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# The Effect of COVID-19 on Firms and Employment in Central America

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*Cover page design: David Peña Blanco*

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# The effect of COVID-19 on firms and employment in Central America<sup>1</sup>

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## Abstract

This paper assesses the effect of the COVID-19 pandemic on firms and employment in El Salvador, Guatemala, Honduras, and Nicaragua. We use data from The World Bank COVID-19 Business Pulse Surveys and other complementary sources. Our analysis shows that since the COVID-19 outbreak, 1 in 4 formal businesses in El Salvador, Guatemala, Honduras, and Nicaragua have closed, with monthly sales dropping by a third on average across countries. To counter the impact of the crisis, firms opted to decrease total hours worked, reduce wages or furlough workers. Small firms exhibited the largest declines in sales and employment and faced greater liquidity constraints. Firms' response in terms of employment was highly correlated to the change in sales and affected by labor regulations. Even though the possibility of telecommuting is limited across Central America, over half of formal firms among Northern Triangle countries and a quarter in Nicaragua started or increased remote work, which helped to cushion the impact on employment. Despite increases in public spending and policies to mitigate the economic and social impacts of the pandemic, few formal firms received government assistance.

Keywords: COVID-19, Central America, Firms, Sales, Employment.

JEL classification: D22, E24, I18, J01, J23.

## 1. Introduction

The COVID-19 pandemic resulted in many countries around the world adopting quarantine and physical distancing measures to curb the spread of the virus. These measures, and the fear of contagion, reduced employment and labor force participation, and hindered demand for non-essential contact-intensive occupations (IMF, 2020). In addition, intersectoral linkages amplified the initial direct impact (Baqae and Farhi 2021, Bonadio et al. 2020) and caused a sharp decline in economic activity. Persistent inequities, weak health systems and institutions, high levels of informal employment, high reliance on remittances, and two tropical storms<sup>2</sup> aggravated the crisis across Central America. Despite most countries implementing widespread lockdown measures in 2020, outbreaks have continued. At the moment of writing this paper, reported COVID-19 cases in Central America ranged from fewer than 7,500 in Nicaragua to over 260,000 in Guatemala and 382,000 in Panama.<sup>3</sup> Inadequate testing, limited tracing capacities, and weak reporting in some countries suggest outcomes could be worse than official statistics (OECD and World Bank 2020).

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<sup>2</sup> Tropical storms ETA and IOTA hit Honduras, Guatemala, and Nicaragua in November 2020. Their economic impact ranged from 1% - 8% of GDP.

<sup>3</sup> <https://www.worldometers.info/coronavirus/>. As of June 8, 2021, confirmed cases in Latin America and the Caribbean represented 19% of all cases worldwide.

The Central American region, including Panama and the Dominican Republic, contracted 6.7 percent in 2020, slightly lower than the downturn in Latin America but with large heterogeneity across countries. This contraction caused a 13.8 percent decline in working hours, equivalent to 10 million full-time jobs lost (ILO, 2020). Even though the employment level slightly recovered in the second half of 2020, it is still below pre-COVID-19 levels. This steep economic recession implies deteriorating living conditions, with significant increases in poverty and unemployment. ECLAC (2021) estimates extreme poverty increased between 2 and 6 percentage points in Central America, equivalent to approximately 1.5 million people.<sup>4</sup> Likewise, IDB (2021) estimates 2.8 million people fell into poverty across Central America, Panama, and the Dominican Republic. As Figure 1-1 shows, a modest recovery is expected in 2021 as lockdown and mobility restrictions are eased, vaccine distribution accelerates, and external conditions improve (World Bank 2021, IMF 2021a). The magnitude of the effect in each country is affected by labor market characteristics, economic structure, and economic policies. Most workers in Latin America were vulnerable to the COVID-19 shock, as close to 60 percent were concentrated in informal employment, around 50 percent in contact-intensive occupations, and less than 25 percent had jobs that allowed for telework (IMF 2020). In Central America these vulnerabilities were even higher. In Honduras and Nicaragua up to 80 percent of workers are informal (ILOSTAT 2021). In El Salvador only 10 percent of workers were able to telework (Erazo 2020) and in Guatemala and Honduras this percentage was slightly higher, reaching 15 percent, but well below other countries.

Globally, women have suffered greater job loss than men (ILO 2020). High-Frequency Phone Surveys conducted by the World Bank in Latin America suggest female workers were 44 percent more likely than men to lose their jobs since the beginning of the COVID-19 crisis (World Bank 2021). School closures increased the need for childcare within the household,<sup>5</sup> which disproportionately affected women as they spend three times more hours than men on domestic responsibilities such as childcare and homeschooling (United Nations 2020, IMF 2020, ECLAC 2021). Surveys carried out with small and medium-sized enterprises (SMEs) in more than 50 countries show that nearly a third of female business leaders (26 percent) spent more time on domestic tasks relative to pre-pandemic levels than their male counterparts. The gender gap was even more evident for female business leaders with a partner (Facebook et al. 2020).<sup>6</sup> An online survey conducted in July 2020 through Facebook suggests that on average, while women in El Salvador, Honduras, Guatemala, and Nicaragua spent 12 hours per day on care activities for family members, men only spent 8 hours. Moreover, 56 percent of women in the same country-group reported that the amount of time spent on household chores increased during the pandemic (Facebook 2021).<sup>7</sup>

Non-essential contact-intensive industries, SMEs, and informal firms have also suffered disproportionately. Leibovici et al. (2020a and 2020b) find that most non-essential contact-intensive industries in the United States experienced much larger job losses relative to non-contact-intensive industries and most essential contact-intensive industries. Female-led business had a higher probability of being concentrated in those sectors, such as services and hospitality, and therefore were more adversely affected by lockdown policies (Alon et al. 2020). The disproportionate effect on SMEs and informal firms has been extensively documented: SMEs faced greater financial hardship, were more likely to close, and suffered more job losses (OECD 2020, ILO 2020, Apedo-Amah et al. 2020, Bartik et al., 2020, Zhang, 2020).

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<sup>4</sup> Extreme poverty estimated using World Development Indicators population estimates for 2019 and ECLAC (2021) 2020 extreme poverty projections. Lakner et al. (2021) estimate the pandemic will result in nearly 30 million new extreme poor across Latin America. Extreme poverty is measured as the number of people living on less than US\$1.90 (PPP 2011) per day.

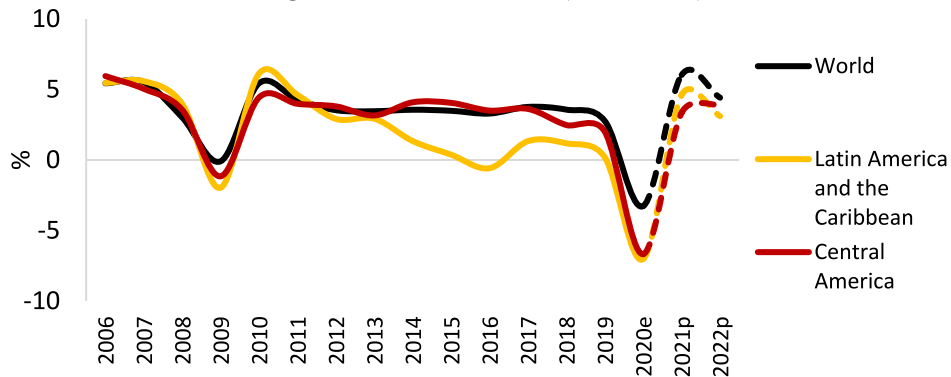
<sup>5</sup> According to UNESCO (2020), 250 million children were still out of school by the end of October 2020.

<sup>6</sup> SME surveys conducted between August 24-31, 2020 show 23 percent of female business leaders with a partner spent more than six hours daily on domestic tasks relative to 12 percent of male business leaders (Facebook et al. 2020).

<sup>7</sup> Survey on Gender Equality at Home. <https://www.equalityathome.org/>



Figure 1.1. GDP Growth (2006-2022)



**Source:** International Monetary Fund (IMF), World Economic Outlook (WEO) April 2021.

**Note:** Estimates for Central America are the average GDP growth for Belize, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama. GDP data for Central America from WEO April 2021.

Given the importance for employment and wellbeing, the effect of the crisis on firms is being widely studied around the world. Several studies using a wide range of datasets suggest the pandemic has resulted in a significant negative shock on firm employment and revenue (Hassan et al. 2020, Chetty et al. 2020, Facebook et al. 2020, Bartik et al. (2020); Humphries et al. (2020a); Adams-Prassl et al. (2020)). Apedo-Amah et al. (2020) provide a broad assessment of the short-term impact of the COVID-19 pandemic on businesses in 51 countries. Their results indicate that the crisis has negatively impacted sales, and firms have resorted primarily to a reduction in working hours or leave of absence, with a smaller share of firms laying off workers. Bachas et al. (2020) analyze administrative tax returns from 10 low- and middle-income countries, predicting that less than half of firms remained profitable, business tax revenue fell by 1.5 percent of GDP, and aggregate losses increased by 2.9 percent of GDP by the end of 2020. Similarly, a May 2020 survey to small businesses in the U.S. finds firms expected demand to be a third lower than pre-crisis levels upon reopening (Balla-Elliott et al. 2020).

Our paper contributes to the expanding literature evaluating the economic impact of COVID-19 by providing a comprehensive analysis of the short-term impact of the pandemic on businesses and employment in El Salvador, Guatemala, Honduras, and Nicaragua using the World Bank COVID-19 Business Pulse Surveys and other complementary sources. Our analysis shows that since the COVID-19 outbreak, and until the last round of surveys in early 2021, 1 in 4 formal businesses in El Salvador, Guatemala, Honduras, and Nicaragua have closed and monthly sales have dropped by a third on average in all countries. To counter the impact of the crisis, firms have opted to decrease total hours worked, reduce wages or furlough workers. Small firms exhibited the largest declines in sales and employment and faced greater liquidity constraints. Firms' response in terms of employment was highly correlated to the change in sales and it was also affected by labor regulations. Even though the possibility of telecommuting is limited across Central America, over half of formal firms among Northern Triangle countries and a quarter in Nicaragua started or increased remote work. Despite increases in public spending and policies to mitigate the economic and social impacts of the pandemic, few formal firms received government assistance. By providing a better understanding of the severity and heterogenous effects of the pandemic's impact, as well as how firms have adapted, this study could help inform the design of more effective policies to smooth the impact of the COVID-19 shock and accelerate the recovery phase.

The rest of paper is organized as follows. Section 2 discusses the aggregate impact of COVID-19 and presents the policies applied in El Salvador, Guatemala, Honduras, and Nicaragua in response to the crisis. Section 3 presents firm-level evidence of the effect of COVID-19 on sales and employment. Section 4 presents an in-depth analysis of the government assistance received by firms to support employment. Finally, section 5 concludes.

## 2. COVID-19 incidence and public policies

Countries implemented diverse policies focused on both public health and the economy in response to the COVID-19 pandemic. The most common measures to slow the transmission of the virus include quarantines, lockdowns, closure of non-essential businesses and schools, social distancing, travel restrictions, and emergency investments in healthcare. Nonetheless these have been heterogenous across countries, with some implementing strict stay-at-home policies and others more lenient voluntary measures. While El Salvador, Guatemala, and Honduras all declared a national state of emergency and imposed strict lockdowns in March 2020, in Nicaragua the Government declared a state of national alert with no lockdowns. Table 2.1 summarizes the policies applied in El Salvador, Honduras, Guatemala, and Nicaragua. We focus on these countries because, as it will become clear in the next section, they have firm-level data that allow us to assess the effect on firms and workers. Even though lockdown measures have eased since the end of 2020 in Central America's Northern Triangle (Guatemala, Honduras, and El Salvador), most businesses continue to operate with limited capacity as cases continue to surge in 2021 (Figure 2.1).

Across the region, countries increased public spending and implemented fiscal policies to mitigate the economic and social impact of the COVID-19 crisis. Governments requested loans from multilateral development banks and the International Monetary Fund (IMF), and in some cases issued sovereign bonds. Though necessary to resolve the health emergency and prevent unemployment and poverty to rise even more, the fiscal cost of these measures has increased already high levels of public debt and further strained the countries' finances. El Salvador and Honduras relaxed their Fiscal Responsibility Laws and allowed additional borrowing of 4 and 10 percent of GDP of 2020, respectively. Likewise, Guatemala approved three fiscal packages equivalent to 3.4 percent of GDP in 2020. This has increased gross public debt an estimated 20 percentage points of GDP in El Salvador and almost 5.5 percentage points in the rest of the countries analyzed.<sup>8</sup> Nicaragua also increased public spending in 2020.

Government spending has been earmarked for low-income households, and workers and businesses most affected by the pandemic. Social security systems in most countries of Central America are not effective due to the high levels of informal labor, as only 20 percent of the economically active population in the region pays social security contributions.<sup>9</sup> El Salvador, Guatemala and Honduras provided temporary cash transfers to vulnerable households ranging from US\$130 per month for 2 million Guatemalan households to a one-time US\$300 subsidy for 75 percent of Salvadorian households. Likewise, Honduras and El Salvador distributed food baskets to poor families. With the exception of Nicaragua, countries also granted temporary tax relief to key economic sectors and provided liquidity support and credit relief for SMEs. Similarly, Guatemala and Honduras offered temporary unemployment benefits to formal and furloughed workers. El Salvador and Honduras also offered short-term deferral of utility payments (see Table 2.1).

Fiscal policy has been accompanied by expansionary monetary policy in most countries. The Central Banks of Guatemala, Honduras and Nicaragua lowered their policy rate between 100-300 basis points to stimulate the economy. Furthermore, banking regulators reduced reserve requirements and eased credit regulations to facilitate loan restructuring for borrowers facing liquidity constraints in all four countries.

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<sup>8</sup> IMF World Economic Outlook, October 2020. General government gross debt as a percent of GDP.

<sup>9</sup> Inter-American Development Bank, Labor Markets and Social Security Information System (See Annex A).

Table 2.1. Key economic and containment measures implemented by country

	El Salvador	Guatemala	Honduras	Nicaragua
<b>Fiscal</b>	<p>Fiscal Responsibility Law relaxed for the duration of the COVID-19 National Emergency</p> <p><b>Households</b></p> <ul style="list-style-type: none"> <li>• US\$150 bonus per month for public employees in front-line duties during the pandemic;</li> <li>• One-time US\$300 subsidy to approximately 75 percent of all households identified from the registry of gas subsidy recipients and other complementary records;</li> <li>• Distribution of food baskets to 3.4 million households;</li> <li>• 3-month deferral of utility payments (water, energy and telecommunications) March-May 2020;</li> </ul> <p><b>Businesses</b></p> <ul style="list-style-type: none"> <li>• 3-month extension for income tax payments without fines or interest for: <ul style="list-style-type: none"> <li>(i) Taxpayers operating in the tourism sector whose tax obligations are below US\$25,000;</li> <li>(ii) Taxpayers with tax obligations below US\$10,000;</li> <li>(iii) Taxpayers in the electricity and telecommunication sectors.</li> </ul> </li> <li>• 3-month exemption from the special tourism tax (5percent) for companies operating in the tourism industry<sup>10</sup></li> <li>• Provisional elimination of import duties on essential medical and food imports such as medical textiles, sanitizer, flour, rice and beans.</li> </ul>	<p>Congress approved three fiscal packages in 2020, equivalent to 3.4 percent of GDP. US\$1.5 billion bond issuance to finance COVID-19 emergency programs</p> <p><b>Households</b></p> <ul style="list-style-type: none"> <li>• Deferring income tax payments and social security contributions</li> <li>• Family Bonus (US\$780 million): US\$130 per month for up to a 3-month period for 2 million vulnerable households<sup>11</sup>.</li> <li>• The Employment Protection Fund (US\$260 million): support private-sector workers who have been laid off by giving them US\$10 a day for 3 months, free from taxes, deductions, and withholding. 300,000 household beneficiaries</li> </ul> <p><b>Businesses</b></p> <ul style="list-style-type: none"> <li>• The Working Capital Credit Fund (US\$440 million): issue loans for SMEs with favorable grace periods and below-market interest rates</li> <li>• Temporary relief to firms (expedited tax credit refunds, deferral of tax payments and social security contributions)</li> </ul>	<p>Fiscal Responsibility Law relaxed, increasing the deficit of the Non-Financial Public Sector (NFPS) to 5.6 percent in 2020 and 4 percent in 2021.</p> <p>This allowed additional borrowing of \$2.5 billion in 2020-21, equivalent to 10 percent of GDP.</p> <p><b>Households</b></p> <ul style="list-style-type: none"> <li>• Temporary unemployment benefits for formal workers (0.6 percent of GDP)</li> <li>• Delivery of food supplies to poor families (0.2 percent of GDP)</li> <li>• Cash transfers to informal workers (0.4 percent of GDP)</li> <li>• Suspended water service disconnection for non-payment of water bills; reconnected services that were disconnected due to non-payment<sup>12</sup>.</li> </ul> <p><b>Businesses</b></p> <ul style="list-style-type: none"> <li>• Reduced advance payments in corporate income tax; temporary VAT exemptions for medical supplies</li> <li>• One-off income tax credit for companies sustaining pre-crisis employment levels (10percent)</li> <li>• VAT payments deferred for SMEs in non-essential sectors;</li> </ul>	<p>Fiscal deficit increased from 1.6 percent of GDP in 2019 to 2.5 percent in 2020:</p> <ul style="list-style-type: none"> <li>• 2020 external loan disbursements US\$ 829.5 million</li> <li>• Placement of Bonds of the Republic of Nicaragua for US\$219.8 million.</li> <li>• Loans from multilateral institutions to finance COVID-19 related expenditures.</li> <li>• November 2020, IMF approved US\$186.8 million</li> </ul>

<sup>10</sup> Chapter V, Article 16 of the Tourism Act.

<sup>11</sup> Beneficiaries selected based on electricity consumption below 200kWh; priority is given to poor households living with a single parent, elderly or malnourished children. *National Emergency and Economic Recovery Plan*

<sup>12</sup> Honduras Water and Sanitation Sector Regulator (*Ente Regulador de los Servicios de Agua Potable y Saneamiento*, ERSAPS) resolution No 05-2020 issued March 13, 2020

<p><b>Monetary and Macro-Financial</b></p>	<ul style="list-style-type: none"> <li>Lowered reserve requirements with the Central Bank by 25percent for newly issued loans</li> <li>Reduced overall reserve requirements for other liabilities about 12percent of deposit</li> <li>Amended provisioning for NPLs by freezing credit ratings of clients to pre-crisis levels</li> <li>Imposed a temporary moratorium on credit risk ratings</li> <li>Temporarily relaxed lending conditions through a grace period for loan repayments</li> <li>US\$650 million trust fund to provide support to workers and SMEs</li> </ul>	<ul style="list-style-type: none"> <li>Central bank lowered its policy rate by 100 basis points (bps) to 1.75percent</li> <li>Flexibilization of reserve requirements</li> <li>Monetary Board eased credit regulations to facilitate loan restructuring for borrowers facing liquidity constraints.</li> <li>Gradual phasing out of mitigation measures since January 2021.</li> <li>Emergency Fund (FEMER), with an allocation of US\$195 million for hospital infrastructure; in-kind food support for vulnerable groups and families; and loans for micro, small, and medium-sized enterprises, sole proprietors, professionals, businesses, and savings and loan cooperatives.</li> </ul>	<ul style="list-style-type: none"> <li>Central Bank lowered its policy rate by 225 bps to 3percent.</li> <li>Central Bank reduced reserve requirements from 12 to 9percent</li> <li>Public development bank (BANHIPROVI) to provide guarantees to cover potential losses on new loans to SMEs and other companies (1.1percent of GDP) and finance loans to SMEs and other sectors affected by the crisis (0.9percent of GDP)</li> <li>Government mandated all financial institutions to provide temporary debt service relief to firms and individuals affected by the crisis (i.e., suspension of debt service until end-June without penalty)</li> <li>3-month moratorium on service of bank loans financed by BANHIPROVI</li> </ul>	<ul style="list-style-type: none"> <li>Central Bank lowered its policy rate by 300 bps.</li> <li>Temporarily reduced reserve requirements in domestic currency to extend more credits to the private sector.</li> <li>Allowed banks and other financial institutions to negotiate with their clients to increase the maturity of loans and/or moratorium on monthly payments of up to 6 months on credits granted before March 2020.</li> <li>Reduced minimum monthly payment for credit cards from 3 to 2percent of total debt.</li> </ul>
<p><b>Containment</b></p>	<ul style="list-style-type: none"> <li>March 21, 2020: nationwide stay-at-home order</li> <li>School/university closures</li> <li>Cancellation of public events</li> <li>August 24, 2020: economy re-opened</li> </ul>	<ul style="list-style-type: none"> <li>March 6, 2020, state of emergency; restrictions on social gatherings</li> <li>March 21, 2020 nationwide curfew &amp; global travel ban</li> <li>School/university closures</li> <li>Cancellation of public events</li> <li>August 2020: state of emergency ends</li> </ul>	<ul style="list-style-type: none"> <li>March 16, 2020: nationwide lockdown</li> <li>School/university closures</li> <li>Cancellation of public events</li> <li>August 2020: gradual reopening of the economy</li> <li>October 2020: lifted restrictions on freedom of movement and night-time curfew</li> </ul>	<ul style="list-style-type: none"> <li>Strict epidemiological controls at all entry points to the country.</li> <li>Voluntary closure of private schools</li> </ul>
<p><b>Vaccination</b></p>	<ul style="list-style-type: none"> <li>Government acquired 9 million doses, 20 percent through COVAX</li> <li>Vaccination campaign-initiated February 2021.</li> </ul>	<ul style="list-style-type: none"> <li>Government aims to cover 50 percent of the adult population in 2021, 20 percent through the COVAX initiative.</li> </ul>	<ul style="list-style-type: none"> <li>20 percent of vaccines for the adult population guaranteed with COVAX (3.8 million doses)</li> <li>Government purchased 4.2 million doses of Sputnik V vaccine.<sup>13</sup></li> <li>Private sector has been given authorization to purchase vaccines for their employees.</li> </ul>	<ul style="list-style-type: none"> <li>February 2021, approved Sputnik vaccine for emergency use.</li> <li>Additional vaccines received through COVAX.</li> <li>April 2021 Central American Bank for Economic Integration (CABEI) approved financing of US\$100 million for vaccination of 3.27 million people.</li> </ul>

Source: IMF Policy Tracker. <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>; Ministry of Finance El Salvador <https://www.mh.gob.sv/pmh/es/Temas/Medicinas-Fiscales-emergencia-COVID-19.html>; Congress of Guatemala, Decree 12-2020 *Ley de emergencia para proteger a los guatemaltecos de los efectos causados por la pandemia Coronavirus COVID-19* [https://www.congreso.gob.gt/detalle\\_pdf/decretos/13517](https://www.congreso.gob.gt/detalle_pdf/decretos/13517).

<sup>13</sup> <https://covid19honduras.org/Noticias>



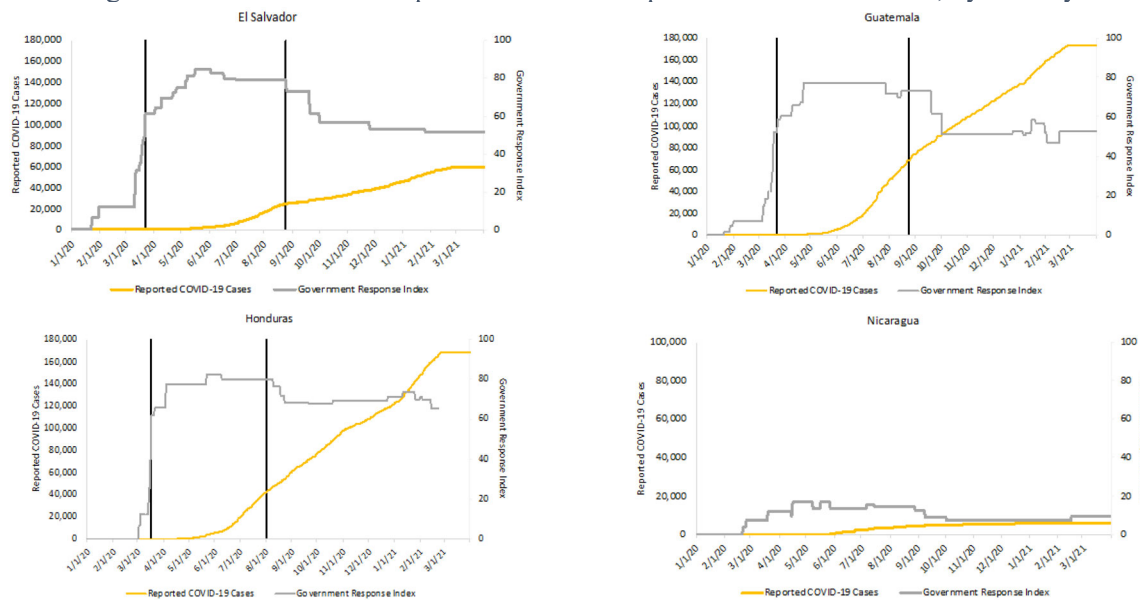
Table 2.2. Public debt and revenue, 2019-2020 (% of GDP)

	General government gross debt			General government revenue		
	2019	2020	Difference	2019	2020	Difference
El Salvador	71.0	88.2	17.2	23.9	25.0	1.1
Guatemala	26.6	31.7	5.2	11.3	10.8	-0.5
Honduras	41.9	48.9	7.0	25.8	23.4	-2.4
Nicaragua	41.7	46.0	4.3	27.6	26.8	-0.8

Source: IMF WEO April 2021.

The Oxford COVID-19 Government Response Tracker (OxCGRT) provides a systematic way to compare policy responses across countries over time. The Government Response Index (GRI) aggregates government measures into a composite index covering containment and health measures, stringency and economic support. The index reflects the level of government action regarding the COVID-19 pandemic, not effectiveness. Of the four countries analyzed, with the exception of Nicaragua, all registered a Government Response Index (GRI) around 80 between March and August 2020. Even though reported COVID-19 cases continue to rise, the level of government action in El Salvador and Guatemala has decreased (Figure 2.1). Countries in Central America’s Northern Triangle had stricter measures than the average country in Latin America. In contrast, Nicaragua presents the lowest response-to-risk ratio,<sup>14</sup> the country reports both the lowest COVID-19 cases and GRI throughout the region. Nonetheless, there are concerns of underreporting of COVID-19 cases and deaths in Nicaragua. Estimates of excess mortality indicate the number of deaths in Nicaragua were 59 percent higher in 2020 than in a typical year.<sup>15</sup> Moreover, independent analysis from the COVID-19 Citizen Observatory in Nicaragua suggests COVID-19 deaths are 17 times higher than reported statistics.<sup>16</sup>

Figure 2.1. Government Response Index and Reported COVID-19 Cases, by country



Source: Thomas Hale, Sam Webster, Anna Petherick, Toby Phillips, and Beatriz Kira. (2020). Oxford COVID-19 Government Response Tracker. Blavatnik School of Government. Available: [www.bsg.ox.ac.uk/covidtracker](http://www.bsg.ox.ac.uk/covidtracker)

Note: OxCGRT data as of February 26, 2021. Vertical lines represent date when nationwide lockdowns started and ended.

<sup>14</sup> The response-to-risk ratio compares government’s response to the risk they face.

<sup>15</sup> <https://www.ft.com/content/a2901ce8-5eb7-4633-b89c-cbdf5b386938>. Excess mortality for Guatemala in 2020 was 20 percent.

<sup>16</sup> As of May 12, 2021, Nicaragua officially reported 184 COVID-19 deaths and the COVID-19 Citizen Observatory reported 3,223 deaths. <https://observatorioni.org/estadisticas-covid-19-nicaragua/>

### 3. COVID-19 impact on firms and formal employment

The COVID-19 pandemic and associated interventions—social distancing, lockdowns, and quarantines—affected firms and workers worldwide. Firms’ production and sales were affected by different reasons, including: (i) regulations on what business could remain open, (ii) reduced demand due to government-imposed restrictions, (iii) changes in consumer behavior to reduce the risk of infection, and (iv) lower demand due to lower consumer income or uncertainty about future income.

Firms adjusted to the pandemic in several ways; from closure to changes in their level of employment, hours worked, or wages paid. Fixed costs, such as debt service and rent payments, are hard to adjust and might have played an important role in the closure decision of several firms. Those who continued operating, also faced decisions on adjusting their production or sale process and their level of activity. In order to reduce labor costs, firms adjusted on the intensive margin by reducing wages or the number of hours worked or on the extensive margin by laying off or furlough workers.

To analyze the impact of COVID-19 on firms and formal employees we primarily use firm-level data from the World Bank COVID-19 Business Pulse Survey (WB BPS). In Latin American and the Caribbean this data is only available for El Salvador, Guatemala, Honduras, and Nicaragua. We also complement the analysis with other sources such as household-level data from the World Bank High Frequency Phone Surveys and country-specific surveys. The World Bank COVID-19 BPS conducted two follow-up surveys on private sector formal firms<sup>17</sup> with five or more employees that were interviewed in the latest round available of the World Bank Enterprise Surveys.<sup>18</sup> Not all previously interviewed firms were reached, as some may have closed before the pandemic, exited due to COVID-19, or simply changed contact information. Non-found rates were similar across the four countries analyzed and sector-size composition.<sup>19</sup>

The WB BPS survey is designed to assess the impact of the pandemic on businesses. Metrics include closures, job and sales losses, inputs’ disruptions, financial resources and constraints, adjustment mechanisms, government support, and firm expectations.

Survey collection for Round 1 coincided with the last months of strict lockdowns in El Salvador, Guatemala, and Honduras between June-August 2020. During the second round of data collection (November 2020 – January 2021), mobility restrictions had been relaxed and economic activity was slowly recovering in all countries (Figure 3.1). Honduras, Nicaragua, and Guatemala suffered two tropical storms (Eta and Iota) in November 2020 between the two rounds, having a significant impact that ranged from 1 to 8 percent of GDP.

Table 3.1 shows the composition of the sample by country, firm size, and sector. Small businesses with less than 20 employees account for nearly 40 percent of observations in all countries and most businesses surveyed are in either manufacturing or services. Likewise, approximately one in ten firms are foreign-owned, 7 percent are exporters, and over a fifth are female-led.

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<sup>17</sup> Our results need to be interpreted exclusively for the formal sector. Informality is predominant in all the countries we are analyzing in this study. The effect of the crisis on the informal sector could have been higher during the period of strict lockdowns. In addition, many employees that lost their jobs might have initiated activities in the informal sector. An important extension of this paper could be to assess the effect on the informal sector.

<sup>18</sup> The survey excludes non-market-oriented services such as government, health, education, and entertainment, which are likely to be largely government owned; and personal services, which is to a great extent informal.

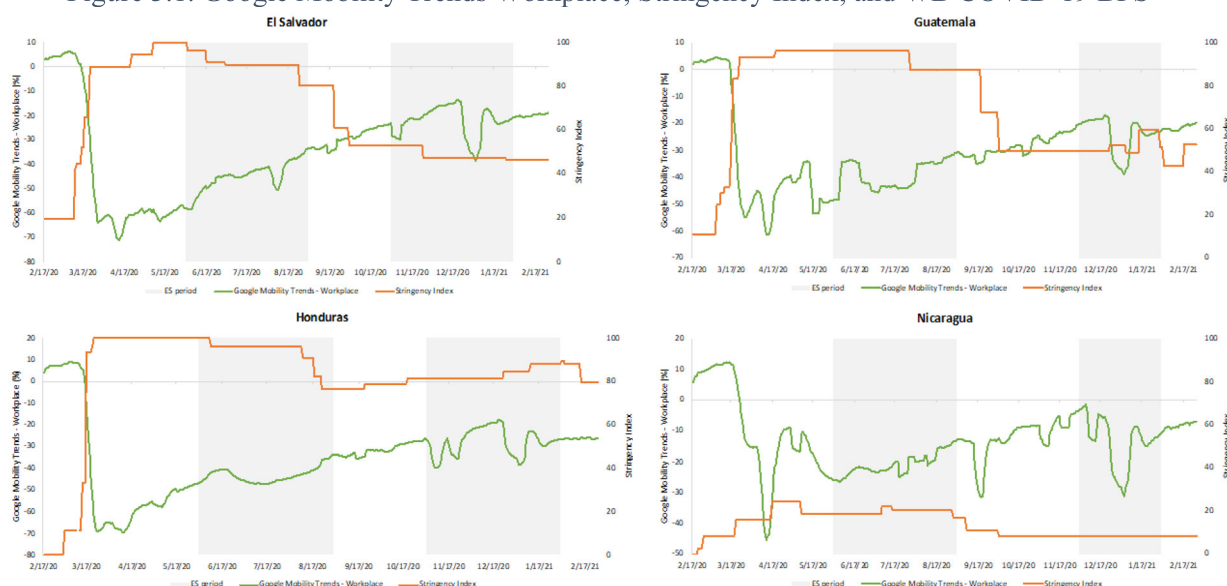
<sup>19</sup> 44 percent in El Salvador, 41 in Guatemala, 49 in Honduras, and 43 percent in Nicaragua.

Table 3.1. World Bank COVID-19 BPS Composition, by country, firm size and sector

	SLV	GTM	HND	NIC
<b>Firm Size (%)</b>				
Small (<20)	51.7	41.7	59.6	38.7
Medium (20-99)	27.0	31.0	28.9	45.3
Large (100+)	21.3	27.2	11.4	15.9
<b>Sector (%)</b>				
Manufacturing	56.3	41.4	27.7	33.0
Retail	20.0	20.3	31.6	20.4
Other Services	23.6	38.3	40.7	46.5
<b>Exports and ownership (%)</b>				
Exporters	10.5	6.9	5.9	2.9
Foreign firms	13.7	10.5	8.1	10.7
Women-led	23.3	18.1	17.4	27.9

Source: Estimates using World Bank COVID-19 Business Pulse Survey.

Figure 3.1. Google Mobility Trends Workplace, Stringency Index, and WB COVID-19 BPS



Source: Thomas Hale, Sam Webster, Anna Petherick, Toby Phillips, and Beatriz Kira. (2020). Oxford COVID-19 Government Response Tracker. Blavatnik School of Government. Available: [www.bsg.ox.ac.uk/covidtracker](http://www.bsg.ox.ac.uk/covidtracker); Google COVID-19 Community Mobility Trends - Last updated March 2, 2021 Note: OxCGRT data as of February 26, 2021. Shaded areas represent data collection of World Bank COVID-19 Business Pulse Surveys, Round 1 and 2. The Stringency Index records the number and intensity of closure and containment policies on a scale of 0-100.

### Business Closures

Since the COVID-19 outbreak, nearly 70 percent of firms across Central America<sup>20</sup> have temporarily closed at least once, with substantial variation across countries. Honduras presented the highest share with 86 percent relative to 34 percent in Nicaragua (Figure 3.2). The share of firms that temporarily closed is larger among business with 20 employees or less and the retail sector. Data collection between November 2020

<sup>20</sup> For the purposes of this study, Central America refers to the four countries with available Enterprise Survey data: El Salvador, Guatemala, Honduras, and Nicaragua.

and January 2021, shows businesses were temporarily closed an average of 19 weeks among Northern Triangle countries relative to only 14 in Nicaragua since the COVID-19 outbreak.

Several closures became permanent. As of January 2021, 1 in 4 businesses were closed or were assumed to have permanently closed. Honduras also exhibits the highest firm exit rate with 26 percent<sup>21</sup> and El Salvador and Guatemala the lowest with 18 percent. Although firms in Nicaragua have the lowest share of temporary closures, they have the second highest share of businesses permanently closed in January 2021. This finding shows that the effect of the pandemic is high even without strict lockdown measures. Large firms had a lower probability of being closed in all countries analyzed (14 percent) relative to medium (24 percent) and small firms (25 percent).<sup>22</sup> Similarly, manufacturing firms were more likely to be closed relative to firms in retail and other services.<sup>23</sup> Firm closures due to the COVID-19 pandemic are much higher than under normal business cycles. In El Salvador, the average exit rate between 2010 and 2015 was just 10 percent, the current crisis has more than doubled this rate.<sup>24</sup>

### **Sales**

Since the COVID-19 outbreak, firms in all four countries experienced significant drops in sales either due to strict lockdown measures or because of a reduction in demand (local or external). Even though the biggest impact is around the peak of the COVID-19 crisis, the decline was still prominent during the second half of 2020. Monthly sales between August 2019 and August 2020 dropped by 57 percentage points (p.p.) in Honduras and 46 p.p. in Guatemala. Between January 2020 and January 2021 monthly sales dropped on average by a third in all countries (Figure 3.3). Within countries, small businesses and those in the services and manufacturing sectors saw the largest decrease in monthly sales across both survey rounds, nonetheless the dispersion is considerable (Figure 3.4).

These findings are consistent with other studies and data sources. Bachas et al. (2020) estimate that revenue among formal firms in Honduras fell by 26 percent between March and August 2020. They also show that small firms and firms in the service sector experienced the largest revenue loss. Private-sector led surveys in Honduras<sup>25</sup> and El Salvador<sup>26</sup> also suggests small firms were impacted the most. As of October 2020, over 80 percent of small and medium enterprises in Honduras and 75 percent in El Salvador reported a decrease in sales due to COVID-19 relative to only 44 percent among larger firms in Honduras and 59 percent in El Salvador (UNAH 2020 and CAMARASAL 2020).

The reduction in sales also affected exporters. Over half of exporting firms in El Salvador and Guatemala, and a third in Honduras and Nicaragua reduced exports relative to August 2019.

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<sup>21</sup> The higher exit rate for Honduras, compared to the other countries, could reflect the compound effect of COVID-19 and the two hurricanes. Unlike the other countries, where hurricane-related losses were not sizeable or located in isolated areas, Honduras suffered sizeable losses in the northern departments, those with the highest levels of economic activity. Lack of geographical data prevents a more accurate analysis.

<sup>22</sup> Average predicted probability of being closed from a Probit that controls for country, size, and sector fixed effects.

<sup>23</sup> Manufacturing includes food, furniture, textile and garments.

<sup>24</sup> Authors calculations using census firm data (*Dirección General de Estadísticas y Censos, Dygestic; Solvencia*)

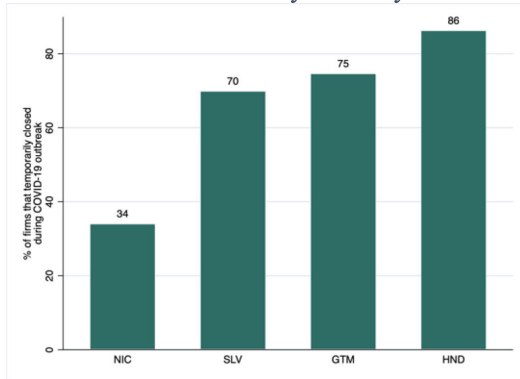
<sup>25</sup> Data was collected in three waves: March 30<sup>th</sup>-April 5<sup>th</sup> 2020; June 2020 and October 2020. The sample was drawn from businesses enlisted in the Chamber of Industry and Commerce. A total of 1,178 businesses were interviewed.

<sup>26</sup> 717 businesses were interviewed in El Salvador between October 9-21, 2020. Among these 84% were small-medium enterprises.

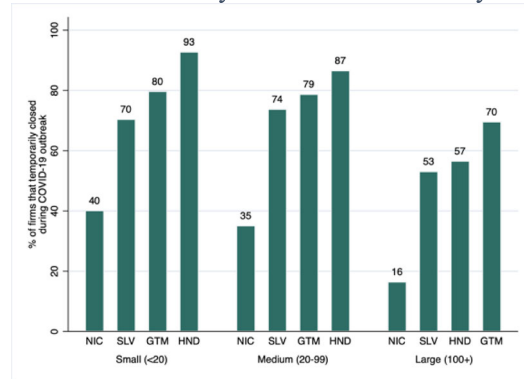


Figure 3.2. Firms that closed during COVID-19 outbreak  
 a. Temporary closures (any moment since the outbreak)

a.1. By Country

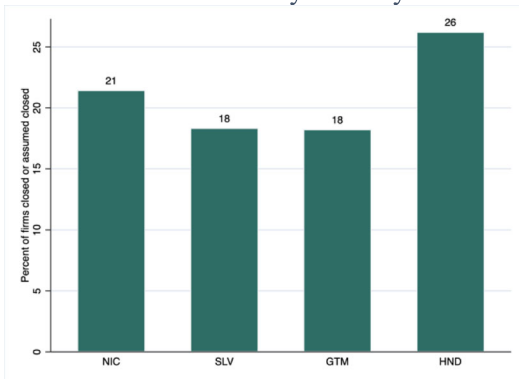


a.2. By firm size and country

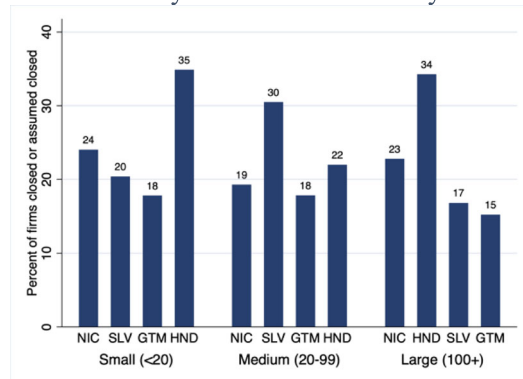


b. Permanent closures as of January 2021

b.1. By Country

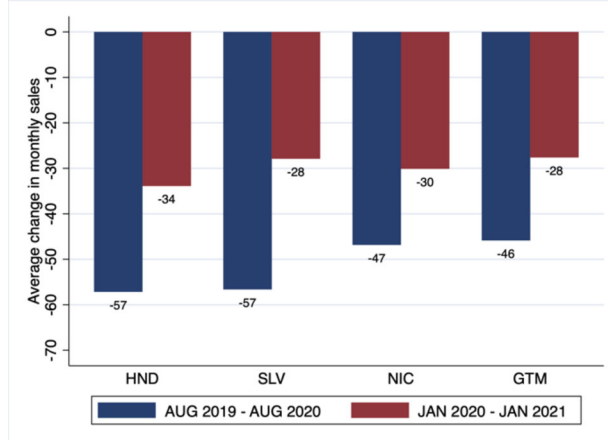


b.2. By firm size and country



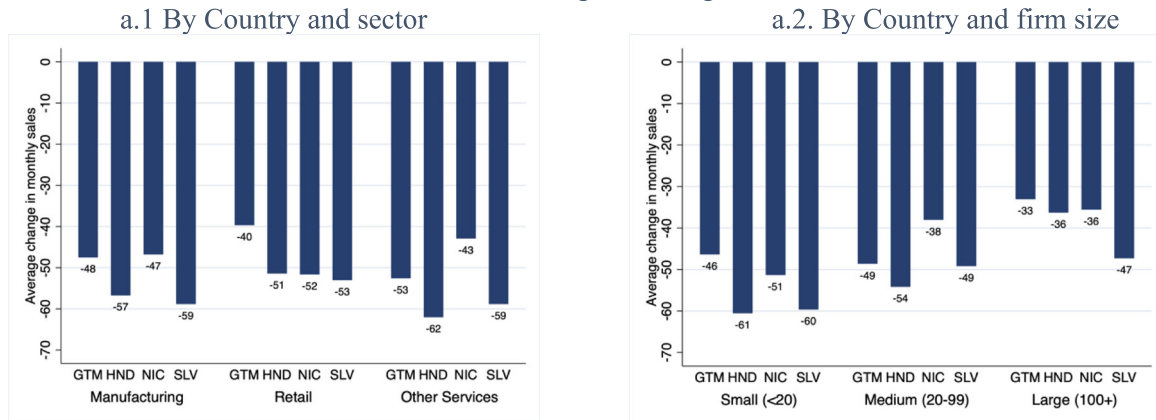
**Source:** World Bank COVID-19 Business Pulse Survey. **Notes:** Panel b includes firms that closed since the pandemic was declared, that closed since the baseline Enterprise Survey for each country, and firms that could not be contacted during the survey.

Figure 3.3. Percentage change in monthly sales relative to one year ago, by country

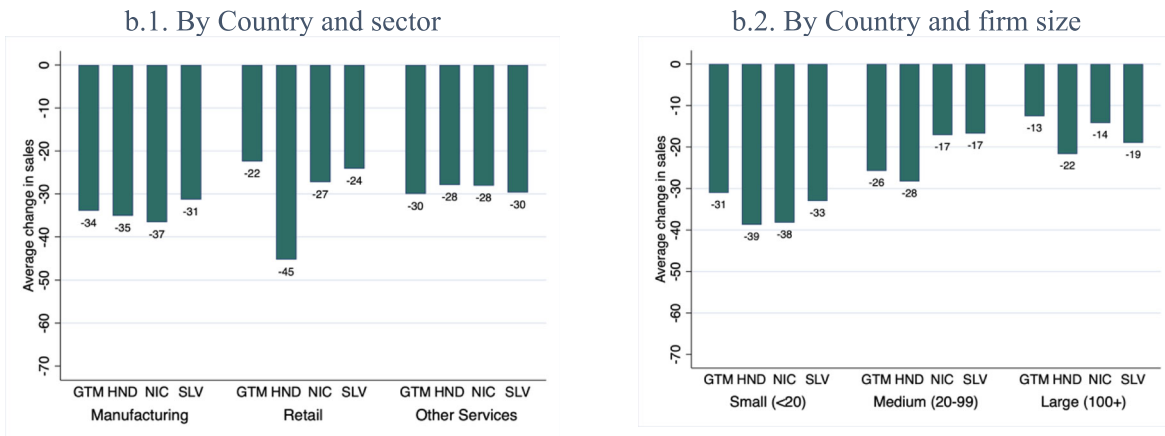


**Source:** World Bank COVID-19 Business Pulse Survey.

Figure 3.4. Average change in monthly sales relative to one year ago, by country, sector, and firm size  
Round 1. Aug 2020/Aug 2019



Round 2. Jan. 2021/Jan. 2020



Source: World Bank COVID-19 Business Pulse Survey.

### Liquidity

Over 80 percent of firms report a decrease in liquidity or cash flow availability since COVID-19 began. Even though large firms saw a smaller decrease relative to their peers, seven out of ten experienced a decrease in cash flow in all four countries. With significant drops in sales and cashflow, businesses have struggled to cover their fixed operating costs. In August 2020, a third of firms in Honduras, Nicaragua and El Salvador were overdue on obligations to financial institutions relative to 20 percent in Guatemala. In January 2021, this dropped in all countries but Nicaragua, where firms were more likely to be overdue on financial obligations (Figure 3.5). This reduction in overdue obligations with financial intermediaries might be related to the restructuring of obligations that many financial intermediaries offered to firms, and it was not necessarily an improvement in the financial performance of firms. In fact, firms increased the percentage of delayed payments to suppliers, landlords, or tax administration (Figure 3.6). The higher effect of the pandemic on smaller firms is also evident in terms of financial constraints as they were more likely to delay payments to suppliers relative to large firms.

Figure 3.5. Share of firms overdue on obligations to financial institutions, by survey round

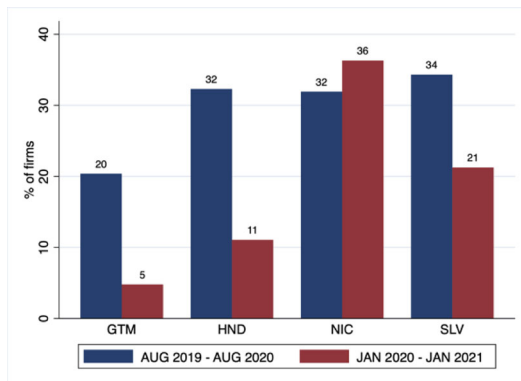
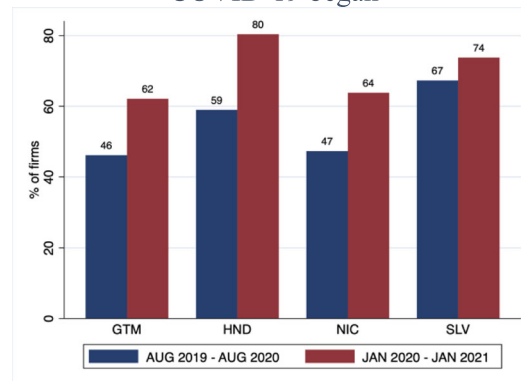


Figure 3.6. Share of firms that delayed payments on suppliers, landlords and the tax authority since COVID-19 began



Source: World Bank COVID-19 Business Pulse Survey.

### Employment

As a response to the reduction in sales and liquidity, firms reduced employment and wages. Most of the employment response has been through adjustments on the intensive margin (reducing wages, furlough workers or fewer hours worked). A smaller share of firms has laid off workers. Nonetheless, there's significant heterogeneity across and within countries. As Figure 3.7 shows, at the peak of lockdown, approximately nine out of ten of firms across Northern Triangle countries and over two thirds in Nicaragua, resorted to laying off workers or adjusting on the intensive margin, particularly by reducing the number of hours worked. By January 2021, as mobility restrictions were eased and Central American economies started showing signs of recovery, this figure dropped between 10-20 percentage points, especially in terms of hours worked. In Honduras, a larger share of firms was likely to furlough workers (43 percent) in August 2020 relative to their peers (ranging from 19 percent in Nicaragua to 36 percent in Guatemala). This is in line with the policies implemented by the Honduran government, as we saw in Table 2.1, by law firms could furlough workers without pay for up to three months. Official statistics from El Salvador,<sup>27</sup> Guatemala,<sup>28</sup> and Honduras<sup>29</sup> estimate 3 percent (25,000 jobs), 4.5 percent (61,000 jobs), and 4.7 percent (180,000 jobs) of employment loss between 2019 and 2020.<sup>30</sup>

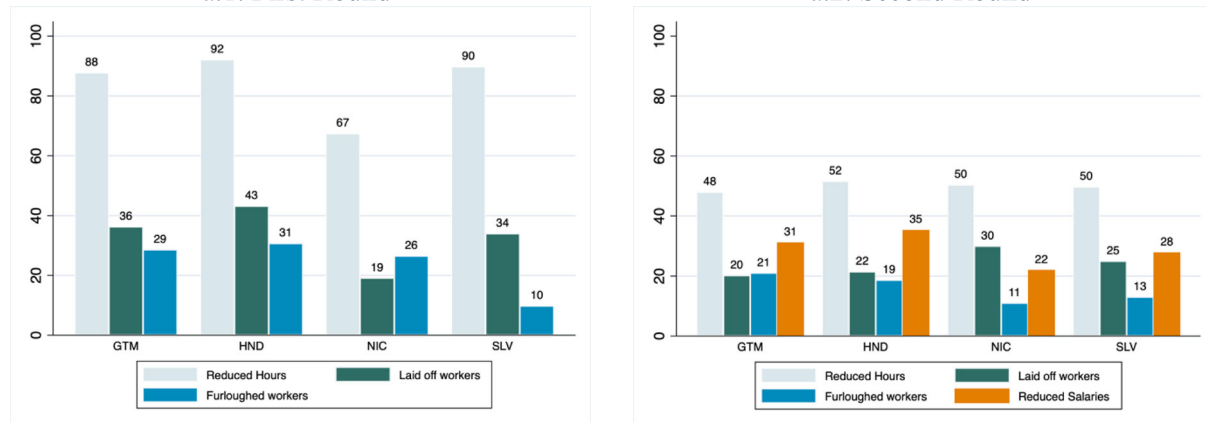
<sup>27</sup> Instituto Salvadoreño del Seguro Social (ISSS) <https://www.transparencia.gob.sv/institutions/iss/estadisticas>

<sup>28</sup> Ministerio de Economía Guatemala. <https://www.prensalibre.com/economia/igss-pierde-41-mil-afiliados-en-2020-por-que-es-una-alerta-roja-para-el-empleo-formal/>

<sup>29</sup> Instituto Nacional de Estadísticas de Honduras. Encuesta Permanente de Hogares de Propósitos Múltiples 2020.

<sup>30</sup> Estimates for job loss from the WB COVID-19 Business Pulse Surveys may differ from official country estimates as the survey only includes formal firms and uses a different time period than official statistics.

Figure 3.7. Firms' employment response, by country and survey round.  
a.1. First Round<sup>(1)</sup> a.2. Second Round<sup>(2)</sup>



**Source:** World Bank COVID-19 Business Pulse Survey. **Notes:** (1) June 2020-August 2020. In the first round there is no information about reduced wages. (2) November 2020-January 2021.

Table 3.2 shows four important facts about the response of firms in terms of employment. First, the employment response was highly correlated to the shock in sales suffered by firms. The higher the reduction in sales suffered by firms the higher the probability of reducing hours worked, furloughing employees, reducing wages, and at a lesser extent, laying off workers. Second, during the second round only the probability of firms reducing hours and furloughing employees was lower, the probability of laying off workers remained constant. As of January 2021 (the moment in which the second round was collected), there is no evidence that firms that are recovering and increasing sales are hiring full-time permanent employees. Third, the response of firms in terms of employment seems to be generalized. In fact, after considering the change in sales, there is no significant differences by size, age, sector, export condition, or if the firm is women-led. Finally, labor regulations affected the decision of firms reducing wages and laying off workers. While labor regulations that were considered as obstacle by firms did not increase the probability of reducing hours or furloughing workers, they increased the probability of reducing wages and laying off workers. This finding is consistent with the literature showing that in less developed countries more stringent labor regulations are associated with lower formal employment and higher informal employment (Nataraj et al 2014). They are also in line with Kaplan (2009), who finds that less stringent labor regulations would increase formal employment in Latin American countries, especially in SMEs.

Female employment was disproportionately affected by the crisis. At the peak of the pandemic, over a third of female workers were laid off in all countries. Nonetheless by early 2021, in all countries but El Salvador, the proportion of female workers among those laid off decreased, this potentially reflects the post-COVID economic recovery in 2021. The proportion of female workers among furloughed workers increased between August 2020 and January 2021 in all countries except Guatemala (Figure 3.8).

Evidence from the World Bank High Frequency Phone Surveys also shows women were more likely than men to lose their jobs towards the end of 2020 relative to mid-2020. At the onset of the crisis, women were 25 percentage points more likely than men to be unemployed in Honduras. Furthermore, job losses were concentrated in female-intensive sectors such as personal services, education and hotels and restaurants. The persistence of the COVID-19 crisis has inevitably increased childcare and household needs, making it more likely for women to leave their jobs to become the family primary caregiver (World Bank 2021).



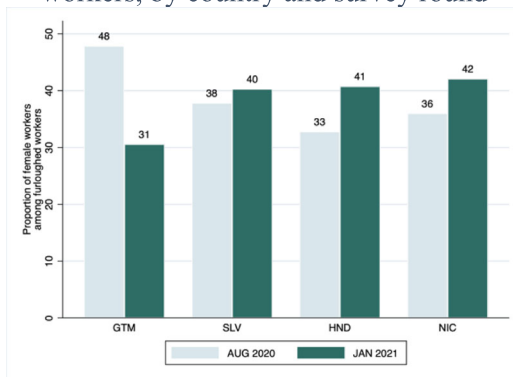
**Table 3.2. Firms' employment response**

	1 = Reduced hours	1 = Furloughed	1 = Reduced wages <sup>(1)</sup>	1 = Laid off workers
Change in sales	-0.4698*** (0.0283)	-0.2571*** (0.0331)	-0.3018*** (0.0487)	-0.0864** (0.0353)
Round 2	-0.2179*** (0.0219)	-0.0817*** (0.0244)	-	-0.0050 (0.0275)
Labor regulations <sup>(2)</sup>	0.1920 (0.1414)	0.1562 (0.1719)	0.4415** (0.2248)	0.3616** (0.1758)
Medium-sized	-0.0629** (0.0292)	0.0352 (0.0362)	-0.0526 (0.0471)	0.0312 (0.0367)
Large	-0.0869*** (0.0327)	0.0398 (0.0383)	-0.0556 (0.0479)	0.1378*** (0.0426)
Age	0.0022 (0.0019)	-0.0034 (0.0023)	-0.0010 (0.0027)	-0.0024 (0.0024)
Age squared	-0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
Retail	0.0160 (0.0270)	-0.0600* (0.0327)	-0.0120 (0.0425)	0.0385 (0.0335)
Other services	-0.0256 (0.0253)	-0.0132 (0.0299)	0.0115 (0.0382)	0.0547* (0.0317)
Women-led	-0.0036 (0.0255)	0.0302 (0.0317)	-0.0021 (0.0408)	-0.0213 (0.0291)
Exporter	-0.0430 (0.0336)	-0.0279 (0.0368)	-0.0860** (0.0421)	-0.0197 (0.0423)
Honduras	-0.0350 (0.0465)	0.0404 (0.0581)	-0.1141 (0.0756)	0.0667 (0.0582)
Guatemala	-0.0223 (0.0426)	0.0853 (0.0528)	-0.1111* (0.0668)	0.0393 (0.0545)
Nicaragua	-0.0465 (0.0292)	-0.0307 (0.0320)	-0.0564 (0.0390)	0.0680** (0.0334)
Constant	0.5394*** (0.0593)	0.2553*** (0.0700)	0.1182 (0.0859)	0.0163 (0.0717)
N. obs.	1.731	1.516	875	1.248
R-squared	0.28	0.09	0.07	0.05

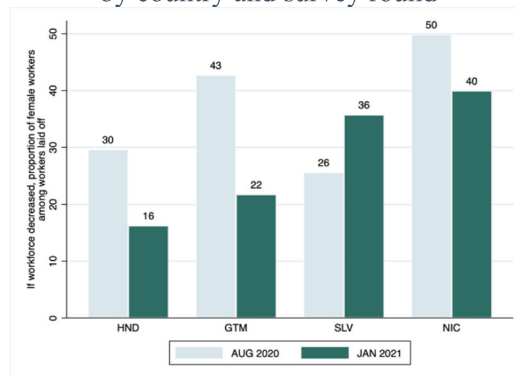
**Notes:** (1) Only available for second round. (2) Labor regulations is the average by country, sector, and firm size category of a dummy variable that takes the value one if firms reported that labor regulations are a moderate, major, or a very severe obstacle in the latest Enterprise Surveys. The latest World Bank Enterprise Survey are 2016 for El Salvador, Honduras and Nicaragua and 2017 for Guatemala 2017. (3) Robust standard errors in parenthesis. (4) \*, \*\*, \*\*\*, Significant at 10%, 5%, and 1%.

Figure 3.8. Effect on female employment

a. Share of female workers among furloughed workers, by country and survey round



b. Share of female workers among workers laid off, by country and survey round



Source: World Bank COVID-19 Business Pulse Survey.

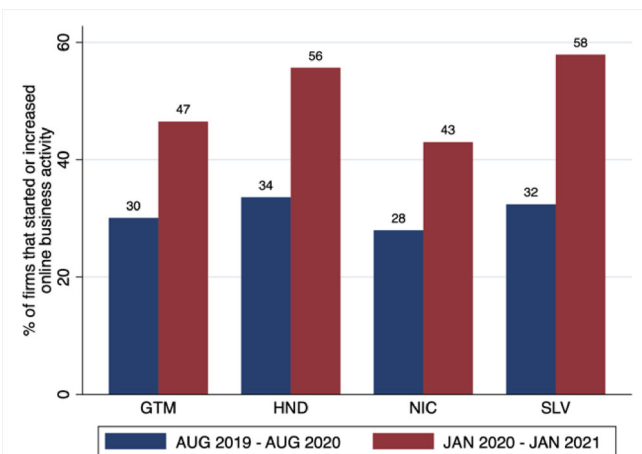
**Online business activity and remote work**

Another prevalent response among firms to cope with the pandemic has been to expand or implement the use of digital platforms and remote work. Most Central American firms started or increased online business

activity. Even though this was less likely among smaller firms, over a third started online activity (Figure 3.9). Likewise, even though the possibility of telecommuting is limited across Central America as less than half have access to the internet or fixed broadband connectivity (ITU 2018), as of January 2021, 60 percent of firms in Honduras, nearly half in Guatemala and El Salvador and 25 percent in Nicaragua started or increased remote work. Nonetheless this represents a mere 14 percent of the workforce in Guatemalan firms working remotely in August 2020 and only 8 percent in Nicaragua. This figure dropped to 11 and 6 percent respectively in January 2021. Large firms and those in the services sector were able to accommodate a larger share of their workforce towards remote work relative to their peers (Figure 3.10).

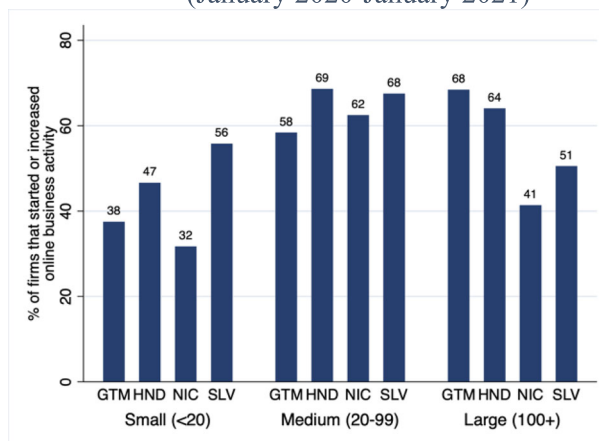
Figure 3.9. Share of firms that started or increased online business activity

a. by country and survey round



b. by country and firm size

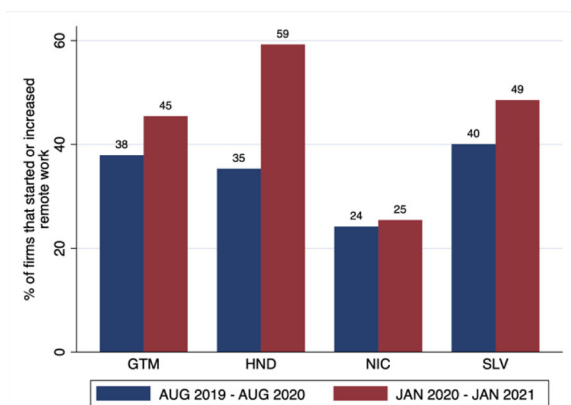
(January 2020-January 2021)



Source: Estimates using World Bank COVID-19 Business Pulse Survey.

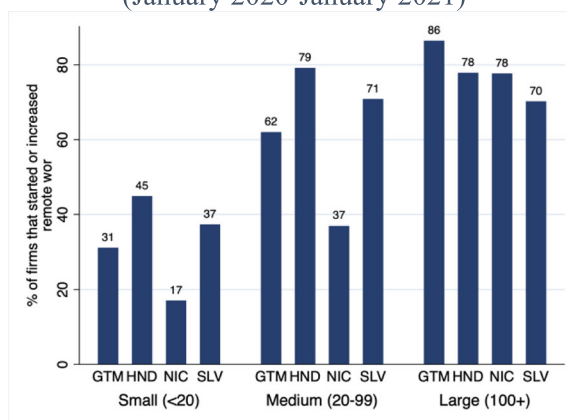
Figure 3.10. Share of firms that started or increased remote work

a. by country and survey round



b. by country and firm size

(January 2020-January 2021)



Source: Estimates using World Bank COVID-19 Business Pulse Survey.

#### 4. Firm level public policy support

In Table 2.1 we presented the policies governments applied to counter the health and economic effects of the pandemic. In this section, we focus on the policies implemented at the firm level.

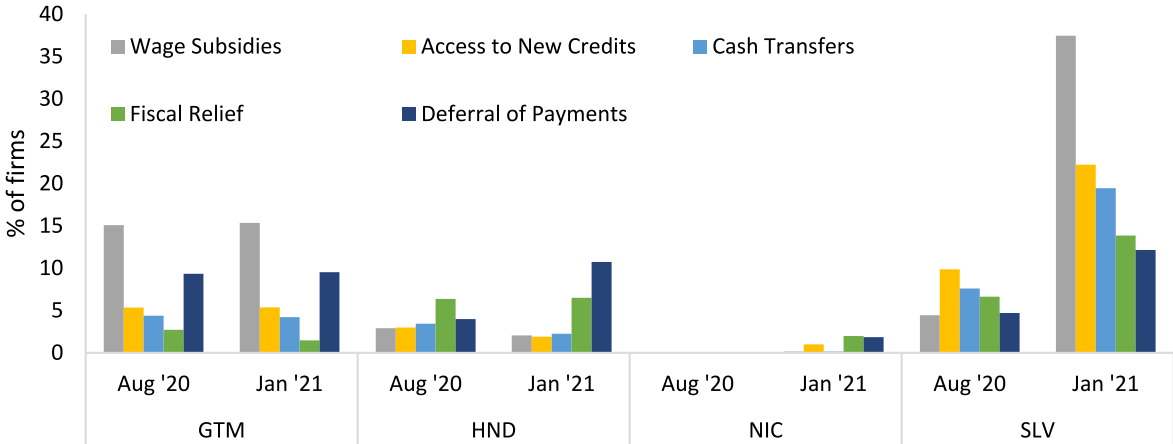
The percentage of firms that received COVID19 related public sector support varied significantly per country. As of January 2021, El Salvador stands out with the highest percentage of firms (43 percent) that received or expect to receive support. Most of these firms received support during the second half of 2020. In the rest of countries, this percentage was considerably lower: 14 percent in Honduras, 11 percent in Guatemala, and only 3 percent in Nicaragua.

To study the targeting of the public support we estimated the probability of receiving or expecting to receive public support using a multinomial logit model. The dependent variable is a qualitative variable that takes three values: 0 if the firm did not receive public support, 1 if the firm received public support, and 2 if the firm did not receive public support but expects to receive it in the following three months. We estimated the model including one by one the variables that characterize the shock and firm reaction; reduction in sales, closed temporarily, reduced employment, and furloughed workers. Table 4.1 shows the marginal effects of each estimation. These estimates show that public support targeted firms that suffered a reduction in sales, closed temporarily, reduced employment, and furloughed workers. When all variables are considered together, the variable that seems to explain receiving public policy is whether the firm furloughed workers.

Despite of being the most affected, firms with 20 workers or less were less likely to receive or expect government assistance in all countries. Medium-sized and older firms benefited more from public support. Exporters, on the other hand, have a lower probability of receiving public support. Female-led firms do not have higher probability of receiving public support. However, they have a higher probability of expecting to receive public support in the following three months. Thus, even when there is no negative effect on receiving public support, women are more likely to be on the waiting list to receive the support.

The type of government assistance received also varied across countries. In El Salvador, 37 percent of firms in the sample received wage subsidies, approximately 20 percent access to new credit and cash transfers and only 12 percent deferral of payments. In contrast, deferral of payments and wage subsidies were the most common type of assistance among Honduran and Guatemalan firms respectively (10 and 10.7 percent) (Figure 4.1).

Figure 4.1. Share of firms receiving/expecting to receive COVID-19 related assistance from the Government, by type of Government Assistance



Source: Estimates using World Bank COVID-19 Business Pulse Survey. Note: Estimates reported for Round 1 and 2.

Table 4.1. Targeting of the government assistance.

	(1)		(2)		(3)		(4)		(5)		(6)	
	Received	Waiting	Received	Waiting	Received	Waiting	Received	Waiting	Received	Waiting	Received	Waiting
Reduction sales	0.0298 (0.0196)	0.0457** (0.0180)							0.0121 (0.0227)		0.0121 (0.0227)	0.0407* (0.0215)
Temporary Closed		0.0634*** (0.0201)	0.0343** (0.0147)						0.0243 (0.0218)		0.0243 (0.0218)	0.0279 (0.0182)
Furloughed					0.0651*** (0.0179)	0.000571 (0.0137)			0.0612*** (0.0204)		0.0612*** (0.0204)	-0.0125 (0.0156)
Reduced permanent employees							0.0167 (0.0166)	0.0195 (0.0119)	-0.00182 (0.0195)		-0.00182 (0.0195)	0.0127 (0.0143)
Reduced Temporary employees									0.0298*	0.0110	0.0212	0.0105
Firm age	0.00290* (0.00158)	0.000796 (0.00120)	0.00241 (0.00166)	0.000128 (0.00128)	0.00416** (0.00164)	0.00191 (0.00140)	0.00306* (0.00157)	0.000541 (0.00119)	0.0164 (0.00330**)	0.0120 (0.000565)	0.0193 (0.00380**)	0.0139 (0.00130)
Firm age squared	-0.000026 (0.000018)	-0.0000083 (0.000014)	-0.000021 (0.000018)	-0.0000028 (0.000015)	-0.000039** (0.000018)	-0.000027* (0.000016)	-0.000028 (0.000018)	-0.0000060 (0.000013)	0.000160 (0.000035)	0.00118 (0.0000058)	0.00187 (0.000035)	0.00154 (0.000022)
Small firms	0.00537 (0.0233)	0.00678 (0.0206)	-0.00226 (0.0240)	0.00308 (0.0210)	0.00939 (0.0235)	0.00574 (0.0201)	0.00597 (0.0231)	0.0126 (0.0201)	0.00442 (0.0233)	0.0180 (0.0197)	-0.00419 (0.0260)	0.0132 (0.0232)
Medium-sized firms	0.120*** (0.0254)	-0.0271 (0.0182)	0.119*** (0.0268)	-0.0319* (0.0183)	0.137*** (0.0266)	-0.0320 (0.0203)	0.119*** (0.0254)	-0.0239 (0.0174)	0.144*** (0.0256)	-0.0200 (0.0169)	0.144*** (0.0300)	-0.0259 (0.0205)
Exporter	-0.0551** (0.0280)	-0.0453* (0.0251)	-0.0516* (0.0293)	-0.0570** (0.0260)	-0.0305 (0.0289)	-0.0725** (0.0302)	-0.0526* (0.0280)	-0.0488* (0.0250)	-0.0468* (0.0276)	-0.0436* (0.0246)	-0.0547* (0.0327)	-0.0662** (0.0327)
Foreign	-0.0301 (0.0276)	0.0181 (0.0193)	-0.0356 (0.0292)	0.0243 (0.0186)	-0.0374 (0.0298)	0.0285 (0.0205)	-0.0303 (0.0273)	0.0223 (0.0188)	-0.0306 (0.0280)	0.0179 (0.0193)	-0.0535 (0.0332)	0.0282 (0.0215)
Women-led	0.00273 (0.0211)	0.0334** (0.0139)	0.00659 (0.0234)	0.0267* (0.0155)	0.0172 (0.0222)	0.0362** (0.0156)	0.00417 (0.0213)	0.0342** (0.0140)	0.00751 (0.0217)	0.0376*** (0.0140)	0.0219 (0.0250)	0.0292 (0.0184)
Retail	0.0156 (0.0215)	-0.0311** (0.0146)	0.00537 (0.0225)	-0.0375** (0.0149)	0.0184 (0.0222)	-0.0372** (0.0163)	0.0228 (0.0217)	-0.0354** (0.0148)	0.0158 (0.0217)	-0.0363** (0.0150)	0.00987 (0.0248)	-0.0414** (0.0184)
Other services	0.0111 (0.0197)	-0.0181 (0.0151)	0.0116 (0.0209)	-0.0198 (0.0160)	0.0232 (0.0202)	-0.0245 (0.0165)	0.0167 (0.0197)	-0.0232 (0.0152)	0.0174 (0.0224)	-0.0285* (0.0178)	0.0211 (0.0295)	-0.0358** (0.0181)
Honduras	-0.0795*** (0.0235)	-0.0429** (0.0175)	-0.0962*** (0.0252)	-0.0332* (0.0183)	-0.0442* (0.0251)	-0.0406** (0.0194)	-0.0758*** (0.0236)	-0.0424** (0.0177)	-0.0836*** (0.0235)	-0.0367** (0.0178)	-0.0801*** (0.0217)	-0.0296 (0.0217)
Guatemala	0.00547 (0.0259)	-0.0337* (0.0173)	-0.0284 (0.0264)	-0.0306* (0.0170)	0.0224 (0.0261)	-0.0344* (0.0189)	0.00986 (0.0264)	-0.0372** (0.0173)	0.00574 (0.0259)	-0.0302* (0.0173)	-0.0263 (0.0278)	-0.0288 (0.0197)
Nicaragua	-0.191*** (0.0160)	-0.0946*** (0.0116)	-0.196*** (0.0186)	-0.0847*** (0.0124)	-0.180*** (0.0160)	-0.0989*** (0.0126)	-0.194*** (0.0159)	-0.0958*** (0.0118)	-0.194*** (0.0164)	-0.0914*** (0.0110)	-0.202*** (0.0196)	-0.0904*** (0.0145)
Round 2	0.160*** (0.0162)	0.0182 (0.0120)	0.151*** (0.0166)	0.0172 (0.0120)	0.172*** (0.0179)	0.0242* (0.0131)	0.152*** (0.0161)	0.00989 (0.0116)	0.154*** (0.0162)	0.0110 (0.0117)	0.166*** (0.0196)	0.0262 (0.0149)
N. obs.		1820		1596	1611	1611	1808	1808	1783	1783	1269	1269

Notes: Multinomial logit marginal effects. Robust standard errors in parenthesis. Significant at 10%, 5%, and 1%.



## 5. Conclusion

The COVID-19 pandemic has depressed economic activity around the world. Central America's high levels of informal employment, weak health systems, and lack of social protection have further aggravated the crisis. Countries have implemented diverse policies focused on both public health and the economy in response to the COVID-19 pandemic. Even though Nicaragua is the only country in the region that did not impose strict lockdowns in 2020 and reported the lowest number of cases according to official statistics, economic activity still declined and estimates of excess mortality indicate the number of deaths were 59 percent higher in 2020 than in a typical year.<sup>31</sup>

Since the COVID-19 outbreak, 1 in 4 formal businesses in El Salvador, Guatemala, Honduras, and Nicaragua have closed or are assumed to have permanently closed. During the peak of lockdowns, 77 percent of firms in Central America's Northern Triangle temporarily closed. In Nicaragua, 34 percent of firms temporarily closed. Firms in all four countries experienced drops in sales during the COVID-19 crisis, either due to strict lockdown measures or because of a reduction in demand (local or external). Between January 2020 and January 2021, monthly sales dropped by a third on average in all countries. Even though businesses were not forced to close in Nicaragua, sales still decreased by 30 percent, possibly reflecting changing consumer demand. The COVID-19 outbreak has also led to severe difficulties for firms to meet financial obligations. Over 80 percent of firms across Central America report a decrease in liquidity or cash flow availability since the crisis began. Overall, small firms exhibited the largest declines in sales and faced greater liquidity constraints in all countries.

The drop in sales and liquidity has forced firms to adjust their business operations. The employment response to the COVID-19 shock has been primarily through the intensive margin. Firms have opted to reduce total hours worked, reduce wages or furlough workers. At the peak of lockdown, approximately 9 out of 10 firms across Northern Triangle countries and over two-thirds in Nicaragua, resorted to laying off workers or adjusting the intensive margin.

Another response by firms to cope with the pandemic has been to expand or implement telework and the use of digital platforms. Even though the possibility of remote work is limited across Central America (a mere 11 percent of the workforce is employed by teleworking firms), over half of firms among Northern Triangle countries and a quarter in Nicaragua started or increased remote work. Likewise, the majority of Central American firms started or increased online business activity. Technology adoption likely contributed to mitigating the impact on employment.

Despite increases in public spending and several policies to mitigate the economic and social impacts of the pandemic, few formal firms received government assistance. Approximately only 1 in 10 firms in Guatemala and Honduras were likely to receive or expected to receive government assistance as of January 2021, followed by only 3 percent in Nicaragua. Deferral of payments and wage subsidies were the most common type of government assistance. As of January 2021, the majority of firms in all four countries identified fiscal relief as their most pressing need.

Female employment was disproportionately affected by the crisis as women were more likely to leave their jobs to become the primary caregiver of the household (UNESCO 2020; United Nations 2020; World Bank 2021; Facebook et al. 2020). Job losses were also concentrated in female-intensive sectors such as personal services, education, and hospitality.

Significant uncertainty remains over the path to recovery. In the short-term, it will largely depend on the duration of the pandemic and each country's ability to control the spread of the virus. Even though vaccine rollouts have begun across Central America, governments are having trouble securing vaccines for their population and lack an efficient system to distribute and administer them. As of June 8, 2021, less than 41 percent of the population had received at least one vaccine dose in Guatemala, Honduras, and Nicaragua,

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<sup>31</sup> <https://www.ft.com/content/a2901ce8-5eb7-4633-b89c-cbdf5b386938>. Excess mortality for Guatemala in 2020 was 20%.

relative to 19 percent in El Salvador and over 58 percent in Chile.<sup>32</sup> Without a strong vaccination campaign, economic activity will likely remain stagnant as several countries have limited business operations to prevent COVID-19 outbreaks. In the long-run, it remains unclear if COVID-19 will have a permanent effect on employment. If strict lockdown measures are reinstated, firms may be unable to operate and resort to permanent layoffs.

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<sup>32</sup> <https://ourworldindata.org/covid-vaccinations>

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## 6. Annex

**Table 7.1. Labor Market Indicators, by country**

	SLV	GTM	HND	NIC
<b>Informal sector (% of employed population)</b>	<b>72.2</b>	<b>80.7</b>	<b>82.6</b>	<b>76.6</b>
<b>Employment by sector (% of total employment)</b>				
<b>Agriculture</b>	<b>16.3</b>	<b>31.3</b>	<b>29.5</b>	<b>30.6</b>
Female (% of female employment)	3.4	9.8	8.3	8.2
Male (% of male employment)	25.6	41.8	42.3	44.7
<b>Industry</b>	<b>22.5</b>	<b>18.7</b>	<b>21.4</b>	<b>16.2</b>
Female (% of female employment)	17.7	17.1	19.0	12.3
Male (% of male employment)	26.0	19.5	22.8	18.7
<b>Services</b>	<b>61.2</b>	<b>50.0</b>	<b>49.1</b>	<b>53.2</b>
Female (% of female employment)	78.9	73.2	72.7	79.5
Male (% of male employment)	48.3	38.7	34.9	36.6
<b>Employment by firm size (% of employed population)</b>				
Small private firms	35	33	21	-
Large private firms	57	60	69	-

**Source:** Inter-American Development Bank, Labor Markets and Social Security Information System (informal sector, ages 15-64); World Development Indicators (employment by sector, Modeled ILO estimates); World Bank Latin America and the Caribbean (LAC) Equity Lab (employment by firm size, ages 18-65).

**Note:** Latest available year for each country, circa 2019.