3.1). Significantly more female than male respondents lost a wage job between February and June 2020. This observation holds true in a weighted logit regression in the whole sample and in subsamples of urban, top-60 households and households with multiple earners. It is likely explained by the higher share of formal wage jobs and service-sector jobs found among female respondents. Controlling for age and education of respondents explains away the statistical significance of the female dummy variable in the regression. Conditional on working as a wage employee, male and female respondents are equally likely to be able to continue work (93 percent of male and female respondents). Although female respondents are slightly less likely to receive full payment than male respondents (85 percent compared to 89 percent, respectively), this difference is not statistically significant in a logit regression both with and without demographic controls.

Figure B2.3.1 Among Vietnam's wage workers, female main respondents reported worse outcomes during the pandemic



Source: World Bank Vietnam COVID-19 household monitoring surveys (R1).

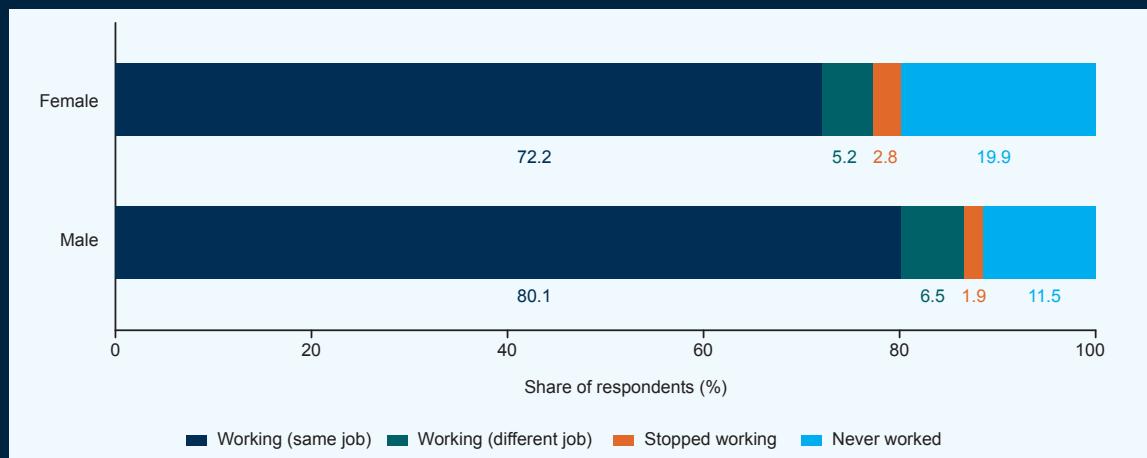
Note: Wage job information is asked of only the main respondent of the household and may not be representative of the entire labor force.



Box 2.3 - continued

Compared to other countries, the female labor force participation in Vietnam before the pandemic is high. However, female labor force participation is still lower compared to males; female respondents are 9.3 percentage points less likely to be working compared to male respondents. This is largely contributed by the preexisting gap in work participation between men and women, with female respondents 8.5 percentage points more likely to have never worked in February (before the pandemic) or in June 2020 (round 1 of COVID-19 monitoring survey). The COVID-19 pandemic did widen the gender gap of labor market participation to a small extent; the share of female respondents dropping out from work, 2.8 percent, is 0.8 percentage points higher than men's 1.9 percent (figure B2.3.2).

Figure B2.3.2 Work participation of male and female respondents in COVID-19 monitoring survey, June 2020 vs. February 2020



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 1).

A higher incidence of women dropping out of the labor force can be explained by various factors. Table B2.3.1 reports the marginal effect of running logit regressions of work stoppage on a female respondent dummy. In the whole sample, the female coefficient is positive and statistically significant at the 10 percent level. Dividing the sample into urban and rural and those with and without a household farm, we note that the work stoppage for male and female respondents is not statistically different within each of these subsamples. However, female respondents have a higher likelihood of stopping work in top-60 households and in households with multiple adult earners. These households are less economically vulnerable, and individuals in them may be more educated and engaged in higher-skill occupations. The statistical significance goes away after we control for respondents' age and education.



Box 2.3 - continued

Table B2.3.1 Female vs. male work stoppage rates, Vietnam

All (N=6213)	
	0.008* (0.005)
Rural (N=4421)	Urban (N=1792)
0.005 (0.004)	0.011 (0.011)
Has household farm (N=3680)	No household farm (N=2533)
0.001 (0.004)	0.010 (0.009)
Bottom 40 (N=2653)	Top 60 (N=3560)
0.003 (0.006)	0.012* (0.007)
No or single adult earner (N=1088)	Multiple adult earners (N=5125)
0.002 (0.011)	0.010** (0.005)
No child under 5 in 2018 (N=4387)	Has child under 5 in 2018 (N=1826)
0.006 (0.006)	0.015** (0.007)

Source: World Bank staff calculations.

Note: Dependent variable takes on 1 if respondent did not work in the first round of the COVID-19 monitoring survey but did work in February (before the outbreak of the pandemic). The table reports logit regressions of work stoppage rates on female dummy in the full sample and subsamples indicated in the column heading. Marginal effects can be interpreted as the percentage point change in the likelihood of stopping working if female respondent is true. Standard errors are reported in parentheses. Household-level weights are applied in the regression. N = number of observations.

Childcare remains a pervasive issue that cannot be explained by age and education controls. Dividing the sample into households with a child under five years old in the 2018 Vietnam Household Living Standards Survey and those without, we note that female respondents are worse off than male respondents in households with a child under five in 2018. The statistical significance does not go away even after controlling for respondents' age and education.

Employment is not yet fully recovered in early 2021

Employment levels in early 2021 are not yet back to pre-COVID-19 levels. In Q1 of 2021, the General Statistics Office reported about 9.1 million people aged 15 and older were adversely affected by job loss, furloughs, suspension of production and business operations, reduced working hours, or reduced labor incomes (GSO 2021b). The size of the labor force and number of workers in Q1 of 2021 was estimated at 49.9 million compared to 50.1 million in Q1 2020. There is also some evidence of some jobs shifting into the informal sector, especially among women, and of higher rates of underemployment.

In Q1 of 2021, responses from the World Bank COVID-19 monitoring surveys in Vietnam show a moderate share of respondents who knew someone currently looking for a job. In March 2021, almost 30 percent of respondents indicated they knew someone who was looking for a job now and had not found one (table 2.3). This response can have a variety of interpretations. At a minimum, it suggests that the labor market was unsettled by COVID-19 and many who experienced job losses have not yet found suitable new

jobs. Although it is difficult to interpret these results in absolute numbers, it is still revealing that the percentage of respondents who knew someone who had switched a job since February 2020 is similar to the percentage who knew someone currently looking for a job in March 2021. Evidence of a high share of job seekers is supported by the increasing numbers of underemployed (as seen in the LFS). In Q1 of 2021, the underemployment rate rose to 2.2 percent, or 971,000 people (GSO 2021b).

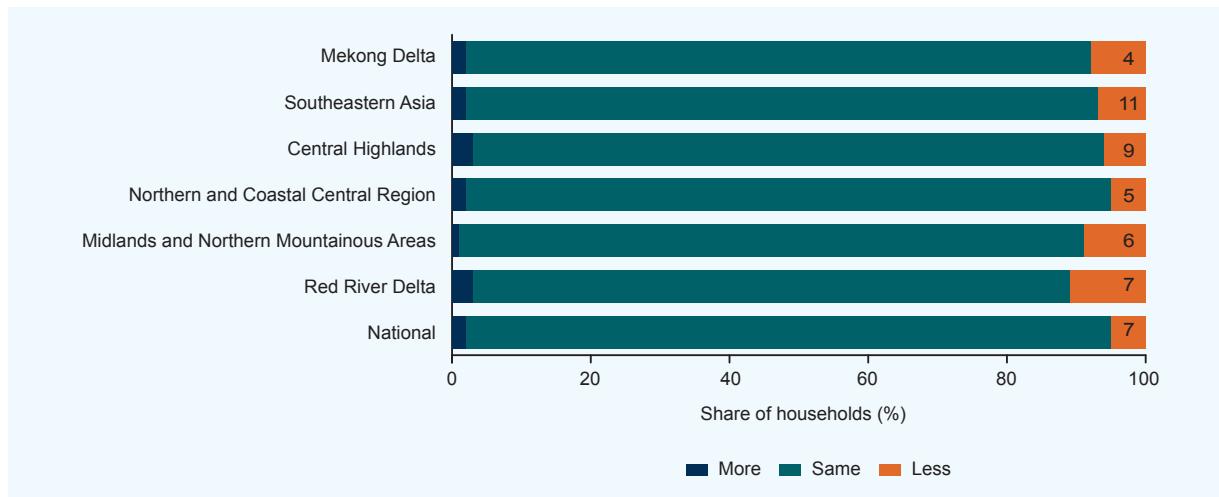
A small share of households had fewer adults working in March 2021 than in January 2020 before COVID-19. In retrospective questions, about 7 percent of households reported that fewer adults in their household were working in March 2021 than in January 2020 (figure 2.11). The differences are largest across geographic regions, as opposed to across income distribution or household ethnicity. The Southeast region reported the largest share of households with fewer adults working in March 2021 than in January 2020. Farming regions such as the Mekong Delta had lower shares of households with fewer adults working, because the beginning of March aligned with the rice sowing season.

Table 2.3 Employment impacts across personal networks, Vietnam

Type of household	March 2021
All	29.3
Urban	31.2
Rural	28.2
Top 60	28.8
Bottom 40	30.1
Kinh	29.7
Ethnic minorities	27.1
Red River Delta	29.6
Midlands and Northern Mountainous areas	29.2
Northern and Coastal Central Region	37.2
Central Highlands	30.2
Southeastern Area	25.2
Mekong Delta	23.4

Source: World Bank Vietnam COVID-19 household monitoring surveys (round 5).

Figure 2.11 About 7 percent of Vietnamese households reported fewer adults working in March 2021 than in January 2020



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 5)

Family farms

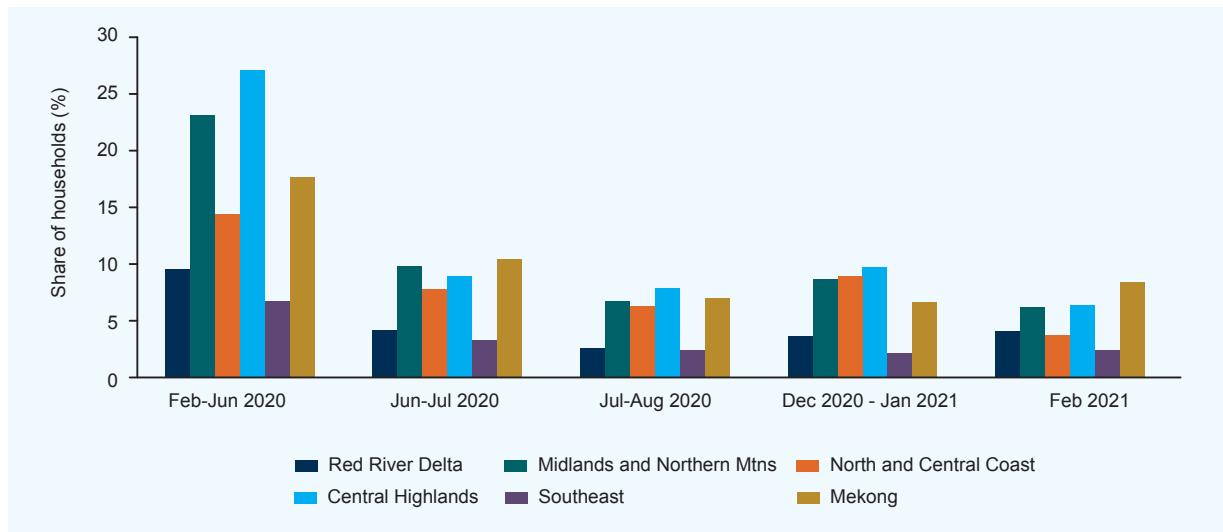
Most family farms reported being able to operate normally over the past year. Only about 10 percent of farming households reported that they were unable to perform normal activities. This aligns with the finding that the agriculture sector fared relatively well in 2020 compared to other sectors, with higher sectoral gross domestic product growth in 2020 than in 2019. Farming households in Vietnam still experienced disruptive conditions from factors both related to and not related to COVID-19. Compared to other countries in the East Asia and Pacific region, the share of farming households in Vietnam that were able to operate normally was lower than in Cambodia, the Lao People's Democratic Republic, and Mongolia between May and July 2020.

Over half of households are engaged in family farming activities with a smaller share of households solely reliant on agriculture. Agriculture income is the primary source of income for 11 percent of all households, and for 30 percent of households in the lowest welfare decile. Thus, poorer households are more likely to

report farming-related factors as the reason for declining household income. Agriculture-reliant regions such as the Central Highlands and the Mekong regions persistently had the highest share of households reporting that they experienced negative shocks related to farming, including disruptions to activities as well as declines in sales prices (figure 2.12).

COVID-19 impacted supply chains and transportation (figure 2.13). A lack of market demand and transportation was the second most common reason that farmers reported for why they could not operate normally. Supply chain challenges were more likely reported by households in the Red River Delta. Particularly in round 5, lockdowns near the Tet holiday severely affected sellers of peach, cherry blossoms, and other seasonal crops that relied on the holiday as the main point of sales for the entire year. Over the year, mobility restrictions and lockdowns disappeared as reasons inhibiting farming functions. By round 5, virtually no affected farming households cited social mobility restrictions as challenges.

Figure 2.12 Declines in income due to farming-related factors were more common among the poor and those in more rural regions of Vietnam



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1 - 5).

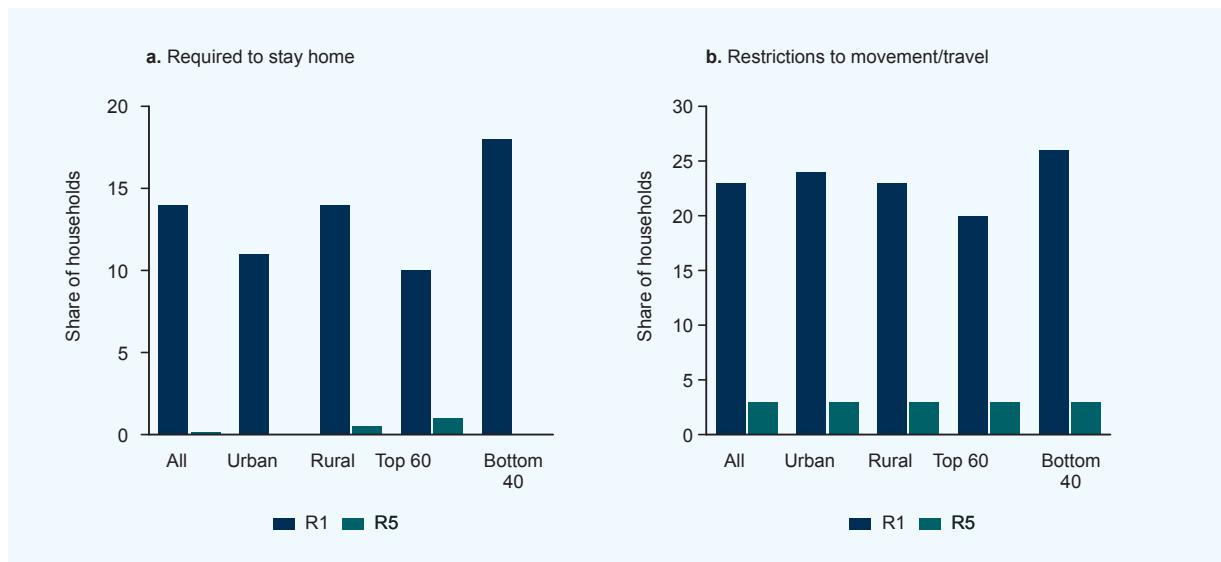
Note: Dates shown are reference periods. In the first round, the reference period for questions on family farm income referenced “Since February 2020,” thus the reference period is shown as “Feb – June 2020.” In subsequent rounds, questions refer to the “previous month” from the date of interview.

Persistent reasons reported for being unable to perform activities are unrelated to COVID-19 reasons, an important reminder that crises can occur simultaneously. Weather, natural disasters, and crop/animal diseases were the most commonly reported causes of farming disruptions across all five rounds of COVID-19 monitoring surveys. Weather and natural disaster risks most severely affected the farmers in the Mekong Delta. During COVID-19, the Mekong Delta, also known as the “Rice Bowl,” was faced with a double crisis as droughts and saltwater intrusion afflicted the region in early 2020. Other natural disasters hit Vietnamese farmers throughout the year but are not captured in the surveys because of the periodicity and timing of fieldwork. Typhoons landed on the central coast in October 2020, leading to over 200 deaths and caused flooding and landslides. Unseasonal frost in early 2021 also led to crop damages in northern mountain areas.

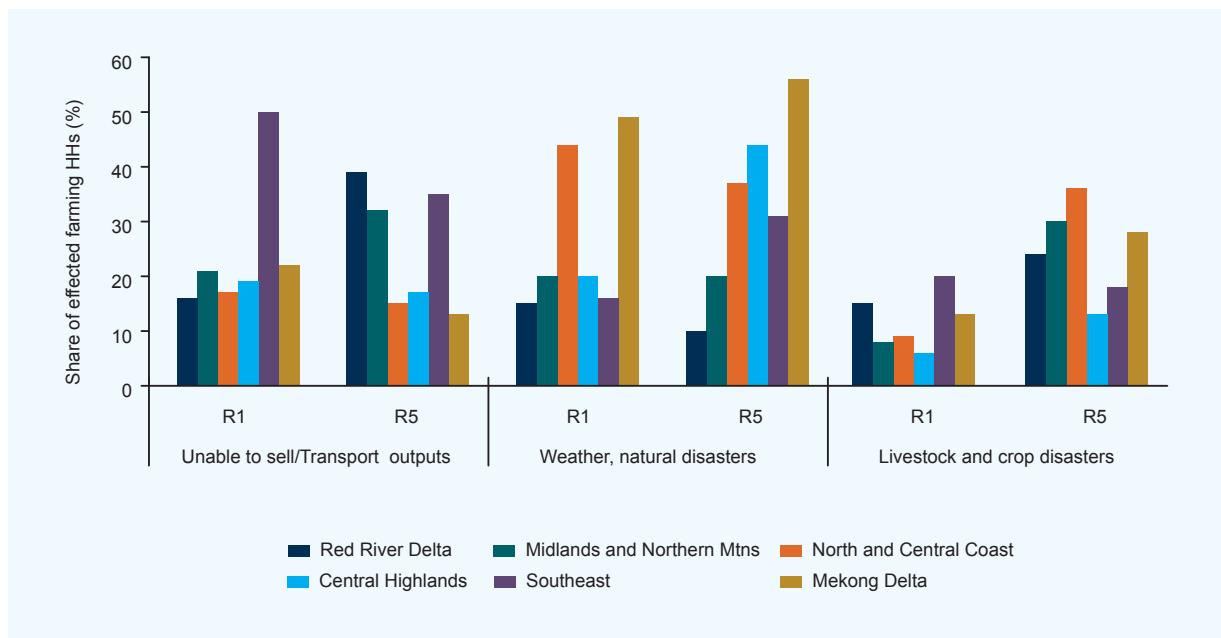
Across different types of crops, the price of rice was the most likely to remain high (figure 2.14). Across all World Bank COVID-19 survey rounds in the field from June 2020 to March 2021, farmers who were selling rice were the most likely to enjoy higher prices than compared to the same time a year ago. Among households, rice is predominantly sold by family farms in the North and Central Coastal and Mekong regions. Rice farmers benefited from competitive prices because rice exports were able to maintain growth and competitiveness during COVID-19, supply was limited because of the drought, and the government stockpiled rice. However, other agricultural products including fruits, vegetables, and livestock yielded lower prices. Agricultural products requiring time-sensitive transportation experienced the most negative impacts from disruptions to supply chain logistics. For example, fruit export revenues dropped by 13 percent in 2020. These disruptions led to lower prices in the domestic market.

Figure 2.13 Farming operations and disruptions during COVID-19, Vietnam

By round 5, mobility restrictions were no longer a cause of farm operation disruptions

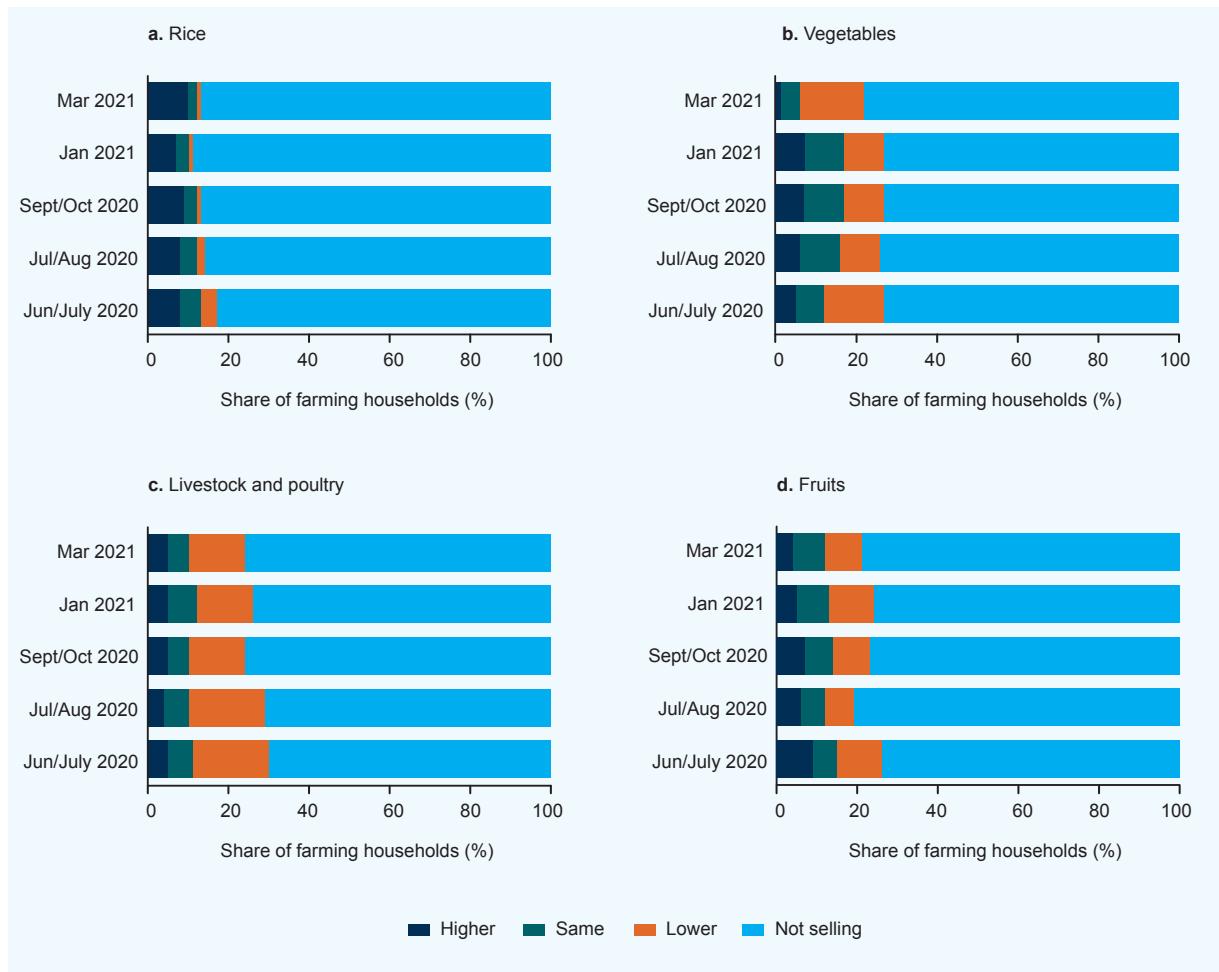


However, supply chain logistics and natural disasters remained relevant challenges throughout the survey period



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 1 and round 5).

Note: Detailed questions on reasons farmers were negatively affected were only asked in round 1 (R1) and round 5 (R5) of the survey series. Field work for R1 was conducted between June 5 and July 8, 2020, with reference to “Since February 2020” to the date of interview. Fieldwork for R5 was conducted from March 13 to March 31, 2021, with reference to “Since January 2021” to date of interview. HH = household.

Figure 2.14 Crop prices in Vietnam compared to the previous year

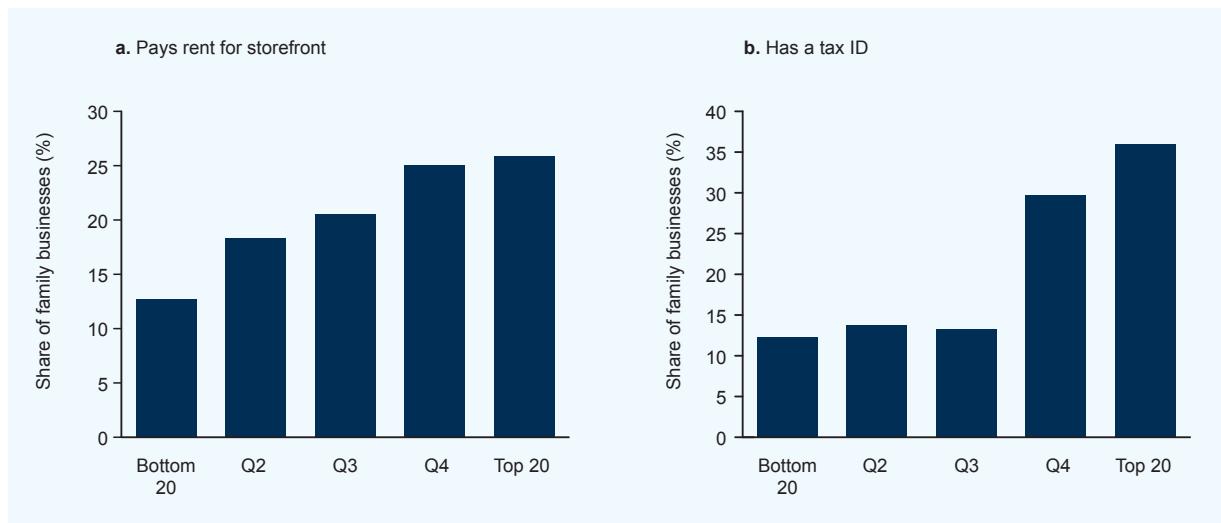
Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

Note: Comparison of crop prices within the last week from the time of interview (June 2020 – March 2021) to the same time last year (June 2019 – March 2020).

Family businesses

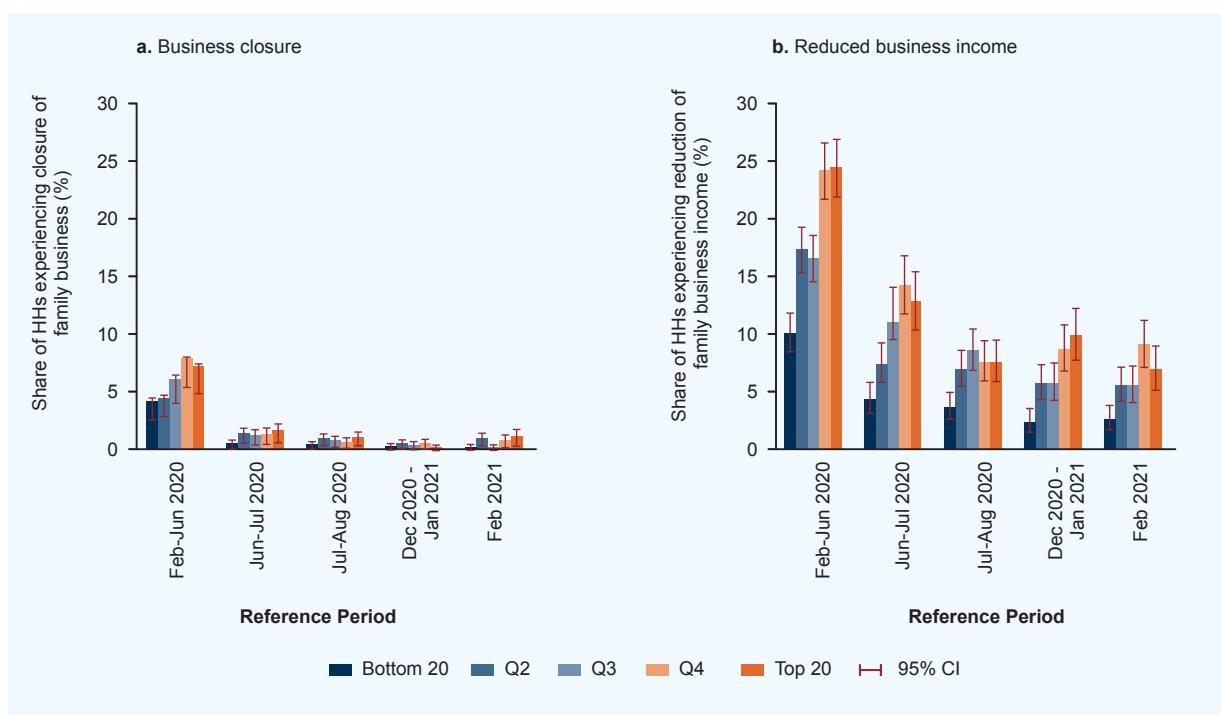
About 25 percent of households are engaged in a family business, and most activities are informal and small-scale. Family businesses range from small peddling activities to owning businesses with permanent storefronts. Most family businesses are in service-oriented activities, followed by agriculture, and then manufacturing. About 20–25 percent of family businesses pay rent for an additional storefront that is not connected to the home, or have a tax identifier (ID), indicating that most family businesses are small-scale and informal (figure 2.15). As expected, households with more means and who are wealthier, are more likely to have separate storefronts and tax IDs for formal revenue reporting.

In the case of family businesses, economic impacts were more severe along the intensive margin rather than the extensive margin (figure 2.16). Family business closure rates remained low throughout 2020. By the second half of the year, most family businesses were open. Although most businesses remained open, a large proportion of family businesses experienced reductions in business income. Wealthier households are more likely to have operations in family businesses, so impacts along this economic channel are more salient at higher ends of the distribution.

Figure 2.15 Family business performance in Vietnam

Source: World Bank Vietnam COVID-19 household monitoring surveys (round 4).

Note: Household (HH) quintiles (Q) are based on household consumption per capita in 2018.

Figure 2.16 Reduced family business income was more common than family business closures, Vietnam

Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5).

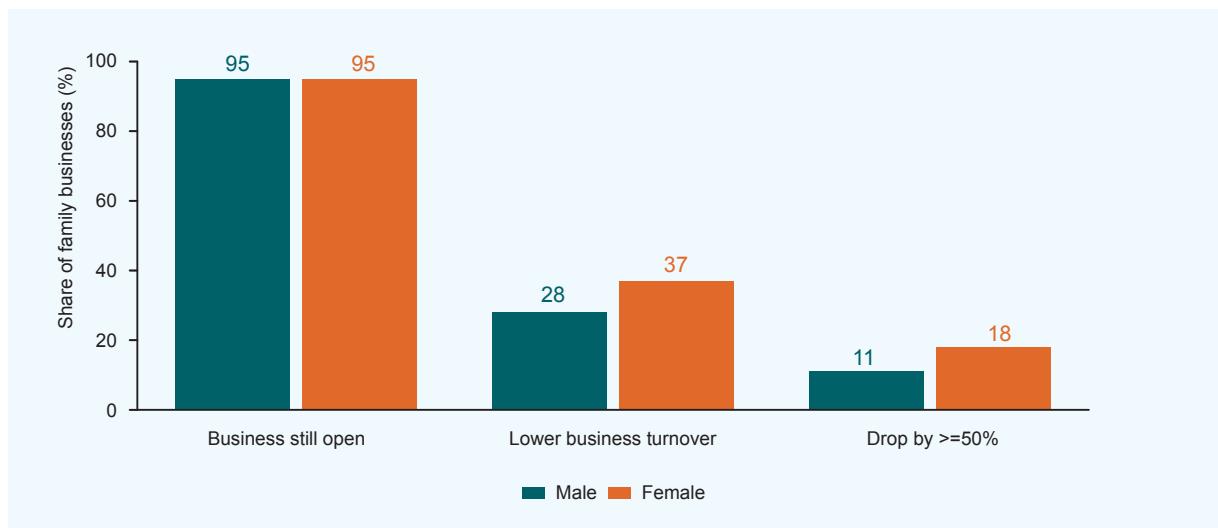
Note: Dates shown are reference periods. In the first round, the reference period for questions on business closure and family business income referenced “Since February 2020,” thus the reference period is shown as “Feb – June 2020.” In subsequent rounds, questions refer to the “previous month” from the date of interview. Household (HH) quintiles (Q) are based on household consumption per capita in 2018.

Households with family businesses and those experiencing poor business conditions are likely to be located in regions associated with lockdowns and outbreaks. For example, closures were more common in the North and Central Coast regions during round 3, coinciding with the Da Nang outbreak. In round 5, households with family businesses in the Red River Delta were also more adversely affected, coinciding with the location and timing of the third wave.

Some gender-biased impacts existed in family business turnover.¹⁴ Although the family businesses in which male and female respondents were engaged were equally likely to be operating at the time of the survey, female respondents' family businesses experienced lower business turnovers than those of male respondents (figure 2.17). Their businesses were also more likely to experience a significant (greater than 50 percent) drop in business turnover.

Increased care responsibilities were the main driver of the gender difference in lost turnover. Women are more likely to work in the service sector, but, even controlling for that, the gender gap on lower business turnover remains. When reduced hours of work are also accounted for, the gap disappears and the reduced hours are statistically significant (see table 2.4).¹⁵ During lockdowns, women tend to take on most of the burden of household care responsibilities. During round 1 (which covered the national lockdown period), mothers were also much more likely than fathers to report reducing hours or stopping work altogether to take care of children during school closures.

Figure 2.17 Family business outcomes by male and female respondents engagement, Vietnam



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 1).

Table 2.4 Mediators of female-specific experience of significant drop in business turnover, Vietnam

	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.073*** (0.024)	0.051** (0.023)	0.048** (0.023)	0.046** (0.023)	0.042* (0.022)	0.024 (0.021)
Urban			0.014 (0.023)	0.015 (0.023)	0.012 (0.023)	0.017 (0.022)
Bottom-40				0.030 (0.025)	0.027 (0.026)	0.025 (0.024)
Ethnicity				-0.054 (0.044)	-0.055 (0.045)	-0.067 (0.044)
Single adult household					0.059 (0.042)	0.046 (0.032)
Reduced hours						0.206*** (0.019)
Observations	1359	1337	1337	1337	1337	1337
Sector FE		X	X	X	X	X
Region FE			X	X	X	X

Source: World Bank Vietnam COVID-19 household monitoring surveys (round 1).

Note: Dependent variable takes on 1 if respondent's family business experienced a significant (greater than 50%) drop in business turnover. Marginal effects can be interpreted as the percentage point change in the likelihood of experiencing a significant drop in business turnover if the binary correlates are true. Standard errors are reported in parentheses. Household-level weights are applied in the regression. FE = fixed effects.

WHAT WERE THE TOTAL IMPACTS ON HOUSEHOLD INCOMES?

The primary impact channel of adverse shocks related to COVID-19 was through household incomes.¹⁶

The preceding section in this chapter illustrated how households reported being adversely affected through a range of impact channels. These channels varied and affected households across the spectrum, affecting incomes for different groups in different ways. Households in the COVID-19 surveys were asked about their current incomes compared to both the last *month* and the same time last *year*. First, self-reported changes in total household incomes during COVID-19 are discussed. Second, trends in an income index from June 2020 to March 2021 are described. The index is constructed from a panel sample of households across all five rounds of the World Bank COVID-19 surveys.

There are pros and cons to using either the last month or the last year as the baseline to measure changes in income, which are important to bear in mind. The World Bank COVID-19 household monitoring surveys are conducted by phone, and it was not possible to collect detailed income information. Because the surveys are not evenly implemented across time periods, there may be missing information on income changes over periods that were not covered by the survey (see figure 2.1 for periods not covered during the fieldwork). The survey may miss episodes of declining incomes if the reductions occurred during an off-survey period and not during the on-survey period. Asking about changes to household income since the last year can also be problematic because conditions in the baseline matter. For example, by the last round, more households report that incomes in March 2021 are

higher than in March 2020, in particular households in the Mekong Delta. However, this can be related to COVID-19's having already exhibited impacts and affected the baseline incomes, or because conditions in early 2020 were worse for some households because of droughts. Recalling income from a year ago is also less precise than recalling income from a month ago.

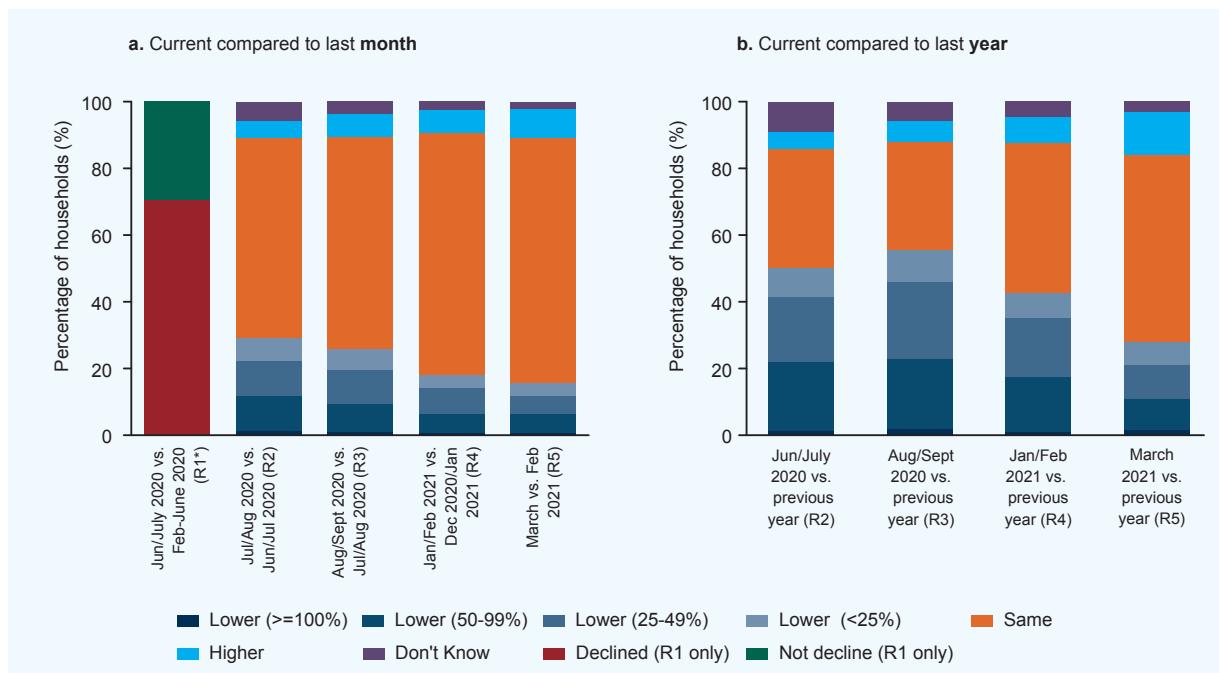
Changes in household income throughout the pandemic

Households along the entire welfare distribution reported episodes of declining household incomes. A range of underlying factors affected households from many walks of life. For example, poorer households were more likely to experience job loss and declines in farm income, whereas richer households were more likely to experience reduced wages and family business income.

The majority of households reported an income decline in the first round, after which income trends significantly improved (figure 2.18, panel a). After round 1 which covered the nationwide lockdown, the share of households reporting lower current income compared to the previous month slowly but consistently reduced over time. The nationwide lockdown was the first in the country and a truly unexpected shock for households. Over time, even though outbreaks continued to emerge, households may have learned to adapt better as the country also learned to manage outbreaks more locally.

Income recovered on both the extensive and intensive margins. Fewer households reported declining household incomes as time passed. In round 2, conducted in late June and early July of 2020, about 33 percent of households reported lower current income than the previous month; this share reduced to 17 percent by the last round in March 2021. Among households reporting lower income, the magnitude of the decline also reduced.

Figure 2.18 Under a longer timeline, more Vietnamese households still have lower incomes



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5) cross-section.

Note: In round 1, the change in income was asked from the time of interview compared to Feb–Jun 2020, and responses were recorded only if income declined or not. Income changes compared to the last year was not asked in round 1. The amount of change was not recorded. For rounds 2–5, current income in the most recent full month at the time of interview is compared to either the last full month or the same month last year. For disaggregated trends by welfare quintile and region, see additional figures in the appendix D.

In round 2, nearly 20 percent of all households reported that current incomes were at least 25 percent lower than in the previous month. By the last round in March 2021, about 10 percent of all households reported such levels of lower incomes. In the last round of the surveys, households engaged in family businesses, families with children, and younger families were the most likely to report declining income compared to the previous month.

Fewer households report declining incomes in the most recent survey round, but not all household incomes have recovered to pre-COVID-19 levels. Incomes compared to pre-COVID-19 periods show that about 30 percent of households still self-report lower household income in March 2021 than in March 2020 (figure 2.18, panel b). In each survey round, more households reported having lower income compared to last year than the previous month. Responses on comparisons of current income to the previous year are more reflective of a cumulative change in income and provide insights on longer-term welfare differences. Responses to income changes compared to the previous month underrepresent all income changes because the survey did not cover all periods of time, with the longest off-survey period being during the prolonged second wave.

As the previous chapters show, impacts from COVID-19 permeated through multiple aspects of life and affected households throughout the entire welfare distribution, but some households were more affected than others. After controlling for economic activity, ethnicity, and region, households with certain characteristics were still more likely to report lower current income relative to the last month. Households without a formal source of income, either those lacking a formal wage contract or having a family business that lacked a tax registration ID, were more likely to report lower incomes across all rounds. Households with children were also more likely to report lower incomes, because work hours were affected by greater care responsibilities.

Among those who still have lower incomes than last year, some groups are more likely to report larger reductions.¹⁷ A very small share of households reported 100 percent or total income loss compared to last year. Wealthier households are more likely to report a lower percentage decline in income loss than the poorest households (< 25 percent decline). Wealthier households are also more likely to report that their incomes are higher in March 2021 than in the previous year. That wealthier households were able to make gains during COVID-19, and poorer households were not, is concerning for widening inequality. The good news is that over time the share of households reporting large differences in current incomes to the previous year is shrinking. About 22 percent of all households reported that incomes in July 2020 (round 2) were over 50 percent lower than at the same time a year ago. By March 2021 (round 5), only 11 percent of households reported that income levels were 50 percent lower than the previous year.

Observing trends using a panel subset

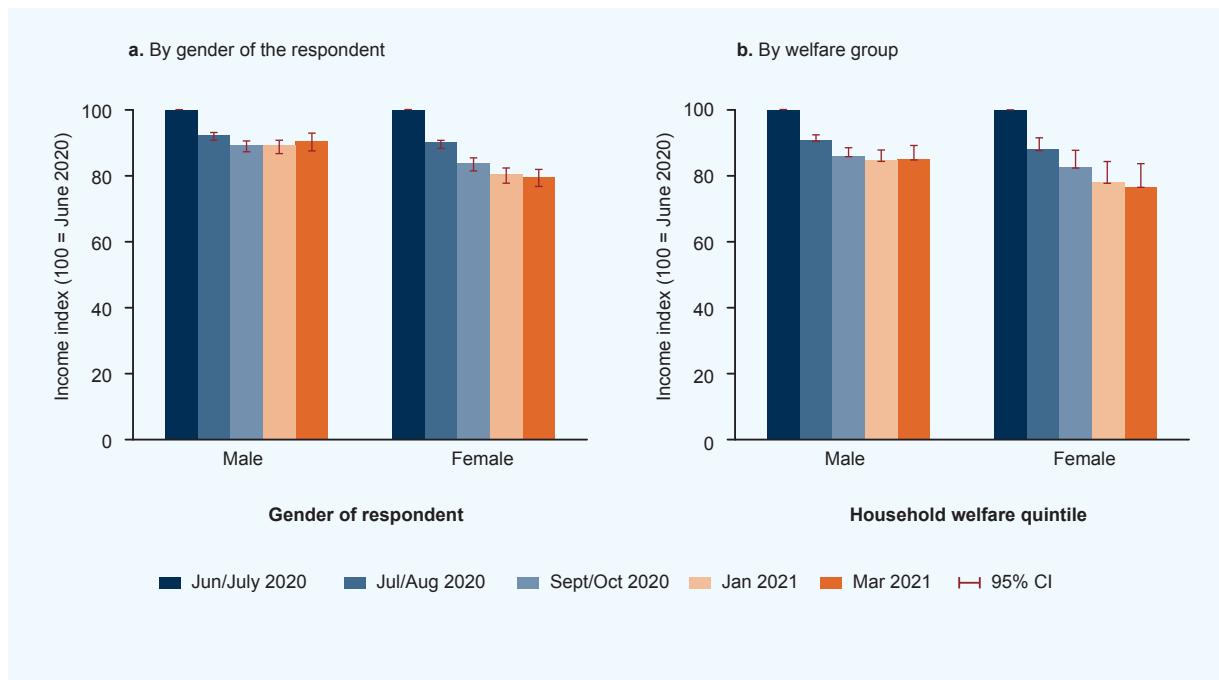
On the basis of responses to changes in income since the previous month, an income index was created using a panel of households present in all five rounds. It is important to note the caveats presented in the beginning of this chapter, especially that the surveys do not cover a continuous period of time and that there are “off-survey” periods. The longest off-survey period in which information was not collected was during the second outbreak. Thus, estimates of adverse impacts are expected to be a lower bound. The index is set at 100 in June 2020 for each household.¹⁸ The construction of the index is based on self-reported changes to household incomes from the previous month. The magnitudes of income change are reported only on the basis of ranges: 1–24 percent, 25–49 percent, 50–99 percent, and 100+ percent. A low-impact estimate of the income index assumes the lowest amount of income decline and the highest amount of income increase on the basis of responses. For example, consider a household that reported lower income between 1 percent and 24 percent. The low-impact estimate would assume income declined by only 1 percent. If a household reported that current household income was 25–49 percent higher than the previous month, the low-impact estimate would assume that income increased by 49 percent.

About half of households reported a decline in household income more than once. Households were more likely to report multiple episodes of declining income if they had a family business, if they had children, or if the respondent was a wage worker, but were significantly less likely if the household had a formal income channel.¹⁹ Households in the North and Central Coast as well as the Southeast and Mekong Delta were the most likely to repeat multiple episodes of declining incomes.

Some groups reported more adverse changes to income. Differences in income trends are not disparate enough to be considered “K-shaped,” but some groups are clearly recovering faster than others. Throughout the period for which the income index was calculated, the following groups reported more protracted declines in their household incomes; female respondents and households in the bottom 20 percent of the welfare distribution before COVID-19, those without any formal channels of income, and households in regions particularly hard-hit by COVID-19 (figure 2.19).

The current COVID-19 crisis may be more gender-biased. Unlike typical past economic crises it is “self-imposed” by mobility restrictions, business shutdowns, school and institutional childcare closures, or stay-at-home orders (Alon et al. 2020). The issue of childcare arose as a key concern and a prerequisite for economic recovery. Although women typically bear a disproportionate responsibility of childcare around the world, the COVID-19 pandemic exacerbated the pressure on women’s time. In a survey of 38 countries across different regions conducted between April and November 2020, UN Women found that, since the pandemic hit, women spent on average an additional 5.2 hours per week, whereas men spent an additional 3.5 hours per week, on unpaid care work. In Vietnam, during the nationwide lockdown in April 2020, women were much more likely to care for children. In more than half of households, the care responsibility fell solely on the mother, whereas the responsibility was shared between the father and the mother in almost 30 percent of households. In only 15 percent of households did fathers take the sole responsibility, and the remaining 4 percent of households relied on other family members.

Figure 2.19 Divergent recovery in an income index, Vietnam



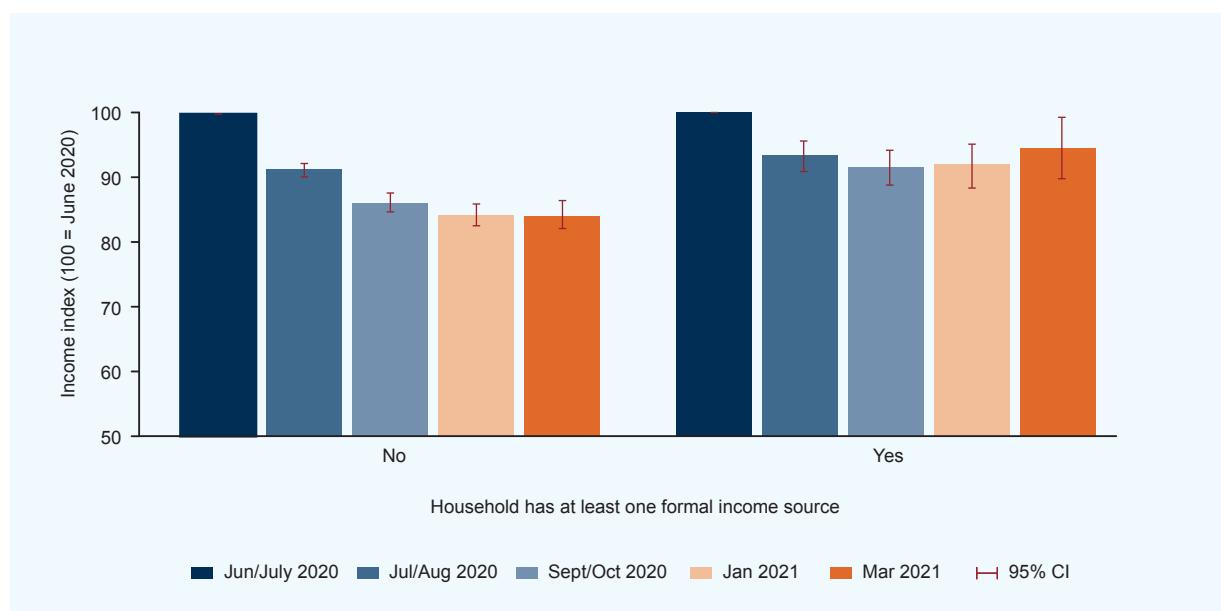
Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5) panel subset.

Note: Exact rates of income change is not recorded, only ranges (<=25%, 25–49%, 50–99%, and 100+%). Low-impact estimates are shown and assume the largest rate of change if income is reported to be increasing, or the smallest rate of change if income is reported to be declining. Estimates assume income levels are constant over off-survey periods.

Informality is strongly correlated with a lower income index (figure 2.20). Informal employment and business are very common. About 19 percent of the panel sample has either formal income sources through wage employment with a contract or a family business with a tax ID. All agricultural activity is assumed to be informal. Informality is associated with lower labor productivity and limited access to finance. Informal workers or businesses have less access to safety nets. Despite a proactive effort by the government to provide cash support to informal workers who were affected by COVID-19, such policies were difficult to carry out because informal workers are not registered and their activities are difficult to verify (more information on COVID-19 household relief policies is presented in chapter 4).

There are regional differences in household income trends (figure 2.21). The North-Central Coast region suffered from the lowest income index in March 2021, as can be expected from a highly service-dependent region that experienced repeated lockdowns from the Da Nang outbreak. The Southeast, where Ho Chi Minh City is located, may not have been as resilient because it is traditionally the largest entry point for international travelers and has the largest international ex-pat community. In 2019, Tan Son Nhat International Airport near Ho Chi Minh City handled about 40 million passengers, which is about 10 million more than Noi Boi International Airport in Hanoi. Hanoi, as the seat of government, has a much more domestically driven economy. The income index in the Mekong Delta showed a rebound after having already been at a low point in early 2020 because of droughts.

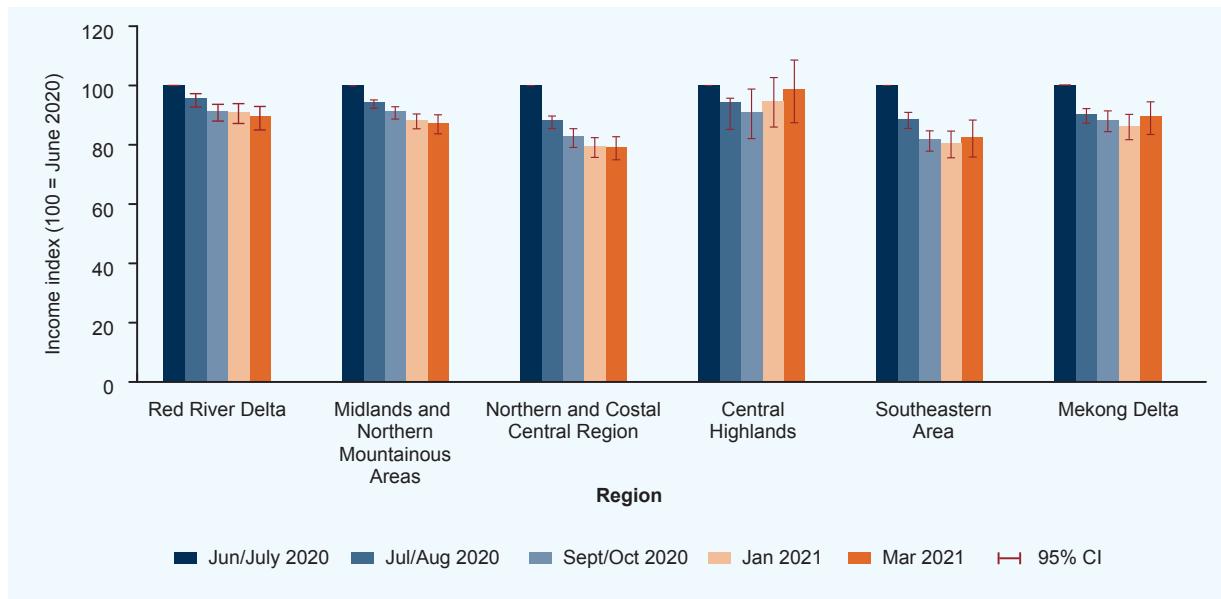
Figure 2.20 Vietnamese households without any formal labor market income sources have a lower income index



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5) panel subset.

Note: Exact rate of income change is not recorded, only ranges (<=25%, 25–49%, 50–99%, and 100+%). Low-impact estimates are shown and assume the largest rate of change if income is reported to be increasing, or the smallest rate of change if income is reported to be declining. Estimates assume income levels are constant over off-survey periods.

Figure 2.21 Changes in the household income index varied by region, Vietnam



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–5) panel subset.

Note: Exact rate of income change is not recorded, only ranges (<=25%, 25–49%, 50–99%, and 100+%). Low-impact estimates are shown and assume the largest rate of change if income is reported to be increasing, or the smallest rate of change if income is reported to be declining. Estimates assume income levels are constant over off-survey periods. CI = confidence interval.

Notes

- ⁷ This report primarily uses information from the World Bank COVID-19 *household* monitoring survey, which completed five rounds from June 2020 to March 2021. Three rounds of the World Bank COVID-19 *firm* monitoring surveys were collected over the same period, and data collection is still ongoing.
- ⁸ The higher negative response rate in the first round may also be related to a longer reference period (four months, compared to one month in subsequent rounds). Questions also ask about new shocks, and those who are experiencing prolonged job loss may not repeatedly report this “shock.”
- ⁹ Shocks can be non-COVID-19 related such as illness or death in the family.
- ¹⁰ Employment information in the World Bank COVID-19 monitoring surveys primarily captures the conditions of the main respondent and are not representative of the full labor force.
- ¹¹ Readers are directed to World Bank (2021d) for more detailed analysis of labor impacts during COVID-19 using the Vietnam Labor Force Surveys.
- ¹² This may also be affected by the reference period for the first round being much longer (four months) than for other rounds (one month).
- ¹³ Those who are currently working but are willing and available for more work.
- ¹⁴ Because questions on family businesses are a household-level rather than an individual-level outcome, there is less concern regarding gender sample selection bias.
- ¹⁵ Mediation analysis is performed by sequentially adding factors that likely absorb some of the magnitude or statistical significance of the female dummy. The analysis starts with a basic logit regression of the binary indicator of experiencing a significant drop in business turnover on female dummy and sequentially adds other correlates in subsequent columns (table 2.4) until the coefficient of female is no longer statistically significant.
- ¹⁶ For background on household income sources, appendix B describes household incomes in the pre-COVID-19 context.
- ¹⁷ For disaggregated figures by welfare quintile and region, see additional figures in the Annex.
- ¹⁸ This question was first asked in Round 2 and June 2020 is the first reference period.
- ¹⁹ A formal income channel is if either the main respondent has a contract through wage employment or the family business has a tax ID. The employment contract status of other household members was not recorded.

References

- Alon, Titan M., Matthias Doepeke, Jane Olmstead-Rumsey, and Michele Tertilt. 2020. “The Impact of COVID-19 on Gender Equality.” NBER Working Paper 26947 National Bureau of Economic Research, Cambridge, MA.
- GSO (General Statistics Office). 2021a. “COVID-19 Impacts on Labour and Employment Situation in Quarter IV of 2020.” GSO, Hanoi, January 6. <https://www.gso.gov.vn/en/data-and-statistics/2021/01/covid-19-impacts-on-labour-and-employment-situation-in-quarter-iv-of-2020/>
- GSO (General Statistics Office). 2021b. “Report on the COVID-19 Impacts on Labour and Employment Situation in the First Quarter of 2021.” GSO, Hanoi, April 16. <https://www.gso.gov.vn/en/data-and-statistics/2021/04/report-on-the-covid-19-impacts-on-labour-and-employment-situation-in-the-first-quarter-of-2021/>.
- Ha, Thi, and Anh Minh. 2021. “Citizens, Businesses Hurt as Rising Prices Raise Inflation Concerns.” *VNExpress*, May 19, 2021. <https://e.vnexpress.net/news/business/economy/citizens-businesses-hurt-as-rising-prices-raise-inflation-concerns-4279567.html>.
- Kugler, Maurice, Mariana Viollaz, Daniel Duque, Isis Gaddis, David Newhouse, Amparo Palacios-Lopez, and Michael Weber. 2021. “How Did the COVID-19 Crisis Affect Different Types of Workers in the Developing World?” Policy Research Working Paper 9703, World Bank, Washington, DC.
- World Bank. 2021d. “The Labor Market and the COVID-19 Outbreak in Vietnam: Impacts and Responses.” World Bank, Washington, DC

Chapter 3.

COPING: A RELIANCE ON SELF-INSURANCE AND PERSONAL NETWORKS

.....

During the COVID-19 (coronavirus) pandemic, households have primarily relied on self-coping strategies and support from personal networks. On the one hand, COVID-19 did not necessitate large financial interventions. On the other hand, the lack of utilization of formal channels to cope (financial institution and government support) may also reflect low levels of financial inclusion for certain vulnerable groups, as well as a social protection system that requires modernization and the limited nature of the fiscal response. The labor force is highly informal, and both household and firm COVID-19-related relief programs faced challenges with implementation. Businesses had access to more formal coping mechanisms, such as through additional financing, adoption of remote work arrangements or new technologies to reach customers. However, small and informal businesses still tend to be more constrained. Many lacked adequate access to formal finance, and a large share of businesses had to downsize operations.

.....

COPING STRATEGIES

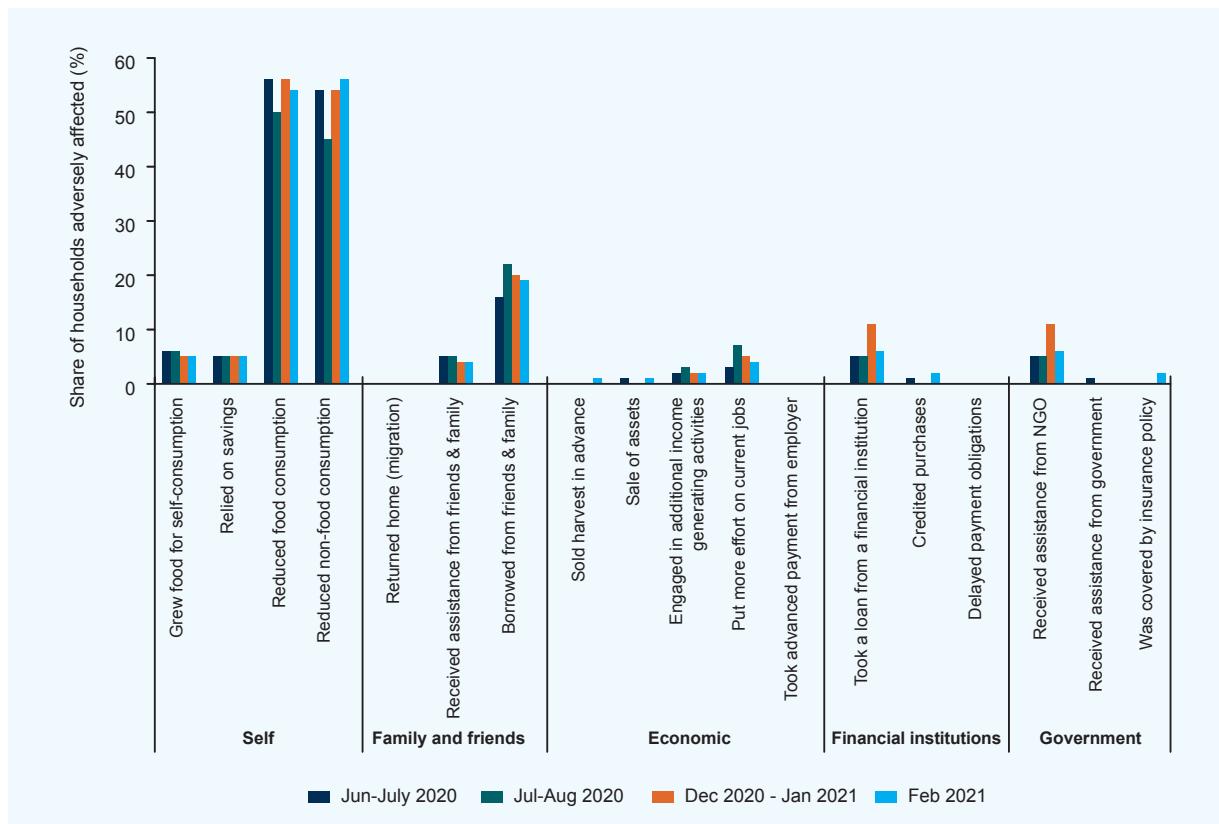
Coping strategies that households rely on during crises or shocks range from self-coping, personal networks, or formal external channels. In the face of crisis, household coping strategies can be based on their own means (assets and savings), or households can change behaviors and reduce consumption. They can also try to engage in more economic activities to smooth income. They can turn to assistance outside their networks of family and friends. In countries with developed social response systems, financial or government institutions can also be a more likely means of support.

During COVID-19, most households in Vietnam primarily relied on self-coping and family or friend networks for support. Household resiliency is notable given the lack of widespread social relief measures, and Vietnamese households were largely self-insuring and self-sufficient (figure 3.1). A few also chose to engage in additional economic activities, but this was about half as many as those who reported putting more efforts into their existing jobs. The most common household coping strategy by far was to simply reduce consumption. The second most common was to borrow from friends. Other strategies were less commonly used: growing food, relying on savings, getting loans from an institution, or receiving assistance from family members. Formal channels of assistance from financial institutions or government were least common. The perhaps surprising low levels of reliance upon formal public support are partly due to the good containment of COVID-19 early on, and also due in part to the limited coverage and benefit levels of the fiscal response, due to issues in both design and implementation discussed in chapter 4.

Poor and rich households relied on different coping strategies. Poor households had to rely on external sources, whereas rich households were better able to cope within their own means. For example, poor households had to borrow and receive assistance from family and friends. Richer households were able to rely on savings. Rich households could also afford to reduce consumption to a larger extent than poor households that are already closer to subsistence levels. In earlier studies on coping behavior during the global financial crisis (2007-9), poor households having lesser assets either employed no coping strategies, sought external financial assistance from family and friends, or sought additional income-generating activities (Tran 2015). Richer households were more able to tap into their own savings and assets in order to cope. These differences in coping strategies across poor and rich households strongly resemble the coping strategies observed during COVID-19, even though the global financial crisis occurred a decade earlier.

In contrast, the coping strategies used by and available to formal firms were quite different. Firms might run down their cash reserves to weather the negative impacts, but this option was usually limited to larger firms. Small and medium firms were less likely to have built up this cash stock. Formal firms could also access formal credit or restructure their debt through financial institutions and markets. Last, firms undertook changes internally to cope with the impacts by adjusting their labor mix (either temporarily through worker leave or reduced pay, or permanently through firing) and adopting technology to reach customers and automate processes.

Figure 3.1 Vietnamese households were more likely to use informal and self-coping strategies



Source: World Bank Vietnam COVID-19 monitoring surveys (rounds 2–5).

Note: Coping questions were asked only of households reporting income loss or having experienced negative shocks within survey reference periods. NGO = nongovernmental organization.

HOUSEHOLD SELF-INSURING AND BORROWING STRATEGIES

Vietnamese households are resilient, independent, and adaptable. Certain preexisting characteristics helped households cope through bouts of declining income. Vietnamese households have high savings rates, have strong family networks and support systems, and are economically ambitious with households having multiple income streams. A low cost of living also ensures that essentials items are still affordable, and growing food for self-consumption was also common before COVID-19 among poorer households. These conditions provided households with some buffers during periods of lockdowns, which helped minimize risks of permanent falls into poverty. Vietnamese households are not indebted,

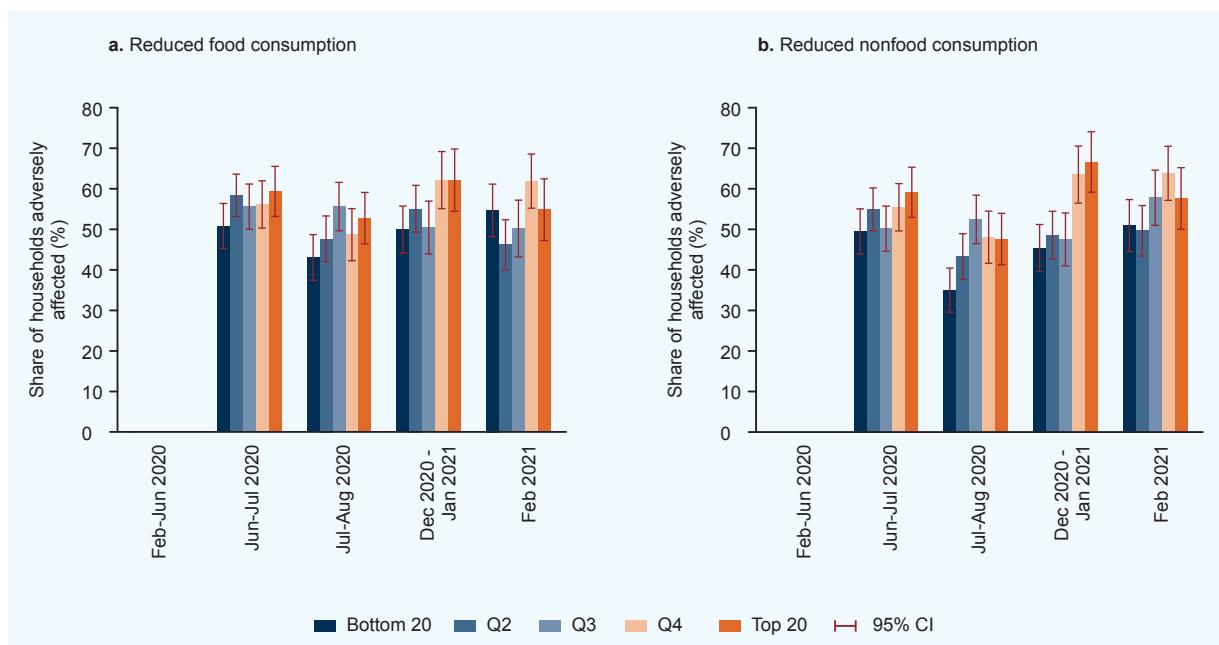
which reduces the serious implications of moderate declines in income. High recurring monthly expenses such as housing rent, mortgages, car payments, or debt payments are uncommon in Vietnamese society. Vietnam has one of the lowest shares of renters in the region at 2.6 percent.²⁰ Among homeowners, only 9.6 percent have an outstanding housing loan.²¹ In contrast in developed countries, a missed wage payment could lead to insolvency on debt payments or loss of assets. Accordingly, policy makers in developed countries responded by implementing rent moratoriums and debt postponement to prevent mass evictions and preserve income for essential purchases.

Reducing consumption and increasing self-consumption

Reducing food and nonfood consumption was the most common coping strategy among adversely affected households. On average, 56 and 54 percent of adversely affected households reduced food and nonfood consumption, respectively, in July 2020. The trends diverged over time. Fewer affected households reduced food consumption in later rounds, whereas more households reduced nonfood consumption in later rounds. The majority of affected households also report reducing both food and nonfood consumption at the same time. However, in the last round, there was a shift, with a slightly higher share of households reporting reduced nonfood but not food consumption. This could be related to the timing of the survey over Tet holidays in February, when families celebrate the new year and consume disproportionately more than other times in the year.

Poorer households were less likely to be able to reduce food and nonfood consumption to cope (figure 3.2). Reducing food consumption can be regarded as a coping strategy to save money, but it can also be potentially harmful if consumption is reduced too much. Although the rate of consumption reduction is not largely different across welfare quintiles, there is more concern for households at the lower end of the welfare distribution not being able to eat enough. The poorest households perhaps did not need to reduce food consumption because they were growing food for self-consumption, or because they were already consuming the minimum needed to survive. Adequate quality and diversified food consumption is still a concern among vulnerable groups. In March 2021 (round 5), about a quarter of households reported that in the last month there was at least one instance when they ate too few kinds of foods or were unable to eat healthy and nutritious foods because of a lack of resources (see more in chapter 5). Adequate food was also a challenge for some households before COVID-19. At the end of 2019, 15.6 percent of households reported that the family had gone without enough food at least once in 2019.²²

Figure 3.2 Wealthier Vietnamese households that experienced a shock or income decline were more able to afford to reduce food and nonfood consumption



Source: World Bank Vietnam COVID-19 monitoring surveys (rounds 2–5).

Note: Coping questions were asked only of households reporting income loss or having experienced negative shocks. The magnitude of the reductions is not recorded. Household (HH) quintiles (Q) are based on household consumption per capita in 2018.

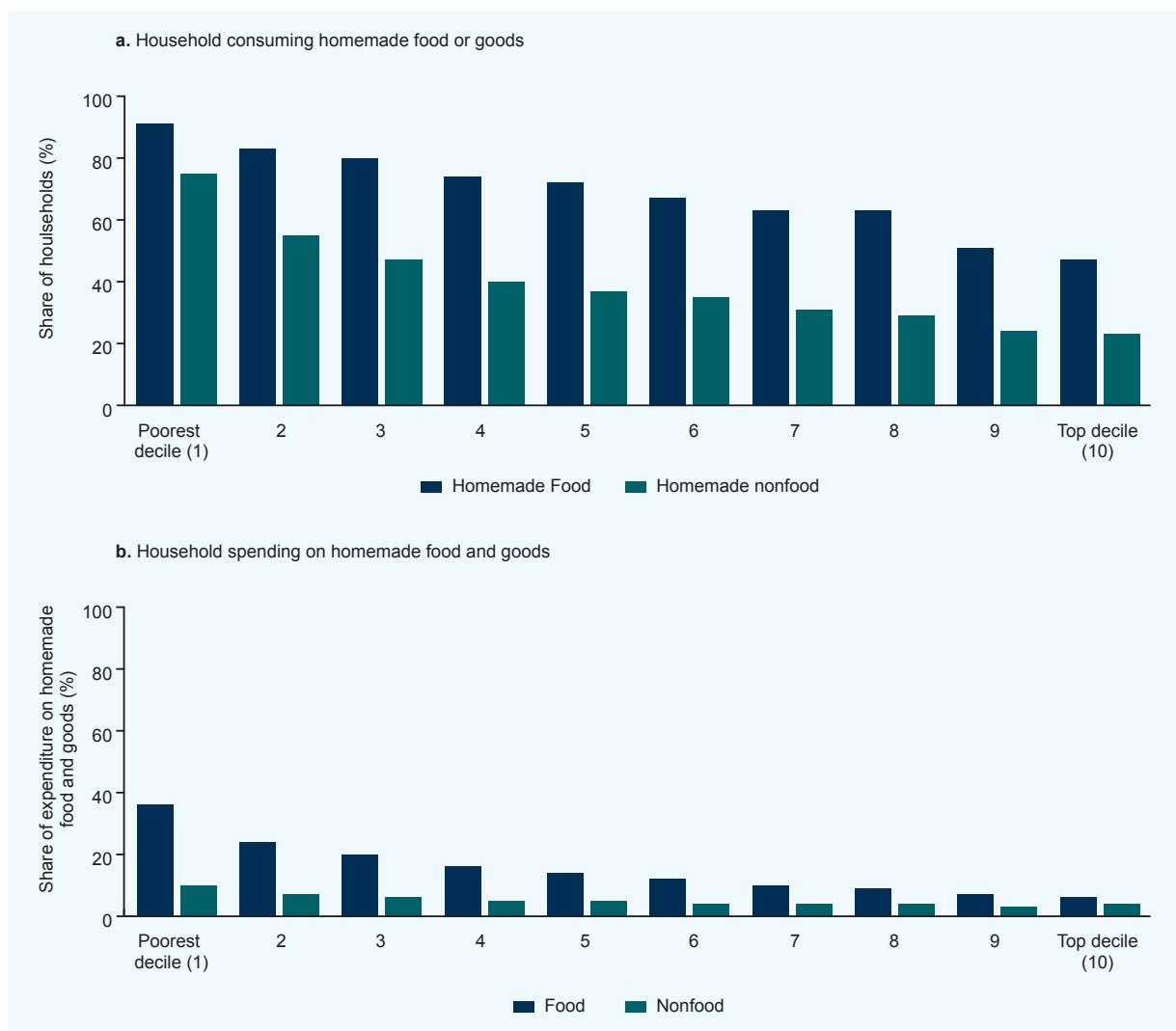
Reductions in nonfood consumption can also be a concern because some forms may potentially lead to a widening of nonmonetary inequality. When asked if households changed future plans, some deferred spending on education. This response was more likely for households at the lower ends of the welfare distribution. Chapter 6 explores this finding in more detail.

Growing food for self-consumption

Growing food for self-consumption was a more common coping strategy for poor households. Compared to other coping strategies, the rate of

households growing food to cope during COVID-19 was not high, perhaps because it was already an existing activity for most before the pandemic. Households, especially poorer ones, commonly produced homemade goods for self-consumption before COVID-19 and likely continued or increased home production during the pandemic. Among the poorest deciles, a majority of households had homemade food or nonfood consumption in 2018 (figure 3.3). In the poorest decile, over 90 percent of households have a portion of food consumption that is homemade, making up on average 36 percent of all food consumption.

Figure 3.3 Poor Vietnamese households are more likely to consume homemade goods



Source: World Bank staff calculations using the 2018 Vietnam Household Living Standards Survey.

In addition, the low cost of living in Vietnam benefited households. The costs for daily necessities such as food and petrol are relatively low and affordable compared to costs in other countries. East Asia and Pacific (EAP) as a region tends to be cheaper than others in the same level of development. According to price data collection from the 2017 International Comparison Program, price levels in the EAP region are low, which means that prices to purchase a comparable basket of goods are lower in the EAP region than in other regions. Within EAP, Vietnam has the second-lowest price level.

Savings

Saving is an important form of self-insurance because it allows households to smooth consumption during income shocks. Vietnam has a higher rate of savings compared to averages among other EAP countries and lower-middle-income countries. In Vietnam, 56.0 percent of individuals (aged 15 years and older) reported saving any money in 2017 compared to 53.1 percent in EAP, and 39.7 percent in lower-middle-income countries.²³ A 2019 financial inclusion survey in Vietnam finds that 60.1 percent of Vietnamese adults saved (World Bank 2019). Vietnamese save to buffer against shocks, in particular illness; out-of-pocket health expenses in Vietnam are some of the highest in EAP (World Bank 2019). Other common reasons cited for savings are preparing for old age, education, investment in businesses, and purchases of high-value assets in the future.

It is unclear, however, if household savings are sufficient to be used for emergency funds. In 2017, 70 percent of respondents (aged 15 and older) reported being able to come up with emergency funds, but only 14 percent of this group reported savings to be the main source of emergency funds.²⁴ The majority would have relied on money from working as a source of emergency funds, which obviously would be less viable during an economic crisis.

During COVID-19, poor households were less likely than rich households to tap into savings (figure 3.4). Because poor households have less assets and savings, this finding is not unexpected and is also consistent with

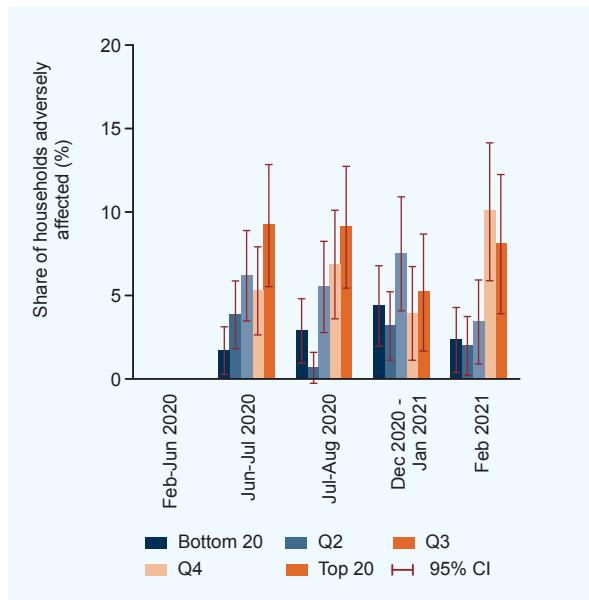
past coping studies in Vietnam. Poor households are also much less likely than richer ones to use formal savings. Sixty-six percent of households earning more than 10 million Vietnamese dong (VND) per month have formal savings channels, compared to less than 20 percent for households earning less than VND 1.3 million per month. Official deposits data also indicate that household deposits growth over the medium term has been declining (figure 3.5). This is important to point out because much of the savings behavior data is from 2019 or earlier, and in 2020 savings deposits have declined considerably.

Borrowing

Financial inclusion is low in Vietnam for certain vulnerable groups. In 2017, just over 26 percent of adults in Vietnam had an account at a financial institution. This rate increased to 42 percent by 2019 (figure 3.6), but there are still differences in access by socioeconomic groups. Less than 17 percent of people in poor households have an account, compared to 83 percent of people in rich households (World Bank 2019).²⁵ Large differences in access also exist by education group, which is correlated to household wealth and age cohort. Differences in the share of adults with accounts are smaller across geographic regions than across wealth and education groups. This highlights that financial inclusion is not necessarily due to limited supply but to household-specific constraints to access that disproportionately affect the vulnerable.

Having large family networks has been shown to provide financial resilience. Family members tend to be more altruistic toward each other, share common obligations, and have stronger contract enforcement (Cox and Fafchamps 2008; Hamilton 1964; La Ferrara 2011). Half of households in the World Bank COVID-19 monitoring surveys are engaged in family businesses with common incentives. Families are essential and core social units. Societal values in Vietnam revere the importance of family ties, roles, and responsibilities. Family units also have implications in administrative processes. The family registry book (a vestige of French colonial rule), passed down for generations, is an essential for life events such as marriages, opening bank accounts, and so on.

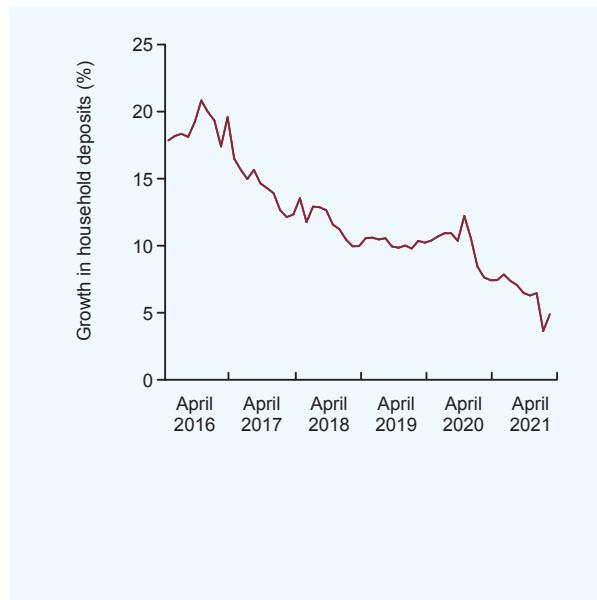
Figure 3.4 Wealthier Vietnamese households are more able to rely on savings



Sources: World Bank Vietnam COVID-19 household monitoring surveys (rounds 2–5)

Note: Coping questions were asked only of households reporting income loss or having experienced negative shocks.

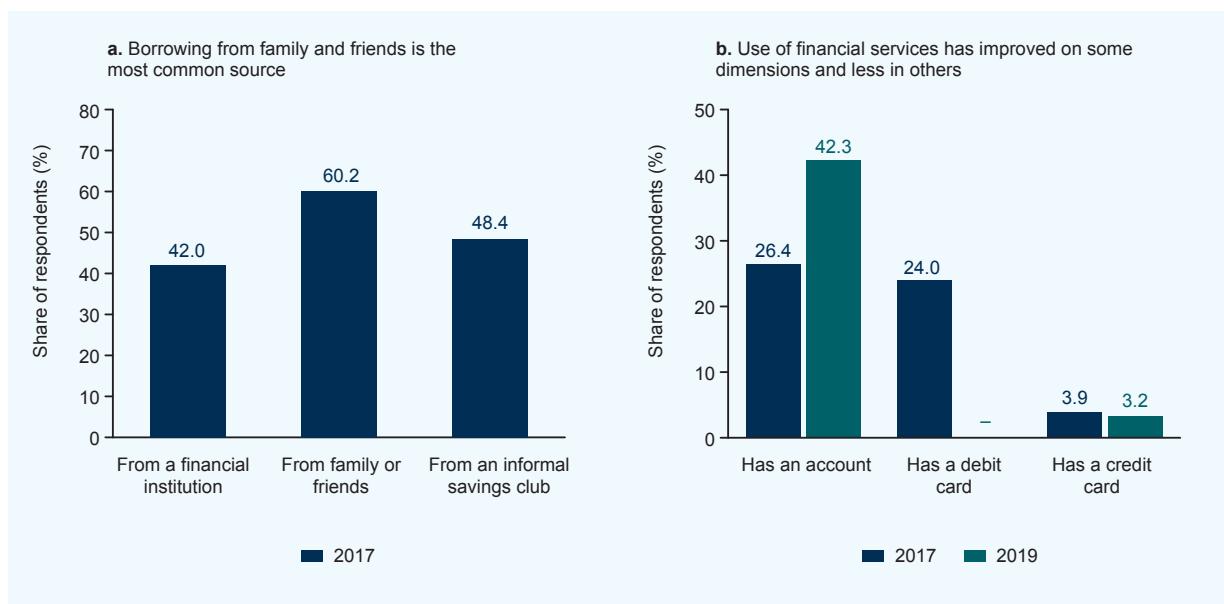
Figure 3.5 Vietnamese households are saving less than before



Sources: World Bank database

Note: Savings Deposits at Credit Institutions (end of period, not seasonally adjusted, year-on-year % change)

Figure 3.6 Indicators of financial access, Vietnam



Source: Based on 2017 data from the Global Findex database and World Bank 2019.

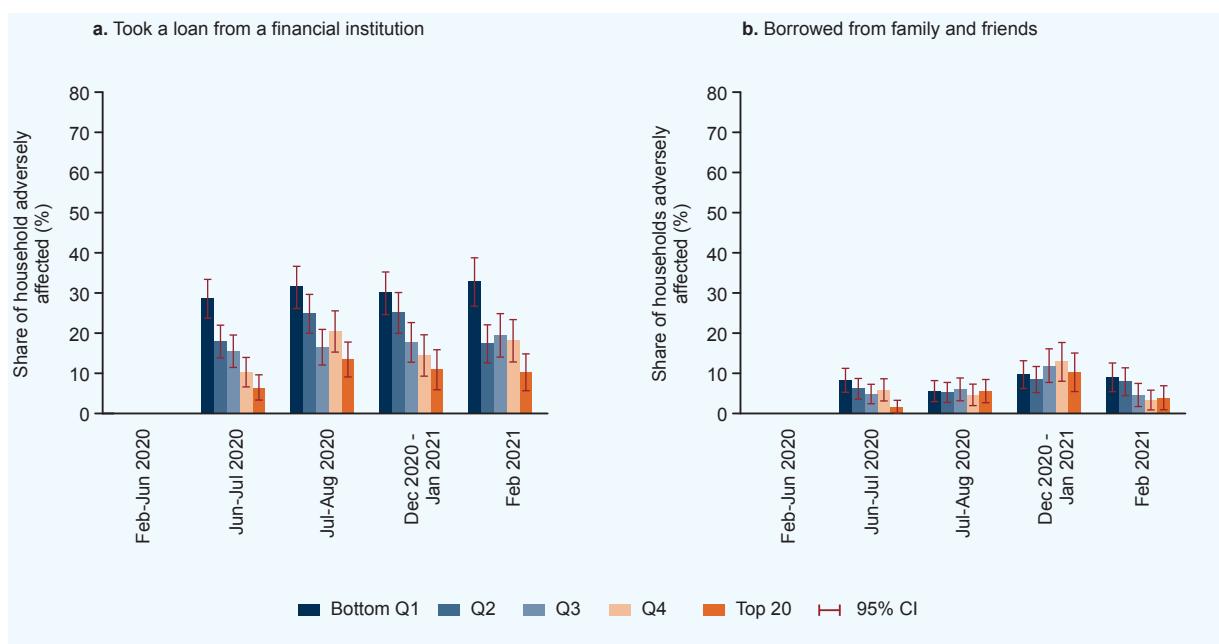
Notes: The Findex target population is the population of individuals aged 15 years and older.

During COVID-19, relying on financial assistance from family and friends was the second most commonly reported coping strategy among those who reported experiencing adverse shocks or reductions in income. In developing countries, borrowing from family and friends is a common strategy in the presence of unexpected shocks (Demirguc-Kunt and Klapper 2013; Pearlman 2010). In Vietnam during COVID-19, borrowing from friends and family was significantly more used by the poor (figure 3.7). The poor were also more likely to borrow from an institution than to rely on personal savings. This trend is consistent with previous research that poor households tend to rely on external sources, whereas rich households are better able to cope within their own means. The percentage of adversely affected households that borrowed from a financial institution is much lower than those that borrowed from personal networks. These financial institutions include State Policy Banks and farming cooperatives and other noncommercial banks, which do provide loans to agricultural and poor households.

BUSINESS ADJUSTMENT STRATEGIES

Chapter 3 concludes by looking at the adjustment strategies different types of formal firms adopted on their own. Firms can adjust and survive through both the actions they take to address the crisis and the support they receive from the government. Chapter 4 will discuss the fiscal support that different firms receive, and the greater utilization of that support by larger, formal firms compared to informal and small and medium enterprises. The rest of this section summarizes the actions different firms took themselves in reaction to economic pressures.

Figure 3.7 Types of borrowing by Vietnamese households during COVID-19



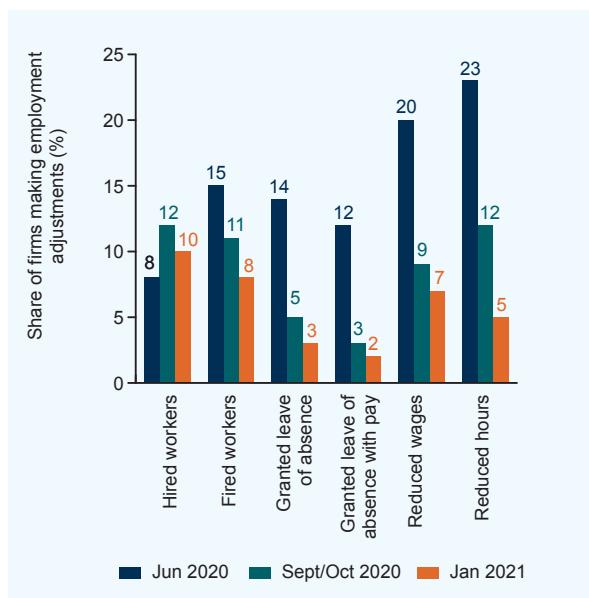
Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 2–5).

Note: Coping questions were asked only of households reporting income loss or having experienced negative shocks.

Employment adjustment mechanisms

In order to cope with the negative impacts of COVID-19, formal firms turned to different employment adjustment mechanisms to survive (figure 3.8). Businesses can choose to fire workers in difficult times but will be reluctant to do so if they believe the downturn is temporary because firing workers can have long-term effects, requiring firms to find and train new workers later. Instead, businesses may choose temporary adjustment mechanisms such as granting workers leave of absence with or without pay, and reducing worker wages and hours. At the initial stage of the pandemic in June 2020, about 20 percent of firms chose to reduce the wages and hours of their workers. A smaller proportion of firms chose to grant leave of absence with or without pay. However, a sizeable percentage of firms (15 percent) chose to fire workers in June 2020, probably in response to the large negative impacts from the April lockdown. Part-time workers form the group that is most vulnerable to layoffs. Firms with higher shares of part-time workers in the workforce are more likely to reduce their payroll (figure 3.9).

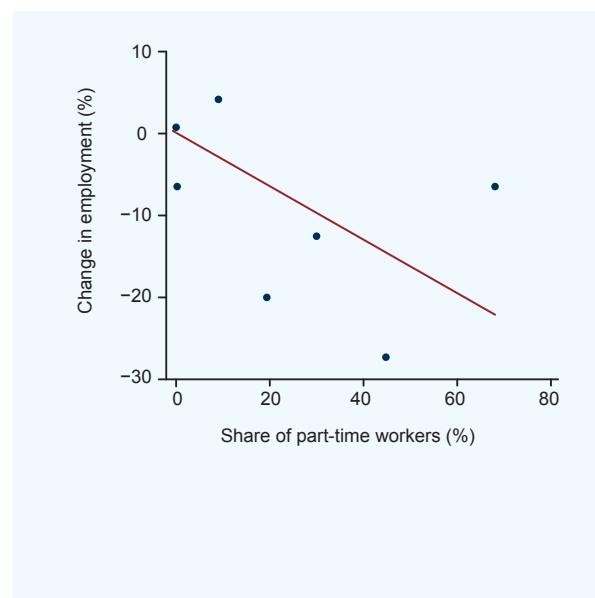
Figure 3.8. Different employment adjustments by firms in Vietnam



Source: World Bank COVID-19 Business Pulse Surveys.

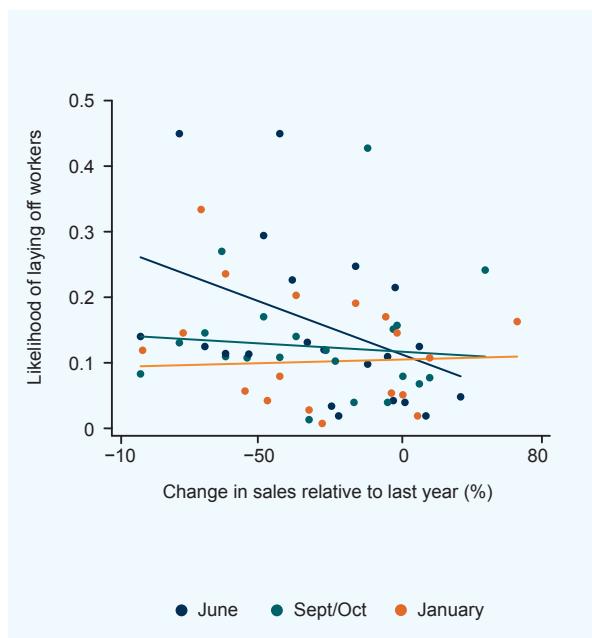
In the second half of 2020 and in early 2021, firms started to reduce their use of temporary employment coping mechanisms. Although some firms still responded to the negative COVID-19 impacts by reducing the wages and hours of workers, fewer firms were granting leave of absence. There are also encouraging signs of recovery among firms, which report hiring workers in September–October 2020 and January 2021. Firms are also becoming less likely to lay off workers in response to drops in sales (figure 3.10). The relationship between worker layoffs and changes in firm sales is becoming weaker over the three survey rounds, which could be explained by two conjectures. Businesses may have adapted their processes to deal with contraction without layoffs, or businesses (especially those that suffered a lot negatively) have already trimmed their labor forces to essential workers or the bare minimum. Both explanations point toward a reduction of worker layoffs in response to future sales drops, but it does not preclude some failing businesses exiting the market, along with the jobs they provide.

Figure 3.9. Part-time workers were the most likely to be laid off, Vietnam



Source: World Bank COVID-19 Business Pulse Surveys.
Note: The figure captures a binned scatterplot.

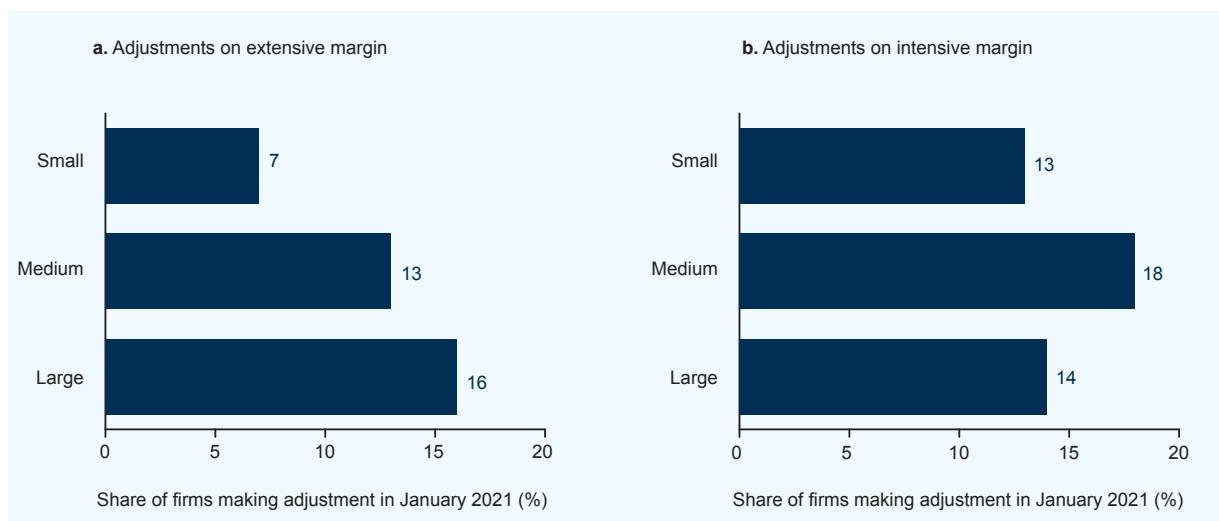
Figure 3.10 Firms in Vietnam are becoming less likely to lay off workers in response to drops in sales



Source: World Bank COVID-19 Business Pulse Surveys.
Note: Conditional on region, sector, and size fixed effects.

Small firms are less likely to fire workers in order to weather the pandemic. As discussed above, compared to medium and large firms, small firms show smaller changes in employment between June 2020 and January 2021. Indeed, small firms are more likely to use intensive margins of adjustments, such as reduction in hours or wages, or granting leaves of absence, compared to extensive margins of adjustments, such as firing workers. In January 2021, 7 percent of small firms fired workers compared to almost 15 percent of medium and large firms. Small firms may have less ability to fire workers because it is costly to fire workers, who have tacit knowledge, during a downturn and then replace them quickly when demand picks up, or because small firms may already have such a small staff they cannot operate with less. As a result, small firms may choose to adopt more intensive margins of adjustments such as reducing worker hours and wages, or granting leaves of absence (figure 3.11).

Figure 3.11 Small firms are more likely to opt for adjustments along intensive margins



Source: World Bank COVID-19 Business Pulse Surveys.
Note: Extensive adjustments are defined as firing workers; intensive adjustments are defined as reduction in hours, wages, or granting leaves of absence.

Access to external financing

Faced with closures and reduced sales, firms had liquidity issues especially at the early stages of the pandemic, but the situation had recovered in January 2021. In June 2020, the median firm expected on average about 9 weeks before they ran out of cash, with an average firm facing 22 weeks (figure 3.12). The cash flow shortages did not improve in September–October 2020. However, firms started to improve in January 2021, with the average time until the next cash flow shortage increasing more than 1.5 times to 36 weeks. Some firms were able to access external finances, and these firms have on average twice as much time before they experience cash flow shortages (figure 3.13).

Restructuring debt

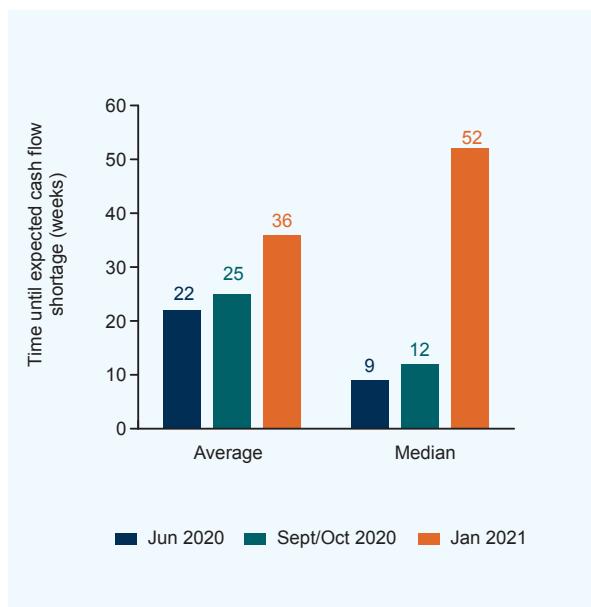
A sizeable share of firms has fallen in arrears during the pandemic, but the rates are declining. The share of businesses having already fallen in arrears increased from 17 percent in September–October 2020 to 24 percent in January 2021 (figure 3.14). Similar shares of

firms expect to fall into arrears in the next six months, albeit at a slightly lower share than in January 2021. One reason may be that more firms are restructuring their debts. The share of firms that already made adjustment in credit or loans repayment terms increased from 11 percent to 13 percent from September–October 2020 to January 2021 (figure 3.15).

Digital adjustments

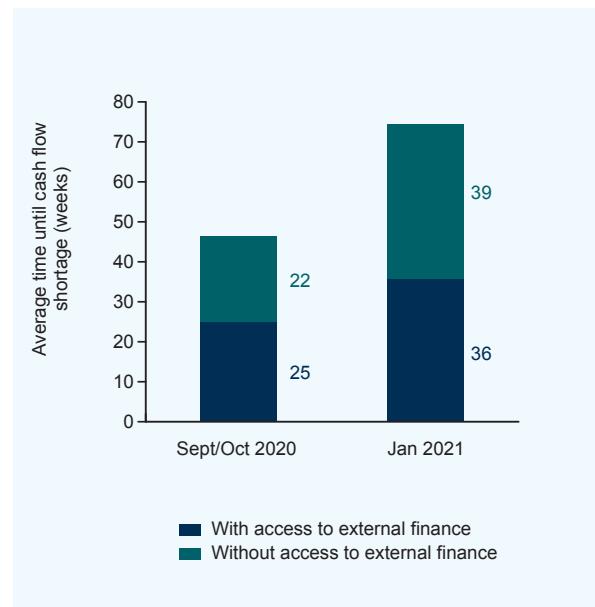
Firms have also turned toward digital technologies as an alternative coping strategy. Firms in Vietnam had been steadily adopting digital technologies before the pandemic, but the social distancing measures and lockdown from March 2020 and lingering negative impacts even in 2021 accelerated firms' motivation to adopt digital technologies. Firms digitized their business operations to make it possible to work remotely and virtually, and to reach their customers. Many firms made this change to their business operations in June 2020, with almost 50 percent of firms reporting that they started using or increased their use of digital platforms, online social media, or specialized apps in response to the

Figure 3.12 Vietnamese firms faced liquidity issues in June and October 2020, but the situation improved in January 2021



Source: World Bank COVID-19 Business Pulse Surveys.

Figure 3.13 External finance can double the time before firms experience cash flow shortages



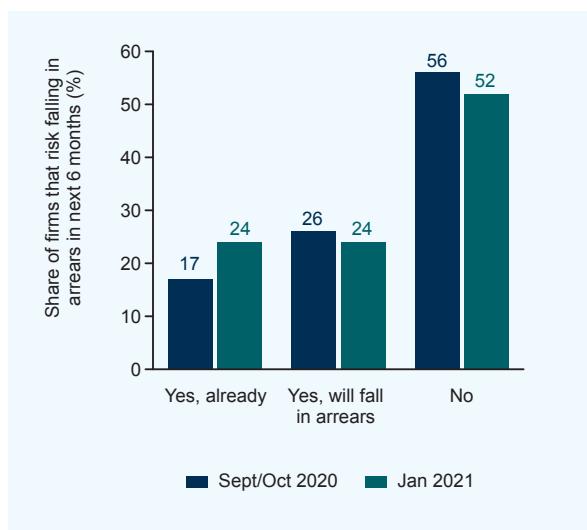
Source: World Bank COVID-19 Business Pulse Surveys.

COVID-19 outbreak (figure 3.16). More firms steadily increased their use over the next six months with 62 percent and 73 percent of firms doing so in September 2020 and January 2021, respectively. A less common strategy among firms was to invest in digital solutions or repackaging their product mix to respond to the pandemic. At the start, only 5 percent of firms had invested in digital solutions in June 2020, increasing to 20 percent of firms in January 2021. The slower increase of investments in digital solutions may be explained by the costs in terms of time, human resources, and changes to business operations required by firms. Firms may not have been willing to invest such costs at the start of the pandemic, thinking that the negative impacts would be short-term and temporary, but they began investing in digital solutions as the pandemic continued into 2021.

COVID-19 has accelerated the existing trends of firms' adoption of digital technology. There has been a marked increase in firms selling on e-commerce platforms over the last eight years, and firms have been moving from websites to e-commerce platforms and social media. The share of firms selling on e-commerce

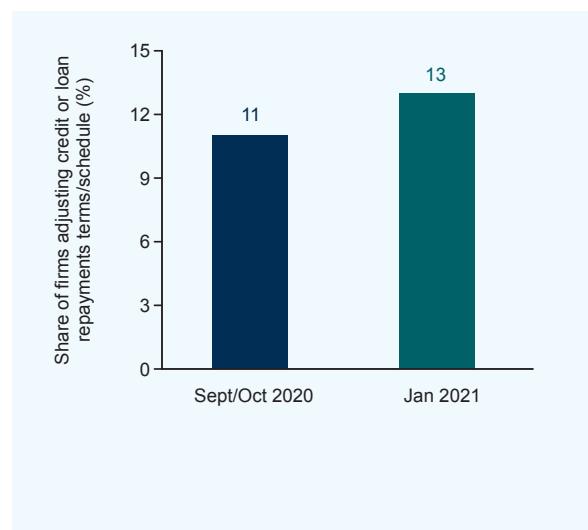
platforms and social networks has increased from about 10–15 percent between 2014 and 2018, to 17 percent in 2019, and 22 percent in 2020 (figure 3.17). The trend has increased in 2020 as more firms are receiving and making orders through e-commerce platforms and social networks. The most common method of sales and purchases by firms is through email, with over 80 percent of firms in the Vietnam E-commerce Association E-business Index receiving and making orders through this medium. This share has been steady over the last five years. Similarly, the share of firms using websites to receive and make orders has been about 40 percent in the last three years. However, there has been a steady rise in the share of firms using e-commerce platforms and social network to reach their customers and suppliers (figure 3.18). The share of firms receiving orders from e-commerce platforms and social networks increased by about 15 percentage points between 2018 and 2020, with 10 percentage points of that increase coming in 2020. There was also a similar percentage increase in the share of firms making orders on e-commerce platforms and social networks between 2018 and 2020.

Figure 3.14 Many Vietnamese firms have already fallen into arrears or expected to do so in the next six months



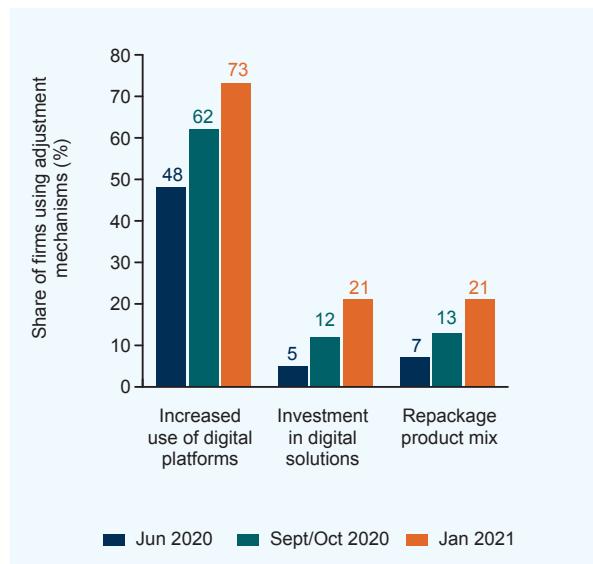
Source: World Bank COVID-19 Business Pulse Surveys.

Figure 3.15 Increasing shares of Vietnamese firms are restructuring their debt



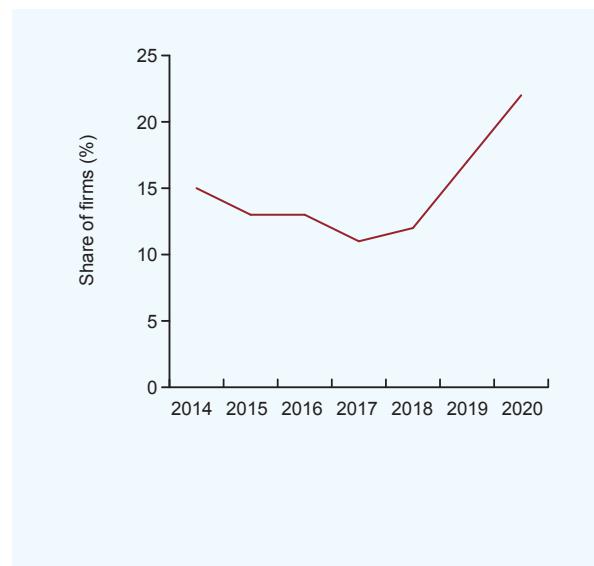
Source: World Bank COVID-19 Business Pulse Surveys.

Figure 3.16 Many Vietnamese firms started or increased their use of digital platforms during the pandemic



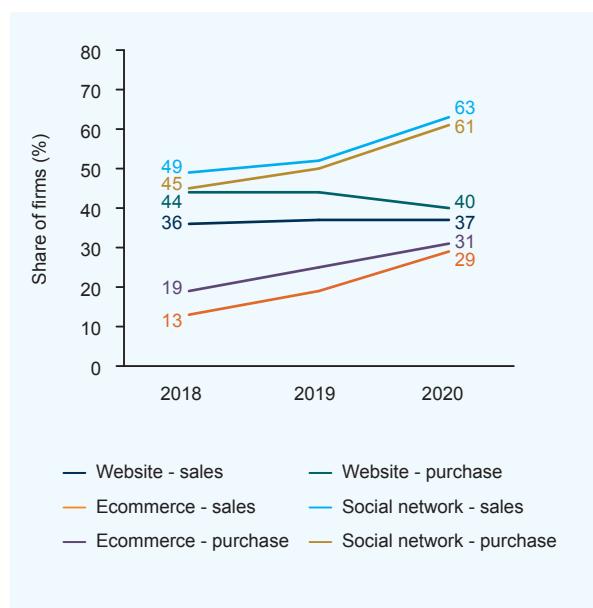
Source: World Bank COVID-19 Business Pulse Surveys.

Figure 3.17 More Vietnamese firms are selling on e-commerce platforms and social networks



Source: E-business Index, Vietnam E-commerce Association.

Figure 3.18 More Vietnamese firms are receiving and making orders on e-commerce platforms and social networks



Source: E-business Index, Vietnam E-commerce Association.

The use of digital platforms has resulted in more e-commerce sales among firms, but this increase may represent substitution from traditional sales methods rather than an increase in total sales. The use of digital platforms is associated with higher share of e-commerce sales in January 2021 (figure 3.19). There is about 5 percent increase in the e-commerce sales after firms started using or increased their use of digital platforms. This effect is statistically significant and conditional on other firm characteristics. The use of digital platforms did not affect overall sales or cash flows, however, suggesting that, although firms reached more customers online, these online customers substituted for the decrease in customers through traditional sales methods. There is also a positive relationship between the use of digital platforms and the expansion of businesses. The use of digital platforms is associated with an 8.5 percent increase in the probability of hiring, and it is not significantly correlated with layoffs.

Figure 3.19 Digital platforms increased e-commerce sales, but not overall sales



Source: World Bank COVID-19 Business Pulse Surveys.

Note: Coefficient estimates from regressing firm outcome on digital adoption, controlling for size, region, and sector fixed effects."

Notes

- ²⁰ East Asia and Pacific Team for Statistical Development household surveys circa 2010–15. See appendix H for figure.
- ²¹ Based on ddata from the Global Findex database.
- ²² According to data from the World Values Survey.
- ²³ Global Findex database.
- ²⁴ Global Findex database.
- ²⁵ In World Bank (2019), poor is defined as income of less than or equal to VND 900,000 per month, and rich is defined as income of less than or equal to VND 10 million per month.

References

- Cox D., and M. Fafchamps. 2008. “Extended Family and Kinship Networks: Economics Insights and Evolutionary Direction.” In *Handbook of Development Economics*, Vol. 4, edited by T. P. Schultz and J. Strauss. 3711–84. Amsterdam: Elsevier.
- Demirguc-Kunt, Asli, and Leora Klapper. 2013. “Measuring Financial Inclusion: Explaining Variation in Use of Financial Services across and within Countries.” *Brookings Papers on Economic Activity* 2013: 279–340.
- Hamilton, W. 1964. “The Genetical Evolution of Social Behaviour I.” *Journal of Theoretical Biology* 7: 1–16.
- La Ferrara, E. 2011. “Family and Kinship Ties in Development: An Economist’s Perspective.” In *Culture, Institutions and Development: New Insights into an Old Debate*, edited by J. P. Platteau and R. Peccoud. New York: Routledge.
- Pearlman, S. 2010. Flexibility matters: Do more rigid loan contracts reduce demand for microfinance? CFA Working Paper No. 2010/10.
- Tran, Van Q. 2015. “Households’ Coping Strategies and Recoveries from Shocks in Vietnam.” *Quarterly Review of Economics and Finance* 56 (May): 15–29.
- World Bank. 2019. “Survey Report. Financial Access of Individuals in Vietnam.” World Bank, Washington, DC.

Chapter 4.

POLICIES: A CALL TO STRENGTHEN AMID HEIGHTENING RISKS

.....

Arguably no country in the world proactively managed challenges in 2020 better than Vietnam, but heightening risks from rising COVID-19 (coronavirus) cases in 2021 call for stronger actions. Reflecting on the impacts and disruptions felt by households and firms from a year of relatively milder shocks in 2020 and early 2021 is important as risks and uncertainty increase. How much did policies affect households? This chapter reviews a set of policies that directly affected households in the space of health and fiscal responses. The health response to contain COVID-19 was stringent but tremendously successful, which allowed the economy to function in a closed setting but still relatively normally. However, each successive outbreak has been larger than the last, and Vietnam is behind on vaccinations. The government made plans to disburse cash support to existing and new target groups. Although the impact of the crisis was small, the intended support faced implementation challenges that motivate modernization of the social protection system to have more effective impact to mitigate future shocks.

.....

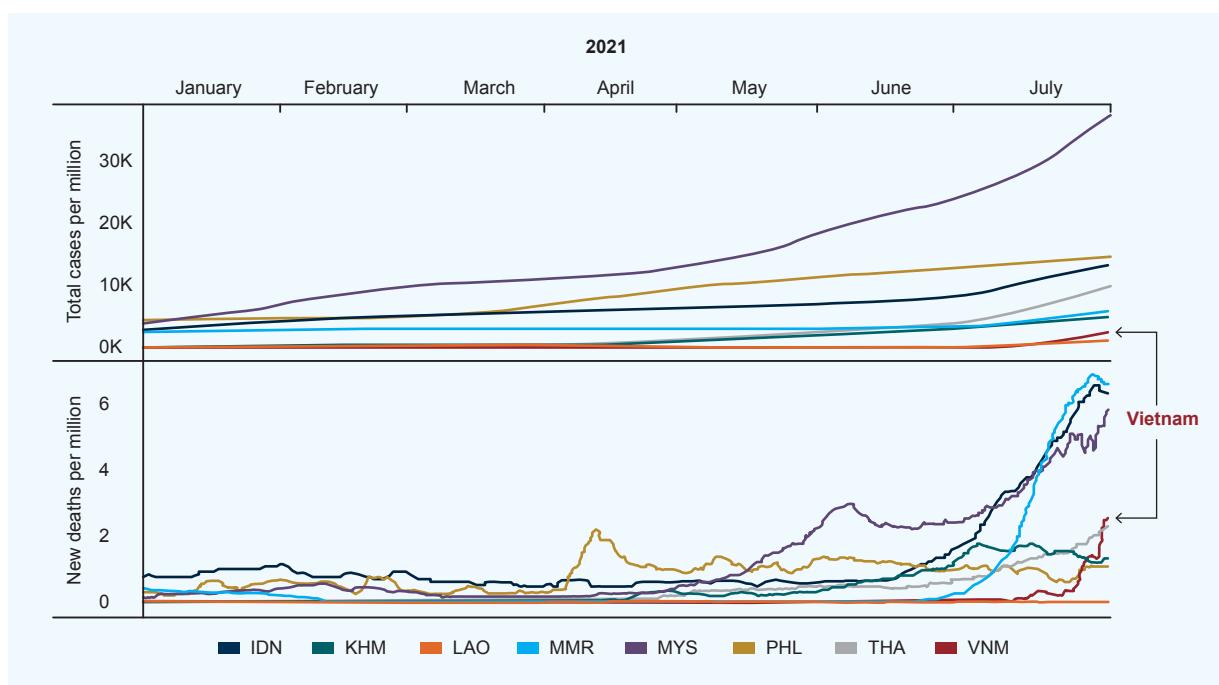
THE HEALTH RESPONSE: START AND FINISH STRONG

Vietnam led early with a strong and successful pandemic response, but amid rising risks will it finish strong as well? Over the course of the first year of the pandemic, Vietnam led the world with some of the fewest cases and deaths related to COVID-19. As other countries were locked down, Vietnam remained open domestically and enjoyed positive economic growth. However, new outbreaks are emerging that are larger and more widespread. These risks challenge Vietnam ability to adequately guard the country through existing strategies. As the developed world is accelerating on vaccinations, and reopening, Vietnam is now falling behind. Under strong government commitment and leadership, Vietnam can stay the course and continue its success but will need to move substantially faster on rolling out vaccinations, testing, and timely monitoring.

Effective management at the start

Vietnam took early and strong measures against COVID-19 compared to other countries. International borders were closed on March 25, 2020, and the country entered a nationwide lockdown in early April for one month. Early actions are notable for preventing a surge in COVID-19 cases and minimizing transmissions. Throughout the early phases of pandemic, Vietnam led the region and world with some of lowest case counts and deaths (figure 4.1). However, cases and deaths are rising dramatically with latest outbreak in April 2021.

Figure 4.1 Vietnam led the Southeast Asia region early on with the lowest numbers of COVID-19 cases and deaths



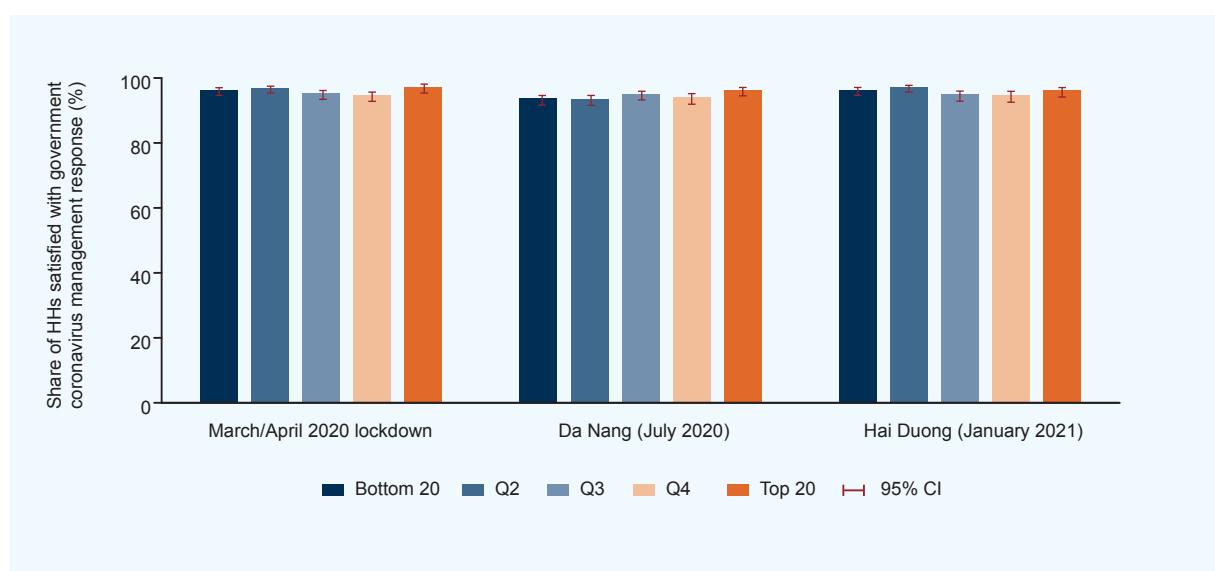
Source: Mathieu et al. 2021, August 5, 2021 update.

Vietnam had a strong public health campaign related to COVID-19 risks and management. There was an abundance of public service messages about safety, social distancing, and healthy practices broadcast through the news and text messages. The public was asked to follow the 5 Ks: Khau trang (face mask), khu khuan (hand sanitation), Khoang cach (social distancing), khong tu tap (no gatherings), and khai bao y te (medical declaration). The media campaign was taken one step further. In February 2020, the Ministry of Health released a song and dance named “Ghen Co Vy,” composed by popular Vietnamese musicians, to remind citizens of practices of handwashing and face covering. This song quickly reached international popularity. During the height of the first lockdown in April 2020, the Ministry of Health sent notifications several times a day through mobile providers reminding residents of COVID-19 precautions.

Many of the health strategies adopted to quickly identify cases were effective and strict. Domestic health response included instances of lockdown of residential buildings, notification, road blockages, isolation of entire provinces, and large fines for those not wearing masks in public or failing to report that they had been in outbreak areas. Compliance with these containment efforts was generally good, with occasional violations clearly publicized and prosecuted by law.

The public highly supported the pandemic management response by the government, reflecting trust in government decision-making. Perceptions of the government health response strategy remained high throughout various outbreaks (figure 4.2). Most domestic and foreign firms are willing to repeat the same lockdown process in the event of further outbreaks, despite the negative effects they felt from such restrictions (Malesky 2021). Over 80 percent of firms would agree with the government’s resuming strict social isolation and measures even if the probability of an outbreak was low at 25 percent.

Figure 4.2 Near unanimous approval of government response in Vietnam



Source: World Bank COVID-19 household monitoring surveys (round 3, round 5).

Note: Household (HH) quintiles (Q) are based on household consumption per capita in 2018. Perceptions on March/April and Da Nang outbreak management were asked in round 3. Perceptions on the Hai Duong outbreak management were asked in round 5.

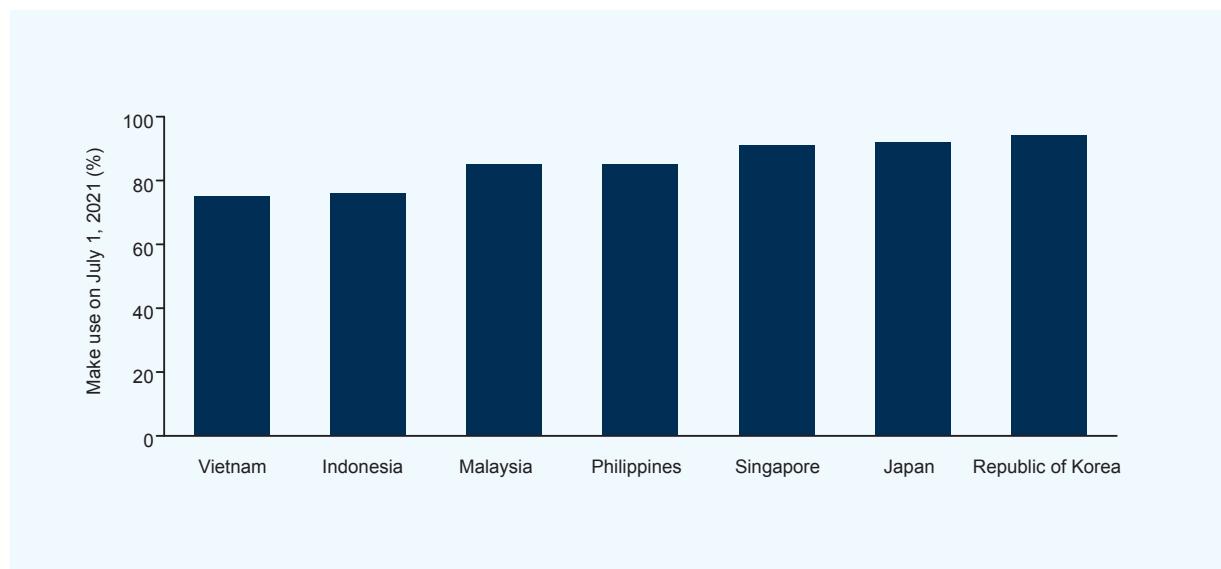
Over time, with each successive outbreak, containment measures became more localized and targeted as the government became more experienced in identifying cases and containing the spread. Even though some later outbreaks were larger with more COVID-19 cases, experience from earlier containment efforts allowed the government to contain in a more targeted manner that led to less disruption in movement and business activity.

With borders closed to tourists, other international travelers became the primary risk channel for COVID-19 transmission. Since March 2020, only a small set of groups including repatriations, international experts, business leaders, and diplomats has been allowed to enter Vietnam under strict protocols. The entry process remained strict throughout the year, with high penalties for those who deviated from policy. Restrictions to in-bound travelers became stricter as time passed but COVID-19 cases still managed to leak into the community. In early January 2021, home quarantine

was removed as a quarantine location option, and all travelers regardless of status were required to isolate at designated sites. During the beginning of the fourth wave, quarantine periods were temporarily extended to three weeks at a quarantine facility plus an additional week of home isolation.²⁶ With exposure to new variants, there was also consideration of separate quarantine areas for those arriving from high-risk countries. Illegal immigration and those entering Vietnam providing false credentials as experts also became an issue. In late May and early June 2021, international airports were briefly closed to in-bound flights.

By the second quarter of 2021, the government also expressed concern about compliance with COVID-19 precautions and public complacency. In July 2021, mask use in Vietnam was 75 percent, compared to still nearly universal levels in the Republic of Korea, Singapore, and Japan. Other neighboring developing countries had similar or higher mask use rates (figure 4.3).

Figure 4.3 Mask wearing in Vietnam eased after the first outbreak in April 2020

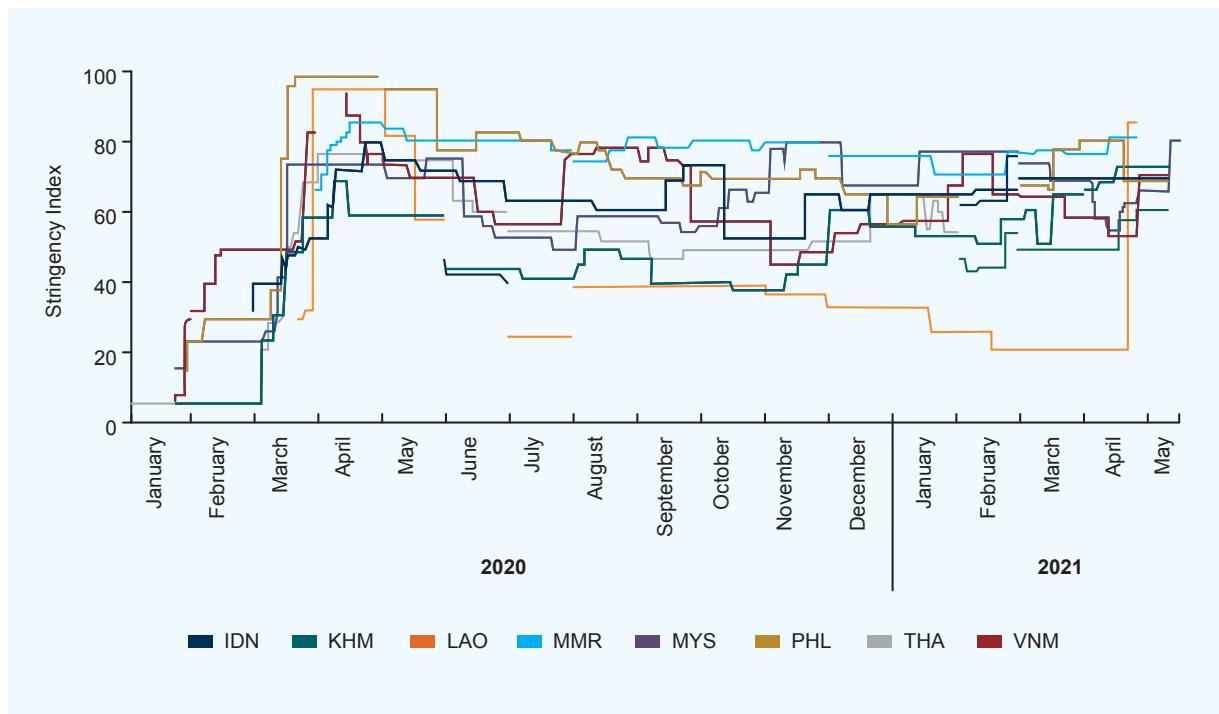


Source: Institute for Health Metrics and Evaluation, <https://covid19.healthdata.org/>.

An important aspect of Vietnam's health response was social distancing and managing movement. Using a more targeted prevention policy approach, Vietnam's overall stringency was not necessarily higher than other countries in the region. Vietnam had either the highest or second-highest stringency in about 100 out of over 400 days since March 2020 (figure 4.4). The Oxford

Stringency index for Vietnam was at its highest value in April 2020 during the nationwide lockdown. Because case counts were much higher in other Southeast Asian countries, policies in Vietnam were relatively more relaxed when observed over the entire pandemic period. See box 4.1 for data insights using mobile phone mobility data.

Figure 4.4 Oxford Stringency Index trends in Southeast Asia



Source: Mathieu et al. 2021, May 18, 2021, update.

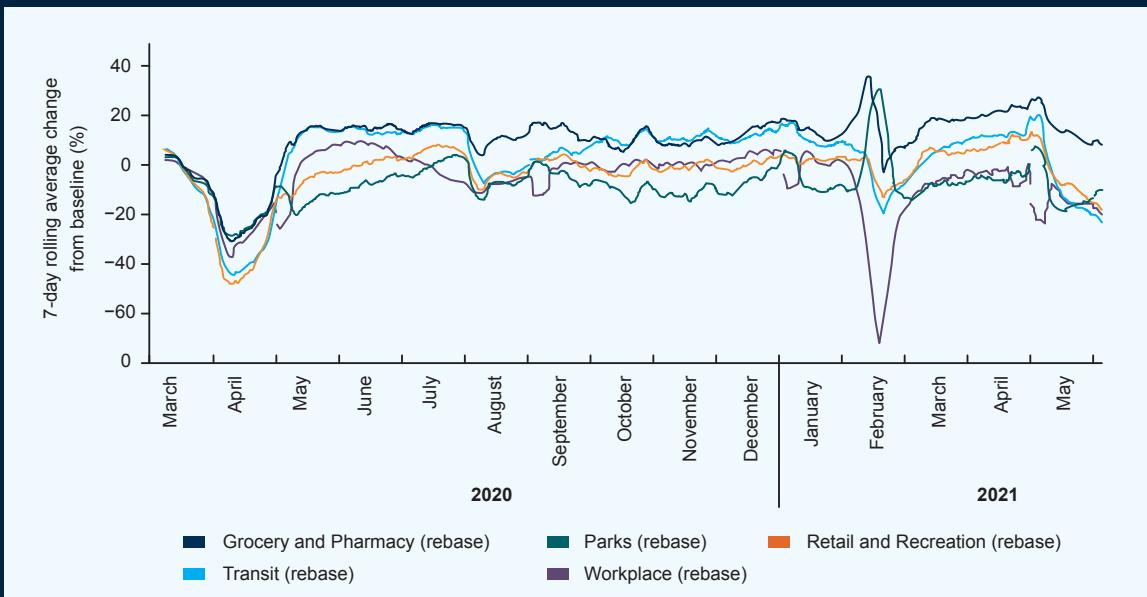
Box 4.1

.....

Insights from mobility and movement data

Information from third-party mobility data can be used in a more informative way to monitor movement during COVID-19. Mobility data from various third-party sources are strongly correlated with periods of lockdowns and outbreaks. Both Google and Facebook data sources rely on location-activated smartphones to track movement. Google data measure the number of visits to tagged locations by categories. Facebook provides a wider range of mobility metrics, such as movement from one location to another, or indicators on staying in place. It is very likely that these data are informative at the least and somewhat representative of the full population, given that ownership of smartphones is virtually universal at the household level and Facebook usage is also high (over 68 million estimated users in 2020). These trends can inform on movement patterns in relation to trends in COVID-19 case counts. At a national level, Google and Facebook mobility data accurately reflect expected changes in movement associated with lockdowns or other large events. For example, Google mobility trends data show a strong decline in overall movement during the national lockdown in April 2020, and workplace visits during the Tet holiday in February 2021 (figure B4.1.1). Movement trends are seen to decline sharply across all provinces, indicating that even among poor or remote provinces, there is coverage from Facebook and Google data.

Figure B4.1.1 Google Mobility Trends, Vietnam



Source: World Bank staff calculations using Google Mobility data, download June 8, 2021.

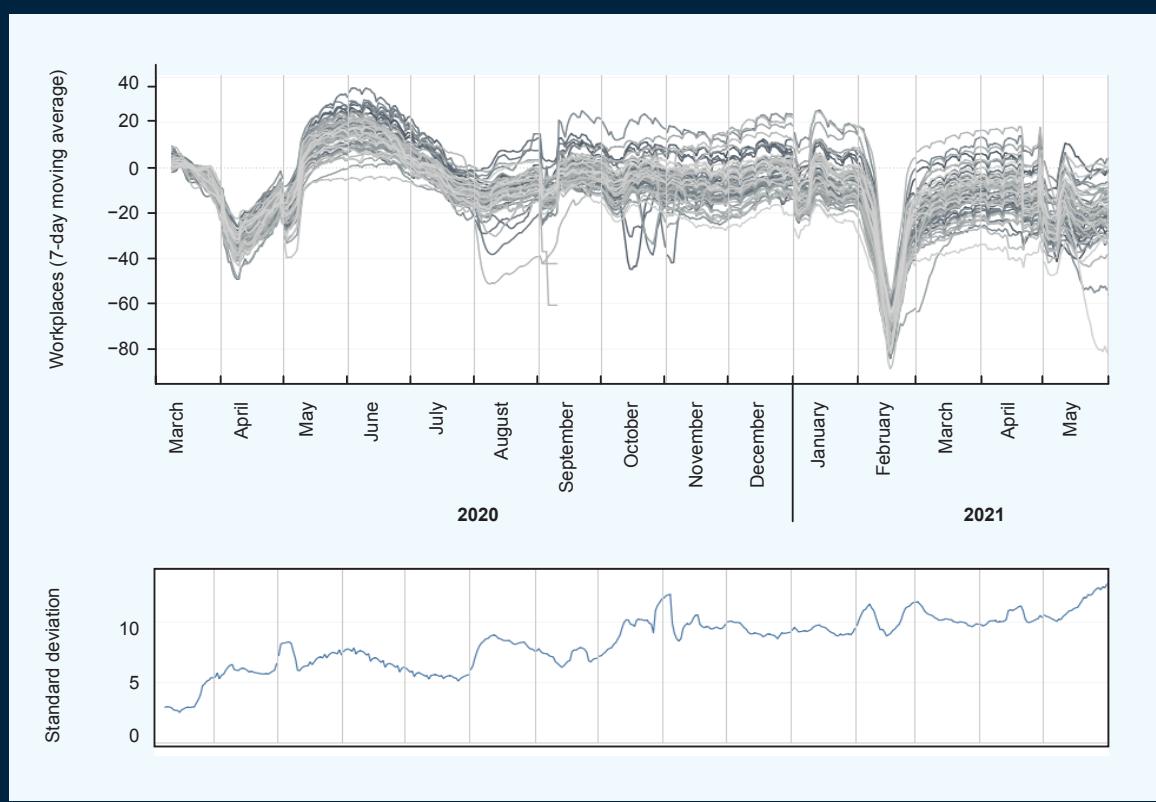
Note: Rebased to March 2020.

Box 4.1 - continued

Google Mobility Data

Beyond national trends, more interesting correlations between localized movement and cases can be derived. For example, the impact of the pandemic and lockdowns is likely very different across regions. Starting in early March 2020, the changes in the number of visits to workplace locations compared to the baseline was similar across the 53 provinces in Vietnam (figure B4.1.2). The standard deviation in workplace visits across provinces increased from less than 5 points before the nationwide lockdown in April 2020 to over 10 points after the Da Nang outbreak in fall of 2020. After Tet in February 2021, large cities (Can Tho, Da Nang, Ha Noi, Ho Chi Minh City) were more likely to rebound with the highest workplace visits relative to the baseline in March 2020. The prolonged pandemic may be hurting provinces without large economic centers of activity.

Figure B4.1.2 Google Mobility, workplace visit trends



Source: World Bank staff calculations using Google Mobility data, download June 8, 2021.

Note: Rebased to March 2020. Top panel shows trends for each province. Bottom panel shows the standard deviation in workplace visits per day across all provinces.

Box 4.1 - continued

Facebook Movement Data

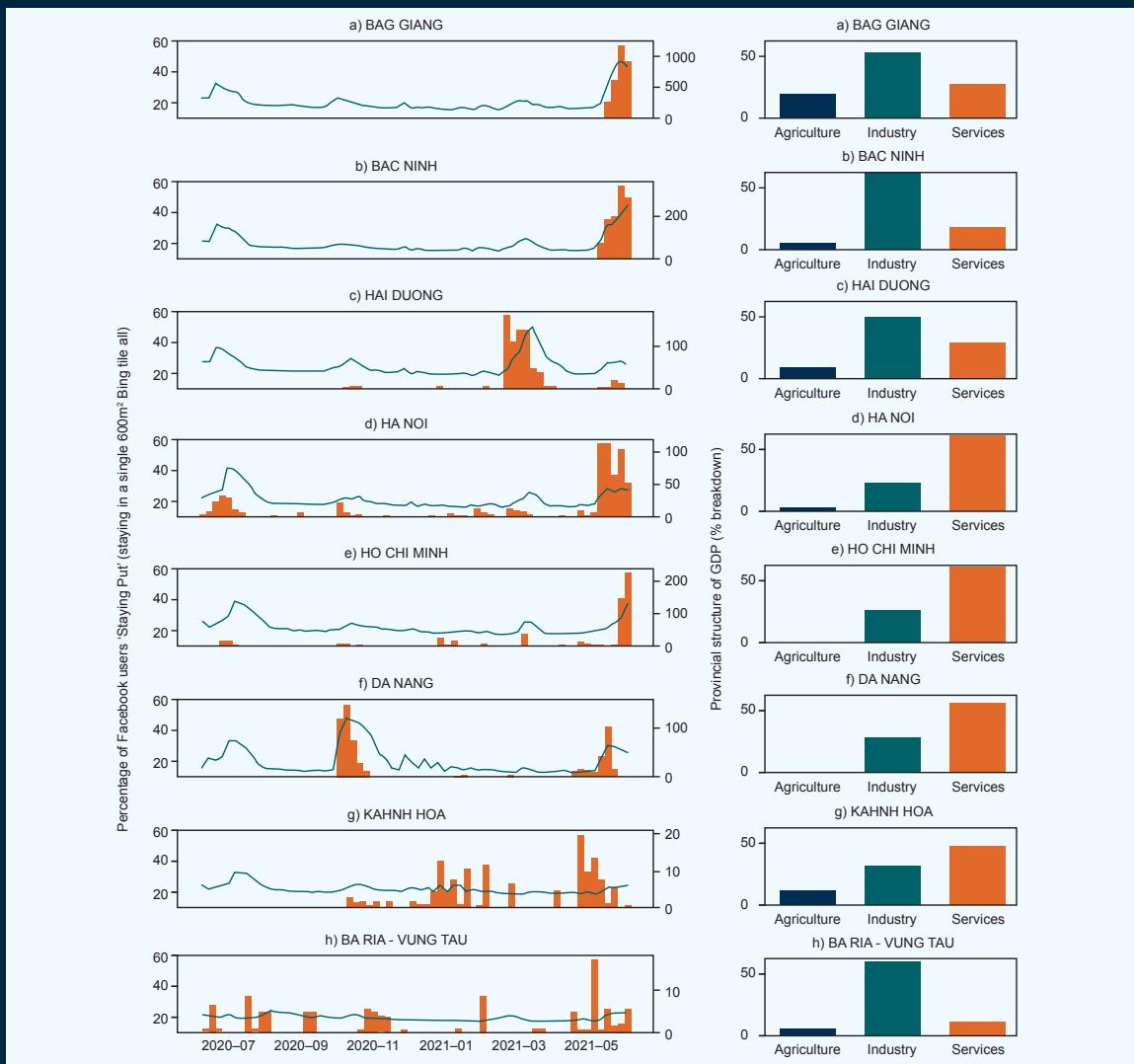
Despite many caveats to the data, big data are at a minimum useful to monitor changes in activity across regions, and potentially also predictive. Facebook Mobility Movement Data can illustrate the correlation between the degree of movement in areas and be compared to timing of outbreaks. As illustrated in figure B4.1.3 for the eight municipalities/provinces with the highest case numbers, we see variation both in how quickly and for how long movement in provinces is affected (illustrated by the mobility data) and, where possible, whether future outbreaks occur. In the case of the recent outbreaks in the Northern, more industrialized (a) Bac Giang and (b) Bac Ninh, we see a 30 percent increase in the percentage of users staying home as soon as the first cases were detected. By contrast, in (c) Hai Duong, we see that people started staying put after case numbers had become high in March 2021. Despite the delay in staying put, cases in Hai Duong quickly stabilized.

Outbreaks in the more services-based cities (Da Nang, Hanoi, and Ho Chi Minh City) have been characterized by much smaller and more contained outbreaks relative to cases (a)–(c). These municipalities have also responded rapidly to each wave, with a large jump (20–30 percent) in the share of Facebook users staying put as cases are detected. Notably, however, the most recent outbreak in Ha Noi appears to be different. Despite far higher case numbers in 2021 compared to 2020, the share of Facebook users staying home has increased by a smaller rate, 15 percent. Although part of this is explained by more localized lockdowns in 2021 than the more expansive and stringent lockdowns in 2020, it may also be indicative of what is being called “lockdown fatigue” or “adherence fatigue” and can be instrumental in informing future policy. Google data also confirm that users are staying home in residential locations to a lower degree compared to the baseline in March 2020.

Lastly, two provinces with smaller outbreaks but unique mobility trajectories are pictured in cases (g) and (h). Perhaps most striking, on the South Coast in Khanh Hoa and Ba Ria–Vung Tau, there are prolonged increases in case numbers without corresponding increases in the percentage of Facebook users staying put. These areas can become hotbeds for future outbreaks and may warrant more proactive measures, such as increased testing, lockdowns, or vaccination programs.

Box 4.1 - continued

Figure B4.1.3 Comparing Facebook Mobility data by province and case counts



Source: World Bank staff calculations using Facebook Mobility Data.

Note: Left panel: Changes in the number of Facebook users “Staying Put” (green lines), plotted against the 10 provinces and centrally controlled municipalities with the largest outbreaks in Vietnam (pink bars). Right panel: For each province, the percentage structure of provincial GDP is also provided. As illustrated, the largest and latest three outbreaks, (a) Bac Giang, (b) Bac Ninh, and (c) Hai Duong, all appear to be highly industrialized. This is relative to initial outbreaks from 2020, which were concentrated in the highly populous and more services-based cities of (d) Ha Noi, (e) Ho Chi Minh City, and (f) Da Nang.

a. Original Google Mobility trends are benchmarked to the median day-of-the-week value from the five-week period in January. Some persistent depression in mobility could be explained by the absence of international travelers. If the baseline is moved to March when international flights began to be suspended, we see patterns that may more accurately describe the internal movement of citizens, and a rather contained population, with minimum entry and exit, which thus more accurately represents movement of the Vietnamese people. International flights were cancelled on March 25, 2020, and the country entered a nationwide lockdown in April. Early March is likely the most representative.

b. Facebook data come with varying levels of granularity and spatial aggregation. In this report we use Movement Range Maps, which provide two indicators of movement at district/city level: (1) staying put, the number of people staying in a single 600m x 600m Bing tile all day, and (2) change in movement, the percentage change in total tiles visited on a given day.

Stepping up to tackle higher risks

Uncertainty looms regarding the duration of the pandemic and potential episodes of new outbreaks.

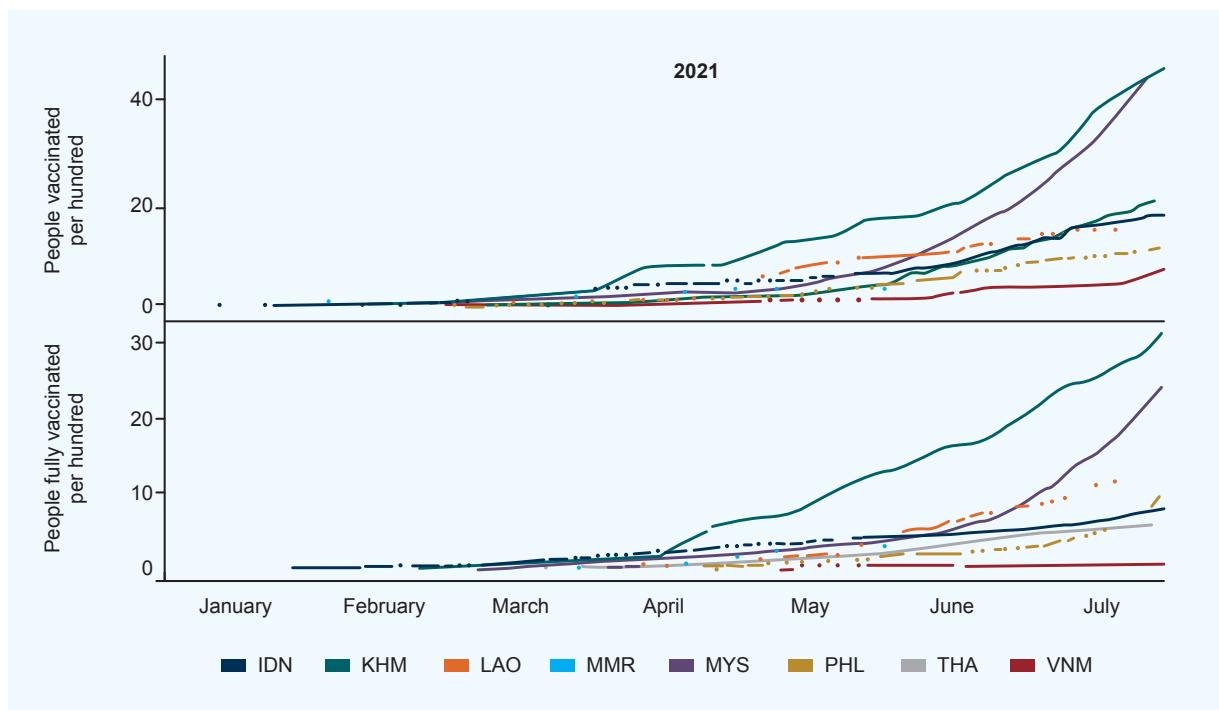
In 2020, Vietnam experienced only one national lockdown, and several severe localized lockdowns. The outbreak in Da Nang in late July 2020, and another significant outbreak right before the Tet holidays in 2021, showed that reoccurrences of the pandemic are hard to predict or prevent entirely. In late April 2021, Vietnam experienced its largest outbreak since March 2020. The new outbreak led to the first domestic COVID-19 death since September 2020. In a span of one month, Vietnam recorded over 3,000 cases, as many as it had over the entire previous year.

Access to health services was not an issue early on but may become one now. Previous rounds of monitoring surveys did not find any disruption to health facilities as is expected given the low volume of cases

before the fourth wave. However, that may change given that the fourth wave has resulted in hospitals being cluster cases themselves, and that the number of cases is spreading and will stretch medical capacity.

The high transmissibility of the new outbreak is concerning because Vietnam faces higher risks from a lagging vaccine rollout. Vietnam started to commit government funding to vaccine purchases only very late, in May 2021. In other words, Vietnam made its biggest vaccine orders at a time when vaccine supply issues were already widespread around the world. So far, Vietnam has received only about 8 million doses. In mid-July 2021, Vietnam had vaccinated about 4 percent of the population, but less than 1 percent are fully vaccinated, a low rate compared to nearly 25 percent of the population of Cambodia being fully vaccinated (figure 4.5). The rate of fully vaccinated people in Vietnam is also the lowest in developing Southeast Asia.

Figure 4.5 COVID-19 vaccination trends in Southeast Asia

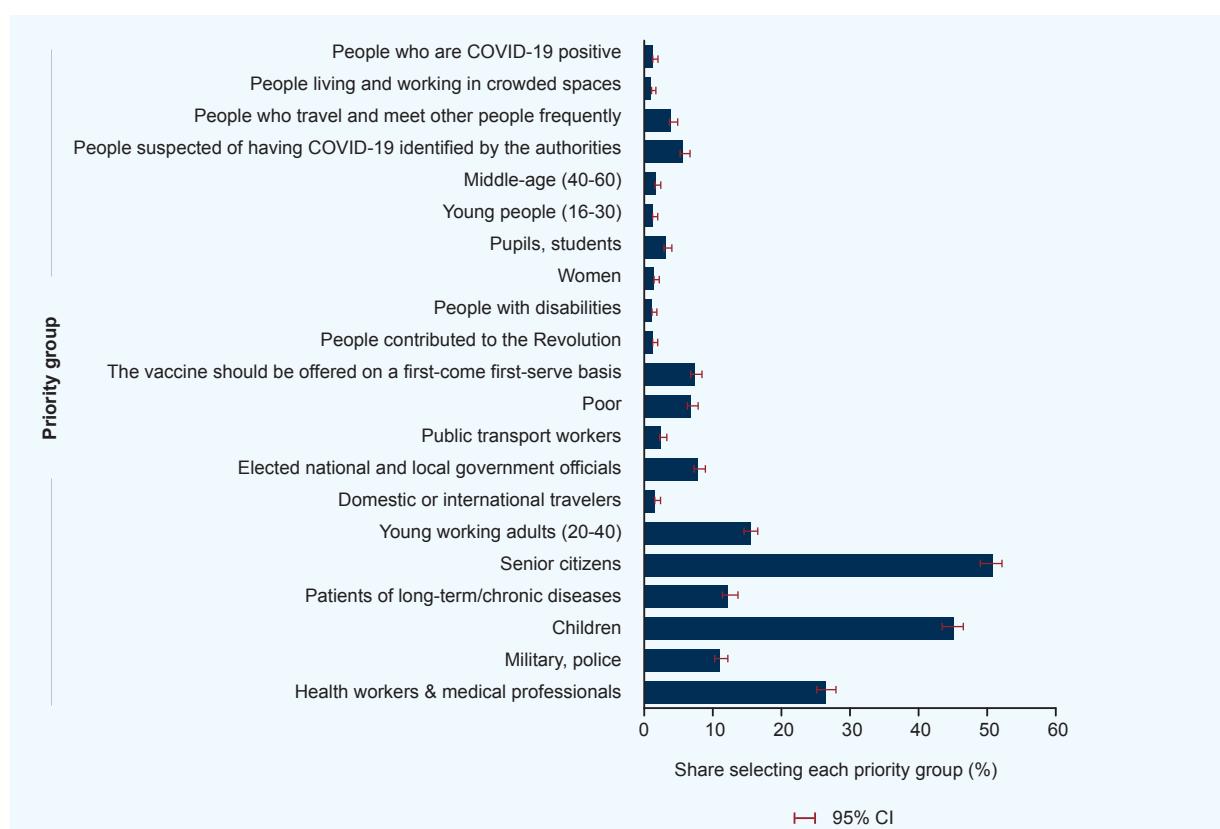


Source: Mathieu et al. 2021, August 5, 2021 update.

Most of Vietnam's population would agree to be vaccinated. Surveys suggest that most of the population would agree to be vaccinated if the vaccine came at no cost, but a slightly lower percentage would agree if it came with a cost. In March 2021, a small sample was asked if they would take the vaccine at cost or no cost, and households in the bottom 40 percent of the income distribution were more likely to report they would take the vaccine at no cost but not at cost.²⁷ It is important to ensure equitable access to vaccines, because fewer among the poorest households would agree to take the vaccine if it was offered at cost versus no cost and it is also less affordable. Among those who do not agree to receiving a vaccine, they either worry about the safety of the vaccine or deem it unnecessary under current conditions. Data collection was conducted before the fourth wave, and perceptions about and willingness to take vaccinations are very likely to have altered.

In January and March 2021, survey respondents chose health workers, children, and senior citizens to be prioritized to receive the vaccine (figure 4.6). Respondents were asked to identify, without prompting, priority groups that should receive the vaccine first. Seniors and children were top choices, followed by health care workers and medical professionals. Almost half of respondents identified senior citizens as a vaccination priority group. Older respondents were more likely to identify government workers as priority groups. Younger respondents were more likely to select children and pregnant women as priority groups. The selection of young children, who are less likely to contract the disease or suffer serious illness and for whom the vaccine has not yet been approved, suggests the need for revisions to the public communications strategy as the vaccine is rolled out.

Figure 4.6 Health workers, children, and senior citizens are most often chosen as vaccination priority groups among survey respondents in Vietnam



Source: World Bank Vietnam COVID-19 household surveys (round 4).

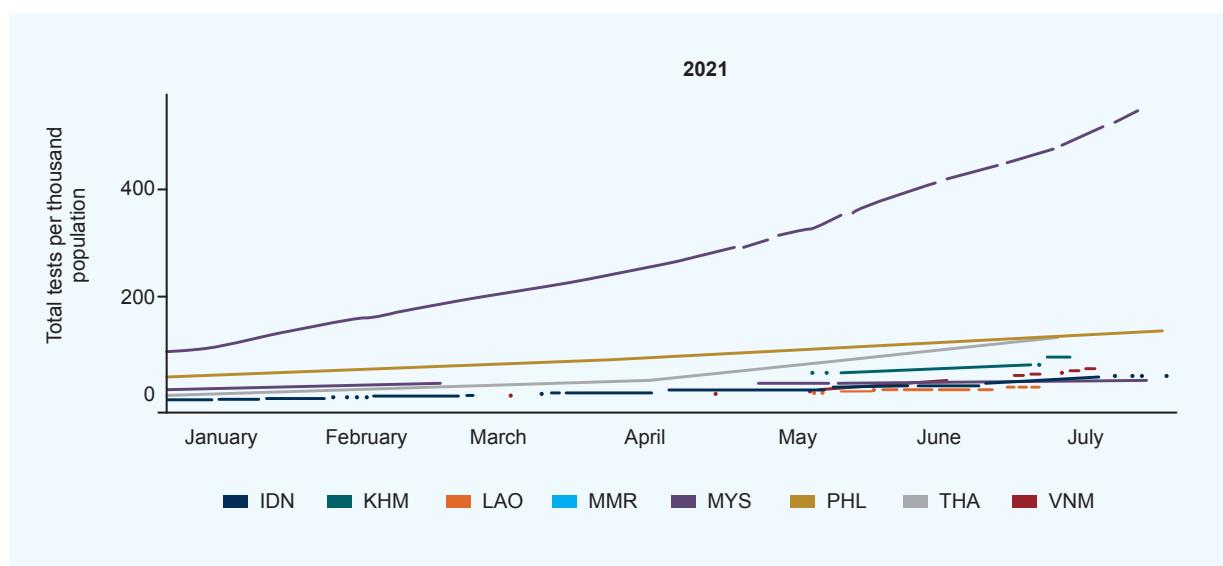
Note: This question was asked in an open-ended manner and unprompted. Responses were post-coded into the categories shown. Multiple selections are allowed per respondent.

The government is speeding up vaccination procurement and should ensure equitable access and distribution. The Prime Minister signed and promulgated Resolution No.09/NQ-CP dated May 18, 2021, on the purchase of COVID-19 vaccines. In the resolution, the government assigned the Ministry of Health to urgently organize the purchase of vaccines as quickly as possible so that vaccines can be widely distributed to the people. At the time of writing this report, the government target is to secure 150 million doses to vaccinate 70 percent of the population by the end of the first quarter in 2022, which is expected to cost 25.2 trillion Vietnamese dong (about US\$1 billion). In late May, the government established a COVID-19 vaccination fund to mobilize all resources, including the government budget at both central and local levels, individual contributions, or donations. Within weeks, contributions amounted to over US\$181 million

(as of June 8, 2021, with contributions increasing daily). Despite these last-minute efforts, the delay in purchasing vaccines and the current global issues in vaccine supply mean that Vietnam is expected to receive the bulk of its purchased doses no earlier than Q4 2021 and Q1 2022.

Testing should be made more commonplace. With only 0.7 test per thousand people, Vietnam testing rate remains on the low side, compared to some other neighboring Southeast region countries (figure 4.7). This is despite a huge ramping-up effort accomplished in a record time: since May 2021, the country has tripled its testing rate and doubled its capacity. Additional efforts are possible (especially for introducing antigenic tests more widely), but further investments are mostly constrained by procurement bottlenecks (like for vaccines).

Figure 4.7 Vietnam has one of the lowest testing rates in the region



Source: Mathieu et al. 2021, August 5, 2021, update.

THE RELIEF RESPONSE: LEARNING FROM EXPERIENCE

The nationwide COVID-19 relief rollout for households lasted for a short duration (April–July 2020) and was smaller than originally planned. Arguably, the impacts of COVID-19 were mild and perhaps relief was not as urgently needed as originally envisioned. Yet the gap between income losses and the support received by households was proportionally larger than in all other countries in the East Asia and Pacific region, except for the Philippines where households experienced very high losses. The relief rollout to new target groups faced implementation challenges that foreshadow longer-term challenges and motivate modernization of the social protection system. Formal firms were offered different types of relief, primarily in the form of deferrals, and rollouts lasted longer, but these programs faced similar implementation challenges as the household relief packages. The emergence of a fourth COVID-19 outbreak in May 2021 led to the largest outbreak in the country yet. Thus, there is still a chance to learn from previous implementation challenges of COVID-19 responses to potentially improve future packages and build resilience for future systemic shocks.

Strong early planning to assist households, but rollouts faced implementation challenges

In early 2020, the government responded swiftly, passing multiple resolutions to support people facing difficulties caused by the COVID-19 pandemic. A national decree set in April 2020 outlined a relief plan that would assist existing beneficiary groups, as well as groups newly affected by COVID-19. See box 4.2 for a list of national policies to respond to the pandemic.

Vietnam's assistance was announced later than that in other countries in the region and had a shorter duration. Vietnam's expansion of social assistance in response to the COVID-19 outbreak was in line with the introduction of new and/or expanded programs in most countries in the region. However, the announcement

of social assistance measures in April was later than in Indonesia, Malaysia, Mongolia, the Philippines, and Thailand, which announced responses in the second half of March. Unlike in Vietnam, many countries in the region including Cambodia, Indonesia, Malaysia, Mongolia, the Philippines, and Thailand have also extended cash transfers into 2021. Vietnam's measures lasted only between April and June of 2020.

Existing beneficiaries in the social protection system received top-ups to their regular benefits. It is reported that all beneficiaries who were already enrolled in an income support scheme received a top-up in addition to their standard benefits. The implementation of COVID-19 cash support to existing beneficiaries went smoothly because it was universally applied, and disbursement channels were already in place. There were no conditions that beneficiaries be affected by COVID-19.

The government also identified new target groups that were adversely affected by COVID-19, but the expansion of coverage was less than in other East Asia and Pacific countries. Additional categories of households not already registered in the social protection system were identified that were eligible to receive payments including informal and contracted workers ("the new target groups"). However, definitions of new target groups as defined by the central policy did not include everyone that may have been adversely affected by COVID-19. Some groups that did not fit into the targeted beneficiary groups include employees not receiving salary from the state budget in public education institutions, small household businesses selling nonessential items (clothes, shoes), mechanics, builders, tailors, porters in factories, self-employed workers in household businesses, and workers in agriculture.

The original target number of new beneficiaries was 5 million workers, but the relief as implemented reached fewer beneficiaries. Because of the strict criteria and the lack of data on informal sector workers

that could be verified or cross-checked against social insurance or other databases, the program was smaller in scale than originally proposed. By the end of March 2021, about 1 million informal workers were reached (table 4.1). The share of the population added as new beneficiaries was only 1 percent, which is lower than all other countries in East Asia and Pacific that added new beneficiaries.

There are two observations on beneficiary targeting worth noting related to the distribution of existing target groups (poor and social assistance recipients) and new target groups (informal workers) (figure 4.8). The existing vulnerable population is those already receiving income support under poor, near-poor, social assistance, or merit (National Devotee) programs. These groups by default received top-ups to their existing benefits. Households classified as poor in their communes and receiving social assistance before COVID-19 represent most but not all of the poor. The groups of National Devotees are people receiving other social protection benefits and are categorical target groups not related to poverty targeting and alleviation.

The main new beneficiary group targeted for COVID-19 relief was informal workers. Informality is extremely prevalent: 21 million or 81 percent of all households have at least one household member who either has a wage job without a contract, is engaged in self-employed agriculture, or is engaged in self-employed business. Given the reported implementation figures, the COVID-19 relief aid to informal workers did not reach all of the potential recipients in this group. Actual disbursements also showed that few households received income support for informal workers, at only 20 percent of planned recipients.

The benefit amount provided through the relief package was small on a per household basis. The national-level package was announced in late April 2020 and implemented from May to July 2020. The duration of benefits was for a maximum of three months. In the most generous case scenario, National Devotees received about VND 1.5 million over three months. In comparison, minimum monthly wages are about VND 4 million per month. Results from chapter 5 of this report will also illustrate the minimal welfare-improving impacts of the COVID-19 relief implementation.

Box 4.2

.....

National COVID-19 relief policies for workers and households in Vietnam

The following is a list of national policies that were put in place in Vietnam to respond to COVID-19 in April 2020, and their subsequent amendments. Some local governments also passed resolutions to support households in their jurisdictions.

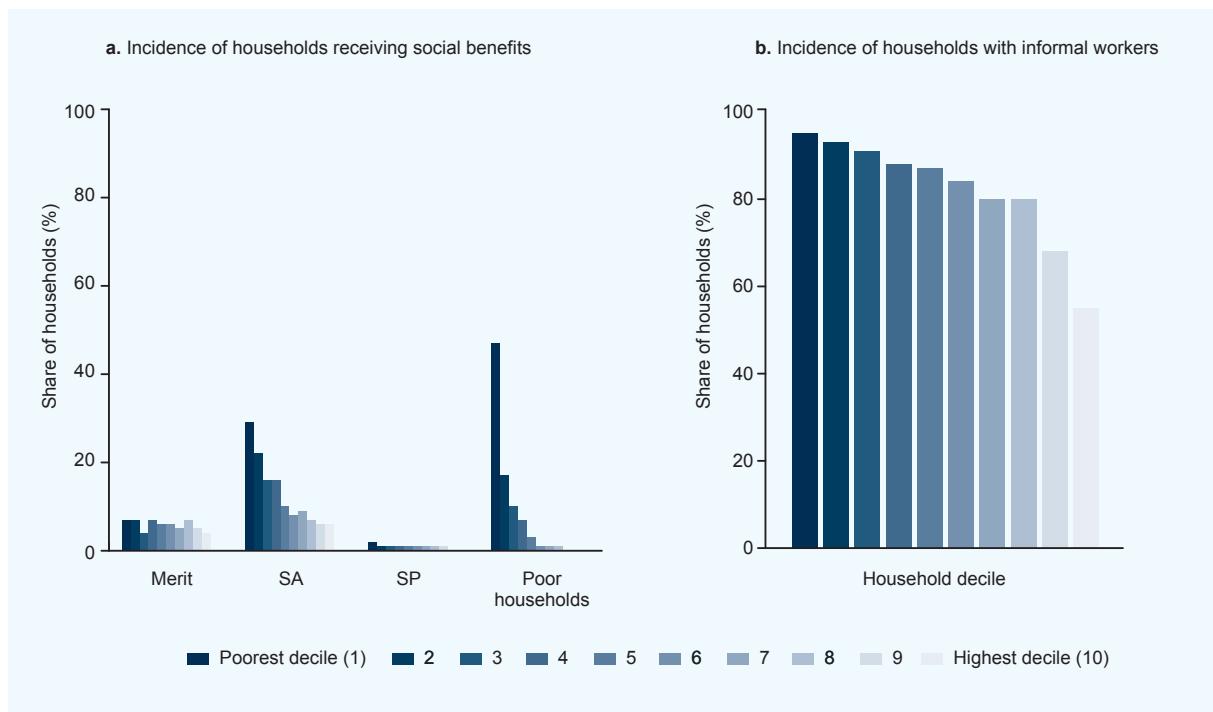
- Resolution 42/NQ-CP dated April 9, 2020, of the government on measures to support people facing difficulties caused by the COVID-19 pandemic
- Decision 15/2020/QD-TTg dated April 24, 2020, of the prime minister on regulating the implementation of policies to support people facing difficulties caused by the COVID-19 pandemic
- Resolution 154/NQ-CP dated October 19, 2020 of the government on amending and supplementing the Resolution 42/NQ-CP dated April 9, 2020 of the government on measures to support people facing difficulties caused by the COVID-19 pandemic
- Decision 32/2020/ NQ-CP dated October 19, 2020, of the prime minister on amending and supplementing a number of articles of the Decision 15/2020/QD-TTg dated April 24, 2020, of the prime minister on regulating the implementation of policies to support people facing difficulties caused by the COVID-19 pandemic

Table 4.1 Vietnam's household COVID-19 relief, planned vs. implementation

NATIONAL	Estimated			Implementation (3 months maximum)		
	No. of people	Amount/month	Cost (billion, Vietnamese dong)	No. of person	Cost (billion Vietnamese dong)	Spending per person
Income support to existing target groups						
Poor and near-poor households	9,200,000	250,000	6,900	7,001,991	5,374.15	767,517
SA beneficiaries	3,000,000	500,000	4,500	2,839,544	4,227.65	1,488,849
Merit people (National Devotees)	1,135,000	500,000	1,703	991,907	1,483.05	1,495,154
Income support to new target groups						
Contracted employees on temporary unpaid leave at least for one month, or not qualified for UI benefit	1,000,000	1,800,000	5,400	139,180	141.76	1,018,508
Informal sector employees being affected	5,000,000	1,000,000	15,000	1.04 million	1.027	980,000
Tax-registered household businesses with income <100 million per year	760,000	1,000,000	2,280	32,409	40.19	1,239,995

Source: World Bank, Social Protection and Jobs (as of March 2021)

Note: SA = social assistance; UI = Unemployment insurance.

Figure 4.8 Incidence of Vietnamese households by policy target groups

Source: World Bank staff calculations using Vietnam Household Living Standards Survey, 2018.

Note: Merit or National Devotee income, social assistance (SA), and social protection (SP) are based on declarations of income received in these categories. Poor households are those that were defined to be poor in their commune in 2018.

Box 4.3

.....

COVID-19 relief packages to households, Vietnam vs. East Asia and Pacific region

Vietnam spent less on COVID-19-related social assistance than other countries in the region did. Vietnam spent only 0.11 percent of gross domestic product on new social assistance beneficiaries, the second-lowest in the East Asia and Pacific region among countries that extended social assistance to new beneficiaries and well behind the Philippines' expansion of 0.62 percent and Indonesia's expansion of 0.57 percent. As a result of the modest top-up spending and the low spending on new beneficiaries, Vietnam's total spending on social assistance during the pandemic was 0.86 percent of gross domestic product, among the lowest in the region and significantly lower than Mongolia's 4.2 percent, Thailand's 3.0 percent, and the Philippines' 2.1 percent (table B4.3.1).

Table B4.3.1 Spending on social assistance before and during the COVID-19 outbreak

Country	Pre-COVID spending	Pre-COVID beneficiaries receiving top-up spending	Pre-COVID beneficiaries new program spending	New beneficiaries spending	Total COVID-19 spending
China	1.56	—	—	0.09	1.65
Cambodia	0.09	0	0	0.63	0.72
Indonesia	0.28	0.05	0	0.67	0.95
Lao	0.04	0.00	0	0.00	0.00
Malaysia	0.53	—	—	—	1.40
Mongolia	1.77	1.79	0	0.60	4.16
Myanmar	0.08	0.09	0	0.53	0.62
Philippines	1.19	1.03	0.30	0.62	2.12
Thailand	0.77	0.15	1.70	0.40	3.00
Vietnam	0.66	0.09	0	0.11	0.86

Source: World Bank Social Protection and Jobs database.

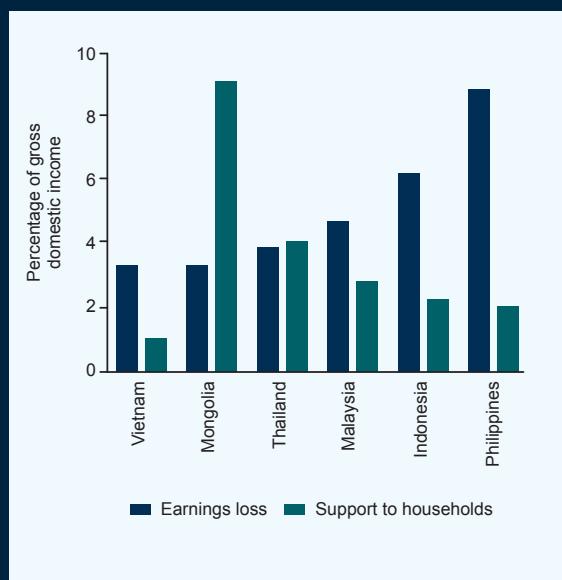
Note: Estimates based on bottom-up calculations. — = not available.

Consequently, although employment and wage losses were lower in Vietnam than in other countries, the gap between those losses and the support that households did receive was proportionally larger than in all other countries except for the Philippines, where households experienced very high losses (figure B4.3.1). Unlike other East Asia and Pacific countries, Vietnam spent much more on other forms of public spending than on income support (figure B4.3.2).



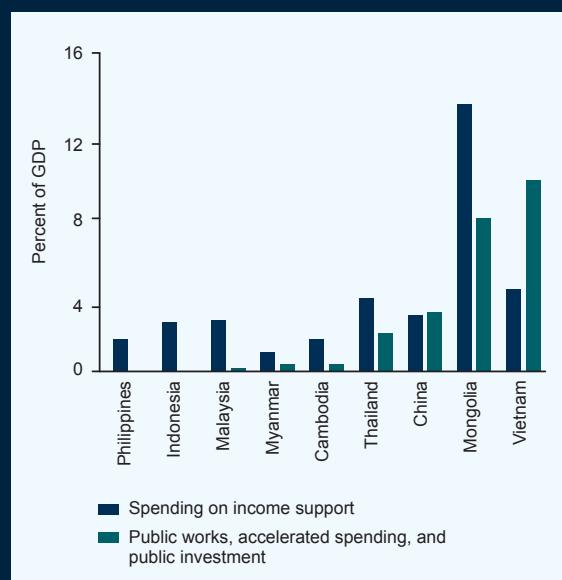
Box 4.1 - continued

Figure B4.3.1 Vietnam had the second-largest relative gap between household losses and support, East Asia and Pacific



Source: World Bank 2021a.

Figure B4.3.2 Vietnam spent much more on other forms of public spending than on income support



Data from the World Bank COVID-19 household monitoring surveys show that more households applied for but had not received COVID-19 relief. Program implementation of the COVID-19 relief package announced in April 2020 faced challenges. Disbursement of new COVID-19 relief packages was low at the time of first round of World Bank COVID-19 surveys undertaken in June 2020. About 10 percent of households had applied for the new COVID-19 relief programs,²⁸ but only about 1 in 10 of those households had received the relief (table 4.2). Urban areas had slightly higher rates of receipt: 13 percent of households in urban areas had received relief as compared to 10 percent of households in rural areas. About 4 percent of households received in-kind food relief.²⁹ The receipt of new COVID-19 relief was also relatively even across the income distribution, which indicates that poor households were not necessarily prioritized in being granted relief. By July, the national “Wave 1” programs ended because benefits were offered for a maximum of three months (May–July 2020).

The delivery of social assistance benefits is still primarily cash based. The majority of social assistance is provided by cash directly handed out by local staff, rather than as payments through bank account deposits. Other modes were reported, such as in-kind assistance like food or medical supplies and assistance in the form of discounts on electricity and hospital bills.

Some regions were more successful than others in reaching people affected by COVID-19. Some localities provided locally funded support that supplemented the national COVID-19 relief programs. Provincial-level programs were implemented in Da Nang and Ho Chi Minh City. Da Nang was found to have a particularly successful rollout compared to some other regions. The city implemented two waves of social relief, whereas the national relief lasted for only one wave.

Table 4.2 Table 4.2 Social assistance in Vietnam during COVID-19

Percent of households				February–June/July 2020		
	Classified as poor in commune	In 2020...		Received cash support for existing vulnerable groups	Applied for new COVID-19 relief programs	Received assistance from new COVID-19 relief programs
All	6.6	38.3	7.7	19.8	10.2	1.2
Urban	3.7	31.5	4.6	14.2	13.7	1.8
Rural	8.1	41.8	9.4	22.7	8.4	0.9
Top 60	2.4	31.7	4.7	13.1	11.4	1.4
Bottom 40	13.3	48.7	12.5	30.4	8.3	0.9
Kinh majority	4.8	33.3	6.9	18.5	10.8	1.3
Ethnic minority	16.8	66.1	12.5	26.7	6.8	0.7

Source: World Bank COVID-19 household monitoring surveys (round 1).

Notes: Existing targeted social assistance programs include cash support for poor and near-poor households, social assistance beneficiaries, and merit people (or National Devotees). Merit people refer to those contributed during the “revolution and war times.”

The Northern and Coastal Central region including Da Nang had a higher percentage of households receiving COVID-19 benefits for new target groups (table 4.3). Nationally, 1.5 percent of households received some benefits from COVID-19 relief targeted to new groups. In the Northern and Coastal Central region, the share was higher at 2.5 percent of all households. The success rate of applicants was also higher than average in this region. Over half of all households that applied for COVID-19 relief for new target groups received benefits between July and September 2020. Round 3 of the World Bank monitoring survey was conducted in early September, so it is possible that even more applicants received benefits afterward.

Perceptions of Vietnam’s COVID-19 health response management are more positive than perceptions of the relief response. Virtually all households were satisfied with the government response on COVID-19 health management, but not as satisfied with the effectiveness of support for households (figure 4.9). Results from earlier rounds of the World Bank COVID-19 household surveys also show that very few households received benefits from newly proposed relief programs targeted to those that were negatively affected by COVID-19. Households that applied and received aid

had more positive perceptions of the government relief response. Using a panel subsample across all five rounds of the household COVID-19 monitoring surveys, households that applied and received support under new COVID-19 relief programs up to July/August 2020, were more likely to agree that the VND 62 trillion relief plan reached the poorest households in need.

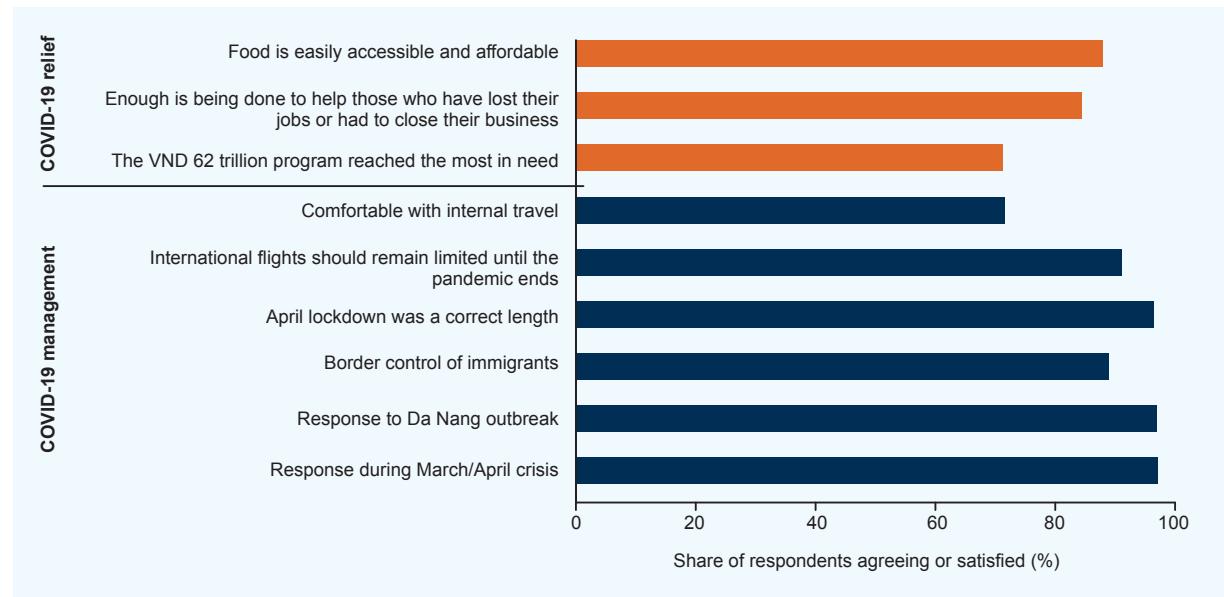
Poorer perceptions on relief response may be related to households feeling persistently at financial risk, despite a well-contained health risk. Government relief policies ended in June 2020. Even with exceptional health management and containment, many households experienced negative economic impacts and still felt financially at risk. A year after the onset of COVID-19, households still viewed COVID-19 as a threat to their household finances (figure 4.10). Moreover, these perceptions did not significantly change over a six-month period from September 2020 to March 2021. Poorer households were also less likely to be optimistic during the pandemic (figure 4.11). The last monitoring survey was conducted in March 2021, but a new and even larger outbreak in May 2021 will likely dampen optimism as the lack of predictability of new outbreaks adds to uncertainty and depresses economic activity. depresses economic activity.

Table 4.3 The highest share of recipients of COVID-19 benefits targeted to new applicants was located in the Northern and Coastal Central region of Vietnam

Location/type of household	New Target Group Relief July–Sept. 2020	
	Applied (%)	Received (%)
All	3.2	1.5
Urban	4.2	2.2
Rural	2.7	1.1
Top 60	3.9	1.7
Bottom 40	2.1	1.0
Kinh majority	3.4	1.6
Ethnic minority	2.5	0.8
Red River Delta	3.1	1.4
Midlands and Northern Mountainous Areas	1.9	0.9
Northern and Coastal Central	4.8	2.5
Central Highlands	0.9	0.1
Southeastern Area	4.0	1.0
Mekong Delta	2.4	1.5

Source: World Bank COVID-19 household monitoring surveys (round 3).

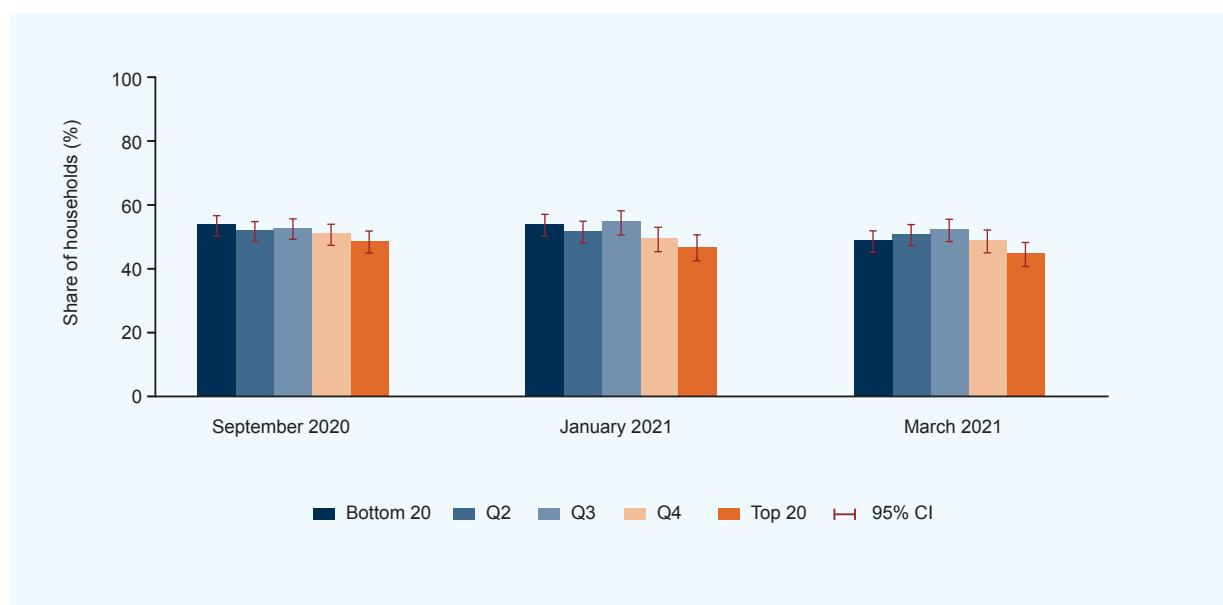
Figure 4.9 Perceptions of government response to COVID-19, Vietnam



Source: World Bank Vietnam COVID-19 household surveys (round 3).

Note: It is important to note that perceptions can change very quickly depending on the timing of the survey, and results should be interpreted with caution. For example, fieldwork for round 3 occurred during the entire month of September 2020 and the share of respondents who did not feel comfortable traveling internally ranged from nearly 30 percent in week 1 of fieldwork that occurred near the Da Nang outbreak, to 10 percent by the end of the month.

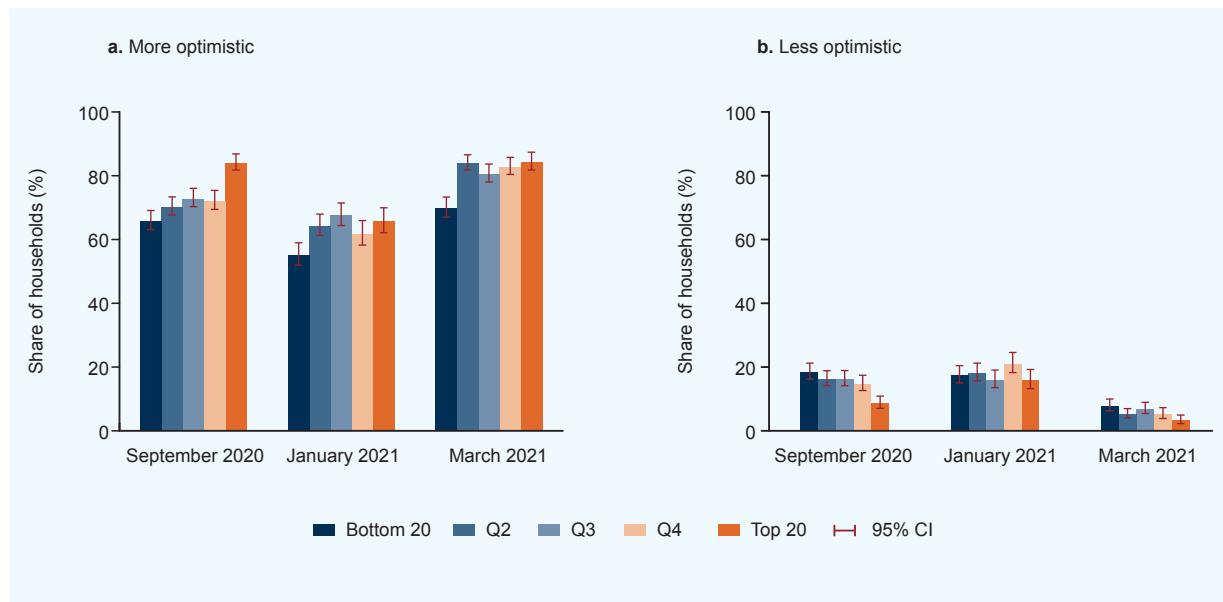
Figure 4.10 About half of Vietnamese households view COVID-19 as a substantial threat to their finances



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 3–5).

Note: Household (HH) quintiles (Q) are based on household consumption per capita in 2018. Perception at time of interview.

Figure 4.11 Poorer Vietnamese households are less likely to be optimistic during the pandemic



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 3–5).

Note: Household (HH) quintiles (Q) are based on household consumption per capita in 2018. Perception at time of interview.

Challenges in implementation of household and worker cash support programs

Qualitative interviews were conducted to learn about implementation challenges on the ground.

The challenges summarized in this section come from qualitative interviews in Da Nang with Department of Labour, Invalids and Social Affairs and local-level representatives. Da Nang is a high-capacity city that was able to implement and target relatively well. Da Nang even supplemented the national relief packages with its own additional relief package. Lower-capacity provinces very likely experienced wider-scale challenges than described here.

The nationwide relief program was announced in April 2020 by the central government and swiftly implemented by local government. The speed of the rollout led to some timing and coordination challenges between central and local levels. During the first wave, guidance from central to local levels was swiftly passed down via many channels. Because the program was new, new forms, questionnaires, and procedures had to be developed very quickly. Some local governments moved proactively and conducted trainings for villages and communes, and designed application forms before central guidance and paperwork and policy specifics were finalized. Thus, some efforts had to be redone.

There were challenges associated with verifying the eligibility of applicants under prescribed definitions for the new target groups. Employees were required to have verification from employers that they had lost employment. Getting this type of verification was sometimes difficult in large organizations, and some employers did not assist with applications and provide necessary documentation for the applications. Eligibility was based on location of residence rather than work, putting migrant workers at a disadvantage. Informality posed additional challenges to verification. First, informal workers without a labor contract could not, in most cases, verify their employment. Household businesses were required to confirm their taxable turnover. If they did not keep receipts, they had to prove turnover through the Tax Division.

The definitions of new target groups were very specific and added complications to enrollment.

Eligibility criteria for new target groups were complicated, and occupations approved for relief were overly specific. For example, employees working in enterprises and educational institutions had to have lost their jobs and social insurance on or after April 1, 2020. However, many establishments had already stopped operating before that date, and other businesses tried to maintain social insurance for employees after it. As a result, many groups of employees were adversely affected but were ineligible.

Required documentation was cumbersome and unclear for applicants, discouraging many from completing applications. Challenges were expected because residents were unfamiliar with new registration and verification processes. Many submitted applications lacked supporting documents, especially paperwork for identification (ID card, household registration). However, the inability to quickly verify and enroll applicants foreshadows larger social assistance challenges in Vietnam in the absence of modernization. Some applicants were discouraged by complex application procedures and did not attempt to follow up or complete applications. Confusion and long wait times also led some households to reapply while they waited to hear on their application status, causing duplications.

The large volume of applications to process and check meant grass roots staff were overburdened with new workloads. The burden of work was primarily carried by commune/ward and village level officials. Their responsibilities included policy communications, guiding residents on registration and collecting supporting documents, checking applications, making the list of beneficiaries, organizing review and assessment, submitting completed applications to the district level, notifying applicants of results, and resolving feedback and complaints from people and communities. In some areas, staff in communes/wards and villages were already engaged in carrying out anti-epidemic tasks, and their capacity was further stretched.

Improving the country's ability to respond to future shocks, whether COVID-19-driven over the next year or climate-driven in the coming decades, is critical for strengthening household resilience. Identifying informal nonpoor during a shock is the hardest task in the targeting of social assistance. But a number of lessons from other countries, both during COVID-19 and before, suggest better ways of identifying those vulnerable to or hit by shocks and the importance of evaluating and improving the entire social assistance delivery chain in making sure those affected are not left out (Grosh et al., forthcoming). Countries with existing social registries were most prepared to respond. Many countries focused initially on speed of response, topping up existing benefits, as Vietnam did, but also significantly expanding coverage, which Vietnam did not. After a fast and broad response, countries then tapered and targeted ongoing support.

A comparative experience of formal firms

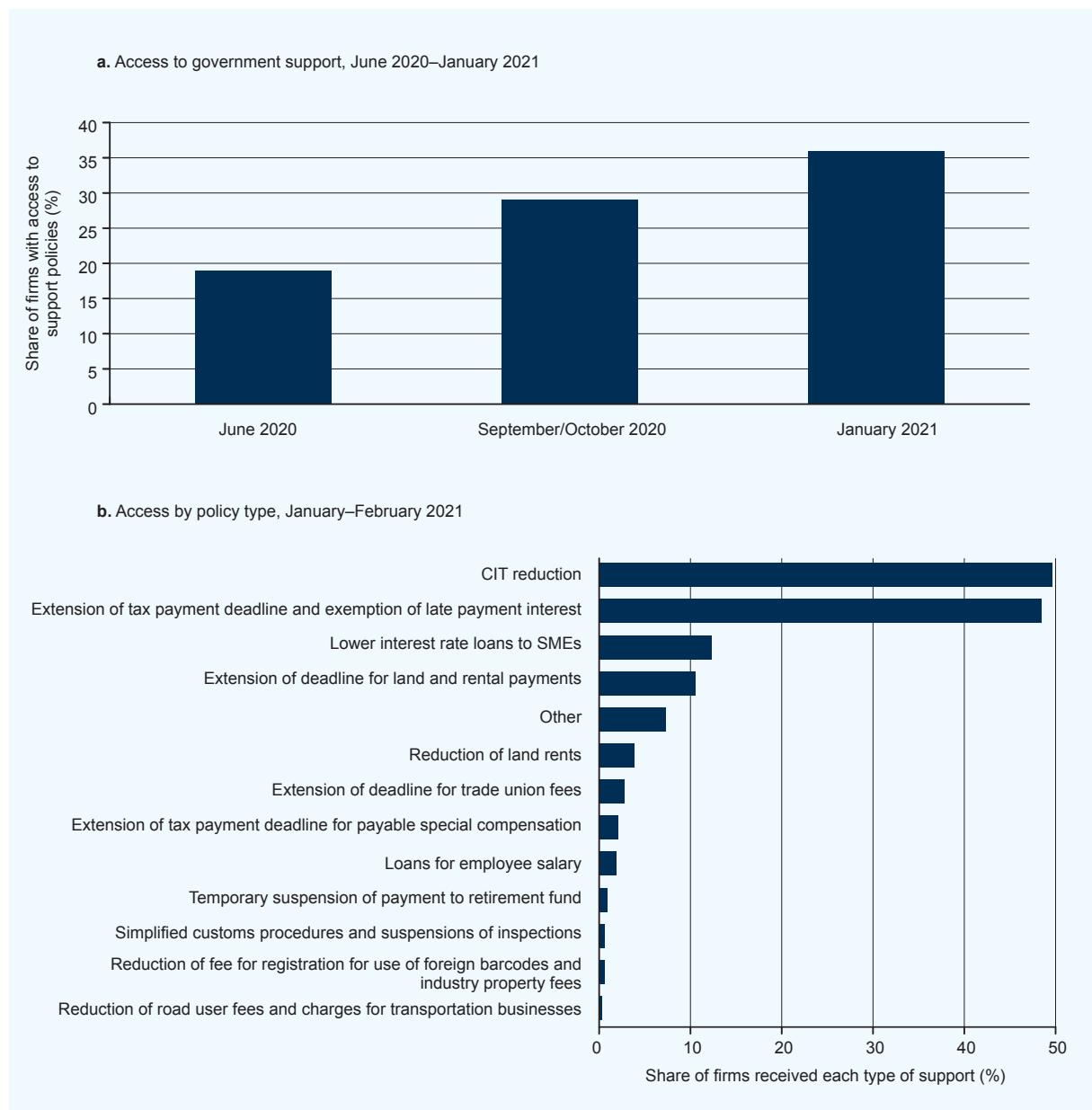
Relief packages designed for formal firms were different than those for households, but they experienced similar implementation challenges in the early stages. These policies were primarily in the form of deferments and credits, and were available for a longer period. Despite the differences, these policies also experienced implementation challenges. Given the continuous availability of assistance to firms, however, there appears to be some learning from experience and improvement in implementation over time.

Access to government support among firms has steadily increased over time. In June 2020, less than 20 percent of surveyed firms reported benefiting from any government support. By January 2021, more about 36 percent of firms had taken advantage of some support policies (figure 4.12, panel a). The most common relief received is in the form of income tax reductions and deferrals, followed by low-interest-rate loans to small and medium enterprises and extension of land rental payment deadlines (figure 4.11, panel b). The dominance of corporate income tax reductions and tax deferrals is consistent with the nature of these measures – they automatically apply as firms file taxes and a wide range of businesses are eligible.

More widespread access corresponds to increased awareness of support policy, but implementation challenges remain. Initially, a major concern of the government's support program was the lack of communication to potential beneficiaries: 34 percent of firms were not aware of support policies, and 25 percent considered them too difficult to apply for. By January 2021, only 14 percent of firms reported not being aware of such policies. Among those without access, the main reason was ineligibility, increasing from 45 percent in June 2020 to 63 percent in January 2021. However, a large fraction of firms, 22 percent, still considered the support programs inaccessible because it is too difficult to apply (figure 4.13, panel a). To improve implementation, firms consider the simplification and improved practicality of eligibility conditions to be the most important changes, above processing time, information, or even the amount of support (figure 4.13, panel b).

There is a persistent inequality in access and some evidence of mistargeting. As of the latest survey round, about 50 percent of all large firms benefited from some government assistance, compared to just over 30 percent of small firms (figure 4.14, panel a).³⁰ Moreover, although small and medium enterprises are less likely to have benefited from support, evidence also suggests that having received government support in the past correlates with a lower likelihood of making a downward employment adjustment on the intensive margin (for example, cutting hours). By contrast, for medium and large firms, there is no significant correlation between employment outcomes and government assistance (figure 4.14, panel b). These results suggest that there may be higher returns to supporting small firms if the policy objective is to preserve employment. Overall, evidence suggests that access to government support is not well correlated with potential needs of firms. Figure 4.14, panel c, shows that access is not correlated with the probability that firms experienced a drop in sales, or the amount of available cashflow, and, if anything, is higher for firms that were able to remain open. This result is perhaps not surprising given that most access has been in the form of income tax deferrals and reductions. By definition, these measures benefit firms that had some positive income, and that may also be able to weather the crisis better.

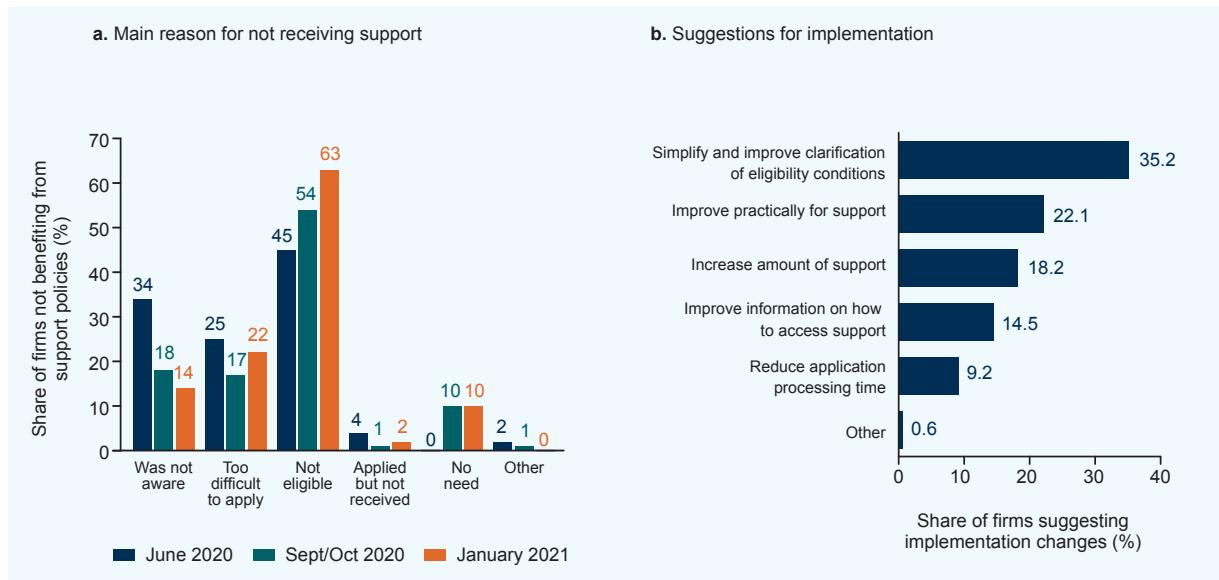
Figure 4.12 Vietnamese firms' access to government assistance has almost doubled since June 2020



Source: World Bank COVID-19 Business Pulse Surveys.

Note: Figure shows support policies among firms that received some support. CIT = corporate income tax; SMEs = small and medium enterprises.

Figure 4.13 Implementation of Vietnam's support measures has improved, but barriers to access remain

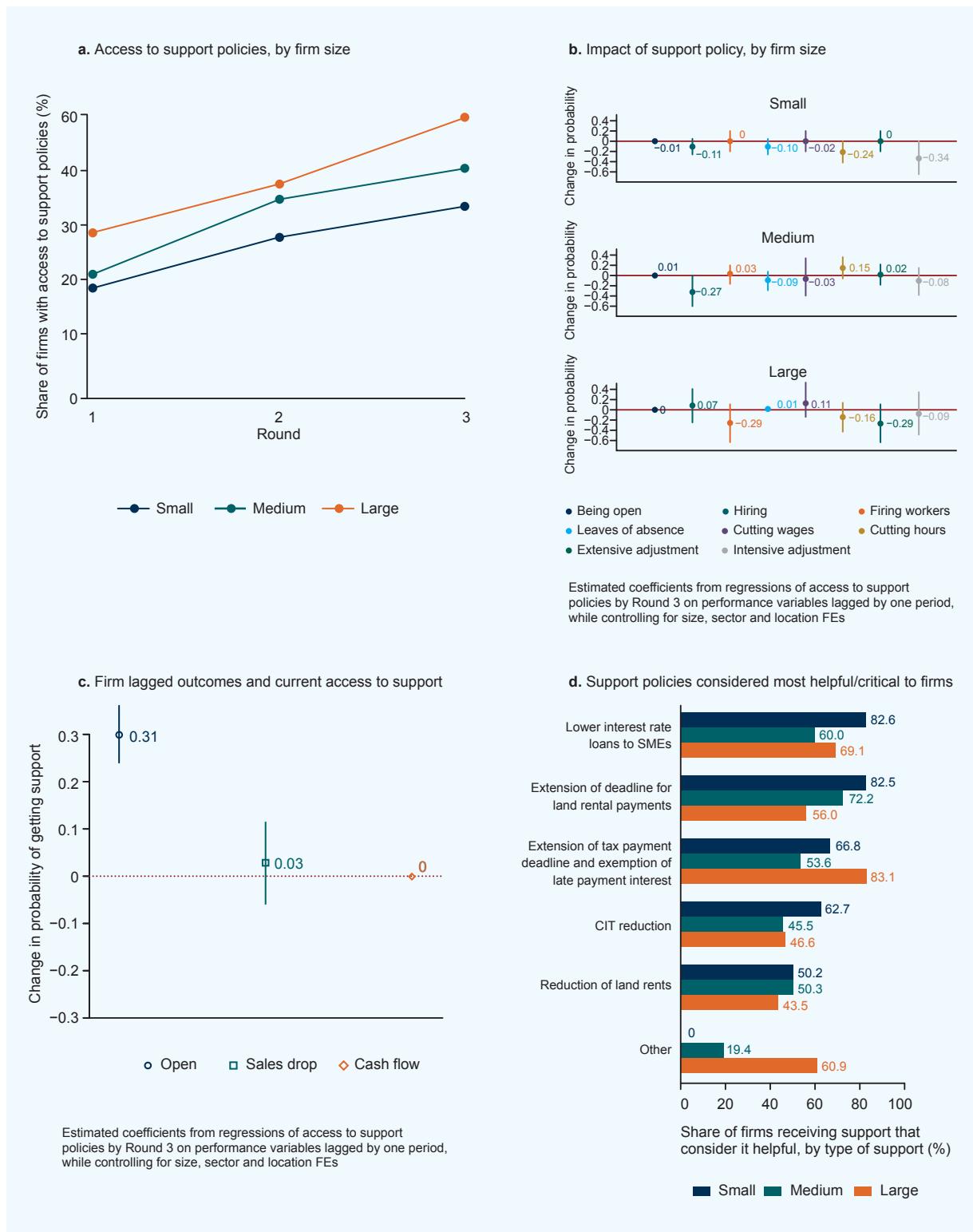


Source: World Bank COVID-19 Business Pulse Surveys.

As Vietnam faces the fourth wave, the impact on businesses and demand for government assistance will likely deepen. The government may wish to consider targeting not only by type of firm but also by policy instrument. Tax deferrals disproportionately benefit large firms and are also considered to be more useful by large firms. Policies such as low-interest-rate loans and land payment deferrals have more limited access and yet are considered critical to survival for recipient firms, especially for small and medium enterprises (figure 4.14, panel d). However, access to these policies potentially have much more complicated and often impractical eligibility conditions, requiring improvement in design and implementation. Different sectors also have different needs. Agricultural firms, for example, appear to have distinct demand for low-interest-rate loans, the deferral of land rental payments, and reduction in land fees. On the basis of these demands, the government can focus outreach efforts based on specific needs by different firm sizes and sectors.

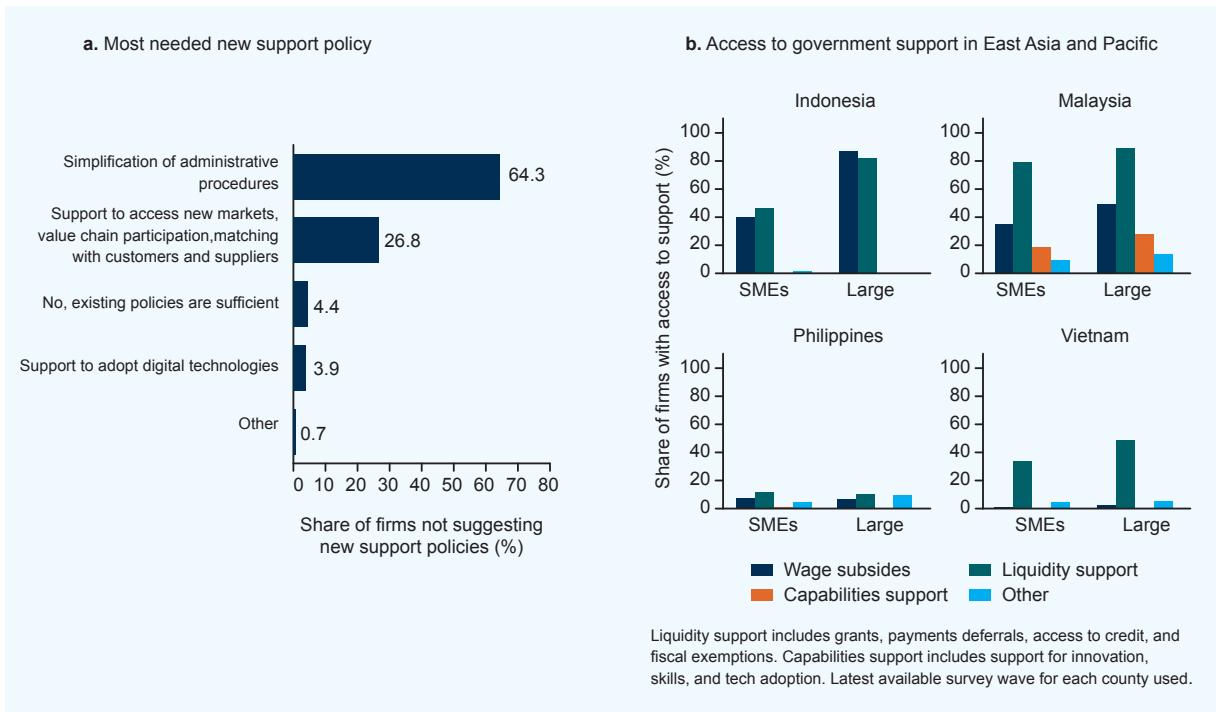
In the longer run, additional policy instruments are also needed to support recovery for the private sector. Simplification of administrative procedures is still considered the most important needed reform by 64 percent of firms (figure 4.15, panel a). This result suggests that, despite this acute crisis, improving the business environment remains a key priority for the private sector in Vietnam. This is consistent with global evidence suggesting that economies respond more sluggishly to crises in the presence of regulatory barriers to business entry and expansion (Barrero, Bloom, and Davis 2020). Given the severe demand shocks during this crisis, it is also important to consider policies to support firms' access to new markets and customers. So far, most support measures in Vietnam still focus on resolving the short-term liquidity crisis. Looking to other countries in the region, more advanced economies such as Malaysia have already implemented a range of other policies to help firms improve their capabilities. They include measures such as subsidies for skills training and innovation investments (figure 4.15, panel b). New support packages will need to consider similar measures to prepare firms in the recovery phase and become more resilient to future shocks.

Figure 4.14 Gaps in Vietnam's policy support widened, but targeting has not improved



Source: World Bank COVID-19 Business Pulse Surveys.

Note: CIT = corporate income tax; FE = fixed effect; SMEs = small and medium enterprises.

Figure 4.15 Policy considerations for recovery

Source: World Bank COVID-19 Business Pulse Surveys.

Note: SME = small and medium enterprises.

Notes

- ²⁶ These isolations were also required of F1 (first-degree contacts) in institutionalized facilities, F2 (second-degree contacts), and the subsequently identified contacted people at home.
- ²⁷ Due to the evolving situation, the vaccination questionnaire was updated throughout survey implementation. The survey asked the full sample about agreeing to no-cost vaccinations take-up in R4, and vaccination with cost in R5. Only a small sample were asked both questions concurrently in Round 5.
- ²⁸ Households in urban areas were slightly more likely to apply, reflecting that economic centers are more hard-hit: 13.7 percent and 8.4 percent of households in urban and rural areas applied, respectively. Although the bottom 40 percent of the income distribution and ethnic minorities are the poorest groups, they were also the least likely to apply for new COVID-19 relief.
- ²⁹ Very likely the result of the new rice ATMs, adoption and use of which took off quickly. These semiautomated machines dispensed 1.5 to 2.0 kilograms of rice at a time. Although these ATMs were initially installed in Ho Chi Minh City to support those experiencing job loss amid the pandemic, more were installed across the country in collaboration with private donors and sponsors.
- ³⁰ The differences in levels across three size groups are weakly significant. When access to government support is regressed on firm size, large firms are 7.4 percent more likely to access support than small firms ($p = 0.08$). Limiting the sample to round 3 only, large firms are 14.6 percent more likely to have accessed support than small firms ($p = 0.066$). The differences in trends are not statistically significant.

References

- Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis. 2020. "COVID-19 Is Also a Reallocation Shock." NBER Working Paper 27137, National Bureau of Economic Research, Cambridge, MA.
- Grosh, Margaret, Phillippe Leite, Matthew Wai-Poi, and Emil Tesliuc. Forthcoming. "A New Look at Old Dilemmas: Revisiting Targeting in Social Assistance." World Bank, Washington, DC.
- Malesky, Edmund J. 2021. "How Businesses in Vietnam Weathered the COVID-19 Crisis: Implications for the Country's Post-Pandemic Trajectory." Unpublished Paper.
- Mathieu, E., H. Ritchie, E. Ortiz-Ospina, M. Roser, J. Hasell, C. Appel, C. Giattino, and L. Rodés-Guirao. 2021. "A Global Database of COVID-19 Vaccinations." *Nature Human Behavior* 5: 947–53. August 5, 2021, update.
- World Bank. 2021a. *World Bank East Asia and Pacific Economic Update, April 2021: Uneven Recovery*. Washington, DC: World Bank. © World Bank

Chapter 5.

IMPACT ON POVERTY IN 2020: PROGRESS SLOWED DOWN BUT DID NOT REVERSE

.....

Despite Vietnam’s enviable macroeconomic outcomes in 2020 and early 2021 in the COVID-19 (coronavirus) context, the pandemic halted a period of rapid income and wage growth for households. Previous chapters provided evidence on the estimated impacts felt by households during COVID-19 through various channels. Simulations in this chapter discuss how many people fell into poverty during COVID-19, that otherwise would not have in its absence. The share of the new poor is small, primarily because of strong agricultural sector growth in 2020, where most of the poor work. At the global lower-middle-income poverty line (\$3.20 per day in 2011 purchasing power parity [PPP] dollars), the estimated share of *new poor*³¹ is small, less than half a percent of the population; at this line, preexisting vulnerable informal and agricultural households are still likely to be the most at risk of falling below the poverty line in a COVID-19 context and make up the majority of the new poor. At the higher upper-middle-income poverty line (\$5.50/day 2011PPP), the new poor represent about 1 percent of the population; at this line, households in manufacturing, construction, and retail sectors make up a larger share of the new poor. Simulations estimate that COVID-19 slowed the poverty reduction trajectory and stalled progress by about a year. The welfare-improving impact from cash support programs to households was small.

.....

A MICRO-MACRO SIMULATION APPROACH

The primary objective of the approach is to measure the differences in the poverty and inequality trajectories across different growth and social assistance scenarios. Previous chapters illustrated a range of impact channels and self-reported changes to household incomes during COVID-19. This chapter asks, how much did COVID-19 slow down the trajectory of poverty reduction, and for whom?

This exercise follows simulation methods similar to those used in other developing countries for assessing COVID-19 impacts on poverty³². There are a variety of simulation methods available to project poverty rates under different conditions. These methods range from the simplest ones, based on growth-poverty elasticities, to more comprehensive computational general equilibrium models. The micro-macro simulation technique used in this report goes beyond a growth-elasticity method by allowing for different rates of growth and growth-employment elasticities across sectors. The strategies employed in this chapter capture the primary impact channels, but not as many behavioral changes as would a computational general equilibrium model. Overall, results still provide a useful assessment of the impact on poverty and inequality under different growth and redistribution scenarios.

Using the micro-macro-simulation method presented in this chapter, the primary channel through which COVID-19 affected households is assumed to be through labor market incomes and employment. Sector-specific growth rates affect the degree of labor allocation across sectors or shedding into unemployment. Losses or gains in employment subsequently affect labor market income and household welfare and poverty. Differences in actual sectoral growth rates and estimates made before COVID-19 will lead to different shifts in employment and poverty impacts that allow for counterfactual comparisons. The simulation also includes an assessment of the welfare impacts of the COVID-19 social assistance policy in Vietnam (figure 5.1).

The remainder of this chapter is organized as follows. The following three subsections will describe assumptions and trends across three broad factors: sector growth, employment, and social protection. The next section then discusses the cumulative impact from these three sets of factors on poverty under two scenarios (no-COVID-19 and COVID-19). Figure 5.1 illustrates the model parameters used.

Growth factors

Two growth scenarios are considered to compare welfare impacts under different conditions. The first, the no-COVID-19 scenario assumes a growth pattern similar to that of 2019. The second, COVID-19 scenario uses actual growth rates from 2020.

1. **No-COVID-19 scenario:** the same sectoral growth in 2020 as in 2019³³
2. **COVID-19 scenario:** actual sectoral level growth rates in 2020

Despite positive gross domestic product (GDP) growth in 2020, actual growth rates were still much lower than expected. GDP growth was nearly 4 percentage points lower than forecasts made before the onset of COVID-19. Growth rates in the manufacturing and services sectors declined the most in percentage point terms. The decline in tourists and flights was severe, and the services-oriented tourism sector was one of the hardest-hit sectors in 2020. An active domestic tourism sector prevented a complete fallout, but many accommodation and tourism businesses still closed. Between the first and second quarters of 2020, about 30 percent of hotel and restaurant workers left the sector, either losing work completely or moving to other sectors for employment. Agriculture, by contrast, performed better than before COVID-19, growing at 2.7 percent and surpassing services, the growth of which fell to 2.2 percent. However, looking at cumulative sectoral performance since 2018, services still outgrew agriculture by 4.7 percentage points.

The ability to disaggregate projected growth rates across sectors allows for the impact of growth on employment levels to be different across sectors.

Sectors shed or gain workers at different rates. This is especially important given the agricultural sector's natural decline due to structural transformation. Sectors have varying contributions to GDP, productivity, and labor intensity. The initial welfare status of households also varies significantly by sector, with those in agricultural being obviously the poorest.

There are strong regional differences in sectoral composition (figure 5.2). Agriculture tends to be the dominant sector in the Central Highlands and Mekong Delta regions. Industrial zones are scattered across the country, but there are larger concentrations outside of Hanoi and Ho Chi Minh City. The major cities are also services oriented, as

well as the North and Central coastal area where Da Nang is located, which is heavily reliant on tourism.

Like other Southeast Asian economies, a large share of the labor force is active in the agricultural sector, but the sector contributes a smaller fraction of GDP (table 5.1). In 2018, 14.3 percent of GDP was from agricultural activity, but 39 percent of workers participated in the sector. When examining the prevalence of agriculture at the household level, just over 50 percent of households had at least one adult who still participated in agriculture in 2018 and almost 43 percent of household heads are also active in the sector. By contrast, of those household members participating in the manufacturing sector, a much lower proportion are household heads, reinforcing that it is primarily younger cohorts that have been able to engage and participate in manufacturing.

Table 5.1 Distribution of households by main economic sector of activity

	Share of GDP, 2020 (%)	Share of GDP, 2018 (%)	Share of HHs with someone working in the sector (%)	Distribution of main sector of the HH head (%)	Distribution of workers aged 15 and older (%)
Agriculture	13.6	14.3	50.9	42.8	39.2
Manufacturing	36.5	35.5	41.8	12.5	17.6
Services	38.6	38.7	50.6	44.6	43.3

Source: Vietnam General Statistics Office; World Bank staff calculations using Vietnam Household Living Standards Survey, 2018.

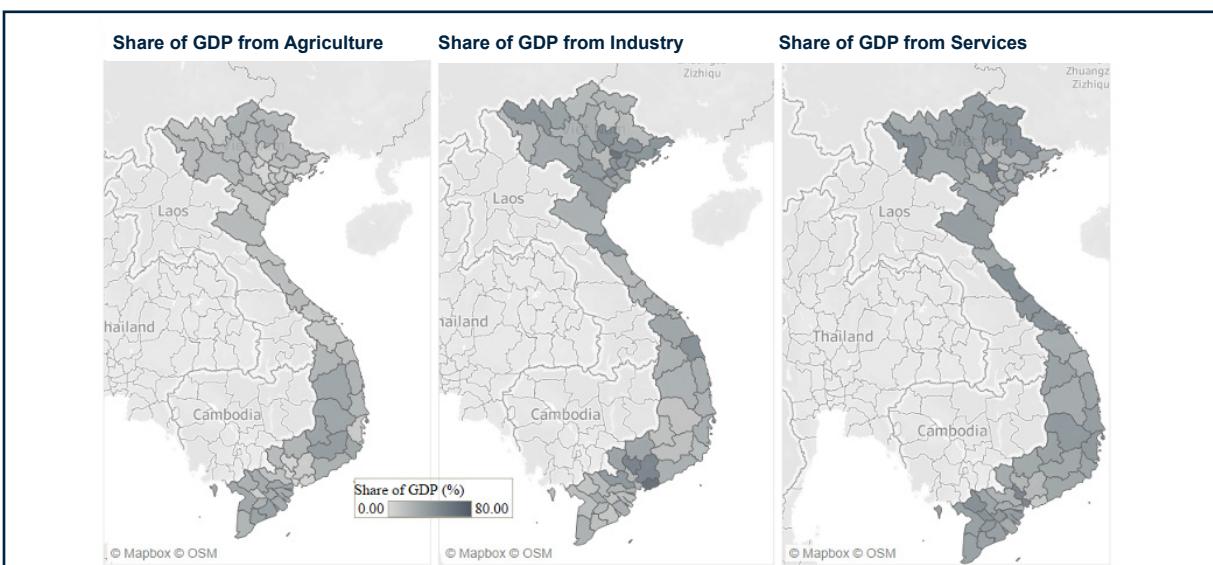
Note: The share of households with someone working in the sector doesn't add to 100 percent. HH= household.

Figure 5.1 Illustration of model parameters to estimate welfare



Source: World Bank staff elaboration.

Note: SA = social assistance.

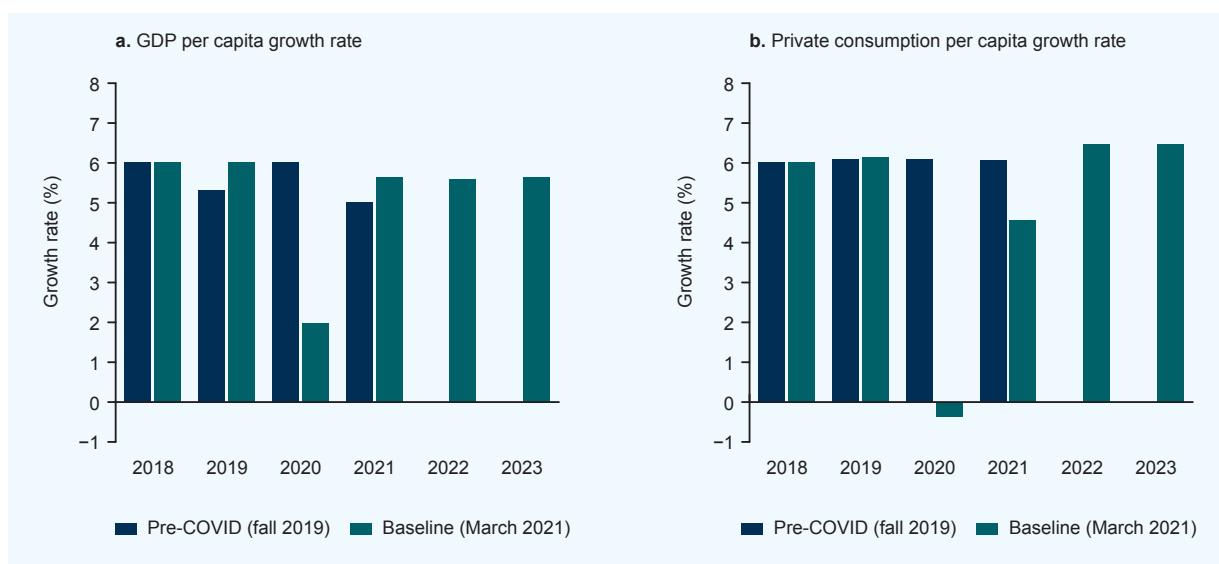
Figure 5.2 Sector concentrations, by province

Source: GSO Statistical Yearbook.

Notes: Provincial GDP shares are 2018 preliminary calculations.

The difference in realized growth rates of GDP and private consumption also suggest varying impacts of COVID-19 on the macroeconomy versus on households at a microlevel (figure 5.3). The export-oriented manufacturing sector in Vietnam was resilient during COVID-19, growing by 4 percent and attracting foreign investment as other countries struggled to

manage the outbreak. However, from the household side as measured in aggregate by Private Consumption, an inevitably slower domestic economy with 14 million fewer tourists and economic activity interrupted by occasional lockdowns led to income and job losses, business closures, delays to large investments and purchases, and lower spending.

Figure 5.3 Growth actuals in 2020 were much lower than pre-COVID-19 forecasts

Source: World Bank.

Note: Macro growth series estimated before COVID-19 were calculated in fall of 2019, use actuals from 2018–19, and are forecasts from 2020 onward. March 2021 macro data use actuals from 2018–20, and forecasts from 2021 onward.

Employment factors

The growth elasticity of employment by sector is used to determine the change in the size of employment by sector under different growth scenarios (table 5.2).

One important calculation that is key to the modeling is the calculation of growth elasticity of employment by sector. These elasticities vary by five sectors: (1) agriculture, industry disaggregated into (2) manufacturing and (3) other industry, and services split into (4) traditional and (5) modern services. The elasticities are calculated on the basis of a simple regression using a GDP and employment series from 2005 to 2019 including crisis interaction terms to allow for different elasticities during COVID-19 and no-COVID-19 scenarios. This pandemic is not the first time Vietnam has experienced a crisis and managed well. During the 1997 Asian and 2008 global financial crises, Vietnam continued to grow as neighboring countries experienced growth slowdowns and recessions. The growth elasticity of employment during the global financial crisis is an important point of comparison to estimate the growth elasticity of employment during the COVID-19 crisis period. The growth elasticity of employment in agriculture is negative; the sector has been naturally shedding jobs for years as it continues to age and become increasingly mechanized, and as young people are drawn to off-farm jobs.

Employment in manufacturing has the largest elasticity, which is expected because millions of new manufacturing jobs have been created over the last decade, matching the sector's continued strong export-oriented growth even during COVID-19.

Vietnam's population continued to grow in 2020, but it is aging. The size of the working-age population is growing, but not by a large share because of the declining demographic dividend. The total workforce in 2020 is projected to be 64.5 million (individuals aged 15–64). However, the growth of the labor force is expected to be slightly smaller in the COVID-19 scenario than in a no-COVID-19 scenario. People are being absorbed into other sectors, but into jobs of lesser quality.

The size of the employed labor force is smaller under the COVID-19 and downside scenarios (table 5.3). The employed share in the COVID-19 scenario is estimated to be 84.2 percent, compared to 86.2 percent in the no-COVID-19 scenario. Although employment rates continue to increase from 2019 levels in both scenarios, the important point of comparison is between the COVID-19 and no-COVID-19 scenarios. The COVID-19 scenario shows higher unemployment rates. In the COVID-19 scenario, agriculture is expected to shed fewer workers, and other sectors are expected to gain fewer workers.

Table 5.2 Employment elasticity in Vietnam, 2020

	No COVID-19 (no crisis)	COVID-19 (crisis)
Overall	0.2800	0.2799
Agriculture	-0.4763	-0.4759
Manufacturing	0.6826	0.6792
Other Industry	1.0071	1.0065
Traditional services	0.6324	0.6284
Modern services	0.4919	0.4908

Source: World Bank staff calculations using Vietnam Household Living Standards Survey, 2018.

Note: Employment elasticity of output (percent change in employment associated with a 1 percent change in GDP).

Table 5.3 Labor shares across scenarios, Vietnam

	2018 (Actual from VHLSS)	2020 Scenarios	
		No COVID-19 (no crisis)	COVID-19 (crisis)
Total workforce (aged 15–64)	1	1	1
Employed	0.819	0.862	0.842
Unemployed/out of labor force	0.181	0.138	0.158
Agriculture	0.368	0.338	0.345
Manufacturing	0.180	0.195	0.192
Other industry	0.093	0.101	0.099
Traditional services	0.242	0.247	0.245
Modern services	0.118	0.120	0.119

Source: World Bank staff calculations using Vietnam Household Living Standards Survey (VHLSS), 2018.

Note: Although employment elasticities of growth are assumed to be the same for the entirety of the manufacturing and services sectors, for the labor reallocation exercise, these sectors can be disaggregated.

According to the sectoral growth elasticity of employment, the employed workforce is about 2 million fewer people in the COVID-19 scenario than in the no-COVID-19 scenario. The majority of this disparity comes from the markedly lower growth in the manufacturing and the traditional services sectors in the COVID-19 scenario. In both the no-COVID-19 and the COVID-19 scenarios, the size of the employed workforce is increasing, but it does so to a lesser extent in the COVID-19 scenario. In the COVID-19 scenario, the number employed in agriculture is higher but close to that in the no-COVID-19 scenario; in both scenarios, the agricultural share of the labor force is declining.

Social protection factors

Early in the pandemic, a nationwide COVID-19 relief package was announced to support households, as discussed in chapter 4. To measure and compare the impact of the cash support onto households, two scenarios are considered (table 5.4). Scenario 1 is based on the actual disbursements and number of beneficiaries. Scenario 2 considers a larger rollout both in terms of the number of beneficiaries and the duration of benefits. The General Statistics Office of Vietnam estimates that by quarter 1 of 2021, 32 million workers were affected by COVID-19, either through job, hours, or income

loss (GSO 2021a). Beneficiary analysis for scenario 2 considering a much larger expanded program uses these statistics as benchmarks for the number of workers who could have benefited from cash support. The total costs of these scenarios range from VND 12 trillion to VND 208 trillion. Vietnam's planned budget allocation in April 2020 for COVID-19-related relief to households was VND 62 trillion (about 0.85 percent of 2019 GDP). Thus, the actual implementation was smaller than planned.

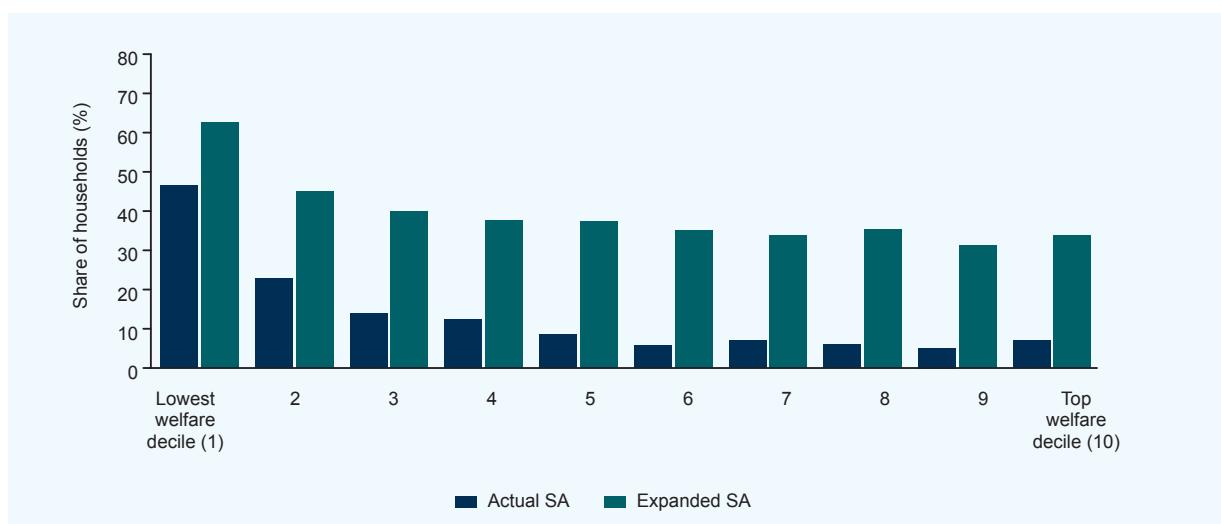
Because existing vulnerable groups and social assistance recipients were preapproved to receive COVID-19 relief top-ups, the benefits from COVID-19 relief were more likely to be received by poor households (figure 5.4). Nationally, the incidence of households receiving benefits in the actual and expanded scenarios are 13 and 39 percent, respectively. Forty-six percent of households in the poorest welfare decile received COVID-19 relief in the form of top-ups. However, the amount of top-ups to poor and near-poor households is lower than amounts provided to informal workers. The expanded social assistance scenario considers an increase in new beneficiaries from 1 million informal workers to 32 million workers. This expansion increases the share of beneficiaries across the entire distribution, without further criteria on the type of affected worker.

Table 5.4 Simulated cash transfer scenarios, Vietnam

Scenario 1 – actual SA (original max of 3 months)		Scenario 2 – expanded SA (6 months)	
No. of people	Spending per person for 3 months (D)	No. of people	Spending per person for 6 months (D)
Income support to existing target groups			
Poor and near-poor households	7 million	7 million	1.5 million
SA beneficiaries	2.8 million	2.8 million	3 million
National Devotees	1 million	1 million	3 million
Income support to new target groups			
Workers affected by COVID-19	1 million (informal workers)	1 million	32 million
Total cost	12.1 trillion		208.2 trillion

Source: MOLISA.

Note: National Devotees are those who contributed during the “revolution and war times.” D = Vietnamese dong; SA = social assistance.

Figure 5.4 Distribution of Vietnamese households receiving benefits, by region and scenario

Source: World Bank staff calculations using Vietnam Household Living Standards Survey, 2018.

Note: SA = social assistance.

POVERTY IMPACTS

COVID-19 slowed the progress of rapid poverty reduction in Vietnam but did not reverse it. Consumption-based poverty rates in Vietnam are reported every two years. Poverty in 2020 is not expected to be higher than poverty in 2018, but the pace of poverty reduction is much slower than historical trends. Based on growth and employment factors³⁴, simulation results show that poverty estimates in 2020 is higher by 0.3 percentage points compared to a no-COVID scenario (6.1 vs. 5.8 percent, under the \$3.20/day 2011 PPP poverty line) (table 5.5). The share of new poor is very small, supported by a resilient agriculture sector where most of the poor are economically engaged. Under the higher Upper-Middle Income class poverty line (\$5.5/day 2011PPP), the size of the new poor is larger, at one percent of the population. At higher poverty lines, households are more diverse and extend into those economically engaged in the relatively more impacted services and manufacturing sectors compared to agriculture.

Welfare-improving impacts from both social assistance scenarios are small. Under the expanded social assistance scenario, beneficiaries would receive about VND 6 million on average for the year, or VND 500,000 per month, or VND 125,000 per capita per month (assuming an average household size of four)³⁵. This amounts to only a small proportion of average household consumption per capita, which is about VND 3.6 million per month per capita. Benefits are also small compared to thresholds considered to be the cost of basic minimum needs. The World Bank LMIC poverty line (\$3.20/day

2011 PPP) converts to just under VND 1 million per capita per month. The monetary poverty threshold in the General Statistics Office's multidimensional poverty index was just recently updated to about VND 1 million per month per capita. Thus, whether the actual rollout of social assistance (scenario 1) or the intended rollout (scenario 2) is modeled, the poverty mitigation effects are limited by the low level of benefits. This is an important consideration for the design of any future COVID-19 responses in case the fourth or later waves require significant lockdowns.

There are some caveats of the model to consider. For example, not all sources of income are impacted through this particular model, such as remittances or financial income. It does not allow for simulation considering multiple sources of household-level incomes. The simulation relies on measuring changes through labor incomes of the primary job, and also agriculture and business as a secondary income source.³⁶ Other income sources were also affected during COVID-19. As described in appendix B, households tend to have more than one source of income, for example, through secondary wage jobs, agriculture, and small businesses. However, only the primary source of household income was taken to be simulated because modeling the dynamics between the primary and other sources of income would both increase the complexity and add more sources of uncertainty. Income impacts through modeled channels can thus be taken to be a lower bound of potential total household income impacts.

Table 5.5 Summary of poverty rates in Vietnam, 2018 (actual) and 2020 (simulated)

	2018		2020		
	Actual	No COVID-19	COVID-19		
			No SA	Actual SA	Expanded SA
Lower-middle-income poverty rate (\$3.20/day 2011 PPP)	6.6	5.8	6.1	6.0	5.6
Upper-middle-income poverty rate (\$5.50/day 2011 PPP)	22.36	16.0	17.0	16.9	16.1

Source: World Bank staff estimates using Vietnam Household Living Standards Survey, 2018

Note: PPP = purchasing power parity; SA = social assistance.

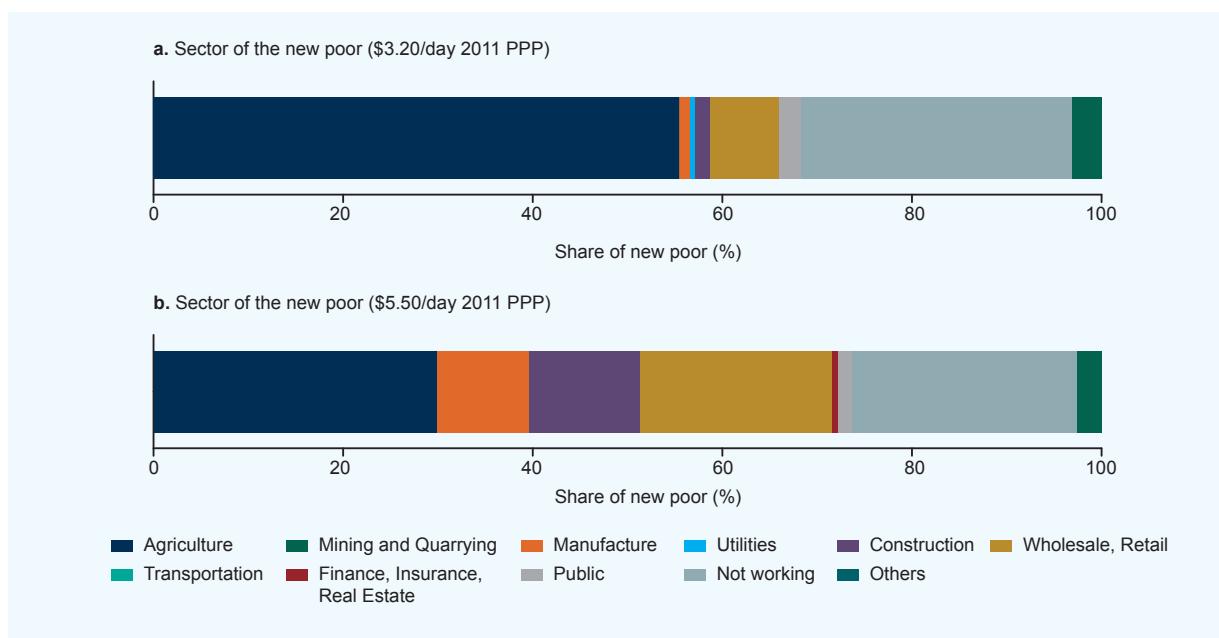
Second, although in the case of Vietnam there are strong regional and localized characteristics in play, the model does not consider region-specific shocks, because such a simulation would require regional-sectoral GDP growth rates that are not available.

Figures 5.5 and 5.6 illustrate the composition of the new poor. Specifically, the composition in the figures is of those who are not poor in 2020 under the no-COVID-19 scenario but are under the COVID-19 scenario without social assistance. It is important to note that this is a very small group to begin with (only 0.33 percent of the population). Even though the results do not account for region-specific effects, they do reflect the nature of the expected geographic profile of new poor. For example, the largest shares of new poor by region are found in the Mekong Delta and Northern Coastal areas. The Mekong Delta was hard hit by droughts in early 2020, and the second outbreak in Da Nang is located in the Northern Coastal region. The majority of the new poor are also households without formal sources of income.

At higher poverty lines, the profile of the new poor will also differ (figure 5.5). At lower poverty lines, the majority of households at the lower end of the distribution rely on agriculture, and small changes in income will push them into poverty. By sector, households in agriculture (which is highly informal), retail services, and with heads who are not working are also more likely to be new poor. At higher poverty lines, more households outside of the agricultural sector also become vulnerable—notably, the share of households that are the new poor under a higher line increases in manufacturing, construction, and retail sectors.

Changes in poverty rates under the COVID-19 and no-COVID-19 scenarios are not substantial, hence the profile of the poor is not significantly different; but there are some small shifts by certain characteristics. In a COVID-19 scenario, the profile of the poor skews slightly more to those working in services whereas those in agriculture make up a slightly smaller share of the poor (figure 5.6). This result is driven by the fact that the services sector experienced the largest percentage point decline in the expected and actual sectoral growth rate in 2020.

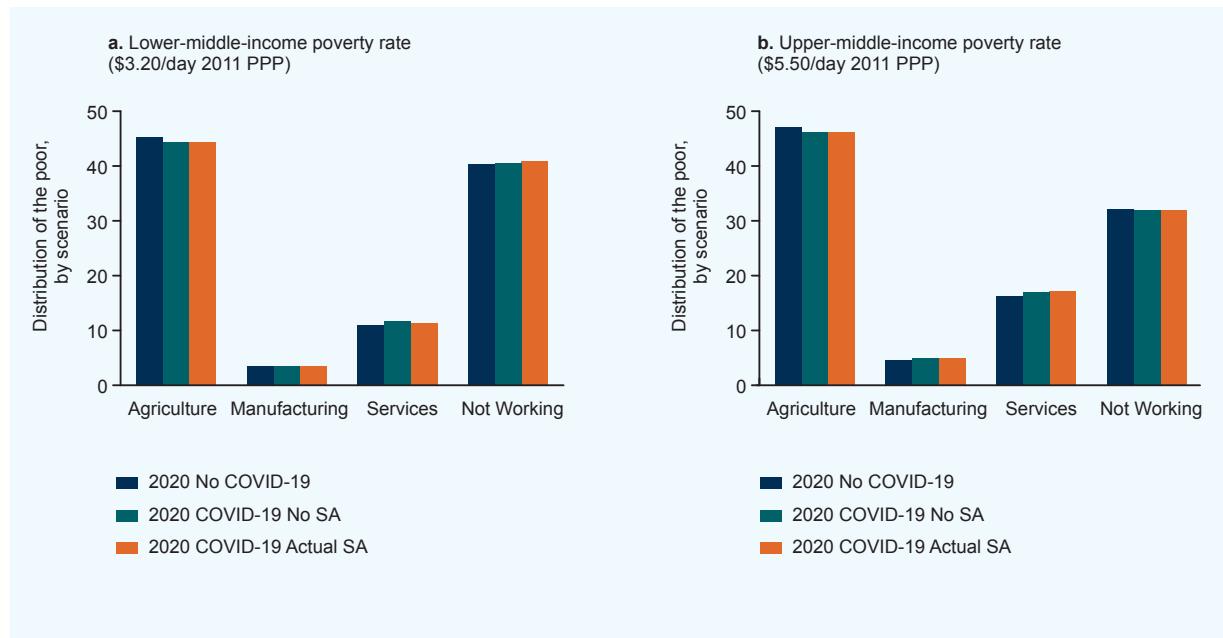
Figure 5.5 The characteristics of Vietnam's new poor differ, by poverty line



Source: World Bank staff micro-macro simulation estimates.

Note: PPP = purchasing power parity.

Figure 5.6 In a crisis scenario, the proportion of Vietnam's poor in services is higher



Source: World Bank staff micro-macro simulation estimates.

Note: PPP = purchasing power parity; SA = social assistance.

Notes

- ³¹ The *new* poor are defined as those estimated to be poor in 2020 under a COVID-19 scenario but who otherwise would not have been poor. The share of the new poor is calculated for different poverty lines.
- ³² See appendix I for more information on the micro-macro simulation.
- ³³ This option is chosen because pre-COVID-19 sectoral growth projections based on desired disaggregation are unavailable.
- ³⁴ Results using actual 2020 GDP growth rates (rather than growth rates estimated pre-COVID) and no expansion/top-up in SA programs
- ³⁵ Welfare concepts used to measure poverty are measured in per capita terms.
- ³⁶ Labor market income is either wage, agriculture, or net business income. First, wage (formal or informal) income for all individuals is applied. For households in the agriculture sector and without any reported wage income, labor market income is applied from agriculture production and business income. This approach is taken because wage income is available at the individual level, but agriculture and business income are available only at the household level.

References

- GSO (General Statistics Office). 2021a. "COVID-19 Impacts on Labour and Employment Situation in Quarter IV of 2020." GSO, Hanoi, January 6.

Chapter 6.

LONGER-TERM IMPACTS: WILL COVID-19 LEAD TO WIDENING INEQUALITY?

.....

Over the past decades, inequality in Vietnam has remained low and stable, and poverty reduction has been growth driven. Will COVID-19 (coronavirus) lead to larger distributional changes in the welfare distribution? Even as most households survived and adapted throughout the pandemic by using various coping strategies, goals and ambitions may have been deferred—and households with more means were able to adapt better. Earlier chapters showed that household income recovery was slowest for those in the bottom welfare quintile, and widening nonmonetary inequality is a concern. Among households negatively affected, the poorest are more likely to defer education needs and are still the least likely to use or adopt digital services and technologies. Some trends proliferated across regions, such as differences in education continuity during lockdowns. Disparities caused by COVID-19 also build on preexisting inequalities in food, digitization, health care, and education. Simulations in this chapter show that rising monetary inequality would further delay poverty reduction.

.....

UNEQUAL EXPERIENCES DURING COVID-19

Inequality may lead to slower economic growth and poverty reduction. A certain degree of inequality can be positive, by rewarding those who work hard, innovate, and take risks. But income inequality is unfair when not everyone has the same initial opportunities in life. The consequences of doing nothing and allowing inequality to grow unchecked could be serious, giving rise to slower economic growth and poverty reduction.³⁷

COVID-19 can be expected to increase monetary and nonmonetary inequality for a range of reasons. From the monetary perspective, households in the poorest quintile were seen to have the slowest income recovery trajectory from June 2020 to March 2021 (chapter 2). Households with lesser means coped less well (chapter 3). According to Vietnam's Labor Force Survey, informality and underemployment rates rose, and wage growth remained stagnated into the first quarter of 2021. The COVID-19 relief program aiming to support informal workers who lost their jobs, implemented on a small scale for a short period early in the pandemic, is estimated to have had minimal welfare impacts (chapter 4 and 5). Among firms, large firms had better capacity to cope and adopt than smaller firms. Inequality may have widened over a range on nonmonetary dimensions as well, affecting longer-term equity. Evidence of potentially widening gaps in education, food consumption, and digital inclusion will be discussed in the next sections.³⁸ Changes in future plans of households and firms are illustrated, which are followed by simulations of distribution-sensitive poverty projections.

Disparities in distance learning

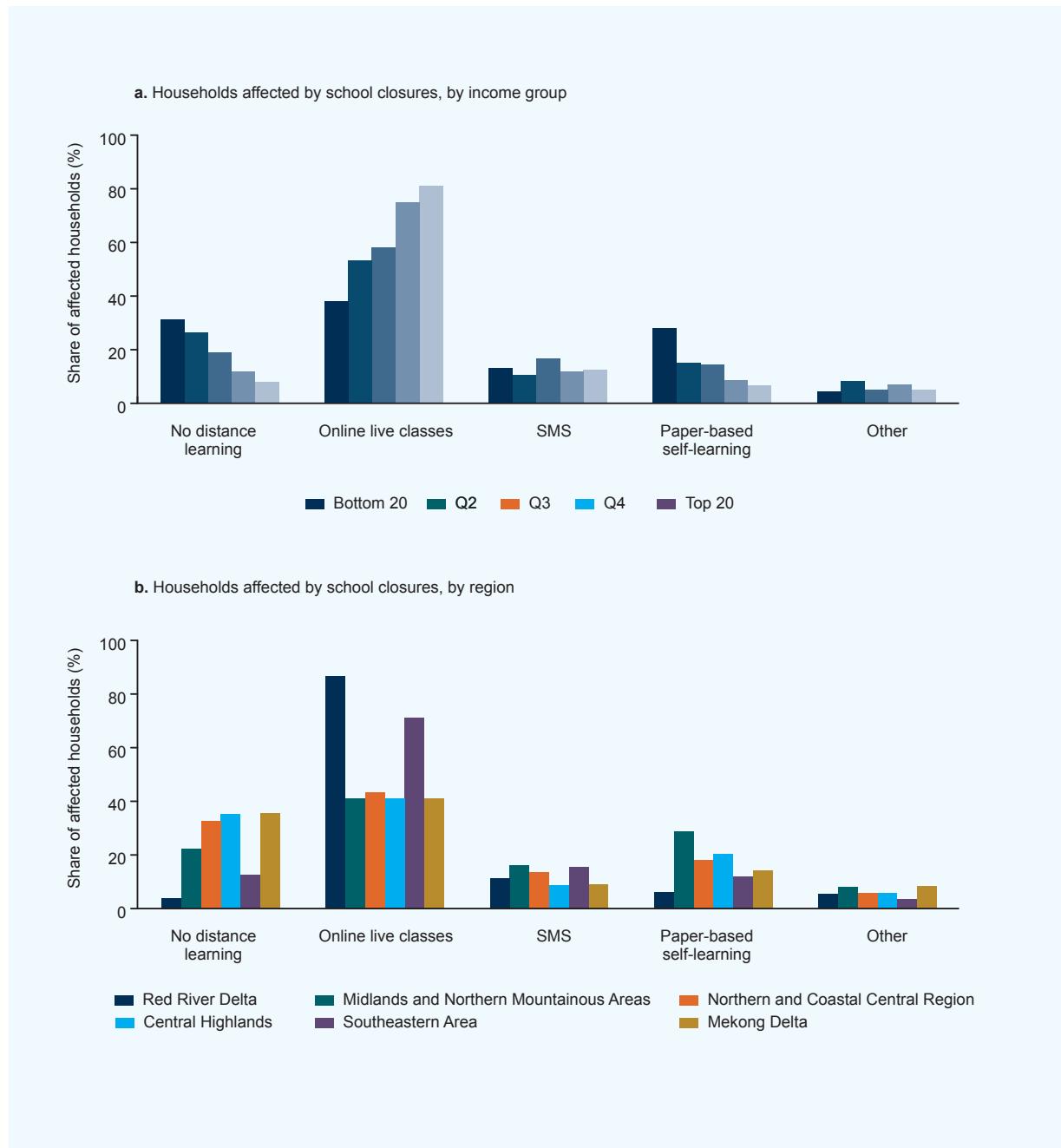
During the first outbreak in early 2020, Vietnam's education sector responded early and decisively to COVID-19 risks and closed all schools for almost three months—among the most prolonged closures in the world. Although containment measures became more localized and targeted over time, school closures were still widespread. Between September 2020 and March 2021, 72 percent of households with a child

between 6 and 18 years of age experienced school closures. Households with children from urban areas, the Red River Delta, and Southeast regions were most affected. As many as 50 out of 63 provinces closed schools early in January and February 2021 ahead of Tet holidays because of the third outbreak.

Adverse learning effects from school closures remain challenging because of limited access to distance learning and remedial learning. Among households with children having school disruptions, only 61 percent had access to online classes and almost 20 percent did not have access to any distance learning opportunities between September 2020 and March 2021. In locations where online classes were not available or accessible, the Ministry of Education and Training and the provincial Departments of Education and Training arranged to broadcast learning sessions on television and/or radio. However, these mediums account for only a negligible portion of distance learning. Short Message Service– and paper-based self-studying are the second most popular methods, but they are generally considered ineffective by teachers and students.

School closures hit economically disadvantaged, ethnic minorities, and low-achieving students particularly hard (figure 6.1). Over 60 percent of households in the lowest welfare quintile and ethnic minorities, and close to 59 percent of those living in the Midlands and Northern Mountainous Areas, Central Highlands, and the Mekong Delta regions did not have online learning offered during school closures. By contrast, only 4 percent of households in the Red River Delta region (Hanoi area) did not receive distance learning. The Red River Delta region and the Southeastern region, where Hanoi and Ho Chi Minh City are located, had very high rates of online live classes.

Figure 6.1 Continuity of education varied across Vietnam's regions and by household socioeconomic groups



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 5).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018. SMS = Short Message Service.

These regional differences reflect not only inequality across households but also inequality in public services across regions. Access rates and performance of the Midlands and Northern Mountainous Area, Central Highlands, and the Mekong Delta regions have persistently lagged other regions at all levels of education. These regions also suffer from a technological infrastructure deficit, inhibiting their ability to implement distance learning. Poor information and communication technology capacity is reflective not just of insufficient infrastructure but also of weaker governance, in addition to poor and unsustainable financing, given that governance and financing for general education are highly decentralized to provinces.

The situation remains fluid, and provinces continue reopening and reclosing schools in a relatively disruptive manner in response to new outbreaks. The start of the fourth wave has resulted in widespread school closures in 49 out of 63 provinces, mostly in the form of early summer breaks or complete closure without remedies or access to distance learning. The latest wave of closures also coincides with a key assessment and testing period. It is still uncertain how these high-stakes assessments, including secondary graduation exams, will be implemented. Given that high-stakes exams are used as a key qualification to enter upper-secondary schools and higher education, school interruption and exam cancellation can have potential long-term consequences for education completion. Because more poorly resourced provinces are less able to provide education continuity, inequities in education completion may also widen across socioeconomic groups.

Digital participation among households

Digital exclusion was apparent in distance learning, but differences in digital participation also manifested in other ways. Because of restrictions on social mobility, and the prevalence of home-based work, COVID-19 was expected to accelerate digital adoption. In the case of Vietnam, it was not clear if this trend would materialize in a significant manner because of the successful containment of the virus and relative normalcy to pre-COVID periods. However, there is evidence of increased digital up-take from both the household and the

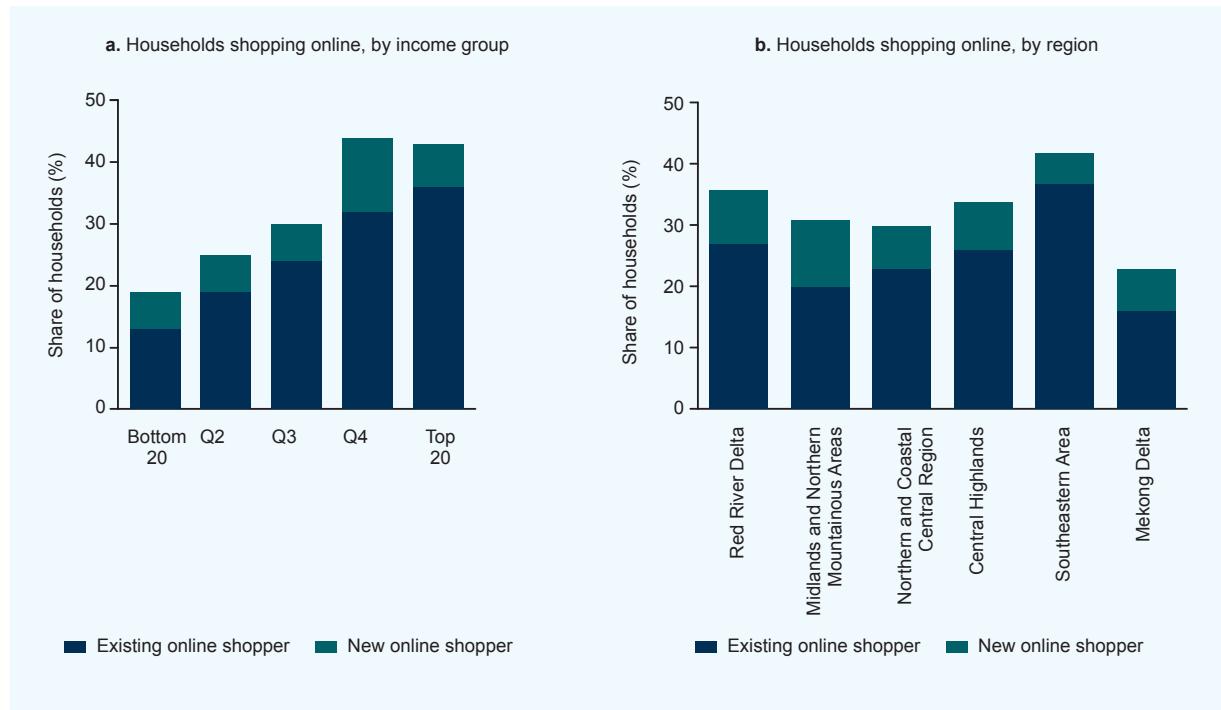
business sides, with some differences across household characteristics and business types.

The number of households that shopped online increased by 30 percent after the onset of the pandemic. About one-quarter of households, or 6.7 million were shopping online on business-to-consumer platforms before February 2020. By January 2021, an additional 2 million households that were not previously shopping online began to do so for the first time (figure 6.2). Facebook is by far the most popular digital platform, but it is slightly more popular among poorer households (figure 6.3). Items purchased online over business-to-consumer platforms are primarily clothing, shoes, and accessories, followed by household items. As a point of comparison, 18.8 percent of individuals aged 15 years and older were shopping online in 2017.³⁹ Thus, it does appear that the growth of new online shoppers was faster during COVID-19.

Wealthier households are more likely to be existing and new online shoppers. Households in urban areas and at the higher end of the welfare distribution were more likely to already be online shoppers before the pandemic. In terms of the adoption of digital technology, the emergence of new online shoppers was higher among households at the higher end of the welfare distribution.

Households at the higher end of the welfare distribution are also more likely to participate in the digital economy from the supply side. Sellers and those employed in digital ride-sharing services are also more likely to be at the higher end of the welfare distribution (figure 6.4).

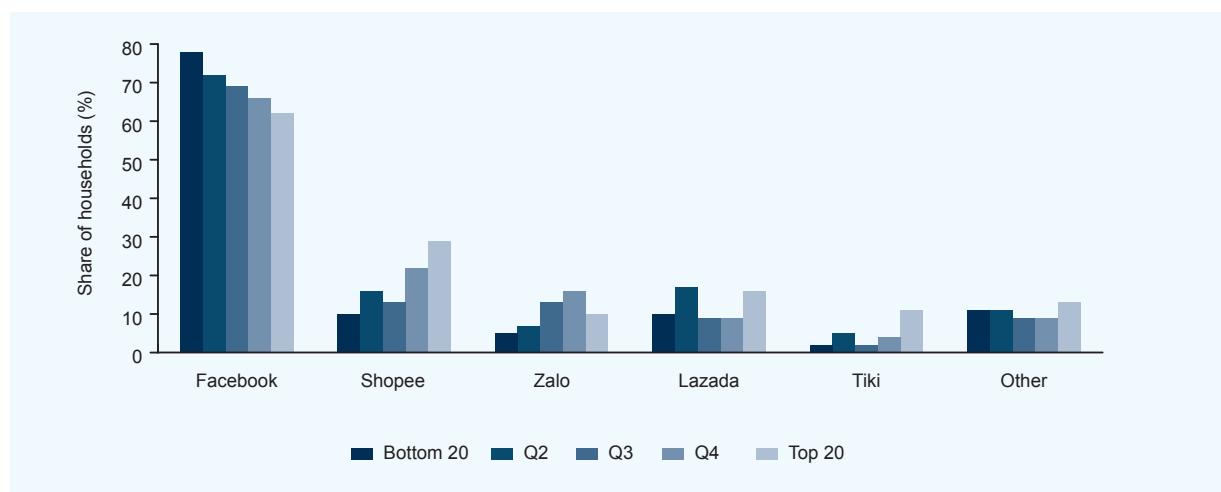
Figure 6.2 An additional 2 million Vietnamese households began shopping online between February 2020 and January 2021



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 4).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018.

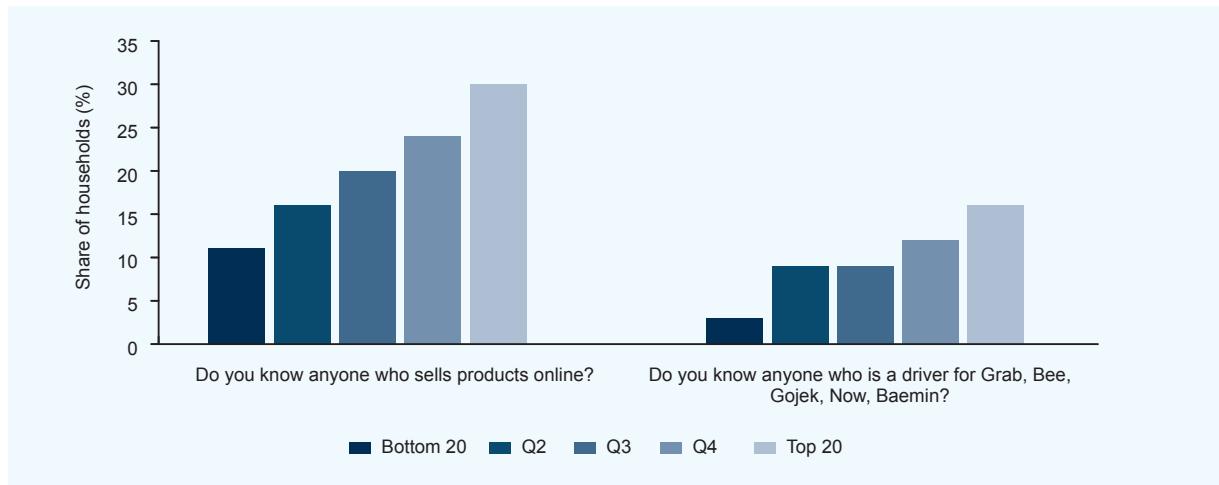
Figure 6.3 Facebook is the most popular digital business-to-consumer platform, Vietnam



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 5).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018.

Figure 6.4 Wealthier Vietnamese households are more likely to know someone who is engaged in the digital economy



Source: World Bank COVID-19 household monitoring surveys (round 5).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018.

Small firms suffered larger impacts but were less able to adapt using digital solutions

Family businesses were less likely than formal firms to adopt technology, highlighting another gap (figure 6.5). Households in the top welfare quintile and who had family businesses were the most likely to adopt digital technology and acquire sales from digital platforms, as well as to increase the share of their sales from digital platforms. At a broader level, the Labor Force Survey also found that digital technology was brought into the workplace. In quarter 1 of 2021, about 78,000 workers reported adoption of information technology applications due to the COVID-19 pandemic (GSO 2021b).

Formal firms adopted digital technologies as a coping strategy to mitigate the negative impacts of the pandemic, but the uptake of technologies, especially for more sophisticated functions, has been skewed toward larger firms. More large firms have consistently been using digital platforms compared with small and medium firms (figure 6.6). Consistently, the share of large firms that started using or increased their use of digital platforms between June 2020 and January 2021 is 10–15 percentage points greater than that of small and medium firms that did so. The higher share

of large firms using digital platforms may be because these firms have more financial and human resources to adopt the digital technology. Moreover, large firms can invest such resources to adopt digital platforms for more sophisticated business functions, such as production planning, supply chain management, and fabrication, for back-end purposes (figure 6.7).

In contrast, the update of digital platforms by small and medium firms is mainly focused on front-end business functions, such as marketing, sales, and payment methods. All firms—small and medium enterprises (SMEs) and large firms—started using digital platforms for front-end purposes at beginning of the pandemic, and this trend has increased over three survey rounds. By January 2021, almost 90 percent of large firms and over 90 percent of SMEs had started or increased their use of digital platforms for front-end purposes. However, fewer SMEs have done so for back-end purposes: about 60 percent of SMEs started or increased their use of digital platforms for these purposes, whereas almost 90 percent of large firms had done so by January 2021. It is easy for small firms to adapt these simpler business functions to digital platforms, but incorporating digital technologies into more complex business functions requires more resources and capabilities.

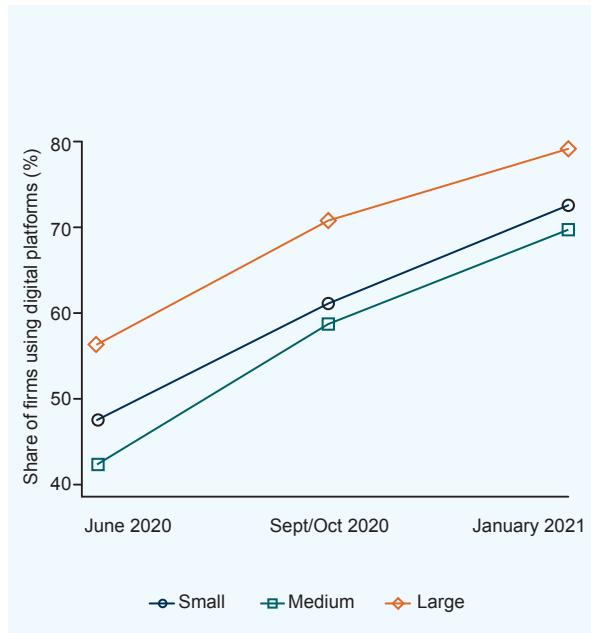
Figure 6.5 Family businesses from wealthier households are more likely to have digital sales, Vietnam



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 2, 4, and 5).

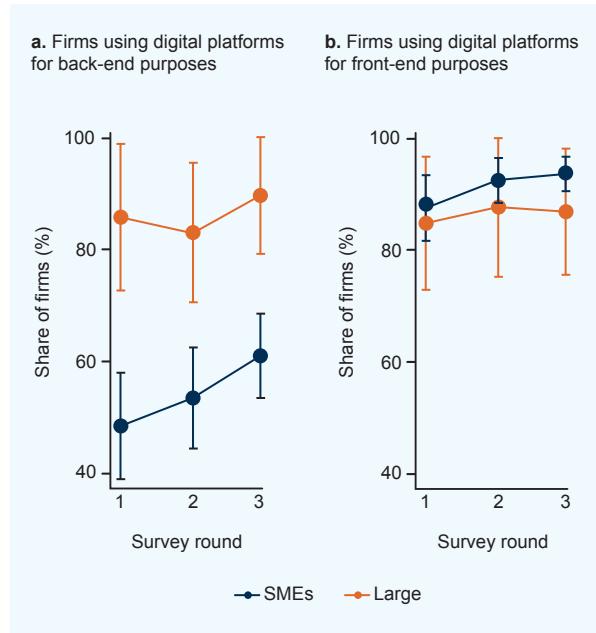
Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018.

Figure 6.6 Higher shares of large firms in Vietnam are using digital platforms



Source: World Bank COVID-19 Business Pulse Surveys.

Figure 6.7 Large firms in Vietnam are using digital platforms for more sophisticated business functions

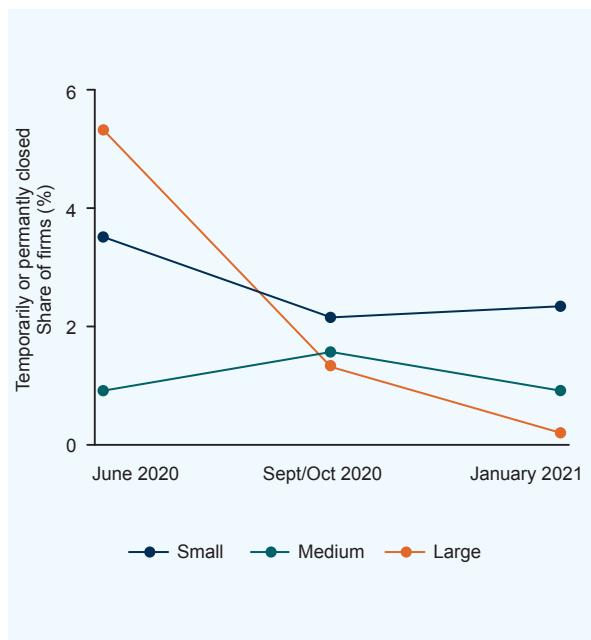


Source: World Bank COVID-19 Business Pulse Surveys.

Note: Back-end purposes include business administration, production planning, and supply chain management. Front-end purpose include marketing, sales, payment methods, and service delivery.

Among formal firms, small firms have suffered the most during the pandemic. Many firms had to temporarily or permanently close because of COVID-19. According to the World Bank COVID-19 Business Pulse surveys, the share of businesses that were closed in June 2020 was 3.3 percent, decreasing to 1.9 percent in both round 2 and round 3. Yet small firms have had the most difficulties in reopening; by January 2021, 2.3 percent of small businesses remained closed (figure 6.8). In contrast, more large firms reacted quickly by closing at the start of the pandemic but most had reopened by January 2021. The negative effects on sales also lingered the longest for small firm (figure 6.9). Large firms experienced about a 30 percent decrease in June 2020 sales relative to the previous year, but sales recovered in January 2021 to just under 5 percent less than the previous year (January 2020). However, small firms experienced a decrease of almost 40 percent in sales in June 2020 relative to the previous year, and January 2021 sales were still 20 percent less than for the same period in the previous year.

Figure 6.8 Small Vietnamese businesses have been the slowest to recover from closures



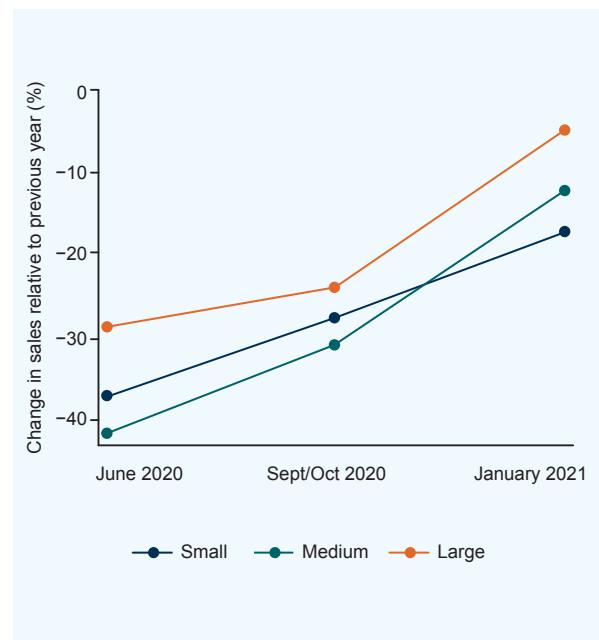
Source: World Bank COVID-19 Business Pulse Surveys.

Chronic conditions among ethnic minorities

Ethnic minorities were adversely affected during COVID-19 across nonmonetary dimensions. Living in predominantly rural and remote areas, ethnic minorities were less affected by social distancing and outbreaks in urban centers, and they did not experience heightened income losses during COVID-19. However, differences in food and health conditions during COVID-19 highlight the ongoing nature of existing disparities in these nonmonetary dimensions. Health, nutrition, and food have long-term impacts on human development and are also important determinants for intergenerational poverty reduction and upward economic mobility.

During COVID-19, ethnic minorities and poorer households were the most concerned about food security, which may reflect financial uncertainty and a general inability to stock up on food (figure 6.10). Although food security concerns subsided substantially, trends persisted across some groups. In keeping with prepandemic trends, food insecurity and low dietary diversity appear more acute among ethnic minority

Figure 6.9 Negative effects on sales have lingered longest for small Vietnamese businesses



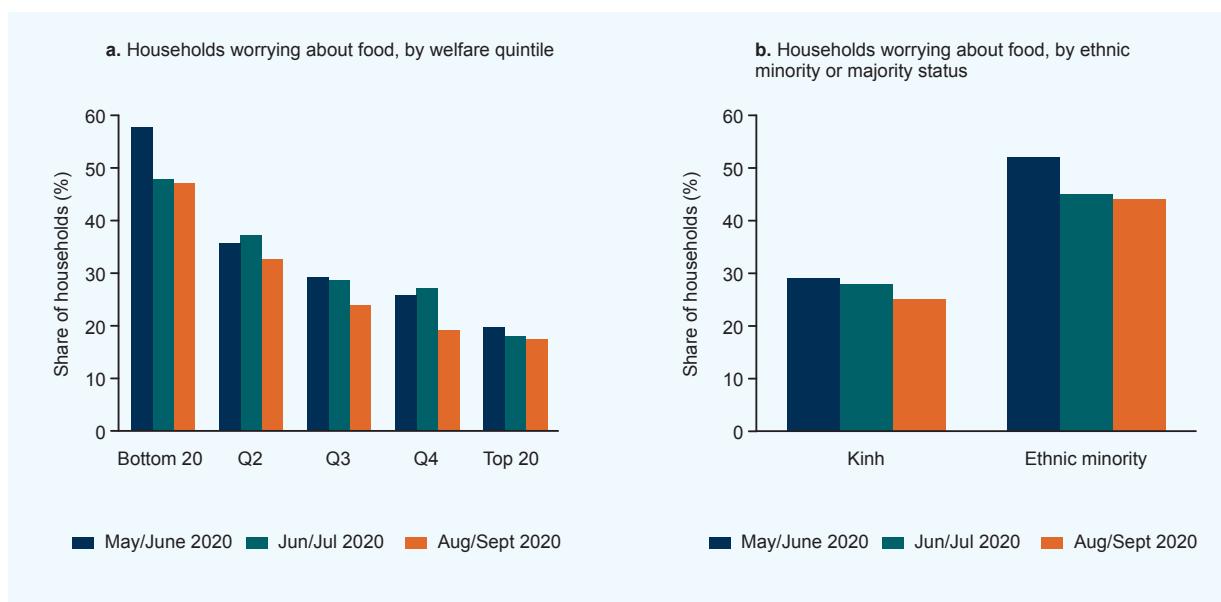
Source: World Bank COVID-19 Business Pulse Surveys.

populations in Vietnam (figure 6.11). Because roughly 75 percent of Vietnam's ethnic minority groups live in the Northern Mountains and Central Highlands regions, these trends illustrate how demographics and geography influence the extent of nutrition disparities throughout the country (Mbuya, Atwood, and Huynh 2019).

In recent decades, Vietnam has been recognized for its remarkable improvements in nutritional status, but progress is slowing down as stunting has stagnated. Between 2000 and 2020, the national stunting rates dropped by nearly half from 36.5 percent to 19.6 percent.⁴⁰ However, Vietnam's childhood stunting rate (children under 5) has stagnated in recent years. The World Bank Human Capital Index (HCI) estimates show increased stunting rates between 2010 and 2020. In early 2020 before the pandemic, the stunting rate among the Kinh majority was 17.1 percent whereas it was much higher among ethnic minority groups at 32.0 percent. In fact, the gap in stunting prevalence between the majority and minority groups widened from a 14.3-percentage-point difference in 2010 to a 17.9-percentage-point difference in 2020.⁴¹

The key determinants of undernutrition among ethnic minority populations are multisectoral. Ethnic minority children are fed less nutritious food, get sick more frequently, and have less access to health services as well as water and sanitation resources compared to majority children (Mbuya, Atwood, and Huynh 2019). On average, women living in mountainous and remote areas get married younger, have lower educational levels, and receive less reproductive care compared to their peers in lowland and urban areas. Poverty, an important basic determinant of undernutrition, is also concentrated among ethnic minorities; although ethnic minority groups account for only 14 percent of the total population, they account for 73 percent of those living in poverty in Vietnam, according to 2016 estimates.

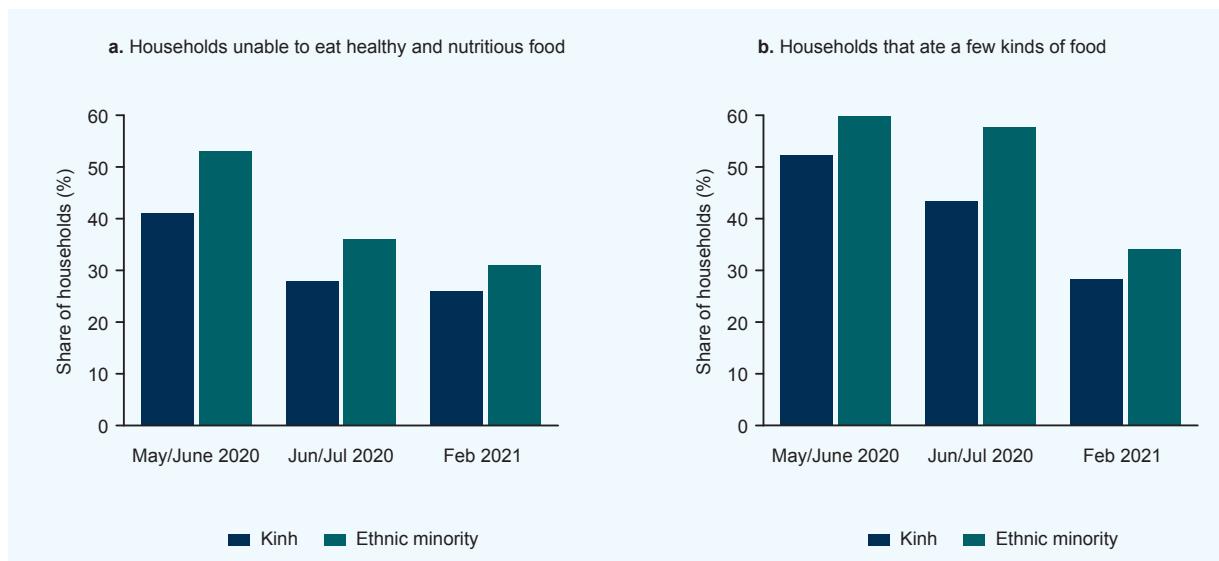
Figure 6.10 Ethnic minority and poor households in Vietnam are more likely to worry about food



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1–3).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018. Reference period is shown and is the last 30 days from date of interview.

Figure 6.11 Fewer Vietnamese households are eating less, but gaps remain across socioeconomic groups



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 1, 2, and 5).

Notes: Reference period is shown and is the last 30 days from date of interview.

Health services were largely accessible throughout the pandemic, and households did not defer or avoid necessary and routine health check-ups. Nearly all respondents from the World Bank COVID-19 household monitoring surveys (96 percent and 98 percent in rounds 1 and 2, respectively) reported that their households were able to access medical treatment if needed. Access to these services was consistent across the welfare distribution, geography (that is, urban and rural). Likewise, in round 1⁴² of data collection, most households with children under the age of two reportedly brought their children to a health center for immunizations (86 percent) and most households with pregnant women were able to access a health facility for antenatal care (89 percent) within the last three months.⁴³

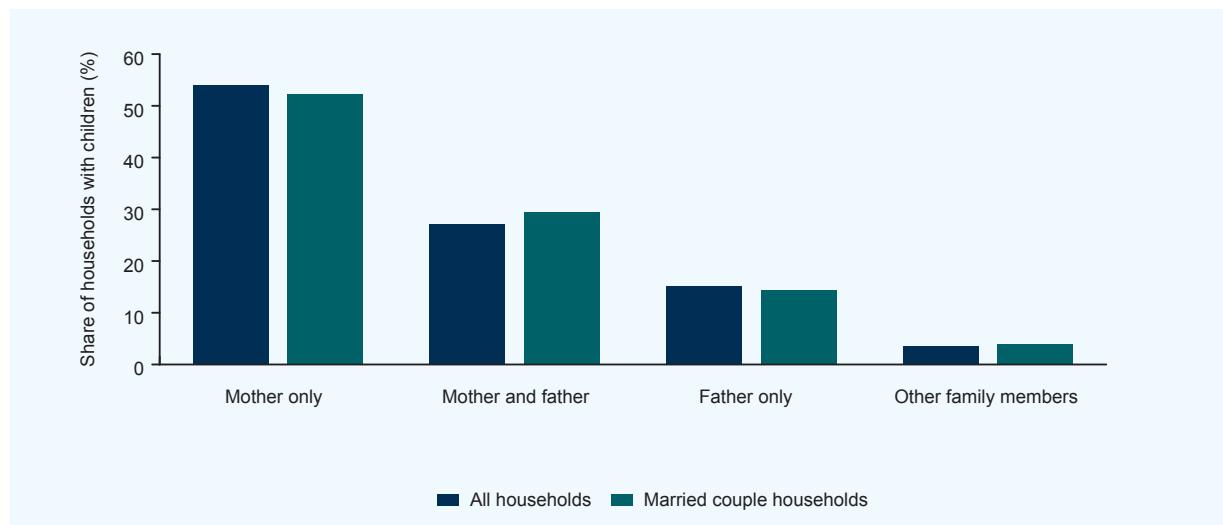
Despite those positive numbers, reporting during COVID-19 reconfirmed some existing disparities related to the use of health services across groups. Antenatal care visits were more common for the top 60 (91 percent) than for the bottom 40 households (85 percent) and were more common for Kinh majority (90 percent) households than for ethnic minority households (84 percent). These differences across subgroups are consistent with broader household demographic composition: three-fourths of surveyed ethnic minority

households (75 percent) are also classified as bottom 40 whereas two-thirds (66 percent) of ethnic majority households are classified as top 60.

A gender-biased crisis

In past economic crises, men were typically more affected in the labor market, because of lost employment, than women. Women may even enter the labor market to cope with the loss or reduction of household income (for example, Bandiera et al. 2019; Frankenberg, Thomas, and Beegle 1999), thereby temporarily reducing the gender gap in labor market participation. Although this effect might dissipate when the economy recovers, some crises may lead to persisting level of higher female labor force participation, especially when the economy also introduced transformative structural transformations, such as the Lanham Act of 1940, in which the United States government introduced the first and only federally administered universal childcare program to help mothers to participate in war production efforts (Herbst 2017). Recent studies show that the war-induced crisis had positive long-run effects on female labor force participation in the United States and that those effects persisted even after the war (Acemoglu, Autor, and Lyle 2004; Goldin and Olivetti 2013).

Figure 6.12 Distribution of household members who stopped work or reduced work hours to take on childcare



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 1).

The current COVID-19 crisis is, however, unlike typical past economic crises because it is “self-imposed” by mobility restrictions, business shutdowns, school and institutional childcare closures, or stay-at-home orders (Alon et al. 2020). The issue of childcare arose as a key concern and a prerequisite for economic recovery. Women typically bear a disproportionate responsibility of childcare around the world, and the COVID-19 pandemic has exacerbated the pressure on women’s time.

Temporary school and institutional childcare facilities closures are expected to exert a greater pressure on women’s time, away from paid work activities. Close to 70 percent of households interviewed in the World Bank Vietnam COVID-19 monitoring surveys have at least one child between the ages of 3 and 22. In slightly more than a quarter of households with a child, someone in the household had to stop working or had to reduce hours worked to care for children staying home because of school closures.

Mothers are more likely than fathers to take up the added childcare responsibility at the expense of their employment (figure 6.12). The distribution does not differ much when looking at all households or only at married couple households. In more than half of households, the care responsibility fell solely on the mother, whereas

that responsibility was shared between the father and the mother in close to 30 percent of households. In only 15 percent of households did fathers take the sole responsibility, and the remaining 4 percent of households relied on other family members.

FUTURE PLANS ARE AFFECTED

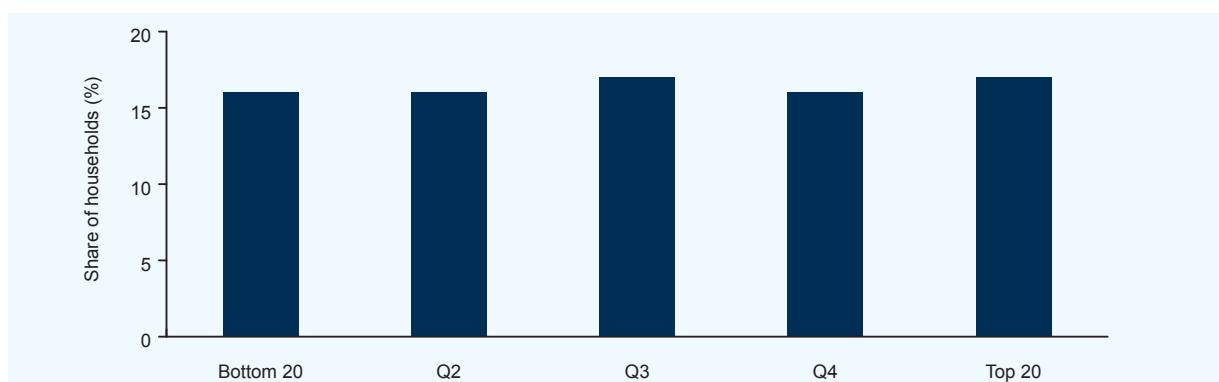
Changed plans among households

In January 2021, 16 percent of households reported that they had changed their plans in the last year because of COVID-19 (figure 6.13). The incidence of households reporting these changes was similar across the welfare distribution, reflecting the broad and varied economic impact channels that permeated across the entire distribution and affected households in different ways. Delaying housing renovation or construction was the most deferred activity; in rural areas, self-construction of homes is common. A host of other responses also ranged from delays in making investments in farming, opening businesses, repaying loans, seeking health care, and traveling, to family planning such as marriage or starting a family.

How households changed their plans for the future differed across the welfare distribution (figure 6.14). Richer households delayed purchases of land, homes, or apartments. Poorer households deferred spending on education. The impacts to poorer households are arguably more consequential, because delays in investments in education have longer-term generational impacts. These impacts compound already large differences in education investment between poor and wealthy households. In 2018, at every level of education, Vietnamese families in the middle class spent three to four times more on education than poor or economically vulnerable households. These expenditures include tuition and fees, coaching, enrichment, and uniforms. At the upper-

secondary levels, middle-class families spend over seven times as much on coaching and study materials than poor and economically vulnerable households do. For children around age 8, the participation rate in extra classes is almost twice as high among top-quintile households compared to bottom-quintile households. Among older children aged 12, the participation rates in top-quintile households is almost three times higher. Moreover, among wealthy households, participation in extra classes increases with age, whereas, in the poorest households, participation declines with age. These differences in education investment create uneven opportunities and realities for future education attainment, skill development, and access to jobs.

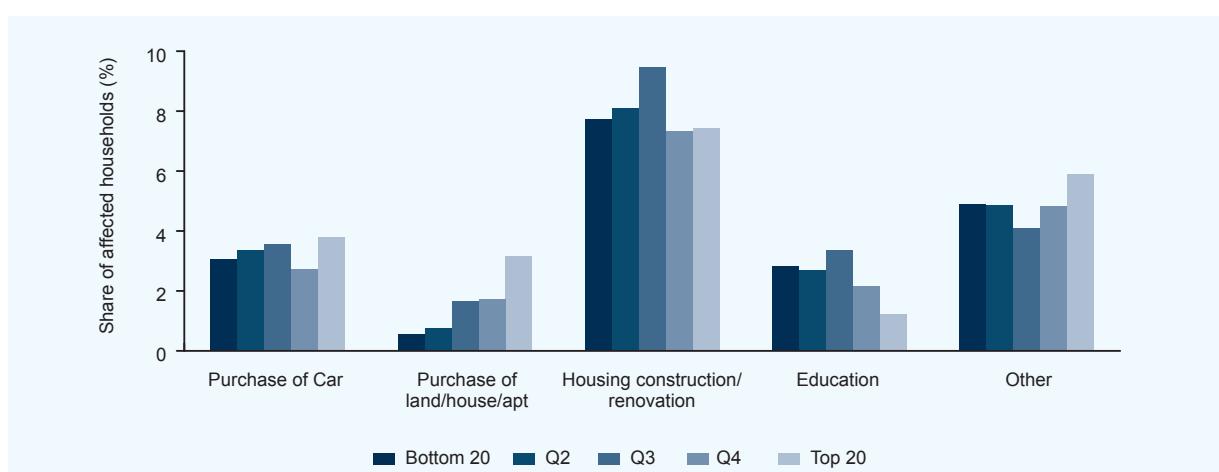
Figure 6.13 Vietnamese households changed plans because of income declines, by income quintile



Source: World Bank Vietnam COVID-19 household monitoring surveys (round 4).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018.

Figure 6.14 Poorer Vietnamese households were more likely to forgo investments into education



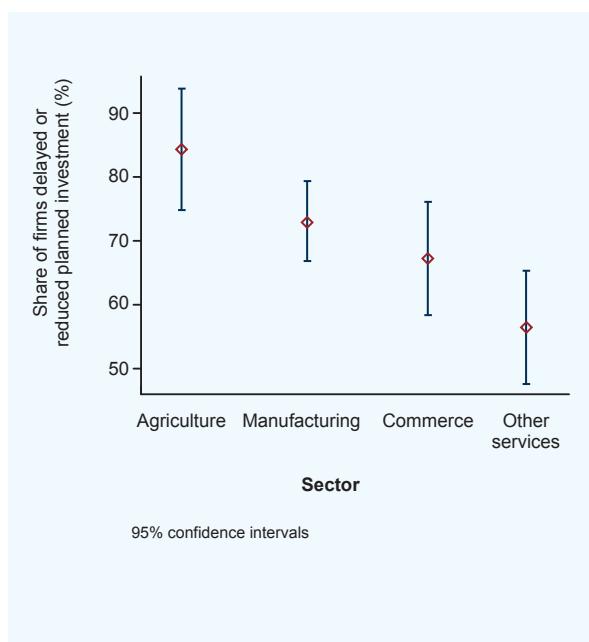
Source: World Bank Vietnam COVID-19 household monitoring surveys (round 4).

Note: Household welfare quintiles (Q) are based on household consumption per capita in 2018.

Dampened business investments and expectations for the future

Disrupted investments may become a drag on future productivity. By January 2021, 65 percent of firms had delayed or reduced their planned investment because of the pandemic (figure 6.15). Further, there is evidence that some sectors are disproportionately affected. Agricultural firms, followed by manufacturing firms, are the most affected, with about 85 percent of agricultural firms and 75 percent of manufacturing firms delaying or reducing their planned investments. With the slight improvement in business expectations in January 2021, there are signs of recovery. Only 1.7 percent of firms expect future delays or reduction in their planned investment in the next six months (figure 6.16). Despite that improvement, it is clear that past disruptions increased uncertainty for the businesses that suffered from them. Agricultural firms remain the group with the most pessimistic outlook (1.8 percent expect future delays).

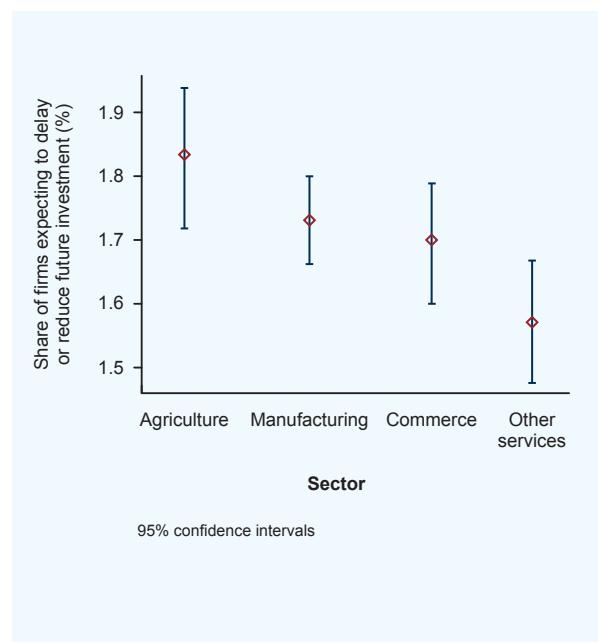
Figure 6.15 The pandemic disrupted the investment plans of most Vietnamese firms, especially agricultural businesses



Source: World Bank COVID-19 Business Pulse Surveys.
Note: Lines represent 95 percent confidence intervals.

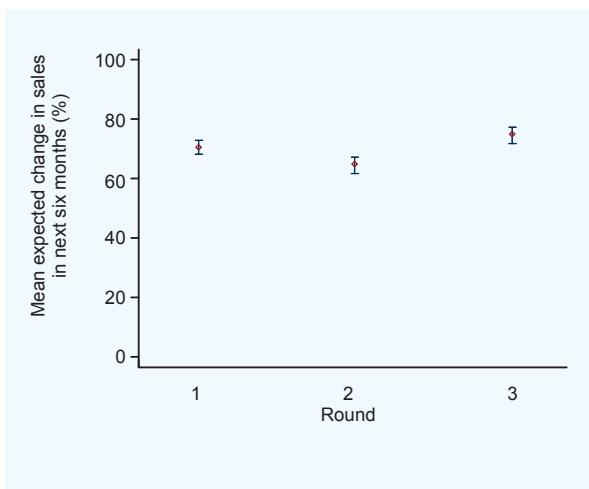
Business expectations suffered greatly from the economic impacts of the pandemic, and firms remain pessimistic about the future (figure 6.17). In all three survey rounds, firms expected sales in the next six months to drop to below 80 percent of what they were during the same period the previous year. Business expectations reached their nadir in October 2020 (65 percent) but had recovered to some extent by January 2021 (77 percent). With the survey round 1 in June 2020 as the reference group, the outlook was statistically significantly worse in round 2 (Sep/Oct 2020) before getting much better in round 3 (January 2021). This recovery most likely stems from Vietnam's impressive performance in containing the pandemic up to that point. However, the largest and most recent outbreak in April 2021 may dampen this slight optimism.

Figure 6.16 With improving business outlooks in January 2021, fewer Vietnamese firms expect to reduce investments



Source: World Bank COVID-19 Business Pulse Surveys.
Note: Lines represent 95 percent confidence intervals.

Figure 6.17 Business expectations of Vietnamese firms reached the lowest level in October 2020 but have since recovered

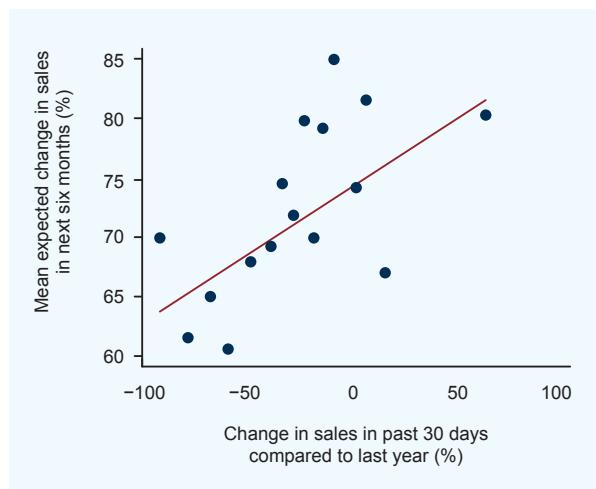


Source: World Bank COVID-19 Business Pulse Surveys.

Note: The graph shows average weighted expectations, controlling for firm fixed effects. Lines represent 95 percent confidence intervals.

Further, there are signs that the reallocation shock due to COVID-19 may be a persistent shock. If we expect all firms to recover to their prepandemic levels, those that were more negatively affected should have had more positive expectations. However, the survey results suggest that firms with better recent business outcomes are also more likely to be optimistic about the future: there is a positive correlation between future expected sales and change in sales in the past 30 days (figure 6.18). This result is also consistent with evidence from the past three survey rounds, which show that firms that experienced higher sales growth in the previous rounds are more likely to do so in the next survey round. The results suggest that there may be a divergent path for recovery whereby better-performing firms keep gaining ground while worse performing firms continue to lose market shares.

Figure 6.18 In Vietnam, business expectations for the next six months are more positive for firms with higher sales growth in the past month



Source: World Bank COVID-19 Business Pulse Surveys.

Note: The diagram is a binned scatterplot.

DISTRIBUTION-SENSITIVE POVERTY PROJECTIONS—LONGER-TERM SIMULATION

Disparities in nonmonetary dimensions of well-being can lead to widening monetary inequality in the future. Examples in the preceding sections illustrated the potential widening of existing monetary and nonmonetary gaps caused by COVID-19, even during an early period when Vietnam managed the crisis extremely well compared to most others in the world. Moreover, these gaps have long-term consequences: lost education is unlikely to be recovered, with consequences for lifetime wages; sold assets cannot produce future incomes; and employment scarring is also associated with lower lifetime earnings. Minimizing future disparities will require forward-looking policies and improving existing support systems. This section describes longer-term poverty trajectory scenarios, with the main purpose of illustrating the potential impacts of increasing inequality on poverty.⁴⁴

Poverty projections with distributional assumptions

Concepts of poverty reduction, inequality and inclusive growth are connected. The literature notes the importance of the impact of inequality on poverty reduction, highlighting a “double-dividend” effect (Alvaredo and Gasparini 2015; Bourguignon 2004). At a macro level, changes in poverty can be decomposed into a combination of growth and redistribution effects (Bourguignon 2003, 2004; Datt and Ravallion 1992; Ferreira 2012). As a growth effect, poverty reduction can be driven by growth in mean income or in consumption. The second channel is redistribution, or through changes in inequality. Reducing inequality has a double-dividend effect because it promotes poverty reduction today and accelerates poverty reduction in the future. Lower levels of inequality have been empirically associated with higher growth elasticity of poverty reduction.

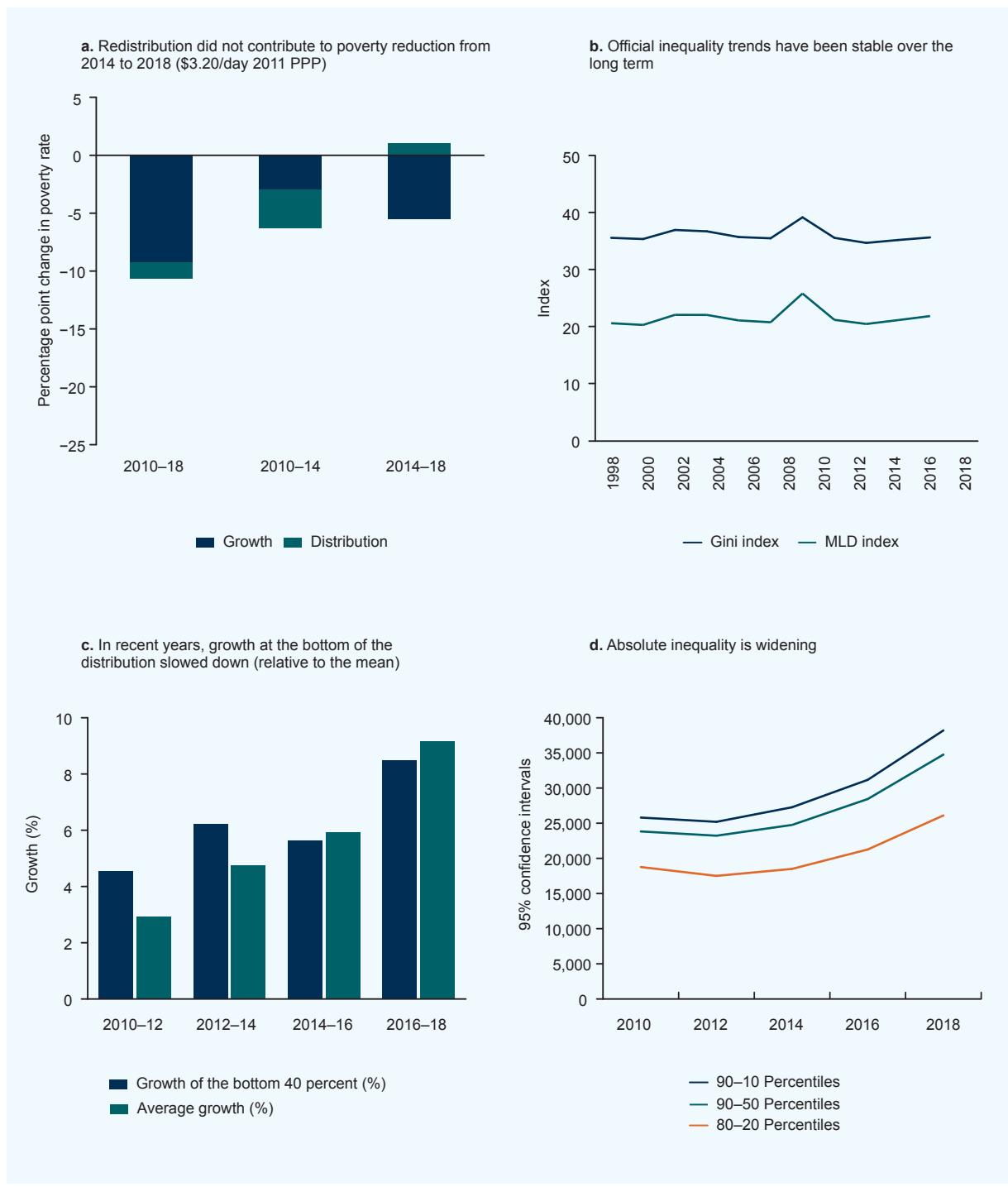
Over the past decade, Vietnam’s welfare trajectory has been primarily growth driven with a smaller role from redistribution as a channel of poverty reduction (figure 6.19, panel a). From 2010 to 2018, about 85 percent of poverty reduction was attributed to growth of the mean of household consumption. Redistribution had a stronger impact in the earlier half of the decade than in the latter. Relative inequality over the past decades in Vietnam has remained remarkably stable. The Gini Index was 35.6 in 1992 and 35.7 in 2018 (figure 6.19, panel b). In recent periods, the growth of the bottom 40 percent of the population has been lower than the national average (figure 6.19, panel c). Although relative inequality is not high compared to other developing East Asia and Pacific economies, absolute gaps were increasing before the pandemic (figure 6.19, panel d). The absolute difference in annual per capita consumption between the poorest and richest 10 percent has increased from VND 26 million in 2010 to VND 58 million in 2018.

For the first time since the aftermath of the global financial crisis, the welfare trajectory is potentially being significantly altered from a distributional perspective. Over almost three decades (1992–2018), the only instance when inequality increased substantially in Vietnam was in 2010, and it then quickly reverted back down in 2012. In 2018, inequality was inching upward, and changes in the distribution hampered poverty reduction. Distribution-sensitive welfare estimates in 2020 show, at the minimum, a slowdown in poverty reduction and, in scenarios with increasing inequality, possible reversals of poverty rates. This subsection discusses poverty trends under scenarios of growth and redistribution at a national level. Longer-term projections of poverty are influenced by assumptions of inequality.

In illustrating longer-term poverty trajectories, the main objective is of illustrating the potential impacts of increasing inequality on poverty reduction in Vietnam in a post-COVID-19 setting. The distribution-sensitive poverty projections in this section follow methods described in Lakner et al. (2020). The growth of household consumption is assumed to align with the projections of gross domestic product per capita growth. Assumptions on the shape of the growth incidence curve of household welfare and the degree of inequality affect how growth passes through to households differently along the distribution. When inequality is present, households do not experience the same rates of growth in household welfare.

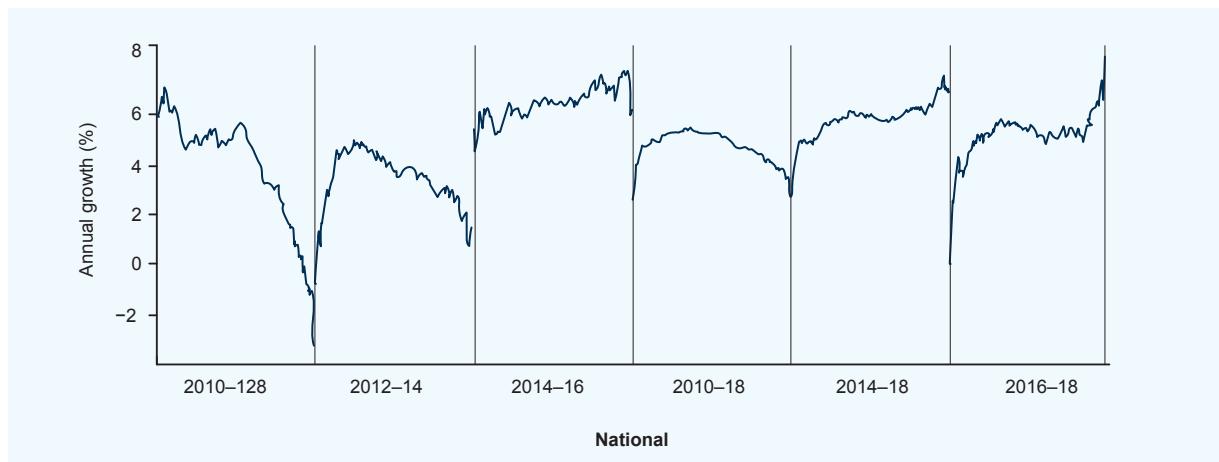
The simulation allows for distribution-sensitive poverty projections by assuming growth passes through to households differently along the distribution. This is done using specific parameterization assumptions of what growth looks like across the welfare distribution (growth incidence curves), which can be either linear or convex under the utilized approach. Empirically, the growth incidence curve appears more linear than convex in Vietnam (figure 6.20). Interestingly, but not fortunately, the shape of the growth incidence curve has reverted in the sense that, in the early period (2010–12), the highest growth rates were observed at the lower ends of the distribution. However, in later periods (2014–18, and 2016–18), the highest rates of growth were observed at the higher ends of the distribution.

Figure 6.19 Inequality has been stable in Vietnam, but redistribution has not contributed to poverty reduction in recent periods



Source: World Bank calculation using the Vietnam Household Living Standards Survey, PovcalNet, and Pimhidzai and Niu 2021.
Note: MLD = mean log deviation.

Figure 6.20 Growth incidence curves, selected periods, Vietnam



Source: World Bank calculation using the Vietnam Household Living Standards Survey.

Note: Figure shows anonymous distribution, that is, not a panel.

A few pieces of empirical evidence suggest that modeling poverty projections with a positive increase in Gini may be more accurate than modeling without. Changes to the distribution are based on assumptions, but observations from the World Bank COVID-19 household monitoring surveys in Vietnam suggest that it is likely that inequality has increased. In earlier chapters, it was shown that, based on the construction of an income index, the bottom 20 are not yet experiencing a clear income recovery, and the Midlands and Northern Mountains region is also the only region where the income index continues to decline. Based on recent official household data from the Vietnam GSO, the change in the Gini coefficient increased 1.2 percent from 2016 to 2018 (from 35.3 to 35.7). The small increase in inequality also coincides with a slower pace of poverty reduction. Moreover, micro-macro simulations conducted independently (see chapter 4) also found inequality to be rising in 2020 under COVID-19 scenarios.

Results—inequality plays a role in poverty reduction

A downgrade in growth from the COVID-19 pandemic slowed poverty reduction by about one year, and a 1 percent increase in the Gini may delay poverty reduction by another year (figure 6.21). These estimates are based on projections starting from 2018, the most recent year for which official poverty data are

available. In a no-crisis context in which growth was not downgraded because of the COVID-19 pandemic and inequality was not increasing, poverty in 2020 was estimated to be 5.4 percent (blue line in figure 6.21). In a context in which growth is downgraded because of the pandemic, poverty would reach 5.2 in 2021 (about a one-year delay; orange line). Under conditions of a growth downgrade and inequality increase, poverty would reach 5.3 in 2022 (about a two-year delay, yellow line).

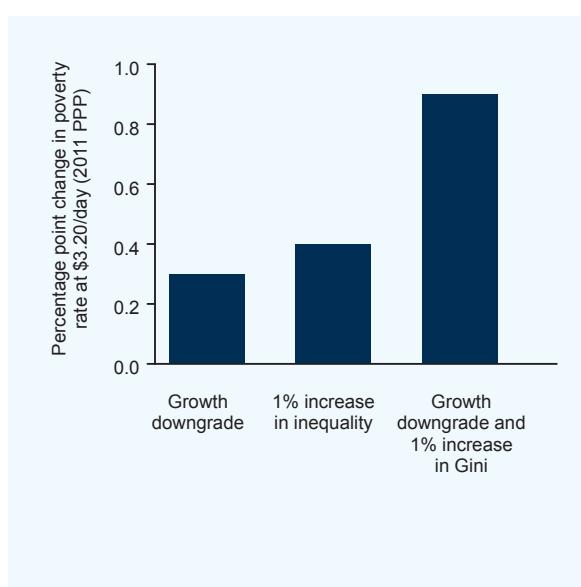
A downgrade in growth alone would not stall poverty reduction, but, in a scenario of a downgrade combined with increasing inequality, poverty reduction from 2019 to 2020 would stagnate. In the scenario in which growth declined but inequality remained unchanged, poverty was estimated to continue to decline from 2019 to 2020 (6.0 to 5.4 percent, respectively; see blue line in figure 6.21). However, with the addition of rising inequality starting in 2018, poverty reduction stalled between 2019 and 2020 (6.3 percent in both years; see yellow line in figure 6.21).

After COVID-19, poverty reduction will get back on track, but higher inequality will slow the pace of an already delayed poverty reduction trajectory. Assuming growth returns to a pre-COVID-19 trajectory, poverty is expected to fall once again. Even so, it will be behind compared to projections without inequality increasing and without the onset of COVID-19.

Figure 6.21 Distribution-sensitive poverty projections for Vietnam, 2018–23

Source: World Bank staff estimations using Vietnam Household Living Standards Survey, 2018.

Note: Poverty rates in 2018 are based on actual survey data, and rates in 2019 onward are based on GDP per capita growth rates. Growth rates between crisis and no-crisis scenarios differ in 2020 and 2021. Changes in inequality, if any, are assumed to start in 2018. Distributionally sensitive simulations are based on Lakner et al. (2020). Poverty projections under different simulation methods yield different results. PPP = purchasing power parity.

Figure 6.22 Small changes in inequality can have large impacts on poverty in Vietnam, 2020

Source: World Bank staff estimations using Vietnam Household Living Standards Survey, 2018.

Note: Changes in poverty in 2020 compared to a no-impact scenario. The 2020 poverty rate in a no-crisis and no-inequality increase scenario is estimated to be 5.4 percent. PPP = purchasing power parity.

The adverse impact of inequality on poverty reduction can be just as large as the impact of a growth downgrade (figure 6.22). A growth downgrade due to the crisis and without any change in inequality would increase poverty in 2020 to 5.7 percent, or by 0.3 percentage points. In the absence of COVID-19 but a 1 percent increase in inequality annually from 2018, poverty in 2020 is estimated to be 5.8 percent, or an increase of 0.4 percentage points from the no-impact scenario. A combination of a growth downgrade and a 1 percent increase in inequality would elevate poverty to 6.3 percent in 2020, or an increase of 0.9 percentage points compared to the no-impact scenario.

Small increases in inequality can slow down poverty reduction, especially when accumulated over multiple years (figure 6.23). The difference in poverty projections under the same growth scenario, but with various Gini assumptions, widens over time. A growth downgrade from a no-crisis to crisis scenario increases poverty estimates 0.3 percentage point in 2020 (from 5.4 percent to 5.7 percent). However, a 1 percent increase in Gini would increase poverty by a higher rate under

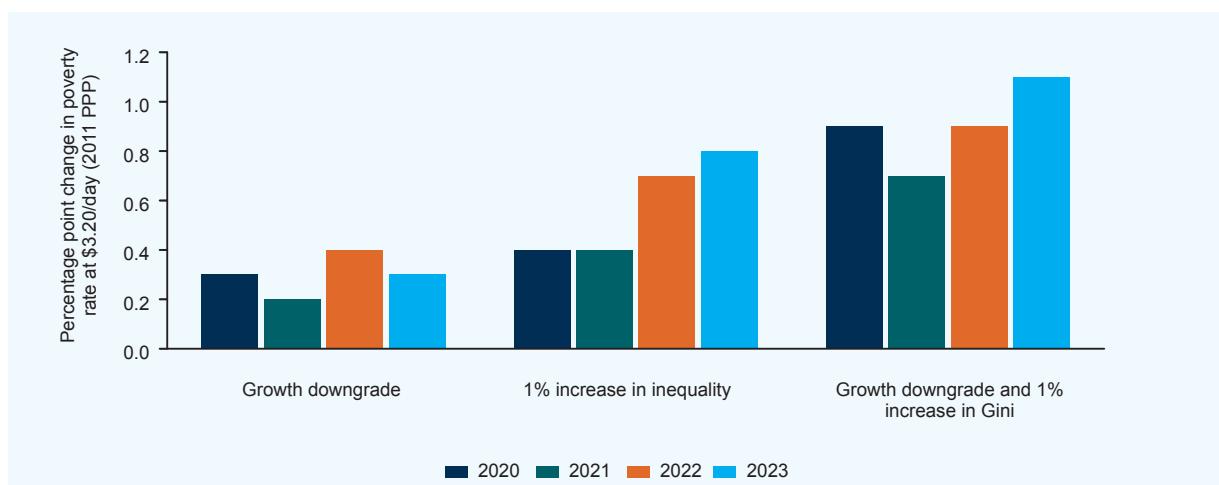
both the no-crisis and the crisis scenarios. Under the no-crisis scenario, poverty would increase by 0.4 percentage point, and under the crisis scenario poverty increases by 0.6 percentage point. Globally, it was also found that a 1 percent decrease in the Gini index in every country would lower global poverty more than a 1 percentage point increase in GDP per capita (Lakner et al. 2020). Bergstrom (2020) also finds that a 1 percent reduction in inequality leads to a more than 1 percent increase in mean incomes, based on global analysis.

Estimates of distribution-sensitive poverty projections in this chapter are in the same range as poverty rates simulated for 2020 in chapter 4.

Projections are estimates, and different simulation methods will yield different exact projections of poverty

and inequality. Yet the distribution-sensitive poverty projections presented here for 2020 are in the same range as the 2020 poverty estimates calculated using the micro-macro simulation methods in chapter 4. Under micro-macro simulations, the no-crisis poverty rate in 2020 was 5.76 percent and the crisis poverty rate was 6.0 percent. Simulations in this chapter are more long-term and extend beyond 2020, which allows for discussions on how much the progress of poverty reduction has been delayed. These numbers are estimates and will be continuously updated as more recent information becomes available. Actual 2020 poverty rates based on official data are forthcoming, and long-term projections will be updated reflecting the new benchmark.

Figure 6.23 Inequality impacts can accumulate over time, Vietnam, 2020–23



Source: World Bank staff estimations using Vietnam Household Living Standards Survey, 2018.

Note: Based on estimated poverty rates in 2020. No-crisis and crisis growth rates differ in 2020 and 2021. PPP = purchasing power parity.

Notes

- ³⁷ For example, Dabla-Norris et al. 2015 indicate that a higher Gini coefficient leads to lower and less stable economic growth. Moreover, when the share of total income held by the richest 20 percent of people increases by 5.0 percentage points, economic growth falls by 0.4 of a percentage point. At the same time, when the share of total income held by the poorest 20 percent of people increases by 5.0 percentage points, growth increases by 1.9 percentage points. Increased income shares for the second- and third-poorest 20 percent of the population also increase growth.
- ³⁸ Because of survey limitations as a phone-based survey, the World Bank Vietnam COVID-19 phone-based household monitoring surveys were able to reflect on some but not all nonmonetary dimensions of well-being during COVID-19.
- ³⁹ Based on data from the Global Findex database.
- ⁴⁰ From the Ministry of Health, National Institute of Nutrition, Main findings of General Nutrition Survey 2019–20.
- ⁴¹ Likewise, the HCI data highlight wide disparities across income and ethnic minority groups. According to the 2020 HCI, the productivity of a child born today as a future worker exhibits a 27-percentage-point gap between the top and bottom 20 percent of the income distribution of Vietnamese households. This is high compared to the 15-percentage-point average among 50 countries for which HCI estimates are disaggregated by socioeconomic status. The disparity is even wider for the not stunted rate, presenting a 35-percentage-point gap between the top and bottom 20 percent, which well exceeds the 19-percentage-point average.
- ⁴² These variables were not included in the second round of data collection.
- ⁴³ Among the households that elected not to bring their children to a health facility for immunizations and/or that had pregnant women who did not seek antenatal visits, about one in five cited fear of contracting COVID-19 as the deterring reason although the most common reason was simply that immunizations or postnatal care were not required for those households.
- ⁴⁴ Simulation strategies here differ than those in chapter 4 because there is a different purpose. The purpose of the simulations presented here is to illustrate how the addition of inequality would alter the trajectory of poverty.

References

- Acemoglu, Daron, David H. Autor, and David Lyle. 2004. "Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury." *Journal of Political Economy* 112 (3): 497–551.
- Alon, Titan M., Matthias Doepeke, Jane Olmstead-Rumsey, and Michele Tertilt. 2020. "The Impact of COVID-19 on Gender Equality." NBER Working Paper 26947 National Bureau of Economic Research, Cambridge, MA.
- Alvaredo, Facundo, and Leonardo Gasparini. 2015. "Recent Trends in Inequality and Poverty in Developing Countries." In *Handbook of Income Distribution*, vol. 2A, edited by Anthony B. Atkinson and François J. Bourguignon, 697–805. Handbooks in Economics Series. Amsterdam: North-Holland.
- Bandiera, Oriana, Niklas Buehren, Markus P. Goldstein, Imran Rasul, and Andrea Smurra. 2019. "The Economic Lives of Young Women in the Time of Ebola: Lessons from an Empowerment Program." World Bank, Washington, DC.
- Bergstrom, K.A. 2020. The Importance of Inequality Toward Poverty Reduction. Unpublished Working Paper.
- Bourguignon, François J. 2003. "The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity across Countries and Time Periods." Working Paper 28104, World Bank, Washington, DC.
- Bourguignon, François J. 2004. "The Poverty-Growth-Inequality Triangle." Working Paper 125, Indian Council for Research on International Economic Relations, New Delhi.

- Dabla-Norris, E., K. Kochhar, N. Supaphiphat, F. Ricka, and E. Tsounta. 2015. *Causes and Consequences of Income Inequality: A Global Perspective*. IMF Staff Discussion Note SDN/15/13. Washington, DC: International Monetary Fund.
- Datt, Guarav, and Martin Ravallion. 1992. "Growth and Redistribution Components of Changes in Poverty Measures: A Decomposition with Applications to Brazil and India in the 1980s." *Journal of Development Economics* 38 (2): 275–95.
- Ferreira, Francisco H. G. 2012. "Distributions in Motion: Economic Growth, Inequality, and Poverty Dynamics." In *The Oxford Handbook of the Economics of Poverty*, edited by Philip N. Jefferson, 427–62. New York: Oxford University Press.
- Frankenberg, E., D. Thomas, and K. Beegle. 1999. "The Real Costs of Indonesia's Economic Crisis: Preliminary Findings from the Indonesia Family Life Surveys." Land and Population Working Paper 99-04, RAND - Labor and Population Program, RAND, Santa Monica, CA.
- Goldin, Claudia, and Claudia Olivetti. 2013. "Shocking Labor Supply: A Reassessment of the Role of World War II On Women's Labor Supply." *American Economic Review* 103 (3): 257–62.
- GSO (General Statistics Office). 2021b. "Report on the COVID-19 Impacts on Labour and Employment Situation in the First Quarter of 2021." GSO, Hanoi, April 16. <https://www.gso.gov.vn/en/data-and-statistics/2021/04/report-on-the-covid-19-impacts-on-labour-and-employment-situation-in-the-first-quarter-of-2021/>.
- Herbst, Chris M. 2017. "Universal Child Care, Maternal Employment, and Children's Long-Run Outcomes: Evidence from the US Lanham Act of 1940." *Journal of Labor Economics* 35 (2): 519–64.
- Lakner, Christoph, Daniel Gerszon Mahler, Mario Negre, and Espen Beer Prydz. 2020. "How Much Does Reducing Inequality Matter for Global Poverty?" Global Poverty Monitoring Technical Note 13, World Bank, Washington, DC.
- Mbuya, Nkosinathi V.N., Stephen J. Atwood, and Phuong Nam Huynh. 2019. *Persistent Malnutrition in Ethnic Minority Communities of Vietnam: Issues and Options for Policy and Interventions*. International Development in Focus. Washington, DC: World Bank.
- Pimhidzai, Obert, and Chiyu Niu. 2021. *Shared Gains: How High Growth and Anti-Poverty Programs Reduced Poverty in Vietnam - Vietnam Poverty and Shared Prosperity Update Report (English)*. Washington, DC: World Bank Group.

Chapter 7.

POLICY CONSIDERATIONS

.....

There is time to learn from early experiences to improve policy responses and understanding of vulnerabilities, not only for the remainder of the COVID-19 (coronavirus) crisis but also for the future. Fortunately, before the fourth wave, the impacts from COVID-19 in Vietnam were mild relative to the rest of the world and households could cope on their own for the most part, with poverty rates in 2020 still estimated to be on a downward trajectory, albeit reducing at a slower pace. Firms were hit hard early on during the pandemic, but operating conditions slowly improved. Despite mild impacts, experiences before the fourth wave still highlighted existing inequities and revealed policy implementation challenges. The differential experiences between different groups of households and firms illustrate their preexisting vulnerabilities and the different capabilities in coping between groups. Observing how households and firms were affected, even if by mild shocks; how they adapted; who received assistance; and who could not cope well offers information on existing gaps in access to services, the importance of building resilience, and the need for better safety nets to guard against poverty traps and business closures. There is still some room to learn and to adapt policies to minimize adverse impacts on households and firms in the face of future shocks. There are lessons both for the short term—how to improve the household and firm response for the much more severe fourth wave—and for the long term—how to improve the broader social safety net for times of crisis and times of normalcy.

.....

LEARN FROM IMPLEMENTATION CHALLENGES EARLY ON DURING THE COVID-19 PANDEMIC

The experiences captured by the World Bank COVID-19 monitoring surveys are an opportunity to understand the weakest links and who are the most exposed to shocks to strengthen policies during a new period when more effective interventions may be needed. A range of health and fiscal policies helped Vietnam manage well during the pandemic. Although most policies were highly effective, not all policies led to large impacts, and some need to accelerate amid rising COVID-19 risks during the fourth wave.

Vietnam's fiscal response mix early in the pandemic was different from that of other countries in the region, with far less spending on direct income support. Early on in the pandemic Thailand, Malaysia, the Philippines, and Indonesia all budgeted more for income support than Vietnam did (figure 7.1), even before considering its very low execution rate (Indonesia had executed 80 percent of its social protection response budget by November of 2020). As chapter 4 discusses, Vietnam spent twice as much on public investment, and accelerated spending than it did on income support. This is a very different pattern from other countries in the region; China spent equally on both categories, and all other countries either spent solely on income support or at least the significant majority. As a consequence, the overall support to Vietnamese households was small when compared to other benchmarks such as the minimum wage.

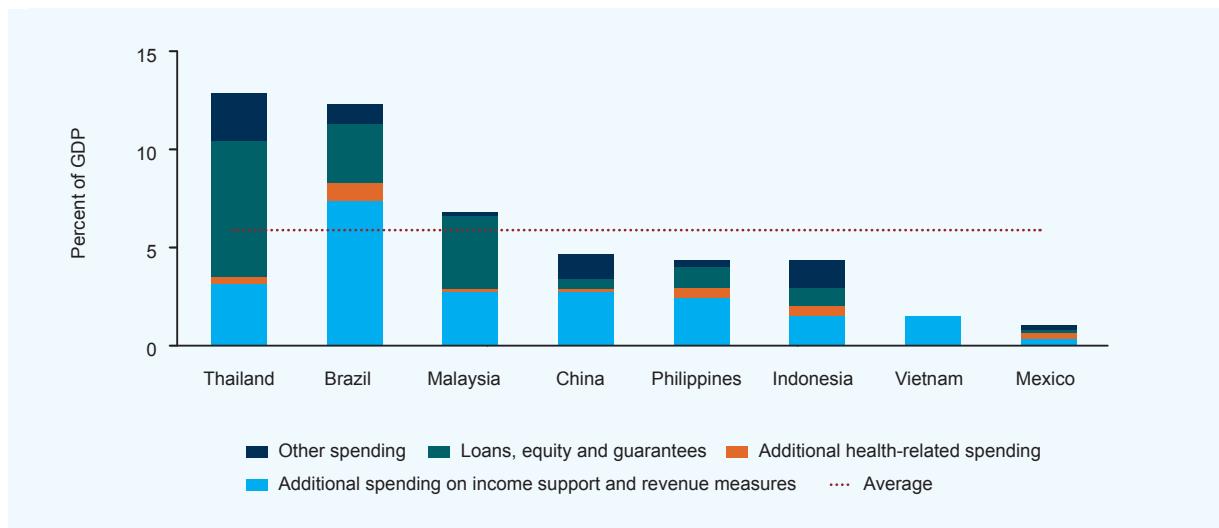
Implementation problems meant that the social assistance expansion and disbursement fell well short of plans. Even though Vietnam budgeted less for income support than other countries in the region,

the cost of the assistance as actually implemented was even less, about 12 trillion Vietnamese dong (VND) compared to a budgeted VND 62 trillion. This disparity reflects the fact that only 1 million new informal worker beneficiaries were reached out of a target of 5 million, primarily because of an inability to verify eligibility.

The household response in April 2020 was too small and its duration was too short. The most generous benefits were for a maximum of three months and for VND 1 million per affected person, compared to the pre-COVID-19 average monthly per capita household consumption of VND 3.6 million. Chapter 5 estimates that, as a consequence of poor implementation and design, only 0.1 percentage point of poverty was mitigated by the household relief program. Much of this comes from the design. A VND 208 trillion program perfectly implemented to cover the 32 million workers estimated by the General Statistics Office to have been affected in the first quarter of 2021 would have reduced poverty by 0.5 percentage points.

The firm response faced similar implementation challenges as the household relief response. These policies were primarily in the form of deferments and credits and were available for a longer period than was the household relief. The initial constraint to policy access was a lack of communication but this was remedied by January 2021. Instead, the main constraint became the ineligibility to support programs and the difficulty in application. Large firms were better able to access and benefit from government benefits than small and medium enterprises. Moreover, these policies were limited to formal firms and informal businesses were mostly left out.

Figure 7.1 Fiscal response, by type, selected countries



Source: International Monetary Fund (June 2020), World Bank staff estimates.

Notes: The "other spending" category includes the forgone revenues and tax incentives. "Average" represents the mean of the fiscal package of the countries presented in the chart. Data for Indonesia's fiscal package are based on the restructured scheme of the package, published in the October 2020 monthly budget report (APBN Kita)

IMPROVE THE DESIGN AND IMPLEMENTATION OF HOUSEHOLD AND FIRM SUPPORT DURING THE FOURTH WAVE

There are lessons from experiences during the COVID-19 relief rollout that can be used to strengthen responses for the fourth wave.⁴⁵ Both the household and firm COVID-19 relief packages were well intentioned but faced some implementation challenges on the ground. This is a normal course when new policies are designed and implemented quickly. It would be beneficial to learn from the implementation to improve future program design and implementation logistics.

Targeting criteria and mechanisms can be improved and simplified for both households and firms. Whereas existing beneficiaries were able to receive benefits easily, new beneficiaries faced challenges to register and be verified. Intake and registration systems need to be made more nimble and able to process greater numbers faster. New targeting methods are needed that account for the lack of formal documentation of income

or loss for affected informal workers. Eligibility criteria was overly specific, which increased the complexity of implementation. To ensure timely and effective delivery of assistance in the immediate aftermath of a massive shock, targeting criteria could be set more broadly and eligibility conditions should be reduced or simplified to ensure that all who need financial support have access to it. The support programs for firms were not designed to target firms based on how much they were impacted by the COVID-19 pandemic: corporate tax reductions applied to a large majority of firms earning below 200 billion VND and the deferred tax payments had no eligibility requirements related to revenues or profits. Administrative relief packages to firms can also be simplified, and lines of relief can be increased in practicality such as reducing collateral requirements or assistance with accessing new markets.

Identifying eligible households for expanding coverage is challenging in the short term and likely would require a similar approach to that of Thailand.

Vietnam's lack of a social registry means it could mostly expand only vertically (top-up payments to existing beneficiaries) rather than also horizontally (temporary payments to new beneficiaries) as Indonesia and the Philippines did, as discussed in lessons for the longer term which follow. In response to the fourth wave, depending on how it unfolds and the extent of necessary lockdown containment measures, Vietnam could adopt a similar approach to that of Thailand. Thailand increased benefits for the 8 million existing social assistance beneficiaries—that is, the pre-COVID-10 vulnerable; however, the bulk of the 2.5 percent of gross domestic product spent on household transfers went to informal workers and farmers who were not considered vulnerable before the pandemic (World Bank 2021c). As a result, 23 million of the 31 million recipients in 2020 represented an expansion of coverage. The number of new beneficiaries has risen to 33 million in 2021 (albeit on smaller benefits than in 2020), meaning 90 percent of households are now covered. An important component of Thailand's approach was allowing individuals who believed they were eligible to apply for assistance online. Similarly, Vietnam could provide assistance to any applying worker or household that does not have a formal income above a certain level through an online portal and verify this against the social security database. Doing so would potentially cover 81 percent of households and be a significant temporary outlay, but it would provide widespread support with little exclusion of affected households.

Digitalizing the payment mechanisms would help make payments more efficient, transparent, safe, and fast. The implementation of the COVID-19 support program relied heavily on delivery of cash payments via face-to-face exchanges during the physical distancing and movement restriction periods. It was time-consuming and fraught with the possibility of error and corruption. Direct deposit into a checking account or cash card or provision of mobile banking to beneficiaries would be safe, more efficient, and transparent. In Vietnam, one idea is to develop a phone application, like the health declaration that has been introduced by the Ministry of

Health. Using this application, potential beneficiaries could fill in their information. Verification could also then take place electronically through cross-referencing with other administrative databases such as social assistance and poverty, National Devotees, and social and health insurance. Village officials can then act as the last verification step.

In the short term, technology can be leveraged to facilitate self-registration and online registration to identify informal workers for assistance. Several countries were more successful in reaching the informal sector by applying online registration, such as Indonesia, Malaysia, Thailand, and the Philippines. Thailand approved around 23 million applications from informal sector workers and farmers—more than half of the working-age population. Within a few weeks, more than 6 million online benefit applications were validated in South Africa. Brazil registered about 27 million households in a matter of weeks through its online process. Vietnam, however, lacks a database on informal workers.

For the fourth wave, the size of the relief package should be much bigger, with benefit levels significantly increased and coverage expanded even if targeting problems will remain. The World Bank high-frequency surveys found that about 30 percent of households experienced job loss or knew of someone who was looking for a job in the first quarter of 2021, before the onset of the 4th wave. Given a more severe phase of COVID-19, extending the scope of support is warranted. Adverse labor market impacts will unquestionably increase. Initial announcements indicate that the second cash support package to workers (resolution 68) will focus on informal workers in selected sectors and workers with a labor contract but who are ineligible for unemployment benefits. Benefits will be disbursed between May and December 20201 and cash support is higher at VND 1.5 million per person. However, initial announcements also indicate that workers will only be eligible to receive benefits once during this period.

STRENGTHEN RESILIENCE AND PROTECTION SYSTEMS FOR THE FUTURE

High informality means that high shares of the population are outside the government's line of sight and that they face disadvantages during crises. A significant challenge for the future is providing safety nets to the informal sector, or those affected by new crises, and that is where the social protection system will need to modernize to react swiftly and decisively. Informality is extremely prevalent: 21 million households in 2018, 81 percent of all households, had at least one household member who either has a wage job without a contract, is engaged in self-employed agriculture, or is engaged in self-employed business. Only 27 percent of a predominantly informal workforce had social insurance coverage in 2019. Global evidence of an uncoordinated recovery of formal sector output and informal sector employment suggests that informal workers and businesses will face a slower recovery than those in the formal sector.

Financial inclusion is still limited for certain vulnerable groups. The impacts of COVID-19 did not necessitate large financial interventions. However, behaviors still highlight that financial services are underused by certain groups. Populations without access to financial services are disadvantaged in growing savings or investible funds that can enhance credit creation and capital accumulation. These disadvantages can further widen the gaps between the rich and poor. The delivery mechanism for the transfers made under the COVID-19 response relied heavily on cash payments via face-to-face exchanges. This impeded payments during the physical distancing and movement restriction periods. A financial inclusion strategy for Vietnam was established in early 2020. The use of direct deposit or digital payments can also help households get assistance faster. Digital payment pilots of regular social assistance cash transfers made via Viettel pay or Vietinbank in collaboration with VN Post in Cao Bang, Hue and Can Tho are great examples of improving implementation of the Government's income support package during the COVID-19 pandemic.

The social protection system requires modernization to more adeptly respond to crises in the future. The lessons of COVID-19 discussed so far underscore the importance of longer-term social assistance reforms. Without a social registry Vietnam's options and the creation of an integrated social protection system in the short term are either to do relatively little to respond to households in need or to cover much of the population somewhat indiscriminately. This highlights the need to modernize the social assistance system to prepare for the next crisis. More crises will emerge in the future that require a more sophisticated and digital response. Guarding against risks is essential to prevent households from falling back into poverty in the event of shocks or disasters that can be poverty traps. Developing an inclusive and responsive social protection system is at the core of this objective. COVID-19 has highlighted challenges in delivering assistance to new vulnerable groups. Without modernization, the same implementation challenges experienced during COVID-19 will manifest in the event of future crises. Digitization and modernization can also reduce staff burden, reduce errors, speed up disbursements, and alleviate capacity constraints. COVID-19 affected countries like the Philippines and Thailand considerably harder than Vietnam, but those countries were able to respond quickly and widely because of their strong existing safety nets systems; preparedness and investments in data were key (box 7.1).

Box 7.1**Emergency household support during COVID-19 in the Philippines**

The Philippine government approved a sizeable package (totalling 3.0 percent of gross domestic product) of fiscal response measures to mitigate the health and socioeconomic impacts of the COVID-19 pandemic, and to help jump-start economic recovery. The social protection pillar focused largely on financial support to the poor and vulnerable, with emergency cash transfers worth 5,000–8,000 Philippine pesos per month for two months to about 18 million households that are either poor or in the informal sector. The program cost 1.1 percent of gross domestic product, and additional social protection programs included employment support programs such as small businesses wage subsidies, cash assistance to displaced workers and overseas Filipino workers, and unemployment benefits for members of the social security system. An emergency employment program was also implemented for affected informal workers (see World Bank 2020a and 2020b).

The cash transfers included both top-up benefits to about 10 million existing beneficiary households and a temporary expansion to cover 8 million more informal sector workers and vulnerable households. Unlike in Vietnam, the additional beneficiaries could be identified immediately because of significant historical investments in the Philippines' social registry, Listahanan, from which the new beneficiaries were drawn. Having a standing registry made it possible for the country to get cash out quickly to a much larger number of households than were currently receiving assistance (World Bank 2020b).

Despite those successes, the Philippines' experience during COVID-19 also highlighted improvements needed in Listahanan to make it more adaptive during large shocks like COVID-19, lessons that should be taken into account when developing a modern social registry in Vietnam (World Bank 2020b). First, when expanding the list of eligible beneficiaries, existing data need to be dynamic and up-to-date; the data in Listahanan are from a 2015–16 survey sweep. Other countries such as Chile, Colombia, Pakistan, and Peru had dynamic social registries that were used to expand the list of eligible beneficiaries and so likely had more accurate responses. Alternatively, other countries such as Brazil, Jordan, and Thailand set up online applications for anyone to apply but verified eligibility by crosschecking against existing administrative databases using a national identifier. In the Philippines the process was paper-based and the lack of a national identifier hindered checking against databases, for example, to see if an applicant was already receiving assistance from another program. Second, although existing beneficiaries had cash cards that could be topped up, new beneficiaries relied upon house-to-house cash delivery or collection at pay-out points, which slowed receipt of benefits and was more dangerous during a pandemic. More global lessons about facilitating social protection responses during COVID are discussed in Grosh et al. (forthcoming).

BE OBSERVANT OF EXISTING AND WIDENING MONETARY AND NONMONETARY GAPS

COVID-19 highlighted existing inequalities and differences in coping and adaptation. Even before the onset of the COVID-19 pandemic, new signs of widening inequality were emerging. The absolute difference in annual per capita consumption between the poorest and richest 10 percent of the populations increased from VND 26 million in 2010 to VND 58 million in 2018. From 2016 to 2018, the household consumption growth of the bottom 40 percent of the population was lower than average. Education outcomes in Vietnam is varied by socioeconomic status,⁴⁶ and progress in reducing stunting had also stagnated. Women, those in the informal sector, and households in the bottom 20 percent experienced the slowest household income recovery between June 2020 and March 2021. In terms of coping during COVID-19, poor households were more reliant on external sources such as borrowing, while rich households were better able to cope through the own means such as tapping into savings.

Inequality can be expected to increase during COVID-19 for a range of reasons. Women bear a larger share of care responsibilities and their labor market activities were more adversely impacted than men's. Informal workers have the least safety nets and experienced the most challenges when seeking government cash support. The continuity of education was uneven during COVID-19, and the pandemic has potentially widened gaps in human capital formation because of the uneven capacity of schools across the country. The future is digital, but there are gaps in digital use and inclusion. Wealthier households are more able to participate in the digital economy both as sellers and as buyers on digital platforms.

Increasing inequality can have longer term implications. Inequities today can have long-term consequences: lost education is unlikely to be recovered, with consequences for lifetime wages; sold assets cannot produce future incomes; and employment scarring is also associated with lower lifetime earnings. Larger businesses and wealthier households were also able to make investments to reap larger sales from digital orders, which may lead to widening inequality down the road. Minimizing future disparities will require forward-looking policies and improving existing support systems.

Notes

⁴⁵ See World Bank 2021d for a more detailed discussion on the April 2020 household relief package and implementation challenges.

⁴⁶ The Human Capital Index is 0.85 for children in the richest 20 percent of households, compared to 0.58 for children in the poorest 20 percent. Unsurprisingly, children in the top 20 percent have higher nutrition, health, and education outcomes. For some outcomes, the gap between the top and bottom is larger in Vietnam than the average gap among other countries. The gap in the Human Capital Index between the top 20 and bottom 20 in Vietnam is 0.27 point, higher than the average gap among 50 countries (0.15 point).

References

- Grosh, Margaret, Phillippe Leite, Matthew Wai-Poi, and Emil Tesliuc. Forthcoming. "A New Look at Old Dilemmas: Revisiting Targeting in Social Assistance." World Bank, Washington, DC.
- World Bank. 2020a. "Promoting Competitiveness and Enhancing Resilience to Natural Disasters." Sub-Program 2 Development Policy Loan Program Document, November 2020, World Bank, Washington, DC.
- World Bank. 2020b. *Philippines Economic Update, June 2020: Braving the New Normal*. Washington, DC: World Bank.
- World Bank. 2021c. *Thailand Economic Monitor, July 2021: The Road to Recovery*. Washington, DC: World Bank.
- World Bank. 2021d. *Vietnam Fiscal Note Series. Note 2: The Impact of COVID-19 Fiscal Policies on Households in Da Nang*.

Appendices

-
- APPENDIX A.**
HOUSEHOLD DEMOGRAPHIC BACKGROUND
- APPENDIX B.**
HOUSEHOLD INCOME BACKGROUND
- APPENDIX C.**
MEASURING GENDER IMPACTS FROM THE WORLD BANK
COVID-19 HOUSEHOLD MONITORING SURVEYS
- APPENDIX D.**
CHAPTER 2 FIGURES
- APPENDIX E.**
WORLD BANK COVID-19 HOUSEHOLD MONITORING
SURVEYS
- APPENDIX F.**
WORLD BANK COVID-19 BUSINESS PULSE SURVEYS
- APPENDIX G.**
VIETNAM LABOR FORCE SURVEYS
- APPENDIX H.**
CHAPTER 3 FIGURES
- APPENDIX I.**
MICRO-MACRO SIMULATION TECHNICAL INFORMATION
- APPENDIX J.**
DISTRIBUTION-SENSITIVE POVERTY PROJECTIONS
TECHNICAL INFORMATION

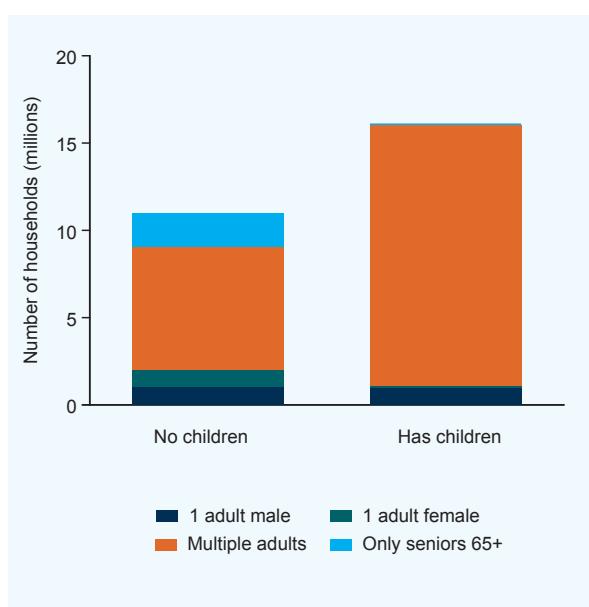
APPENDIX A.

.....

HOUSEHOLD DEMOGRAPHIC BACKGROUND

In 2018, there were about 26 million households in Vietnam, with an average of 3.7 members and 2.2 adults per household. The most common household composition, representing over half of all households, are multiadult households with at least one child (figure A.1). Sixty percent of households have children. Single-adult male-headed households with a child are much more common than single-adult female-headed households with a child. Skip-generation households, those with seniors and children, are very uncommon. Vietnamese society values strong family networks or support, and members will support extended family in difficult times as much as they are able, which is important as a coping strategy.

Figure A.1 Sixty percent of Vietnamese households have children

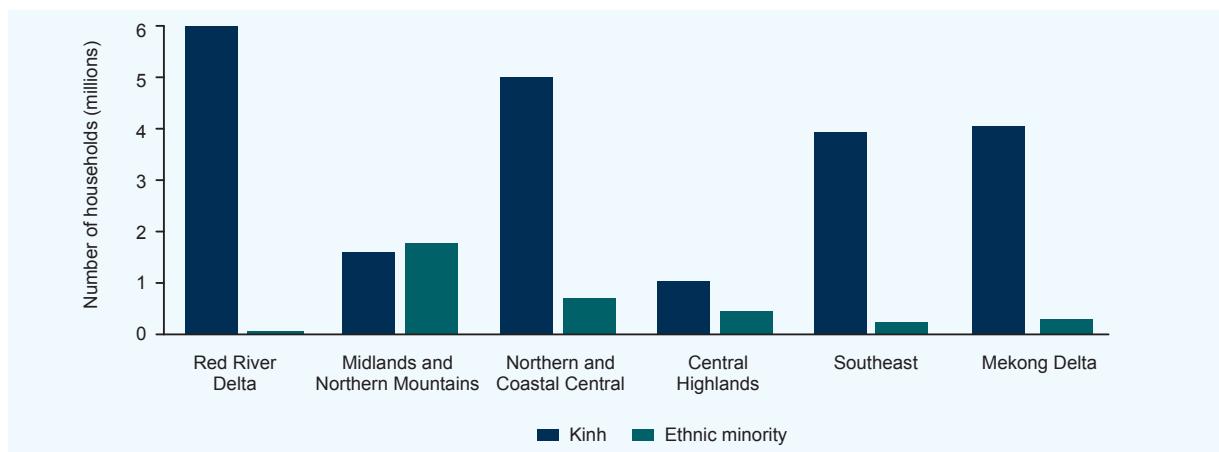


Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

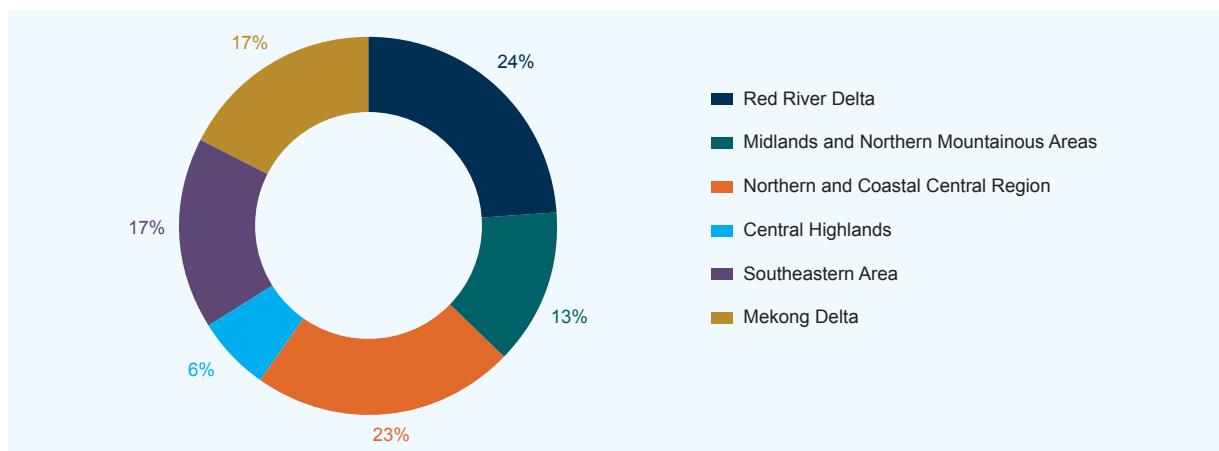
Ethnic minorities represent about 15 percent of the population, or 3.8 million households. Across regions, they are most heavily concentrated in the Midlands and Northern Mountain region, where they even outnumber the Kinh majority (figure A.2). However, in other regions, particularly regions with large cities and vibrant economies, they are less represented. Ethnic minority households are smallest in number in the Red River Delta (fewer than 100,000 households). Because ethnic minorities are primarily in agriculture and less in exposed sectors, they were not largely economically affected during COVID-19 (coronavirus), but they still suffer chronic nutrition and poverty challenges.

Living standards vary across regions (figure A.3). About 20 percent of all households live in the poorer Central Highlands and Midlands and Northern Mountains regions. The Red River Delta and the Southeast regions are where the largest cities and economic poles in Vietnam are located (Hanoi and Ho Chi Minh City, respectively); they are home to 40.5 percent of all households and are where industrial zones are most concentrated. The single region with the largest number of households is the Northern and Coastal Central region. Agriculture is a large part of the economy in the Mekong Delta and the Central Highlands.

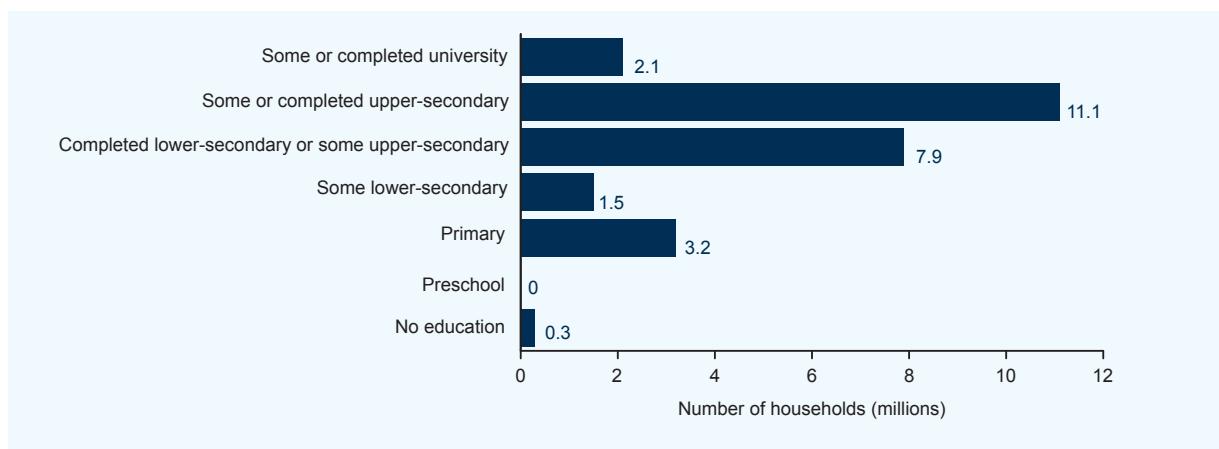
Although education is improving, education levels are still low in the typical household. In half of all households, the maximum level of education of any member is lower-secondary level or less (figure A.4). Eleven percent of households have a member who has completed upper-secondary education, and only 2 percent of households have a member who has completed university level education or higher.

Figure A.2 Ethnic minorities comprise a small share of Vietnamese households

Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

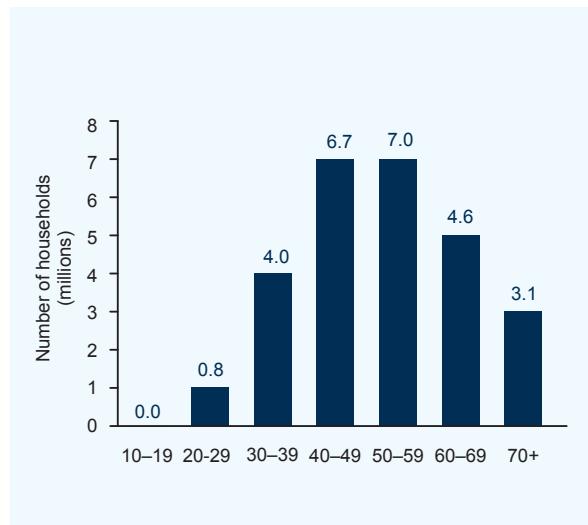
Figure A.3 Population distribution by region

Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

Figure A.4 The maximum level of education in half of Vietnamese households is less than completed upper secondary

Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

Figure A.5 Fifty-six percent of households have a head that is 50 y/o or higher

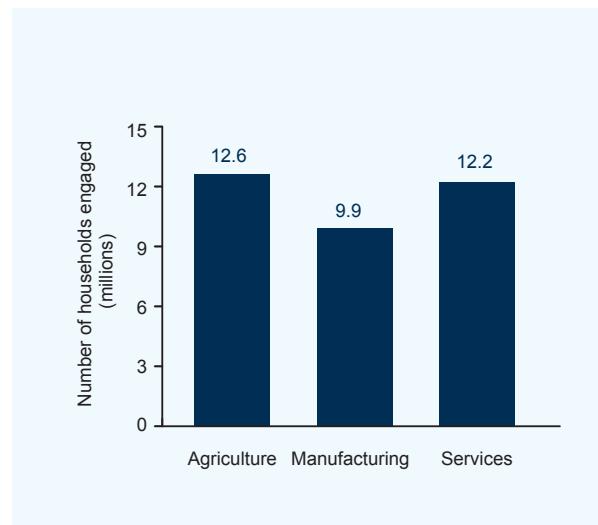


Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

Vietnam is one of the fastest aging economies in Asia. The demographic dividend has already past peak and is declining. In 56 percent of households, the age of the household head is 50 years of age or over (figure A.5). Vietnam is projected to become old before it becomes rich, by aging at levels that are much higher than other lower-middle-income developing countries (World Bank 2016).

Agriculture is the most common sector in which at least one person in a household is engaged. Households are often engaged in multiple sectors, either because of multiple working adults or because the same person is engaged with different labor activities across different seasons. About 80 percent of households have at least two people employed. About 30 percent have at least three people employed. About 12.6 million households, or 48 percent of all households, have some engagement in the agricultural sector (figure A.6). This does not necessarily mean these households are reliant on agricultural income (agriculture is one of the lowest-paying income streams); it is more likely that agriculture is an easy activity for diversification and income supplementation. Households are diversified across sectors; almost the same number of households are engaged in services, and 38 percent are engaged in manufacturing.

Figure A.6 Agriculture is still the most common economic activity among households



Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

Informality is extremely prevalent in Vietnam. Twenty-one million households, or 81 percent of all households, have at least one household member who either has a wage job without a contract, is engaged in self-employed agriculture, or is engaged in self-employed business. The informal economy was more vulnerable during COVID-19. Because informal workers are unregistered and out of the line of sight of government, they faced difficulties in benefiting from government relief measures even though such measures were intended for workers who were adversely affected by COVID-19.

References

-
- World Bank. 2016. "Taking Stock. An Update on Vietnam's Recent Economic Developments. Special Focus: Promoting Healthy and Productive Aging in Vietnam." World Bank, Washington, DC.

APPENDIX B.

.....

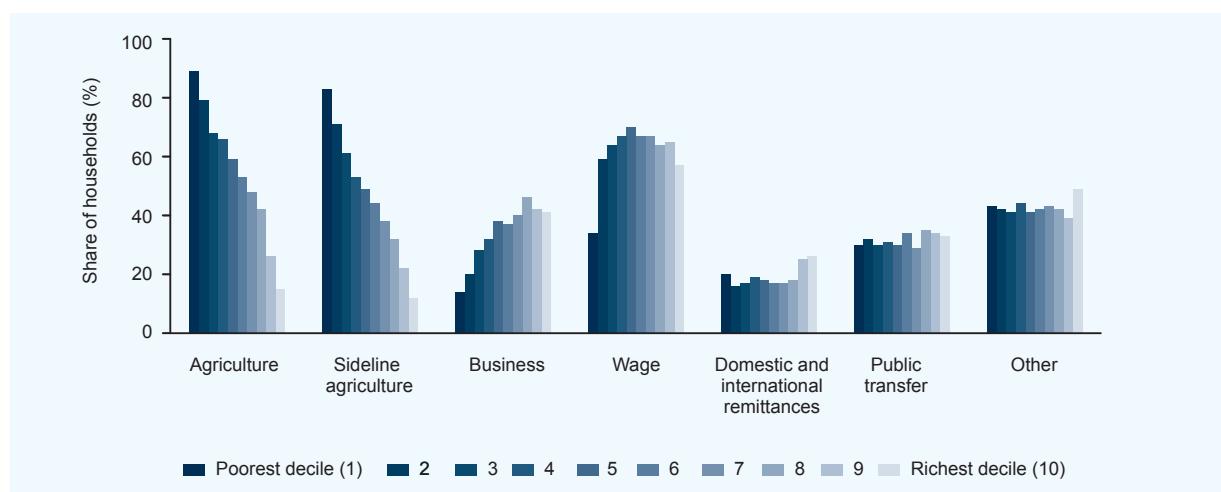
HOUSEHOLD INCOME BACKGROUND

There are strong distributional differences in some sources of income in Vietnam (figure B.1). The poorest households in Vietnam are significantly more reliant on agriculture income. For households in the poorest welfare decile, nearly 90 percent receive agriculture income in some amount, and nearly 30 percent in the poorest decile rely on agriculture as the main source of household income. Households in the top decile is significantly more likely than other households to receive remittances and other financial income.

Wage income is the most common source of household income, although it is significantly less common for households in the lowest welfare decile. It is also important to note that there is large variation in the type of work and quality of work associated with “wage” employment. Wage income can be derived from all sectors (agriculture, manufacturing, and services) and obtained through informal work or skilled contract work. The labor market in Vietnam is still highly informal, with only 27 percent of wage workers having a contract through which employers contribute to social insurance and health care.

The incidence of households receiving either public or private transfers is relatively even across the welfare distribution. Social assistance schemes include programs not just targeted to the poor but also based on characteristics—that is, people with disabilities, people with HIV, the elderly, and National Devotees (war veterans). In the 2018 Vietnam Household Living Standards Survey, about 17.6 percent of households reported receiving a social benefit of some kind (including social assistance, National Devotees, or disaster relief benefits). The social assistance system in Vietnam is fragmented. The share of households receiving some form of public transfer is lower than compared to other countries in the region such as Thailand, where over half of households received some form of public assistance in 2017. The share of households receiving private transfers through remittances is also lower than in Thailand, where about 30 percent of households received remittance income in 2019. In terms of the amount of income, both private and public transfers are on average larger for wealthier households than for poorer ones. Thus, the reliance on domestic labor market income in Vietnam is larger than in some neighboring countries.

Figure B.1 The prevalence of income sources varies across households, Vietnam



Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

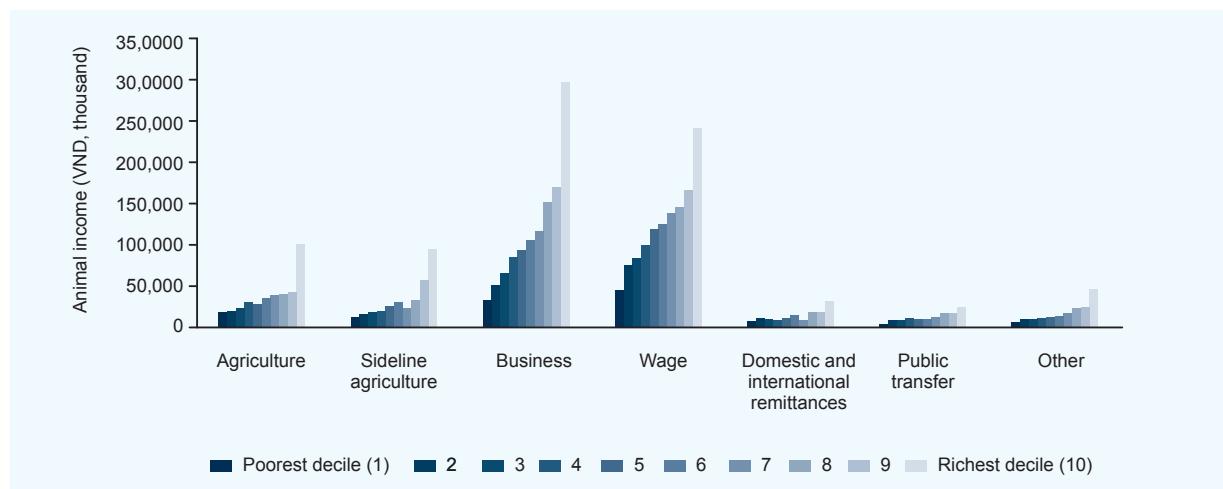
Business and wage incomes are the highest (figure B.2). Average incomes for the top decile tend to be significantly higher than for all other deciles. For some income categories (remittances and business incomes), the average income for the top decile is even double the average for the ninth decile.

A high share of Vietnamese households receives income from multiple sources (figure B.3). Nearly 30 percent of households in Vietnam have three income streams across broad categories representing diversification of activities and sources. Income categories are significantly different and do not reflect differences in crops in agriculture or sectors in wages. For example, if a household grows multiple types of crops, it is still considered to have one type of income source and rather than separate income streams for the purposes of this analysis. Poorer households tend to have slightly higher income diversification across broad categorizations.

Few households rely on only one income channel. About 3.5 million households (out of 26 million) have only one income source (figure B.4). Among these, about 1.5 million rely on wages. However, almost a million (970,000) rely solely on remittances. Households relying on remittances are more likely to be those with only elderly household members.

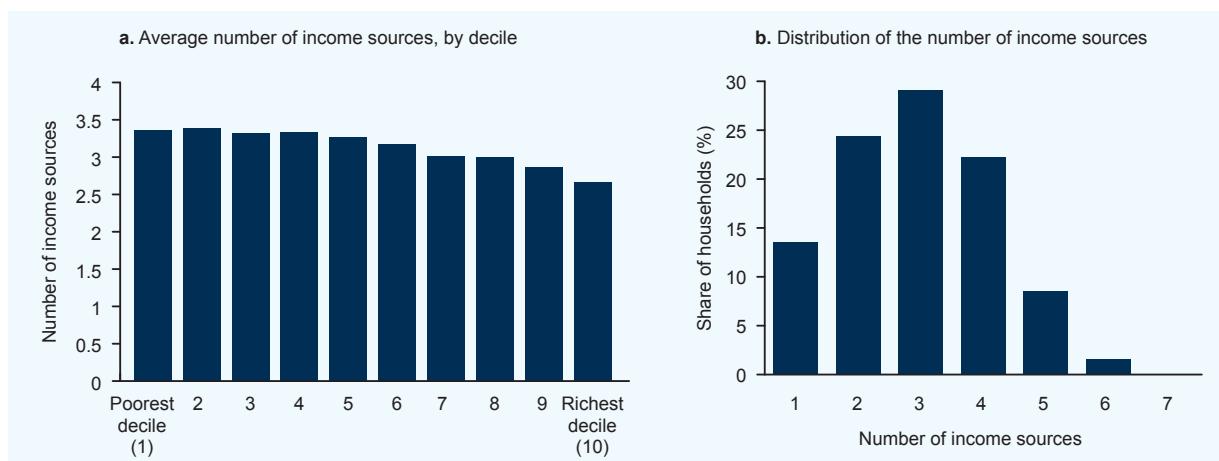
There are some differences in the primary source of household incomes across the welfare distribution. Most households rely on wages as the largest source of household income. Across the entire welfare distribution, no more than 10 percent of households in any decile has a primary source of income from nonlabor market categories (remittances, public transfers, and other) (figure B.5). There is one exception, which are households in the lowest decile having a starkly higher dependence on agriculture incomes. For those households deriving the largest share of income from wages, the poorest primarily receive agriculture and manufacturing wages, whereas the richest earn wages predominantly in the services sector. There are also strong distributional differences in agricultural and business income. Business income is about nine times more likely to be the leading income source among households in the top decile than among households in the bottom decile. Conversely, over 40 percent of households in the lowest decile receive the majority of their household income from agriculture sources, compared to less than 5 percent of households in the top decile.

Figure B.2 Business and wage incomes are much higher than other income sources, Vietnam

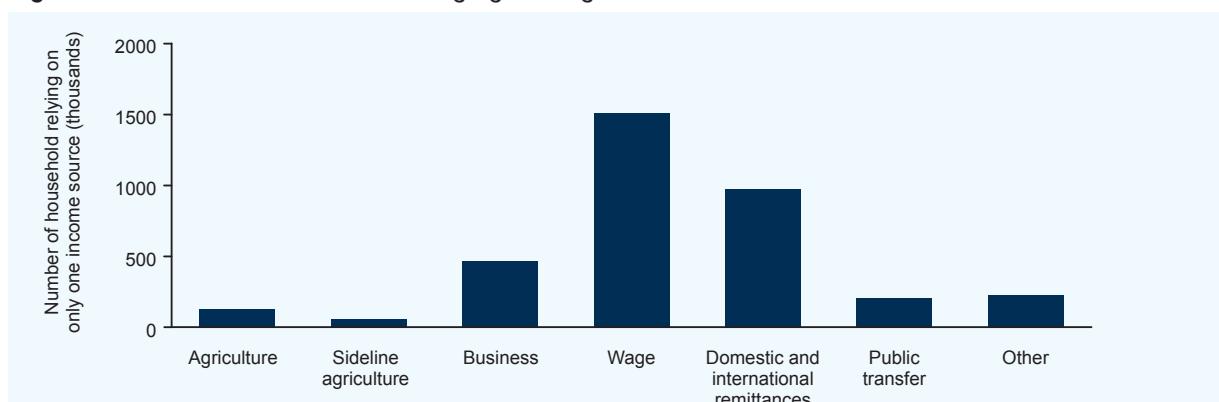


Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

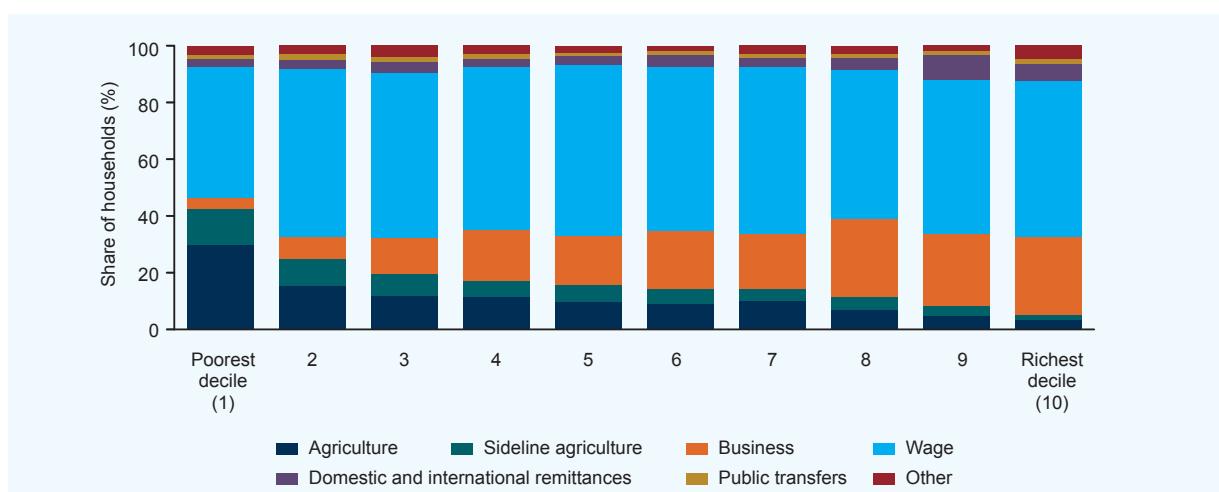
Note: VND = Vietnamese dong.

Figure B.3 A high share of Vietnamese households receives income from multiple source

Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

Figure B.4 Vietnamese households relying on only one income source

Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

Figure B.5 Primary income source in Vietnam, by decile

Source: World Bank staff calculations using the Vietnam Household Living Standards Survey, 2018.

APPENDIX C.

.....

MEASURING GENDER IMPACTS FROM THE WORLD BANK COVID-19 HOUSEHOLD MONITORING SURVEYS

To monitor the impacts of COVID-19 (coronavirus), the World Bank began an unprecedented data collection effort in over 100 countries, including Vietnam. With mobility restrictions and to ensure the safety of enumerators and survey respondents, data collection turned from the typical face-to-face household survey, which asks questions of all adult household members (especially related to labor market participation), to remote survey collection by phone. This mode of survey collection adds challenges to inferring population-based estimates on the gender-differentiated impacts of COVID-19. The majority of indicators from the COVID-19 monitoring surveys are measured at the household-level, but gender-differentiated impacts require individual-level information and representativeness.

First, men and women may have different rates of phone ownership and survey response. For example, in rural areas, households may have only one cell phone that is kept by the male household head. Therefore, the type of household represented by a female respondent may be different from the type of household represented by a male respondent. Table C.1 compares household characteristics of male and female respondents who interviewed in a pre-COVID-19 baseline survey and included in the COVID-19 monitoring survey. Female respondents tend to come from households in urban areas and from single-adult households with fewer working adults; they are less likely to come from households of ethnic minority, in the bottom 40 percent of the income distribution, with access to a household farm, and with health insurance support in 2019.

Table C.1 Household characteristics of female and male respondents in the World Bank Vietnam COVID-19 monitoring survey

	Female	Male	Female – Male
Urban	0.381	0.313	0.069***
	(0.49)	(0.46)	(0.012)
Ethnic minority	0.126	0.176	-0.050***
	(0.33)	(0.38)	(0.009)
Bottom 40	0.370	0.401	-0.031**
	(0.48)	(0.49)	(0.012)
Single adult household	0.165	0.084	0.081***
	(0.37)	(0.28)	(0.008)
Number of working adults	2.063	2.286	-0.223***
	(1.07)	(1.09)	(0.028)
Household farm	0.477	0.593	-0.116***
	(0.50)	(0.49)	(0.013)
Health insurance support in 2019	0.365	0.413	-0.048***
	(0.48)	(0.49)	(0.012)
Observations	2826	3387	

Source: World Bank.

Note: Household weights are applied. "Single adult household" and "number of working adults" come from merging the COVID19 monitoring survey with the 2018 Vietnam Household Living Standards Survey.

Second, a phone survey—constrained by short duration—typically interviews only one member per household and asks about his or her own labor market participation. The phone number collected at baseline may be that of the household head or the spouse of the household head. This means that the type of male and female individual captured in the phone survey may be different from the distribution of male and female individuals in the population. Of note, male and female household heads/spouses may have stronger labor market attachments than other male and female individuals in the household. In fact, male and female respondents of the COVID-19 monitoring survey are older than other individuals in the household, are more likely to be married, are more likely to work at baseline, and are more likely to be the head of the household. Male respondents have fewer years

of education and are less likely to be the spouse of the head of household, whereas female respondents are more likely to be the spouse of the household head than other individuals in the household (table C.2).

Preliminary effort to address this sample selection issue with a different reweighting adjustment led to a similar conclusion on the gender-differentiated impacts of COVID-19. It suggests that further research is needed to understand whether a reweighting adjustment (or a different type of reweighting adjustment) can adjust for the sample selection bias (Kugler et al. 2021). The analysis presented in this report uses the original household sampling weight, without additional reweighting adjustment.

Table C.2 Individual characteristics at baseline, Vietnam, 2018

	All household members (1)		COVID-19 survey respondents (2)		(2) – (1)		(2) Female – Male
	Female	Male	Female	Male	Female	Male	
Age	44.22 (18.33)	42.44 (17.45)	46.87 (13.00)	49.10 (12.77)	2.756*** (0.371)	6.991*** (0.322)	-2.224*** (0.333)
Years of education	8.308 (4.81)	8.754 (4.47)	8.170 (4.48)	8.281 (4.16)	-0.144 (0.100)	-0.498*** (0.084)	-0.111 (0.113)
Married	0.660 (0.47)	0.713 (0.45)	0.747 (0.44)	0.929 (0.26)	0.090*** (0.010)	0.226*** (0.008)	-0.182*** (0.009)
Work participation	0.721 (0.45)	0.798 (0.40)	0.874 (0.33)	0.918 (0.27)	0.159*** (0.009)	0.126*** (0.007)	-0.044*** (0.008)
Head of household	0.210 (0.41)	0.504 (0.50)	0.349 (0.48)	0.881 (0.32)	0.145*** (0.008)	0.395*** (0.009)	-0.531*** (0.010)
Spouse of the household head	0.430 (0.50)	0.102 (0.30)	0.544 (0.50)	0.039 (0.19)	0.118*** (0.010)	-0.065*** (0.006)	0.504*** (0.009)
Observations	65492	63910	2733	3306			

Source: World Bank.

Note: COVID-19 survey respondents (column 1) is restricted to respondents who were household members in the 2018 Vietnam Household Living Standards Survey (VHLSS). All household members in the 2018 VHLSS sample (column 2) are restricted to households that responded to the employment module and have nonmissing household weights, and to individuals who were 15 years old or older in the 2018 VHLSS.

References

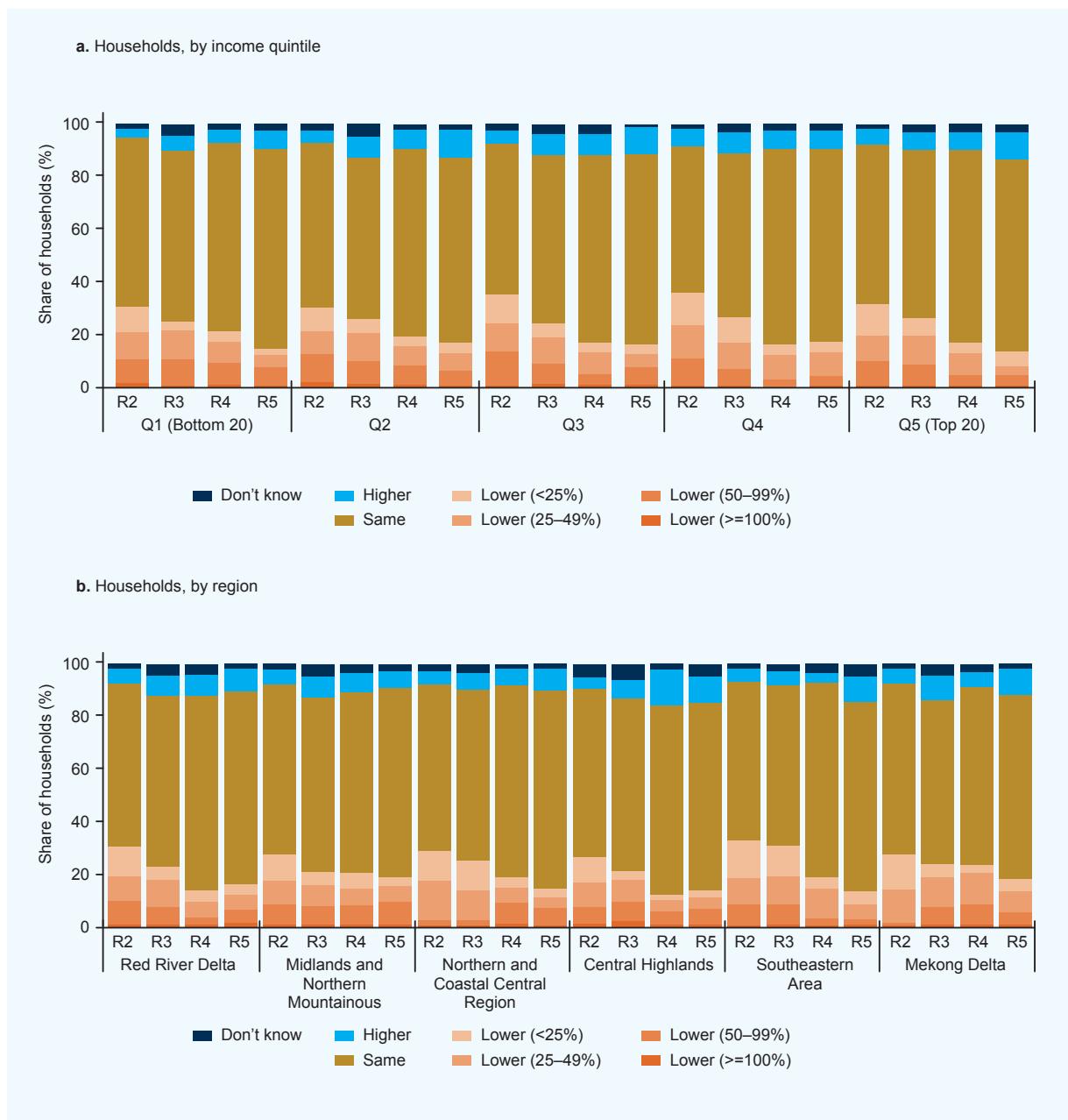
- Kugler, Maurice, Mariana Viollaz, Daniel Duque, Isis Gaddis, David Newhouse, Amparo Palacios-Lopez, and Michael Weber. 2021. "How Did the COVID-19 Crisis Affect Different Types of Workers in the Developing World?" Policy Research Working Paper 9703, World Bank, Washington, DC.

APPENDIX D.

.....

CHAPTER 2 FIGURES

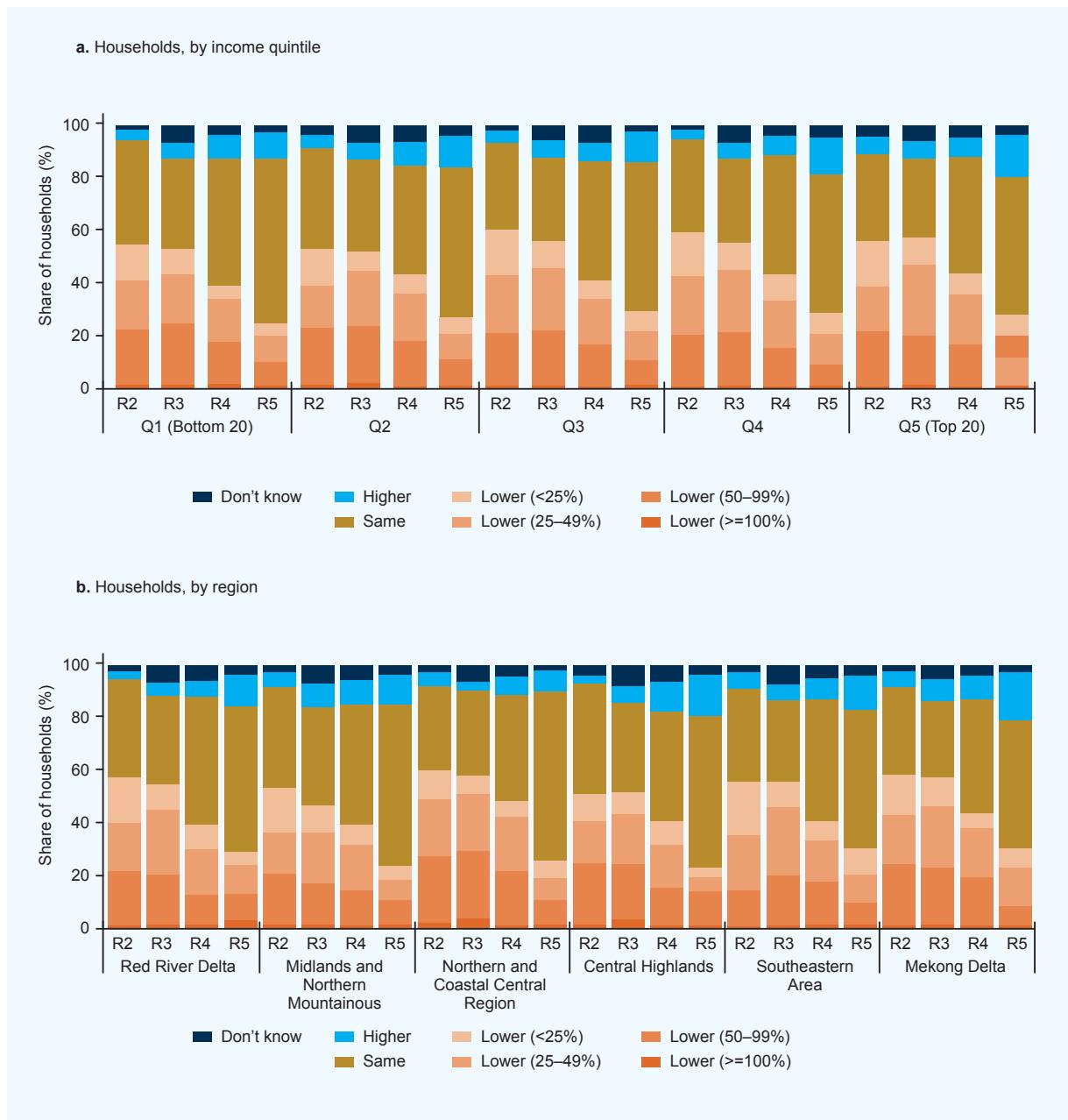
Figure D.1 Vietnamese households reporting lower income at the time of interview compared to last MONTH



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 2–5) cross-section.

Note: Income in the most recent full month at the time of interview compared to the last full month. Welfare quintiles are based on household consumption per capita in 2018.

Figure D.2 Vietnamese households reporting lower income at the time of interview compared to last YEAR



Source: World Bank Vietnam COVID-19 household monitoring surveys (rounds 2–5) cross-section

Notes: Income in the most recent full month at the time of interview compared to the same month last year. Welfare quintiles are based on household consumption per capita in 2018.

APPENDIX E.

.....

WORLD BANK COVID-19 HOUSEHOLD MONITORING SURVEYS

To monitor the social and economic effects on households amid the pandemic, the World Bank designed and conducted its COVID-19 High-Frequency Phone Surveys of Households in Vietnam. These monitoring data help to gather insights on household well-being as post lockdown reopening unfolds, and to highlight the effects on the most vulnerable members of Vietnamese society. The household surveys are collected by the Mekong Development Research Institute, under the supervision of the World Bank. Globally, the World Bank has conducted the COVID-19 monitoring surveys in over 100 countries worldwide as part of a large global effort (for more information, visit <https://www.worldbank.org/en/topic/poverty/brief/high-frequency-monitoring-surveys>).⁴⁷

From June 2020 to March 2021, five rounds of the COVID-19 household monitoring surveys were implemented (table E.1). The initial round was planned to have the largest sample to take into account attrition. The surveys also oversample ethnic minorities to obtain a representative sample of this group. The timing of

fieldwork is important to note because fieldwork is not evenly spaced, and outbreaks were unpredictable. Thus, some fieldwork periods occurring during lockdowns, and others do not. Comparisons of trends across rounds should therefore take into account field work and reference periods.

Sample Procedure

The 2020/1 Vietnam COVID-19 High Frequency Phone Survey of Households used a nationally representative household survey from 2018 as the sampling frame. The 2018 baseline survey included 46,980 households from 3,132 communes (about 25 percent of total communes in Vietnam). In each commune, one enumeration area (EA) was randomly selected, and then 15 households were randomly selected in each EA for interview.

Table E.1 Summary of five rounds of the World Bank Vietnam COVID-19 household monitoring surveys

Round	Field work dates	Target sample size	Special notes
1	June 5–July 8, 2020	Approximately 6,300 households (at least 1,300 minority households)	Round 1 was planned to be a larger sample than the subsequent rounds. The reference period for some questions in round 1 included the first wave and as early as February 2020.
2	July 27–Aug. 12, 2020	Approximately 4,000 households (at least 1,000 minority households)	This is the only round during which there were no domestic COVID-19 cases recorded during the survey reference period.
3	Sept. 9–Oct. 1, 2020	Approximately 4,500 households at least 1,000 minority households	This round covered conditions during the second wave. The sample size in this round is larger because there was an expansion cover more households in the second wave outbreak areas.
4	January 2–15, 2021	Approximately 4,000 households (at least 1,000 minority households)	Conditions covered by round 4 reflect the period near the end of the second wave.
5	March 13–31, 2021	Approximately 4,000 households (at least 1,000 minority households)	The final round asked about conditions during the period including the third outbreak as well as Tet.

The target sample size for round 1 was to complete interviews for 6,300 households, of which 1,888 households were located in urban areas and 4,475 households in rural areas. In addition, at least 1,300 ethnic minority households were to be interviewed. A random selection of 6,300 households was made out of 7,951 households for official interview and the rest for replacement. However, the refusal rate in the first round of the survey was about 27 percent, and households from the same EA were randomly contacted for replacement.

Sampling of subsequent rounds was treated in the same manner. An attempt was made first to recontact all existing respondents, and then new households from the same locations were contacted as needed to reach the target sample size for each round (see table E.2). Thus, attrition does not affect representativeness of cross-sectional samples around rounds. Moreover, cross-sectional sampling weights for each round are provided.

Panel Sample

A balanced panel was constructed out of households that responded across all five survey rounds. Panel weights were constructed following the same weighting principles as the cross-sectional data sets, and are representative at the regional level. Attrition was expected, and round 1 purposely had a larger target sample size than subsequent rounds (6,300 households in round 1 compared to 4,000 in subsequent rounds). In round 2, only 10 households were new contacts. Round 3 purposely expanded to new households in provinces affected by the Da Nang outbreak. Even given this expansion, attrition was high in round 3, with 700 households from round 2 dropping out in round 3. Households on the lower end of the welfare distribution were more likely to drop out than households at the top end. Households in the Southeast and Mekong Delta region were also more likely to drop out. With each successive round, fewer original households dropped out, only 354 and 229 in rounds 4 and 5, respectively. Balanced panel weights were created that recalibrated to fit predetermined regional and decile distributions.

Weighting

For each round, cross-section sampling weights were calculated independently. The steps for weight adjustment to ensure national and regional representativeness are

- Start with base weights from 2018 survey.
- Conduct household selection and nonresponse adjustment using propensity score and probability of selection correction.
- Poststratification: Rescale weights to match national, region, and urban/rural populations based on the 2019 population census.
- Trim weights.

Questionnaires

The Vietnam COVID-19 High Frequency Phone Survey questionnaire covered the following topics, with topics varying across survey rounds:

- Household roster
- Behavior and social distancing
- Access to health services
- Education and childcare
- Employment of the respondent
- Family farm and family businesses
- Shocks/coping
- Safety nets
- Food Insecurity Experience Scale
- Opinions on policies and government action
- Vaccination

Data Access

Anonymized cross-sectional data sets are available to registered users on the World Bank Microdata Library website.

Table E.2 The size of the panel sample across rounds of Vietnam COVID-19 monitoring survey

	Round 1	Round 2	Round 3	Round 4	Round 5
Number of original round 1 households	6,213	3,924	3,234	2,880	2,651
Total number of households	6,213	3,935	4,560	3,948	3,922

Source: World Bank.

Notes

⁴⁷ Information on the World Bank global household monitoring efforts can be found at: <https://www.worldbank.org/en/topic/poverty/brief/high-frequency-monitoring-surveys>.

APPENDIX F.

.....

WORLD BANK COVID-19 BUSINESS PULSE SURVEYS

Three rounds of the COVID-19 Business Pulse Surveys (BPS) were conducted in Vietnam between June 2020 and April 2021. The COVID-19 BPS is a rapid survey designed to measure the various channels of impact of COVID-19 on firms, firm adjustment strategies, and public policy responses. In addition to the core questions tracking firm performance during the pandemic, special modules were included in different rounds to collect more in-depth information about certain topics. These modules included supply chain issues (round 2) and the effectiveness of government support (round 3). Firms were sampled randomly from the Technology Adoption Survey, which was recently implemented in February 2020. The BPS collected responses from 500 firms across 15 provinces through a mix of phone and in-person interviews. The sample is representative of all formal firms in Vietnam and is stratified by three firm size categories and four broad sectors: agriculture, manufacturing, commerce (wholesale and retail), and all other services. The results presented in this report are calculated using sampling weights. The panel retention rate is high, with a total of 475 firms (or 92.1 percent) appearing in all three rounds.

The BPS rounds were implemented at varying intervals, adjusting to the three COVID-19 waves. The first round was in the field in June–July 2020 and asked questions with reference to business performance during the April lockdown and June 2019. The second round was in the field in late September to mid-October 2020 and captured the recovery and smaller, localized second wave in Danang. The third round was in the field from late January to March 2021 to capture recovery, but implementation was delayed as a result of the third wave and the Tet holidays. The survey collected responses from firms outside of Hanoi from late January to early February 2021. For firms in Hanoi and selected firms in other provinces, collection was done in late February (after the Tet holidays) to March 2021. For comparability, firms were asked about their performance in January 2021, so the data miss some of the negative consequences from the business closures and business and consumer anxiety in the third wave. Two additional survey rounds are planned from July to December 2021. These rounds will capture the impacts of the fourth wave.

Table F.1 Summary of three rounds of the World Bank Vietnam COVID-19 Business Pulse Surveys

Round	Fieldwork dates	Notes
1	June 15–July 7, 2020	The reference period includes the first wave.
2	September 21–October 15, 2020	The reference period includes the second wave.
3	January 25–April 10, 2021	The implementation was affected by the third wave and the Tet holidays. The reference period does not include the third wave.

Source: World Bank.

APPENDIX G.

.....

VIETNAM LABOR FORCE SURVEYS

This study uses the Vietnam Labor Force Surveys (LFSs) from 2015 to 2020. LFSs are conducted annually by the General Statistics Office of Vietnam. The LFS uses a two-stage stratified cluster design. There are 126 strata, which are urban and rural areas of 63 provinces throughout the country. (At the first-level administrative division, Vietnam consists of 58 provinces and 5 central-level cities or municipalities. A province is divided into districts, and a district is further divided into communes or wards. Currently, there are about 700 districts and 11,000 communes.) The list of enumeration areas is based on the most recent Population and Housing Census (2009) or Intercensal Population and Housing Survey (2014). The number of enumeration areas in each stratum is selected by the method of probability proportional to size. In the second stage, 15 households are randomly selected from each enumeration area. The total sample size for each LFS is about 800,000 individuals.

The sample size is allocated for all the months throughout a year. Thus, about one-twelfth of the sampled households is surveyed in each month. LFSs are representative at the national, urban-rural, and provincial levels. It should

be noted that the sample is selected alternately: each enumeration area is divided into two rotational groups whose households are selected into sample in two adjacent quarters, and then excluded in two succeeding adjacent quarters. It means that we can have a panel of households and individuals by two adjacent quarters. Moreover, 50 percent of individuals surveyed in the first quarter are reinterviewed in the fourth quarter. The panel structure is illustrated in figure G.1. This panel structure allows for examining the mobility of workers across short term (three months) and medium term (nine months).

LFSs contain basic demographic information for all individuals. People aged 15 years and older are surveyed for detailed information on employment, wages, and working hours. Information on unemployment is also conducted for unemployed people. These data sets allow for analysis disaggregated for different population groups such as occupations (managers, skilled, unskilled, and so on), sectors (public, private, and foreign direct investment), age groups, gender, urban/rural areas, and regions.

Figure G.1 Panel data structure of Vietnam Labor Force Survey

Quarter 1				Quarter 2				Quarter 3				Quarter 4			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
id1									id1						
	id2									id2					
		id3									id3				
id4			id4												
	id5			id5											
		id6			id6										
			id7			id7									
				id9			id9		id9						
					id9					id9					
						id10			id10						
							id11			id11					
								id12			id12				

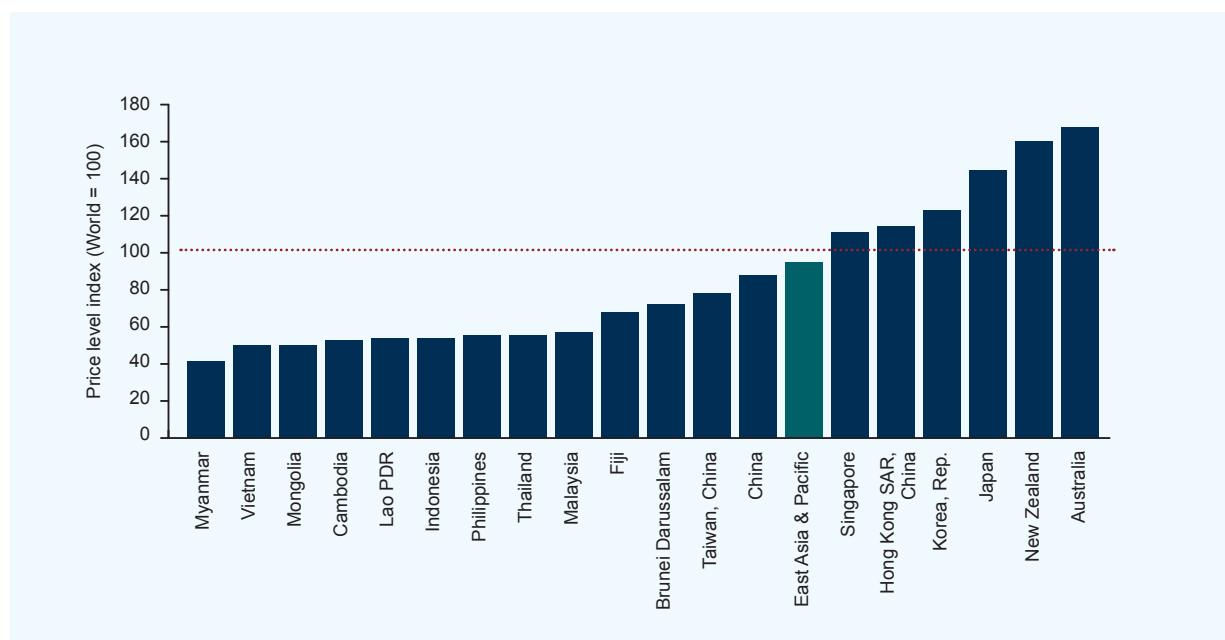
Source: World Bank illustration.

APPENDIX H.

.....

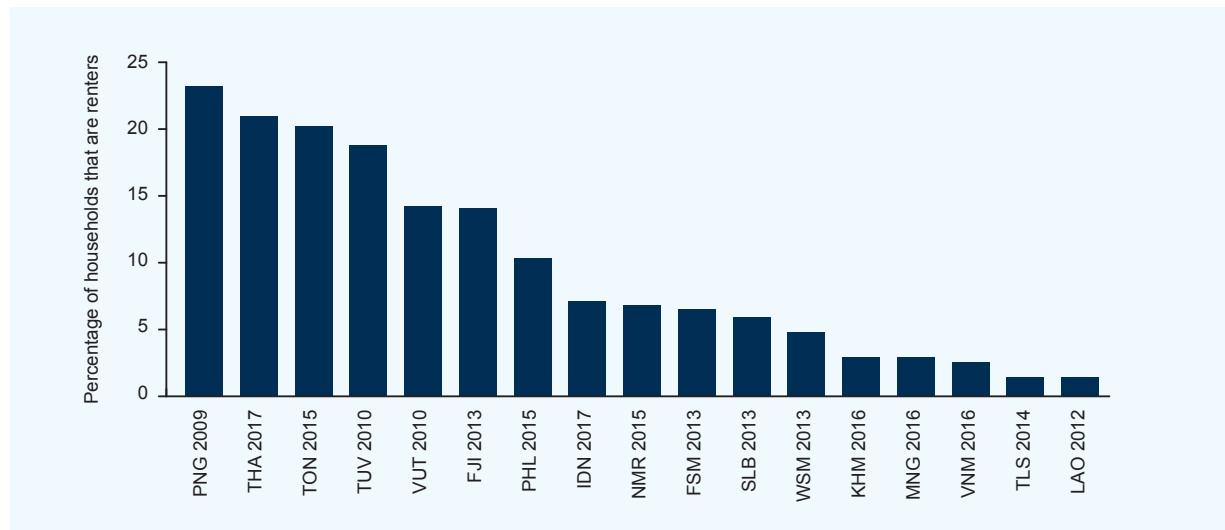
CHAPTER 3 FIGURES

Figure H.1 Vietnam has the second-lowest price level among economies in the East Asia and Pacific region



Source: World Bank International Comparison Program data visualization (<https://www.worldbank.org/en/news/slideshow/2020/10/20/pli-chart2>).

Figure H.2 Most Vietnamese own their homes and have no large recurring expenses



Source: World Bank, East Asia and Pacific Team Statistics Development.

APPENDIX I.

.....

MICRO-MACRO SIMULATION TECHNICAL INFORMATION

The micro-macro simulation uses the 2018 Vietnam Household Living Standards Survey to simulate techniques following approaches described in Bourguignon et al. (2008) and Ferreira et al. (2008), with the important simplification of omitting the computable general equilibrium component to produce poverty simulations for 2020 under various scenarios. Notable applications to global financial crisis impacts include Habib et al. 2010 and Olivier et al. 2014.

The method essentially takes existing 2018 household surveys as a starting point and uses the following information to simulate the consumption distribution in 2020 under various scenarios.

- Macro-growth projections under various scenarios in 2020
- Estimated structural relationships between employment in specific sectors and output in that sector, using the sectoral growth-employment elasticities to estimate changes to sector level employment under various gross domestic product (GDP) growth scenarios
- Parameters from estimated occupational choice models to determine sectoral sorting and reallocation of workers to match sectoral distributions under scenarios in 2020
- Parameters from an estimated earnings model to calibrate labor and other sources of income
- Scenarios of different levels of social assistance response taken into account following policies described in chapter 4.
- Simulated household income converted to household consumption for poverty estimation and profiling

Data

Micro data come from the 2018 Vietnam Household Living Standards Survey. The sample is about 9,300 households.

Macro-level data come from (1) historical and actual sectoral level employment and GDP from 2005 to 2019 (data source: World Bank) and 2) population growth projection to account for demographic changes (source: General Statistics Office estimates).

Macro-growth assumptions

Sectoral level GDP and employment levels are available from 2005 to 2019. These series are essential to estimate subsector growth-employment elasticities to project the composition of the labor force across sectors in 2020 under different growth scenarios.

Occupation choice

The probability of working in each subsector is predicted using multinomial logistic regressions. The regressions are performed separately for low- and high-skilled individuals, defined using years of education, and take into account several individual and household characteristics: gender, age, education, household head status, marital status, school enrollment, household dependency ratio, and presence of a public sector employee in the household. The probabilities are then predicted based on the regressions, and these are then used to sort individuals by likelihood of being employed in each sector.

Mincer regressions

Workers who are not reallocated into a different sector preserve their existing wages. Wages for job switchers are calculated using Mincerian regions. Like the occupational choice models, these are run separately by skill level but take into account a slightly different set of characteristics. In addition to individual characteristics—marital status, gender, education, and potential experience—the model also includes the type of employment, contractual status, average work hours, and whether the individual has more than one job, and geographical dummies. These help to produce better estimates in the Vietnamese context with high informality and geographical heterogeneity. However, as job switchers are not guaranteed to retain the occupational characteristics of the previous job, and similarly previously unemployed individuals do not have these characteristics, they need to be assigned before the predictions can be done. They are randomly assigned, keeping in mind the underlying distribution of characteristics in the labor market.

One challenging aspect of using the household surveys is that households tend to have multiple labor income sources. Multiple workers in the same family are taken into account in the model. However, the presence of household-level agriculture and family business income is challenging to model. In the case of agriculture, family

agriculture income is mapped to household members without labor market earnings but who participate in the agriculture sector.

Social assistance

See chapter 4 for description of policies. All existing social assistance beneficiaries are assumed to receive the average top-up. New beneficiaries under the two scenarios are categorically selected on the basis of informality and employment status, and are not related to income thresholds.

Estimating poverty

Simulated total household income is the simulated labor income, simulated social assistance income, and a component of other income that is constant. Although the full range of income sources is not simulated in this model, the labor income component is by far the largest component of household income. See appendix B for a discussion on household income sources. Using empirical consumption-income ratios, the simulated values of total household income are converted to total household consumption per capita for poverty estimation and profiling.

References

- Bourguignon, F., M. Bussolo, and L. Pereira da Silva. 2008. "Introduction: Evaluating the Impact of Macroeconomic Policies on Poverty and Income Distribution." In *The Impact of Macroeconomic Policies on Poverty and Income Distribution*, ed. F. Bourguignon, M. Bussolo, and L. Pereira da Silva, 1–23. World Bank Group, Washington, DC.
- Ferreira, F., P. Leite, L. Pereira da Silva, and P. Picchetti. 2008. "Can the Distributional Impacts of Macroeconomic Shocks Be Predicted? A Comparison on Top-Down Macro-Micro Models with Historical Data for Brazil." In *The Impact of Macroeconomic Policies on Poverty and Income Distribution*, ed. F. Bourguignon, M. Bussolo, and L. Pereira da Silva, 119–75. World Bank Group, Washington, DC.
- Habib, Bilal, S. Olivieri, and C. Sánchez- Páramo, 2010. "Assessing ex ante the Poverty and Distributional Impact of the Global Crisis in a Developing Country: A Micro-Simulation Approach with Application to Bangladesh." Policy Research Working Paper 5238, World Bank, Washington, DC.
- Olivieri, Sergio; S. Radyakin, S. Kolenikov, M. Lokshin, A. Narayan, and C. Sánchez- Páramo. 2014. *Simulating Distributional Impacts of Macro-dynamics: Theory and Practical Applications*. World Bank Group, Washington, DC.

APPENDIX J.

.....

Distribution-sensitive poverty projections technical information

At a macro level, changes in poverty can be decomposed into a combination of growth and redistribution effects (Bourguignon 2003, 2004; Datt and Ravallion 1992; Ferreira 2012). Poverty projections can be made taking into account these two channels. In a simplified scenario, poverty can be projected on the basis of growth alone, when growth is assumed to be even across the entire distribution under a neutral-distribution assumption. This assumption allows for simplified calculations, but may not be accurate in all cases. A distribution-sensitive poverty projection assumes that growth is uneven across the welfare distribution. Calculations of distributional sensitive poverty projections follow the methods described in Lakner et al. (2020), and are calculated using the povsim STATA command documented in Lakner, Negre, and Prydz (2014).

The initial poverty rate is the 2018 \$3.20/day 2011 PPP (purchasing power parity) poverty rate in Vietnam, based on the most recently available survey data. Poverty projections begin in 2019.

Growth of household consumption is assumed to follow similar patterns of gross domestic product (GDP) per capita growth from national accounts.

- Actual GDP growth rates are used for poverty projections in 2019 and 2020. For 2021–23, growth projections are used for poverty projection calculations.
- A pass-through rate is fixed at 1. This assumes that the welfare aggregate grows at the same rate as GDP or private consumption per capita. This is the most optimistic scenario.

Assumptions on the shape of the growth incidence curve and changes in inequality affect the degree of how growth is distributed across households. Inequality

is modeled through parameterized assumptions regarding how welfare grows at different rates along the welfare distribution. The shape of this growth curve along the welfare distribution is referred to as the growth incidence curve. On the basis of empirically observed growth incidence curves using the Vietnam Household Living Standards Survey, a linear growth incidence curve is assumed. A linear assumption also yields more conservative projections of poverty rates:

$$g_i = \delta - \theta * p_i$$

where

g_i = the growth rate for percentile group i .

p_i = a percentile group j . The poorest households are percentile group 1, and richest are percentile group 100.

δ and θ = growth parameters that can be considered to reflect a transfer and tax.

The final Gini obtained will depend on the values of δ and θ . The parameters δ and θ are values that solve the following equation that yields the desired change in inequality.

$$\varphi(\delta, \theta) = \frac{Gini^{forecasted}(\delta, \theta)}{Gini} - 1$$

Poverty in 2018 is based on the initial welfare values y_i . The final welfare (y_i^*) is determined by the formula below, assuming everyone is taxed in proportion to their initial welfare (y_i) and their rank (p_i):

$$y_i^* = (1 + \delta)y_i - \theta * p_i * y_i$$

where

y_i = the initial value of welfare for a percentile group i .

References

- Bourguignon, François J. 2003. "The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity across Countries and Time Periods." Working Paper 28104, World Bank, Washington, DC.
- Bourguignon, François J. 2004. "The Poverty-Growth-Inequality Triangle." Working Paper 125, Indian Council for Research on International Economic Relations, New Delhi.
- Datt, Guarav, and Martin Ravallion. 1992. "Growth and Redistribution Components of Changes in Poverty Measures: A Decomposition with Applications to Brazil and India in the 1980s." *Journal of Development Economics* 38 (2): 275–95.
- Ferreira, Francisco H. G. 2012. "Distributions in Motion: Economic Growth, Inequality, and Poverty Dynamics." In *The Oxford Handbook of the Economics of Poverty*, edited by Philip N. Jefferson, 427–62. New York: Oxford University Press.
- Lakner, Christoph, Mario Negre, and Espen Beer Prydz. 2014. "Twinning the Goals: How Can Shared Prosperity Help to Reduce Global Poverty?" Policy Research Working Paper 7106, World Bank, Washington, DC.
- Lakner, Christoph, Daniel Gerszon Mahler, Mario Negre, and Espen Beer Prydz. 2020. "How Much Does Reducing Inequality Matter for Global Poverty?" Global Poverty Monitoring Technical Note 13, World Bank, Washington, DC.

