IMPACT OF THE COVID-19 CRISIS ON FIRMS
FINDINGS FROM THE ENTERPRISE SURVEY FOLLOW-UP IN GEORGIA AND ARMENIA

SUMMER UNIVERSITY
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ENTERPRISE SURVEYS

Context and Methodology
Background on Enterprise Surveys

• **Objectives**
  1. To obtain an overall description of the business environment in a country, which is comparable across the world.
  2. To obtain basic financial information that allows measuring the effect of the environment on selected quantitative variables (productivity, performance, access to credit, growth, employment).

• **Coverage**
  • Standard Enterprise Surveys administered to over 165,000 firms in 144 countries.

• **Standard Methodology**
  • Representative sample of the non-agricultural, non-extractive formal private economy.
  • Survey results are comparable across countries.
  • Stratification by three dimensions.
    • Sector
    • Firm Size
    • Geographic Location

• The **Enterprise Surveys in Armenia and Georgia** were part of a larger joint project with EBRD and EIB in 43 economies in ECA and MENA.
  • The Armenia and Georgia projects were expanded through cooperation between DEC and POV to include a module on Micro firms.

Baseline Survey Details

Georgia

• Fieldwork Period: March - December 2019
• Sample Size: 701 interviews
• Coverage: Entire country in 4 regions
• Size Categories:
  • Micro (1-4)
  • Small (5-19)
  • Medium (20-99)
  • Large (100+)
• Universe Source: GeoStat

Armenia

• Fieldwork Period: December 2019 - Ongoing
• Sample Size (Target): 700 interviews
• Coverage:
  • Yerevan
  • Gyumri
  • Vanadzor
• Size Categories:
  • Micro (1-4) COMPLETED
  • Small (5-19)
  • Medium (20-99)
  • Large (100+)
• Universe Source: Statistical Committee of Republic of Armenia
  • Sampling Frame self-constructed through block enumeration

Sectoral Coverage

**ISIC Rev.3.1**

- **A** - Agriculture, hunting and forestry
- **B** - Fishing
- **C** - Mining and quarrying
- **D** - Manufacturing
- **E** - Electricity, gas and water supply
- **F** - Construction
- **G** - Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
- **H** - Hotels and restaurants
- **I** - Transport, storage and communications
- **J** - Financial intermediation
- **K** - Real estate, renting and business activities
- **L** - Public administration and defense; compulsory social security
- **M** - Education
- **N** - Health and social work
- **O** - Other community, social and personal service activities
- **P** - Activities of private households as employers and undifferentiated production activities of private households
- **Q** - Extraterritorial organizations and bodies

COVID-19 Emerges – how can we assess the Impact on the private sector?

- Countries with recent ES
- Countries with ES currently in the field
- Countries with upcoming ES

Measuring impact of Covid-19 on the private sector via follow-up surveys in 39 countries

Expand the questionnaire to include a module on COVID-19

Why a Follow-up Survey?

- **Analytical (Natural Experiment):**
  - Full baseline data pre-outbreak enables *before and after* analysis
  - Representative sample of the private sector excluding agriculture and extractive industries provides metrics of *exit* and *magnitude* of changes

- **Implementation:**
  - Existing contracts with local vendors allows *faster* contracting
  - **Existing processes** (Samples/Training/Quality Assurance)
  - Existing relationship with respondents along with full *updated contact information* (phone numbers and emails)

Baseline and Follow-up Questionnaires

Implementation

- Phone interviews using CATI system for about 15 minutes
- All contacts on the baseline are attempted
- 3 waves:
  - ASAP
  - After 3 months
  - After 6 months
- Questionnaire to be adapted with the evolution of the crisis
- Collection time: approximately 2 weeks

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Interview Time</th>
<th>Length of Fieldwork</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia (June)</td>
<td>17 Minutes</td>
<td>9 Days</td>
<td>87.5%</td>
</tr>
<tr>
<td>Georgia (June)</td>
<td>11 Minutes</td>
<td>8 Days</td>
<td>87.6%</td>
</tr>
<tr>
<td>Moldova (May)</td>
<td>16 Minutes</td>
<td>9 Days</td>
<td>79.4%</td>
</tr>
</tbody>
</table>

Coverage of ES Follow-up Surveys

Universe Projections

• In Standard ES, the probability of selection is:

\[ p_{ijh} = \frac{n_{ijh}}{N_{ijh}} \]

Therefore, the sampling weights are:

\[ w_{ijh} = \frac{1}{p_{ijh}} = \frac{N_{ijh}}{n_{ijh}} \]

• The Follow-up Survey datasets provides a set of 3 weights to users:
  • \texttt{wmedian\_ES} (baseline weights with no adjustments) - used to compute exit rates.
  • \texttt{wmedian\_COVID} (assuming unreachable contacts have discontinued) - used to compute indicators.
  • \texttt{wweak\_COVID} (assuming unreachable contacts continue to exist).

<table>
<thead>
<tr>
<th>Recorded Status</th>
<th>Median Assumption</th>
<th>Weak Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Firm</td>
<td>Confirmed Survivor</td>
<td>Confirmed Survivor</td>
</tr>
<tr>
<td>The firm discontinued businesses - (Establishment went bankrupt)</td>
<td>Confirmed Exit</td>
<td>Confirmed Exit</td>
</tr>
<tr>
<td>The firm discontinued businesses - (Original establishment disappeared and is now a different firm)</td>
<td>Confirmed Exit</td>
<td>Confirmed Exit</td>
</tr>
<tr>
<td>The firm discontinued businesses - (Establishment was bought out by another firm)</td>
<td>Confirmed Exit</td>
<td>Confirmed Exit</td>
</tr>
<tr>
<td>The firm discontinued businesses - (It was impossible to determine for what reason)</td>
<td>Confirmed Exit</td>
<td>Confirmed Exit</td>
</tr>
<tr>
<td>The firm discontinued businesses - (Other)</td>
<td>Confirmed Exit</td>
<td>Confirmed Exit</td>
</tr>
<tr>
<td>Refuses to answer the follow-up</td>
<td>Likely Survivor</td>
<td>Likely Survivor</td>
</tr>
<tr>
<td>No reply after having called in different days of the week and in different business hours</td>
<td>Likely Exit</td>
<td>Likely Survivor</td>
</tr>
<tr>
<td>Line out of order</td>
<td>Likely Exit</td>
<td>Likely Survivor</td>
</tr>
<tr>
<td>No tone</td>
<td>Likely Exit</td>
<td>Likely Survivor</td>
</tr>
<tr>
<td>Phone number does not exist</td>
<td>Likely Exit</td>
<td>Likely Survivor</td>
</tr>
<tr>
<td>Answering machine</td>
<td>Likely Survivor</td>
<td>Likely Survivor</td>
</tr>
<tr>
<td>Fax line- data line</td>
<td>Likely Survivor</td>
<td>Likely Survivor</td>
</tr>
</tbody>
</table>

Estimated Exit Rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Confirmed Exit</th>
<th>Assumed Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>2.6%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Italy</td>
<td>7.2%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Moldova</td>
<td>1.3%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Armenia</td>
<td>3.8%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Russia</td>
<td>3.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Greece</td>
<td>0.8%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Georgia</td>
<td>2.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Albania</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

BASELINE RESULTS
Financial Integration pre-COVID

Main Obstacles to Firms pre-COVID

Innovators may be able to adapt

COVID-19 FOLLOW-UP

Key Findings
Timeline


Mar 16. Government of Armenia declares state of emergency


Feb 29. Georgia closes schools.

Mar 1st. First COVID-19 case reported in Armenia


Mar 16. Government of Armenia declares state of emergency


Source: WHO (2020); Government of Georgia; Wikipedia.
Notes: BEEPS = Business Environment and Enterprise Performance Survey.
COVID-19 FOLLOW-UP

Key Findings in Georgia
1) External shock

Observed changes in demand and supply
(compared to the same month in 2019)

Demand for products and services

- Decreased demand for products or services: 80%
- Increased demand for products or services: 8%
- None: 12%

Supply of inputs, raw materials, or other intermediate inputs

- Decreased supply of inputs, raw materials, or other intermediate inputs: 80%
- Increased supply of inputs, raw materials, or other intermediate inputs: 11%
- None: 61%

1) External shock

Impact on sales

Observed changes in monthly sales, compared to one year ago

<table>
<thead>
<tr>
<th>Country Average</th>
<th>Micro(1-4)</th>
<th>Small(5-20)</th>
<th>Medium(20-99)</th>
<th>Large(100+)</th>
<th>Manufacturing</th>
<th>Services</th>
<th>Exporter</th>
<th>Non-exporter</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1) External shock

Impact on sales in Georgia

Change in monthly sales compared to one year ago

2) Firm adjustments: Closures

Temporary and permanent closures

2) Firm adjustments: Closures

Temporary and permanent firm closures

<table>
<thead>
<tr>
<th></th>
<th>Ever temporarily closed during the COVID-19 outbreak (% of surviving firms)</th>
<th>Permanently closed since COVID-19, confirmed (% of contacted firms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country Average</td>
<td>68.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Center</td>
<td>61.5</td>
<td>3.0</td>
</tr>
<tr>
<td>East</td>
<td>72.5</td>
<td>0.2</td>
</tr>
<tr>
<td>North and West</td>
<td>70.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Tbilisi</td>
<td>69.7</td>
<td>4.6</td>
</tr>
</tbody>
</table>

*Source: Enterprise Survey Follow-Up. Maps taken from Google Earth.*
2) Firm adjustments: Operations

Capacity adjustments in manufacturing, Georgia and Moldova

Capacity utilization in Georgia (%)

<table>
<thead>
<tr>
<th>Type</th>
<th>2019</th>
<th>COVID-19 Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (5-19)</td>
<td>65%</td>
<td>55%</td>
</tr>
<tr>
<td>Medium (20-99)</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>Large (100+)</td>
<td>80%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Capacity utilization in Moldova (%)

<table>
<thead>
<tr>
<th>Type</th>
<th>2019</th>
<th>COVID-19 Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (5-19)</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Medium (20-99)</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>Large (100+)</td>
<td>80%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: Enterprise Survey 2019 and Enterprise Survey Follow-Up. Notes: Capacity utilization is calculated based on the question “[...] what was this establishment’s output produced as a percentage of the maximum output possible if using all the physical capital available (capacity utilization)?”. Only manufacturing firms answer this question.
2) Firm adjustments: Operations

Firms adjusting or converting their production or services

Source: Enterprise Survey Follow-Up. Notes: Responding to the question “Has this establishment adjusted or converted, partially or fully, its production or the services it offers in response to the COVID-19 outbreak?”
2) Firm adjustments: Coping strategies

Coping strategies and innovation

- Started or increased online business activity
- Started or increased delivery of goods, services or carryout
- Started or increased remote work

Source: Enterprise Survey Follow-Up.
2) Firm adjustments: Workforce

Impact on full-time employment and hours worked

Change of permanent full-time workers since ES interview

<table>
<thead>
<tr>
<th>National</th>
<th>Size</th>
<th>Sector</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Average</td>
<td>Micro(1-4)</td>
<td>Small(5-20)</td>
<td>Medium(20-99)</td>
</tr>
<tr>
<td>Percent of firms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Changes in total hours worked per week

- Increased total hours worked per week
- Decreased total hours worked per week

Source: Enterprise Survey COVID-19 Follow-up.
2) Firm adjustments: Workforce

Impact on female workers

Proportion of female workers taking more than 5 days of leave or quitting

Source: Enterprise Survey COVID-19 Follow-up. Georgia.
2) Firm adjustments: Workforce

Impact on female workers

- Proportion of female workers among the workers laid off
- Proportion of permanent full-time workers that are female

Source: Enterprise Survey COVID-19 Follow-up. Georgia.
2) Firm adjustments: Finance

Cashflow shortages

Firms experiencing changes in cash flows

Use of credit

<table>
<thead>
<tr>
<th>Percent of firms experiencing</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro(1-4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small(5-20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium(20-99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large(100+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Enterprise Survey Follow-Up.
2) Firm adjustments: Finance

Main source of finance to face cashflow shortages

Source: Enterprise Survey Follow-Up. Notes: *Loans from non-banking financial institutions include “microfinance institutions, credit cooperatives, credit unions, or finance companies”. **Equity finance refers to “increase contributions or capital from existing owners/shareholders or issuing new shares”.
### 3) Government support

**Policy responses targeted at businesses**

<table>
<thead>
<tr>
<th>Category</th>
<th>Policy</th>
<th>Objective</th>
<th>Instrument</th>
<th>Eligibility and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial Support (Stage 1 &amp; 2)</strong></td>
<td>Fiscal stimulus</td>
<td>• Contain immediate impact of crisis on tourism firms.</td>
<td>• Tax deferral</td>
<td>• Property and income tax deferral until November 1st 2020 for firms in tourism.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Stimulate economic growth and support entrepreneurs.</td>
<td>• Tax returns</td>
<td>• Automatic VAT return.</td>
</tr>
<tr>
<td></td>
<td>Access to finance</td>
<td></td>
<td>• Credit subsidy for small hotels.</td>
<td>• Co-financing Mechanism for Supporting Family-owned, Small and Medium-size Hotels. Subsidizes 80 percent of interest payments during 6 months for small hotels (4 to 50 rooms).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Access to finance. • Improved liquidity. • Adequate risk management.</td>
<td>• Partial credit guarantees.</td>
<td>• Collateral scheme for SMEs in industries directly affected by the crisis. GEL 330 M allocated as credit collateral (secures approx. GEL 2 billion credit portfolio).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Micro-grants</td>
<td>• Development grants for small business, with increased amount.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Increase banking finance supply.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Long-term deposits.</td>
<td>• 600 M GEL long-term deposits to increase liquidity of commercial banks</td>
</tr>
<tr>
<td><strong>Sectoral Support (Stage 3)</strong></td>
<td>Recovery Plan for Tourism</td>
<td>• Foster sectoral recovery and economic activity.</td>
<td>Fiscal and financial instruments</td>
<td>• Continue several fiscal and financial incentives for tourism (Stage 1 &amp; 2). • Credit-guarantees for public catering. Subsidize guarantees for travel operators.</td>
</tr>
<tr>
<td></td>
<td>Recovery Plan for Construction</td>
<td>• Foster sectoral recovery and economic activity.</td>
<td>Credit subsidies. • Guarantees. • Public investment.</td>
<td>• Subsidy of ≤4% of nominal interest rate of mortgage contracts. • State guarantee of mortgage portfolio (issued 01/06/2020 – 01/01/2021). • Bulk State purchase of residential property by the State. State guarantee scheme for completion of residential property projects.</td>
</tr>
<tr>
<td><strong>Subsidy for Employers</strong></td>
<td></td>
<td>• Retain employment</td>
<td>Wage subsidy.</td>
<td>• State subsidy for every retained job for 6 months.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Other financial assistance</td>
<td>• Access to finance. • Safeguard financial system.</td>
<td>Financial instruments and regulations.</td>
<td>• Restructuring support for entities with difficulties servicing loans. • Three-month bank loan service deferral for individuals &amp; legal entities. • NBG measures to support capital &amp; liquidity, safeguard financial system. • Amendments to Enterprise Georgia State program: increase co-funding periods; broader range of activities; lower minimal loan; funding ≤ 80% of floating assets.</td>
</tr>
</tbody>
</table>

3) Government support

Coverage across firms

- Received national or local government assistance
- Expect to receive national or local government assistance

Source: Enterprise Survey COVID-19 Follow-up.
3) Government support

Source: Enterprise Survey COVID-19 Follow-up. Note: * Deferral of payments refers to “Deferral of credit payments, rent or mortgage, suspension of interest payments, or rollover of debt.” The category “Other assistance” is not presented in the graph due to limited observations.
4) Looking ahead

**Expected time to return to normal**

- Return to normal level of sales
- Return to normal level of workforce

<table>
<thead>
<tr>
<th>National</th>
<th>Size</th>
<th>Subsector</th>
<th>Region</th>
<th>Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Average</td>
<td>Micro(1-4)</td>
<td>Small(5-20)</td>
<td>Medium(20-99)</td>
<td>Large(100+)</td>
</tr>
<tr>
<td>Months</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Enterprise Survey COVID-19 Follow-up. Note: Only firms that are not at normal levels of sales and workforce are included.
4) Looking ahead

Survival and Liabilities

If sales stopped, average duration of establishment survival

[Bar chart showing survival and liabilities across different categories such as Country Average, National, Size, Micro (1-4), Small (5-20), Medium (20-99), Large (100+), and subsectors like Food Manufacturing, Other Manufacturing, Hotels & Restaurants, Retail, Other Services, Center, East, North and West, Tbilisi.]

Source: Enterprise Survey COVID-19 Follow-up.
COVID-19 FOLLOW-UP

Key Findings in Armenia
1) External shock

Observed changes in demand and supply
(compared to the same month in 2019)

Demand for products and services
- Decreased demand for products or services: 91%
- Increased demand for products or services: 2%
- None: 7%

Supply of inputs, raw materials, or other intermediate inputs
- Decreased supply of inputs, raw materials, or other intermediate inputs: 83%
- Increased supply of inputs, raw materials, or other intermediate inputs: 13%
- None: 4%

% of all (micro) firms

% of micro firms

Source: Enterprise Survey Follow-Up.
1) **External shock**

**Impact on sales in Armenia**

- **Observed changes in monthly sales compared to one year ago**
- **Change in monthly sales compared to one year ago**

<table>
<thead>
<tr>
<th></th>
<th>Country Average</th>
<th>Manufacturing</th>
<th>Services</th>
<th>Exporter</th>
<th>Non-exporter</th>
<th>Female manager</th>
<th>Male manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased sales</td>
<td>-61</td>
<td>-56</td>
<td>-63</td>
<td>-58</td>
<td>-61</td>
<td>-68</td>
<td>-58</td>
</tr>
<tr>
<td>Increased sales</td>
<td>-75</td>
<td>-65</td>
<td>-63</td>
<td>-58</td>
<td>-61</td>
<td>-68</td>
<td>-58</td>
</tr>
<tr>
<td>No change</td>
<td>-75</td>
<td>-65</td>
<td>-63</td>
<td>-58</td>
<td>-61</td>
<td>-68</td>
<td>-58</td>
</tr>
</tbody>
</table>

*Source: Enterprise Survey and Enterprise Survey Follow-Up.*
2) Firm adjustments: Closures

Temporary and permanent closures

Firms that have ever temporarily closed during the COVID-19 outbreak

- Gyumri
- Vanadzor
- Yerevan
- Manufacturing
- Services
- Female manager
- Male manager

Firms permanently closed since COVID-19 outbreak

- Confirmed
- Likely

Source: Enterprise Survey and Enterprise Survey Follow-Up.
2) Firm adjustments: Closures

Temporary and permanent closures

<table>
<thead>
<tr>
<th></th>
<th>Ever temporarily closed during the COVID-19 outbreak (% of surviving firms)</th>
<th>Permanently closed since COVID-19, confirmed (% of contacted firms)</th>
<th>Permanently closed since COVID-19, unconfirmed (% of contacted firms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>Country Average</td>
<td>88.5</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Gyumri</td>
<td>75.9</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Vanadzor</td>
<td>81.1</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Yerevan</td>
<td>91.1</td>
<td>5.6</td>
</tr>
</tbody>
</table>

2) Firm adjustments: Operations

Capacity adjustments in manufacturing, Armenia

Source: Enterprise Survey 2019 and Enterprise Survey Follow-Up. Notes: Capacity utilization is calculated based on the question “[…] what was this establishment’s output produced as a percentage of the maximum output possible if using all the physical capital available (capacity utilization)?”. Only manufacturing firms answer this question.
2) Firm adjustments: Operations

Firms adjusting or converting their production or services

<table>
<thead>
<tr>
<th></th>
<th>Percent of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Average</td>
<td>13.0%</td>
</tr>
<tr>
<td>Gyumri</td>
<td>7.7%</td>
</tr>
<tr>
<td>Vanadzor (Region)</td>
<td>23.1%</td>
</tr>
<tr>
<td>Yerevan</td>
<td>12.3%</td>
</tr>
<tr>
<td>Manufacturing Sector</td>
<td>1.7%</td>
</tr>
<tr>
<td>Services Sector</td>
<td>19.5%</td>
</tr>
</tbody>
</table>

Source: Enterprise Survey Follow-Up. Notes: Responding to the question “Has this establishment adjusted or converted, partially or fully, its production or the services it offers in response to the COVID-19 outbreak?”.
2) Firm adjustments: Coping strategies

Coping strategies and innovation of micro-firms, Armenia and Georgia

- Started or increased online business activity
- Started or increased delivery of goods, services or carryout
- Started or increased remote work

Source: Enterprise Survey Follow-Up.
2) Firm adjustments: Workforce

Impact on full-time employment and hours worked

Change of permanent full-time workers since ES interview

Changes in total hours worked per week

Source: Enterprise Survey COVID-19 Follow-up.
2) Firm adjustments: Workforce

Impact on female workers

- Proportion of female workers among the workers laid off
- Proportion of female workers among the workers furloughed
- Proportion of permanent full-time workers that are female

Source: Enterprise Survey COVID-19 Follow-up.
2) Firm adjustments: Finance

Cashflow shortages

Firms experiencing changes in available cashflows

Source: Enterprise Survey Follow-Up.
2) Firm adjustments: Finance

Survival and Liabilities

If sales stopped, average duration of establishment survival

Delayed payments due to the COVID-19 outbreak for more than one week

- Delayed payments to suppliers
- Delayed payments to landlords
- Delayed payments to tax authorities

Source: Enterprise Survey COVID-19 Follow-up.
2) Firm adjustments: Finance

Main source of finance to face cashflow shortages

- Equity finance
- Loans from non-banking financial institutions
- Government grants
- Delaying payments to suppliers or workers
- Loans from commercial banks

Source: Enterprise Survey Follow-Up. Notes: Loans from non-banking financial institutions include “microfinance institutions, credit cooperatives, credit unions, or finance companies”. Equity finance refers to “increase contributions or capital from existing owners/shareholders or issuing new shares.”
### 3) Government support

#### Policy responses targeted at businesses

<table>
<thead>
<tr>
<th>Package</th>
<th>Objective</th>
<th>Instrument</th>
<th>Eligibility and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low interest rates for large enterprises</td>
<td>• Address liquidity shortages.</td>
<td>• Co-financing, refinancing and subsidizing high interest rates.</td>
<td>• Loans provided by banks &amp; financial institutions. 24-months maturity. Maximum amount of AMD 500 million &amp; maximum interest rate of 6%.</td>
</tr>
<tr>
<td>(Package #1)</td>
<td>• Ensure continuity of economic activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Maintain employment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans for SMEs in most affected sectors</td>
<td>• Maintain employment and salary payments.</td>
<td>• Loans of the Investor Support Center. Licensed banks and credit institutions act as servicing agents.</td>
<td>• Firms with turnover AMD 24 million to 500 million in 2019. 36 months maturity without loan repayment in 1st year. Maximum loan of AMD 50 million &amp; ≤10% of turnover in 2019.</td>
</tr>
<tr>
<td>(Package #3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants to businesses up to 50 employees</td>
<td>• Preserve productive jobs.</td>
<td>• Lump sum payment.</td>
<td>• Businesses (≤50 employees) keeping the wage bill &amp; number of employees the same as before the crisis. Size of grant is the average salary for each 5th employee.</td>
</tr>
<tr>
<td>(Package #5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplementary income transfer for workers in tourism/hospitality and other services</td>
<td>• Supplement income of workers in vulnerable sectors.</td>
<td>• One-time income transfer to employees or entrepreneurs.</td>
<td>• Current workers in tourism/hospitality; hairdressers; retail stores (except selling food, tobacco and alcohol); pharmacies. Amount based on Jan-Feb average salary or 10% of sales turnover during 2019-Q4. Maximum of AMD 136,000.</td>
</tr>
<tr>
<td>(Package #8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash payment for microbusinesses</td>
<td>• Assistance for microbusinesses.</td>
<td>• One-time assistance payment.</td>
<td>• Microbusinesses with annual turnover &lt; AMD 24 million. Payment of 10% of turnover in 2020-Q1.</td>
</tr>
<tr>
<td>(Package #10)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) Government support

Coverage across firms

Firms that received national or local government assistance

Source: Enterprise Survey COVID-19 Follow-up.
3) Government support

Source: Enterprise Survey COVID-19 Follow-up. Note: * Deferral of payments refers to “Deferral of credit payments, rent or mortgage, suspension of interest payments, or rollover of debt.” The category “Other assistance” is not presented in the graph due to limited observations.
4) Looking ahead

**Expected time to return to normal**

<table>
<thead>
<tr>
<th>Country Average</th>
<th>Gyumri</th>
<th>Vanadzor Region</th>
<th>Yerevan</th>
<th>Manufacturing Sector</th>
<th>Services</th>
<th>Female manager</th>
<th>Male manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Enterprise Survey COVID-19 Follow-up.
COVID-19 IMPACT

Micro-simulation Results
Microsimulation: Basic Methodology

Shock to household welfare

(1) Labor Incomes
- Unemployment
- Reduced Earnings
  - Agriculture
  - Industry
  - Services

(2) Remittances ↓30%

(3) Agricultural Sales ↓10%

<table>
<thead>
<tr>
<th>Probability of unemployment</th>
<th>0</th>
<th>0.1</th>
<th>0.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings loss among workers</td>
<td>↓10%</td>
<td>↓20%</td>
<td>↓30%</td>
</tr>
</tbody>
</table>

Source: South Caucasus Poverty and Equity Team.
Microsimulations: Poverty Changes

Source: South Caucasus Poverty and Equity Team. Notes: Using the USD 3.20 / per day (2011 PPP) international poverty line. n= Nowcasted, f= Forecasted.
Microsimulation Results

Who will be impoverished in Armenia?
Household and individual characteristics

Source: South Caucasus Poverty and Equity Team. Notes: Using the USD 3.20 / per day (2011 PPP) international poverty line.
* Restricted to individuals 25 years-old and older.
**Microsimulation Results**

Who will be impoverished in Georgia?

Household and individual characteristics

- **Location:**
  - Tbilisi: 40.4%
  - Other Urban: 25.8%
  - Rural: 33.8%

- **Sex:**
  - Male: 47.6%
  - Female: 52.4%

- **Age:**
  - Children (0-14): 24.2%
  - Adults (15-64): 68.2%
  - Elderly (65+): 7.6%

- **Educational attainment:**
  - Incomplete secondary: 2.4%
  - General Secondary: 42.8%
  - Specialized Secondary: 17.0%
  - Tertiary: 38.1%

- **Household head - Sex:**
  - Male: 65.1%
  - Female: 34.9%

- **Household head - Educational attainment:**
  - Incomplete secondary: 1.6%
  - General Secondary: 53.0%
  - Specialized Secondary: 17.7%
  - Tertiary: 27.7%

- **Household - Social Assistance:**
  - TSA: 4.0%
  - No TSA: 96.0%

- **Household - Pensions:**
  - Pension: 40.8%
  - No pension: 59.2%

**Source:** South Caucasus Poverty and Equity Team. Notes: Using the USD 3.20 / per day (2011 PPP) international poverty line.
* Restricted to individuals 25 years-old and older. ** Based on imputed eligibility (SPJ Estimates).
THANK YOU!

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WORLD BANK GROUP
Poverty & Equity

ENTERPRISE SURVEYS
## Representativeness across countries

<table>
<thead>
<tr>
<th>Size</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro (1-4 employees)</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Small (5-20 employees)</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Medium (20-99 employees)</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Large (100+ employees)</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Services</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Hotels &amp; Restaurants</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Retail</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Other Services</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Own...</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Moldova</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
<tr>
<td>Foreign</td>
<td>🇦🇲</td>
<td>🇬🇪</td>
<td>🇲🇩</td>
</tr>
</tbody>
</table>

**Source:** Enterprise Survey.