

Measuring the Pulse of Firms

The COVID-19 Business Pulse Survey (COV-BPS) - Poland



COVID-19 shocks operate through at least 5 channels

COVID-19 shocks operate through many channels, but the magnitude and who is more affected is hard to predict:



Lockdown effects

Public health measures require non-essential businesses to close

Temporary shock, targeting non-essential businesses, mostly in **retail, hotels/restaurants** (tourism) and **personal services**.



Supply shocks

Decline in labor and intermediate inputs, global value chains disrupted

E.g., firms that **rely on imports** are affected.



Financial shocks

Opportunities for finance becoming further constrained

Deterioration in availability of credit while demand increases will affect access to finance



Demand shocks

Economic downturn drives down demand domestically and abroad

Broad-based shock. Will especially hit firms producing **durables, apparel/textiles** and those **reliant on export** (manufacturing & services – e.g. tourism).



Uncertainty

Uncertainty is driving down investment and innovation



1394 companies participated in the 1st wave of BPS in Poland

- **Timeline:** survey carried out from the 25th of May to 1st of July 2020;
 - A number of questions relate to the period 30 days before the interview, so the survey captured period between 26th of April and 30th of June.
- **Sample:** 1394 companies participated: 1005 in CATI and 389 in CAWI;
 - Non-agricultural micro, small and mid-size companies participated;
 - CAWI survey has been executed in cooperation with the **Polish Agency for Entrepreneurship Development (PARP)**, CATI by **CEM**.
- Due to the application of sampling weights, the **aggregate results reflect mostly the situation of micro firms** since these firms dominate the population; results disaggregated into size and sector are also presented
- Second wave starts at the end of August, third wave at the end of November. The same companies will be followed up (panel structure) which will allow **capturing dynamic effects**.

The survey captures firm's situation between April, 26th and June 30th, during the transition from lockdown to a mostly open economy

- **15th of April:**
 - Shopping malls, apparel shops, hotels, personal services (hairdressers etc.) are still closed;
 - Restrictions on number of people in shops;
 - Restaurants can offer only take-aways;
 - Schools and pre-schools are closed;
- **4th of May:**
 - Reopening of shopping malls and hotels, with restrictions;
 - Preschool care in small groups allowed;
- **18th of May:**
 - Personal services and restaurants allowed to be open, with restrictions.
- **6th of June:**
 - Cinemas, theatres, fitness clubs and other sport facilities can reopen;
 - Wedding celebrations allowed.
- **15th of June:**
 - Borders reopen, people arriving in Poland do not have to be quarantined.

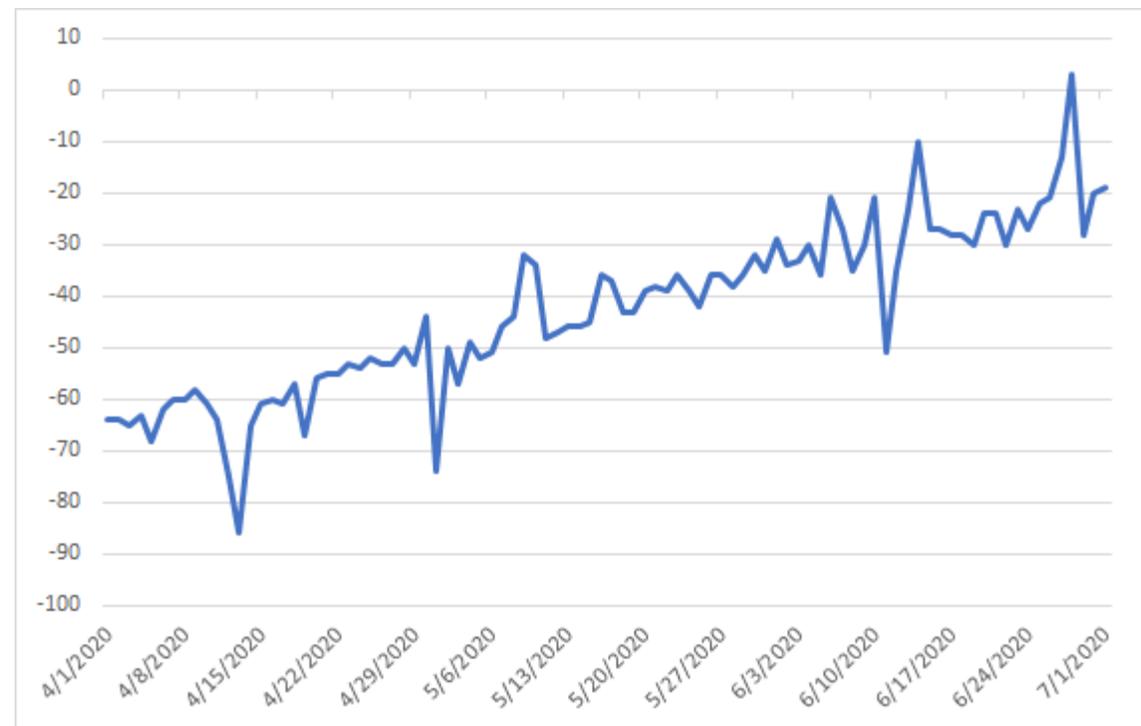
LOCKDOWN
REOPENING

Survey period in context (Google Mobility to transit stations)

The mobility trends confirm the dynamic transition from a lockdown to a mostly open economy: at the end of April mobility was more than 50% smaller than in the baseline from January and February, whereas in the 4th week of June it was higher than during baseline.

However, average mobility to transit stations between April 1 and July 1 decreased by 43% compared to the baseline.

Mobility trends for places like public transport hubs such as subway, bus, and train stations.

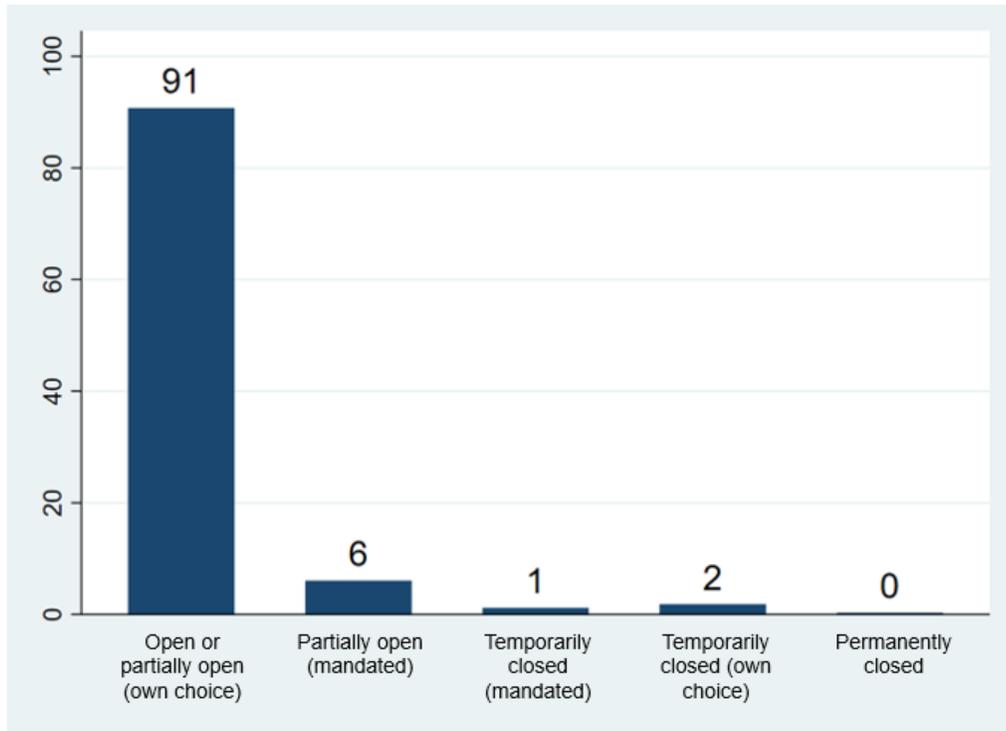


Source: Google COVID-19 Community Mobility Reports.

Note: the baseline is the median value for the corresponding day of the week, during the 5 week period Jan 3-Feb 6, 2020.

3% of businesses were temporarily closed and 6% partially open. Service sector most affected.

At the time of the survey, **91% of businesses were open or partially open (by own choice)**, 6% only partially opened due to regulations and 3% of businesses were temporarily closed.



Services have the largest share of businesses in vulnerable conditions (i.e. partially open - mandated by containment measures, or temporarily closed).



Note: Based on 1394 phone and Internet interviews conducted between May 25th and July 1st in Poland. It includes non-agricultural firms with 1-249 employees.

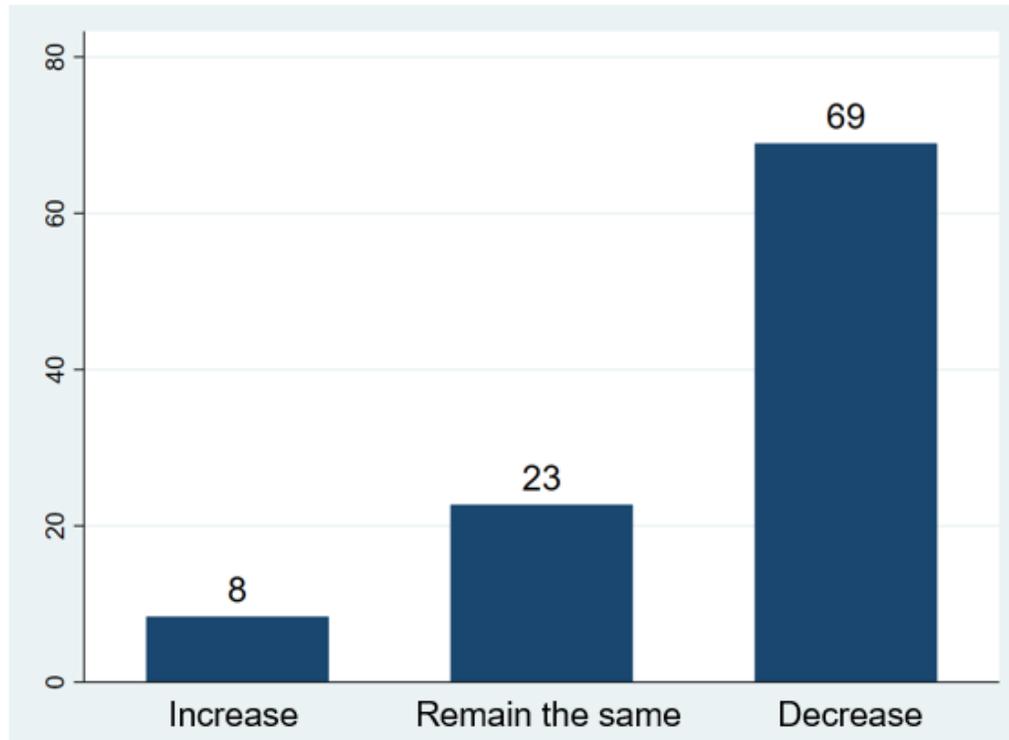
At least 9% of workers were in businesses facing high-levels of vulnerability

Estimated number of jobs in businesses affected by the pandemic

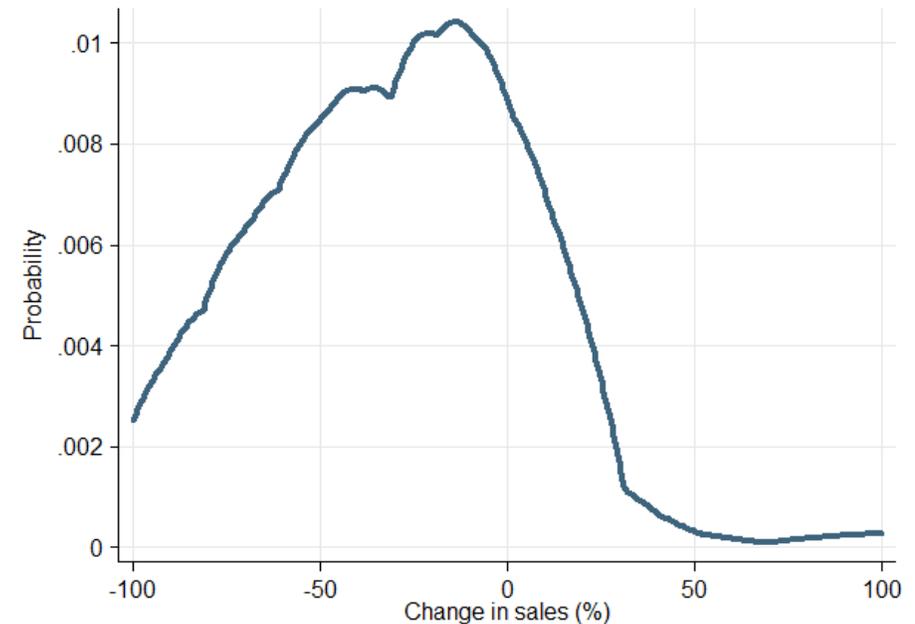
	Open or partially open (by choice)	Partially open (mandated)	Temporarily closed (mandated)	Temporarily closed (by choice)	Permanently closed*	Vulnerable (partially opened, mandated + temporarily closed)
Total	91%	5%	1%	3%	0%	9%
Micro (1)	82%	9%	1%	8%	0%	18%
Micro (2-9)	92%	5%	1%	2%	0%	8%
Small (10-49)	96%	4%	0%	0%	0%	4%
Medium (50-249)	98%	2%	0%	0%	0%	2%
Industry	95%	4%	0%	0%	0%	5%
Retail	98%	1%	0%	1%	0%	2%
Services	84%	8%	2%	6%	0%	15%
Young (0-4)	92%	5%	3%	0%	0%	8%
Maturing (5-14)	83%	5%	2%	10%	0%	17%
Established (15+)	94%	5%	0%	0%	0%	6%
Exporter	99%	1%	0%	0%	0%	1%
Non exporter	88%	7%	1%	4%	0%	12%

The impact on **SALES** has been large and widespread

69% of businesses experienced a decline in sales the 30 days before the survey relative to the same period in 2019.



Sales dropped 30% on average in the last 30 days before the survey relative to the same period of 2019. The median change of sales was -30%.

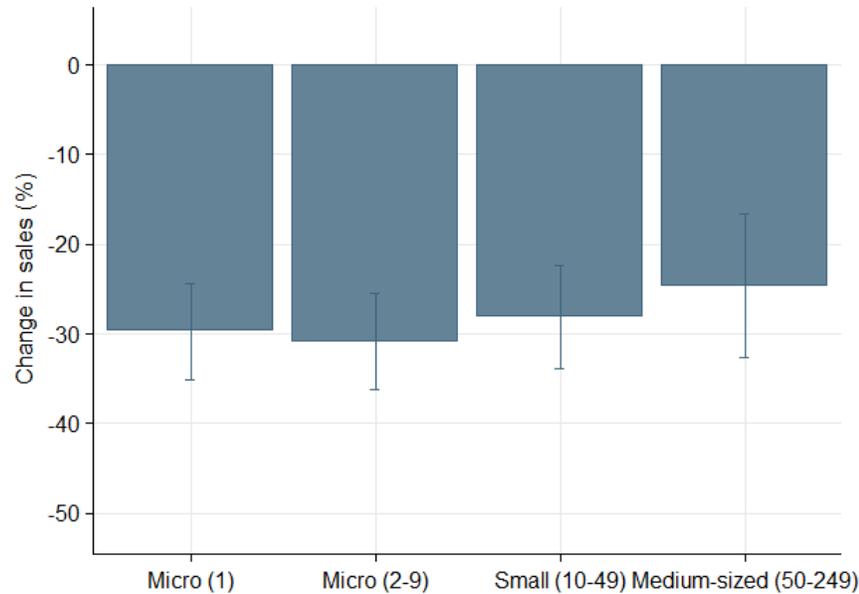


Average decline	25 th percentile	Median decline	75 th percentile
-30	-50	-30	0

Differences in sales do not seem to be statistically significant across size groups.

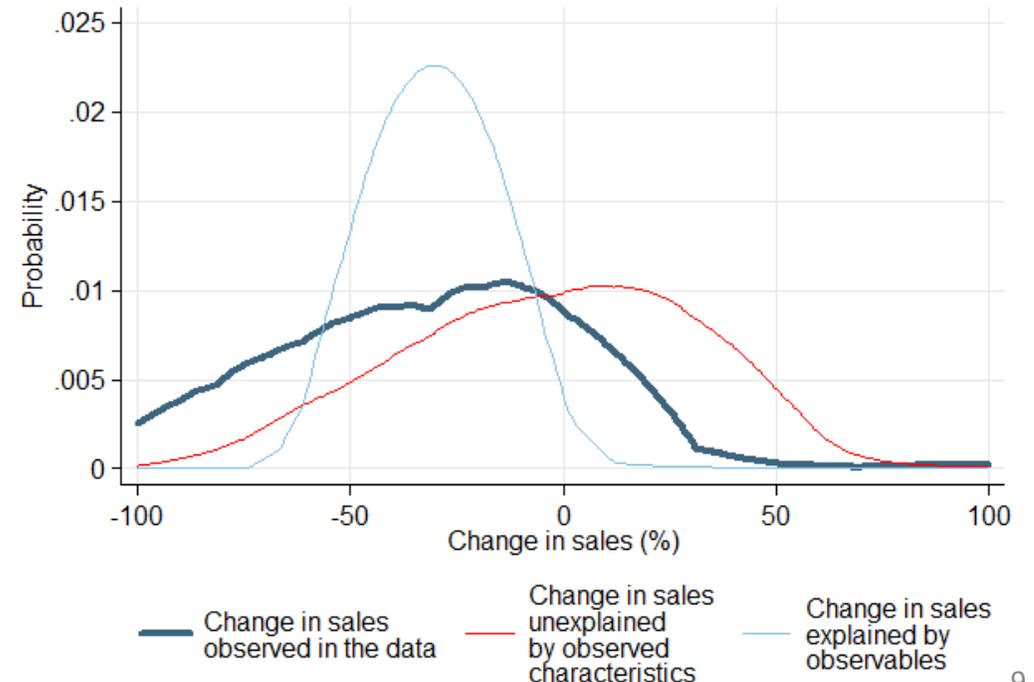
The smaller the size of the company, the relatively higher the reduction in sales, but the differences are not statistically significant.

Predictive effect of size on change in sales with 95% confidence interval



The COVID-19 shock is affecting similar firms differently:
A model based solely on observable business characteristics explains only a small fraction of variance observed in reduction in sales.

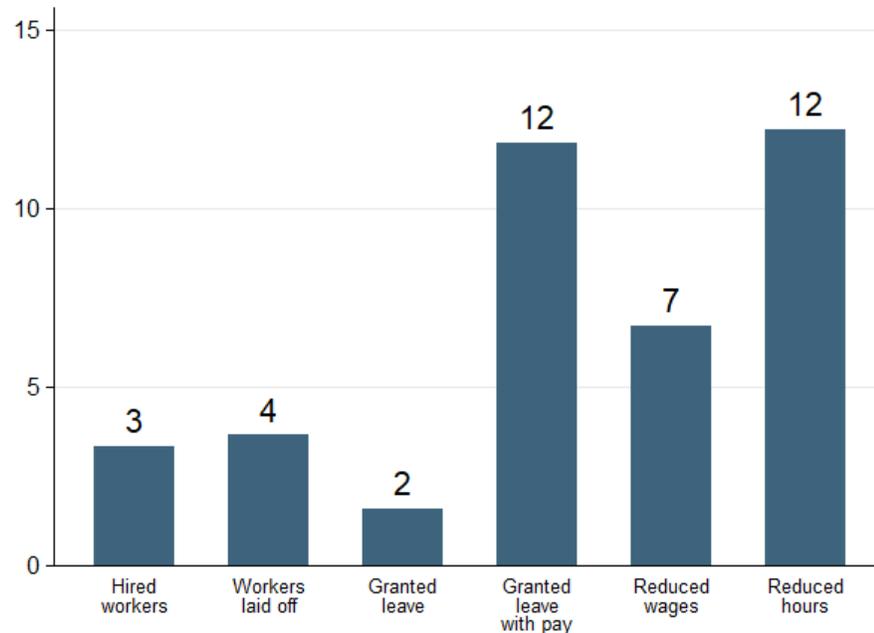
Distribution of the reduction in sales explained by the observed characteristics of the firm



Labor adjustment has been dominated by the intensive margin, i.e. reduction in working hours, leave or reduction in wages

- The employment response to the shock has been dominated by a reduction in the number of working hours and a granting of leave with pay.
- More firms made labor adjustments in May than in June.

Margin of adjustment in employment
(fraction of plants; excludes plants that are permanently closed)



- There are statistically significant differences in intensive margins of adjustment across sectors.
 - The most popular adjustment in services is reduction of hours, in trade – granting leave with pay, while in industry – reduction of wages.
 - Employees in industry are also the most affected by the adjustments.

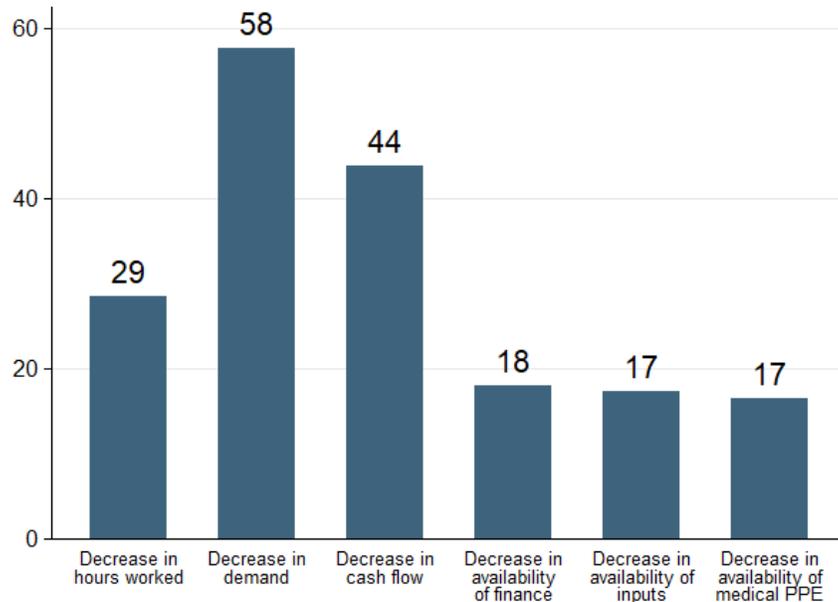
Estimated fraction of workers affected by margin of labor adjustment to the shock (% of workers)

Characteristics	Businesses open or temporarily closed					
	Workers hired	Workers laid-off	Workers granted leave of absence	Workers granted leave of absence with pay	Workers with wages reduced	Workers with hours reduced
Total	2%	2%	1%	12%	18%	19%
Industry	2%	1%	1%	14%	39%	28%
Trade	2%	2%	1%	17%	9%	14%
Services	2%	3%	1%	9%	10%	17%

The majority of companies were adversely affected by the demand shock

- 73% of firms were affected by at least one channel of the shock
- Majority of businesses report experiencing a reduction in the demand for their products.
- The results indicate little variation associated with observable characteristics. Only some heterogeneity is observed but it is not consistent across different channels:
 - Micro (2-9) and small firms were affected more frequently by decreases in demand.
 - Exporters reported more often decrease in cash flow than non-exporters.

Share of firms affected by each shocks (aggregate)

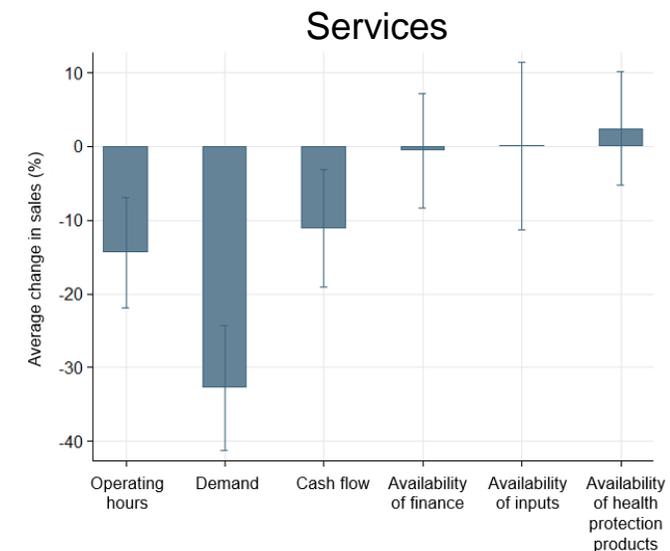
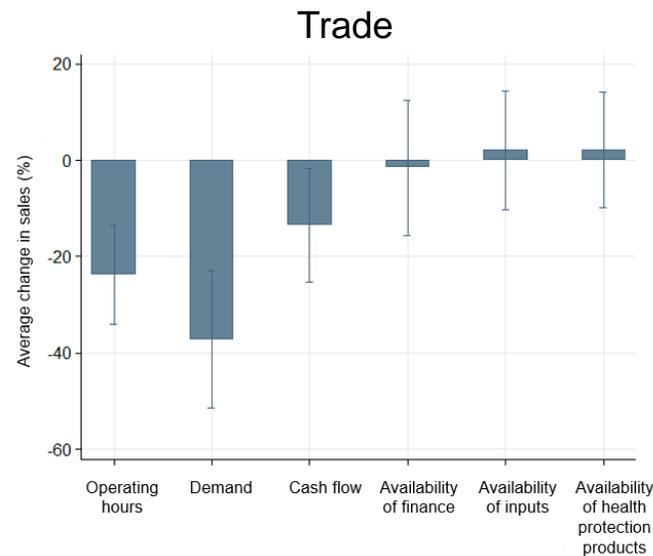
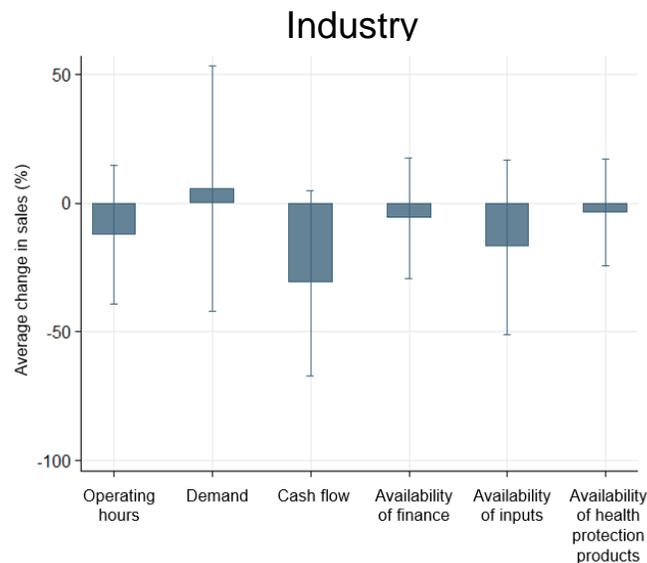


Summary of statistically significant correlations between the share of firms reporting the shocks and their characteristics

	Decrease in hours worked	Decrease in demand	Decrease in cash flow	Decrease in availability of finance	Decrease in availability of medical PPE	Decrease in availability of inputs
Size		+ Micro (2-9) + Small				
Sector					+ Retail + Services	- Services
Age				+ Maturing		
Exporting status			- Exporter			

The pandemic seems to have a differentiated impact across sectors in terms of the importance of different channels

- Reduction in operating hours, demand and cashflow is significantly correlated with reduction in sales in retail and services.
- Changes in the availability of finance, inputs, and health protection are not statistically associated with changes in sales
- None of the shocks is statistically relevant in the industry sector.



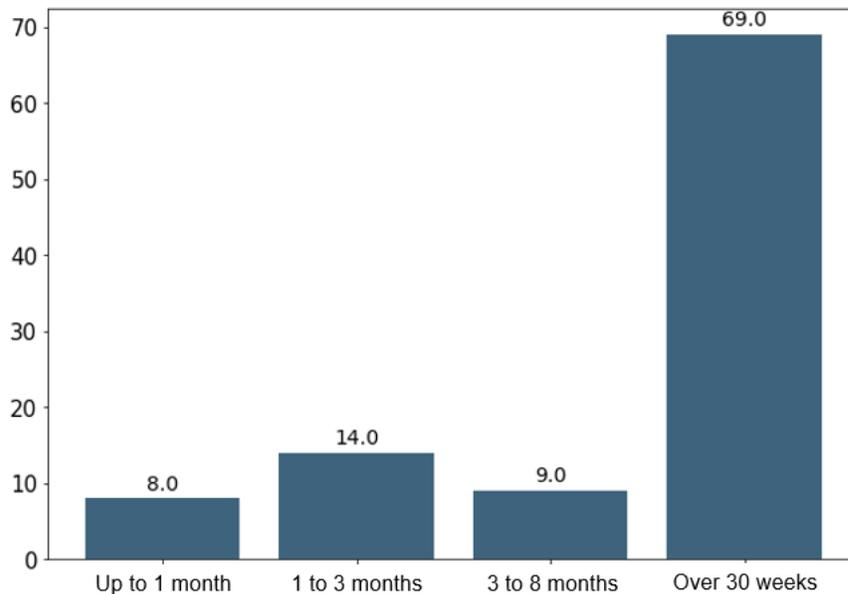
Estimated coefficient from a regression of the percentage change in sales on dummies for the shocks from COVID-19. In each panel, the regression considers only businesses in the sector.

22% of business said they wouldn't survive for more than a quarter unless market conditions improve

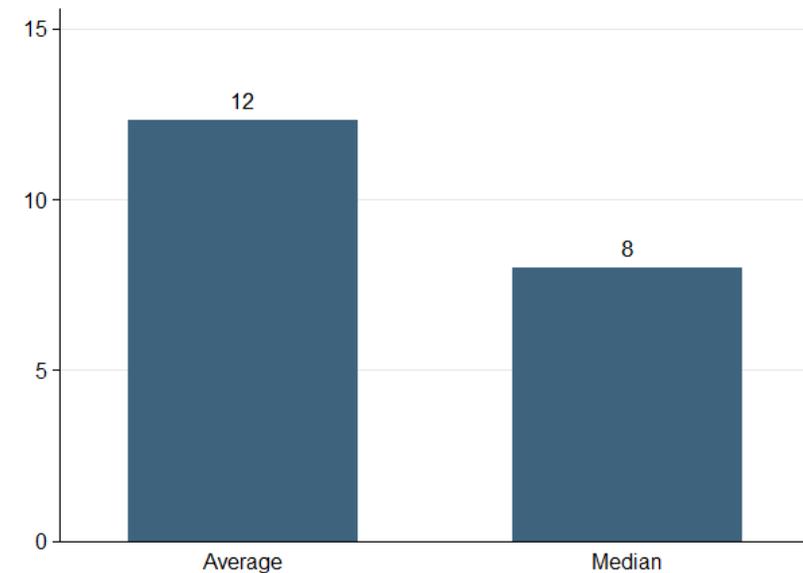
22% of enterprises reported an ability to survive for less than a quarter unless market conditions improve.

The median firm could continue to cover costs with cash available for about 8 weeks

Period of time for which business can remain open in current circumstances (share of firms)



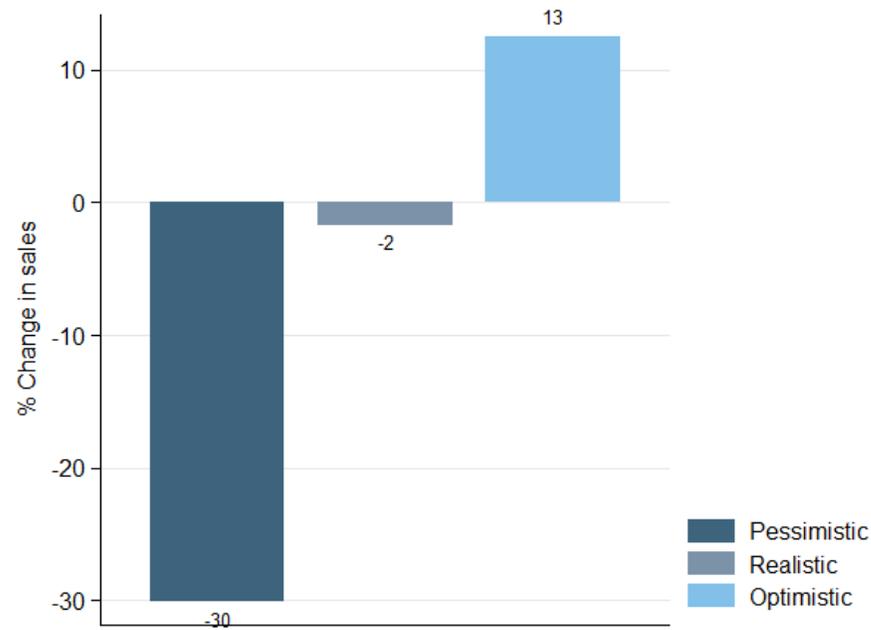
Number of weeks that the business can continue to cover costs with cash available



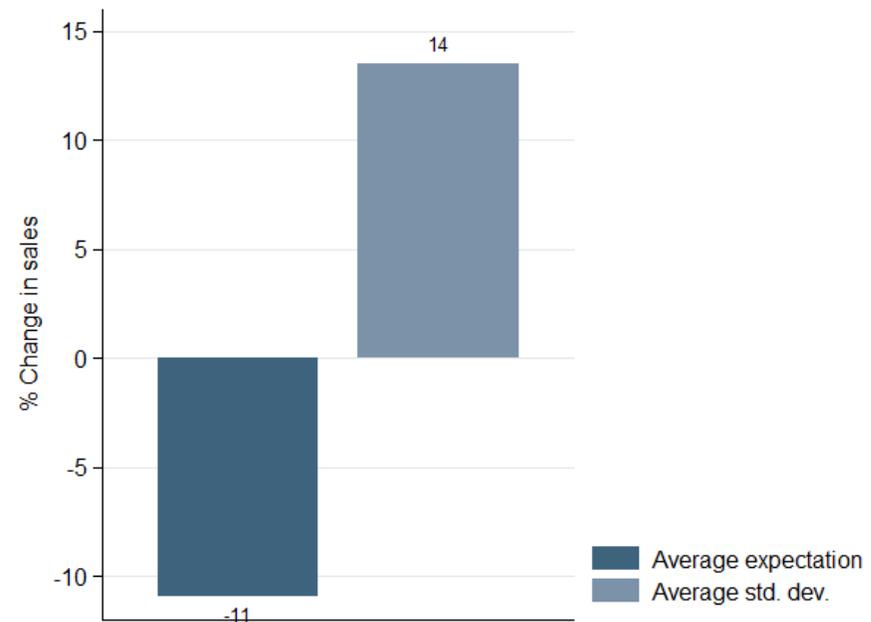
Firms expected sales to drop by 11% in the next 3 months

On average, firms expect a drop in sales in the next 3 months compared to the sales in the same period last year by **11%**; however, the divergence of expectations across scenarios is wide.

Average change in sales expected for the next 3 months across scenarios



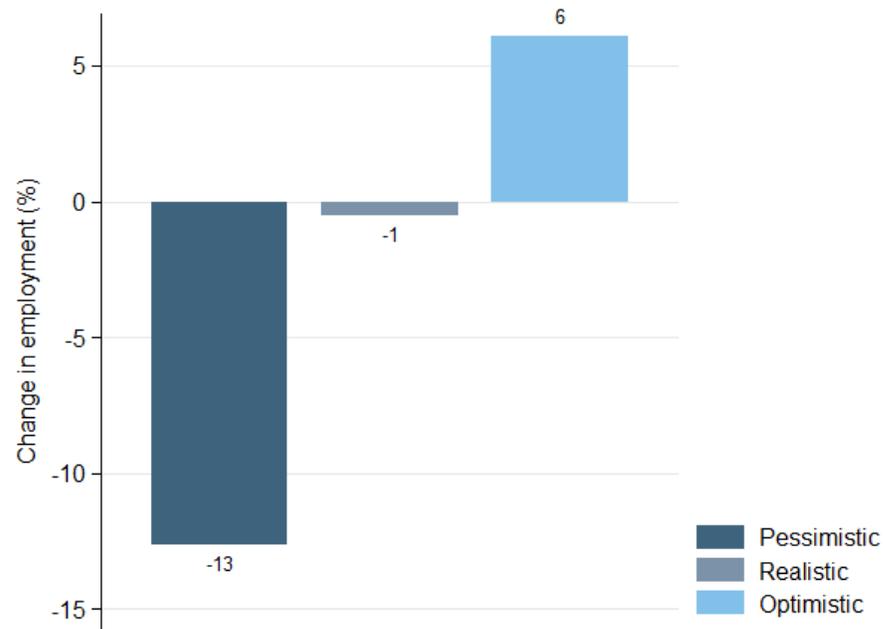
Expectations and uncertainty about sales growth for the next 3 months



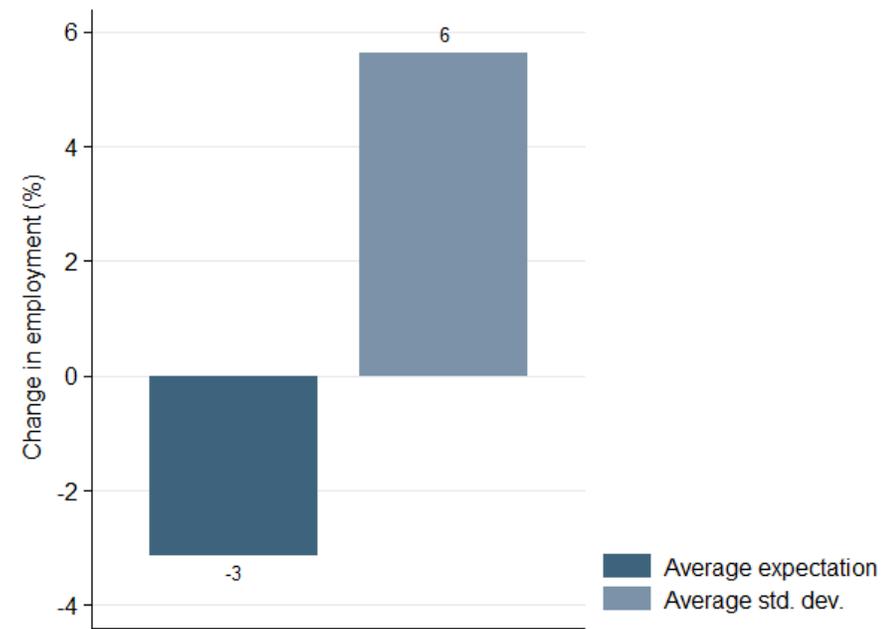
Firms expected employment to drop by 3% in the next 3 months

The expected employment growth for the 3-month period after the implementation of the BPS is **-3%**. The uncertainty for employment is twice smaller than for sales.

Average change in employment expected for the next 3 months across scenarios

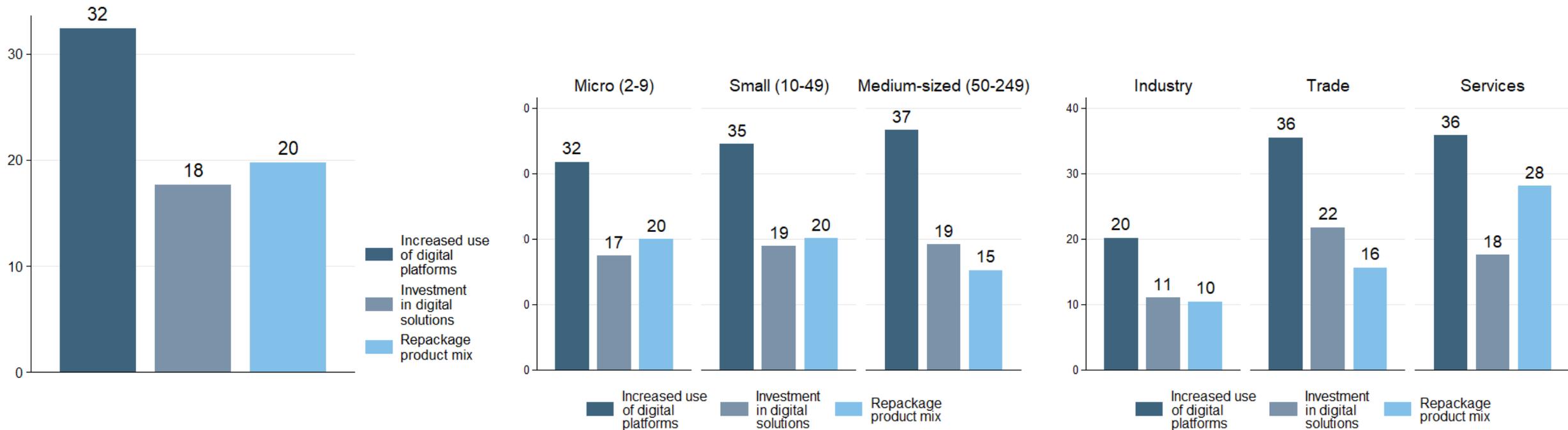


Expectations and uncertainty about employment growth for the next 3 months



One third of companies employed digital platforms to counteract the COVID shock

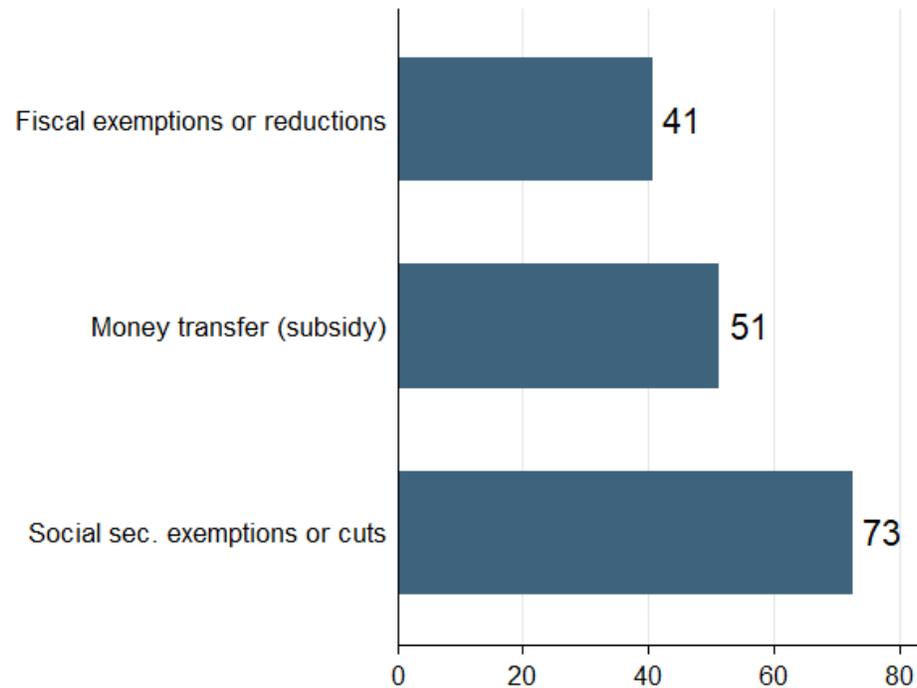
- **32% of the firms started using or increased the use of digital platforms.**
- The share of small and medium firms adopting or increasing the use of digital technologies and investing in digital solutions in response to COVID-19 is significantly larger than micro firms.
- Increased use of digital platforms was reported more often by service and trade companies compared to industrial ones.



Social security exemptions and reductions were the most demanded policy

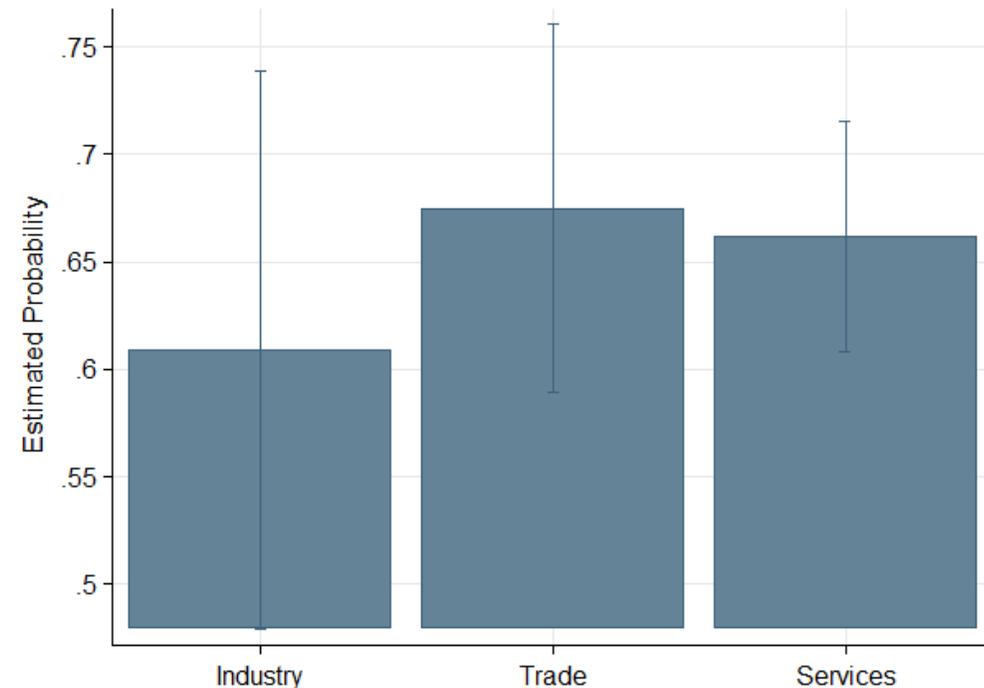
Social security exemptions or reductions were widely referred as the most needed policy support across different dimensions.

Self-reported top 3 most needed public policies to support businesses during the COVID-19 pandemic



Money transfer means Polish Development Fund's subsidy or conditionally non-returnable loan.

Predictive effect of sector on probability of reporting social security exemptions or cuts as most needed support, with 95% confidence interval*



Small and medium companies expressed need for access to new credit

- Small and medium companies – compared to micro – requested access to new credit more frequently.
- Companies older than 4 years - compared to young companies - considered access to a new loan and deferred tax payments to be significant more often.

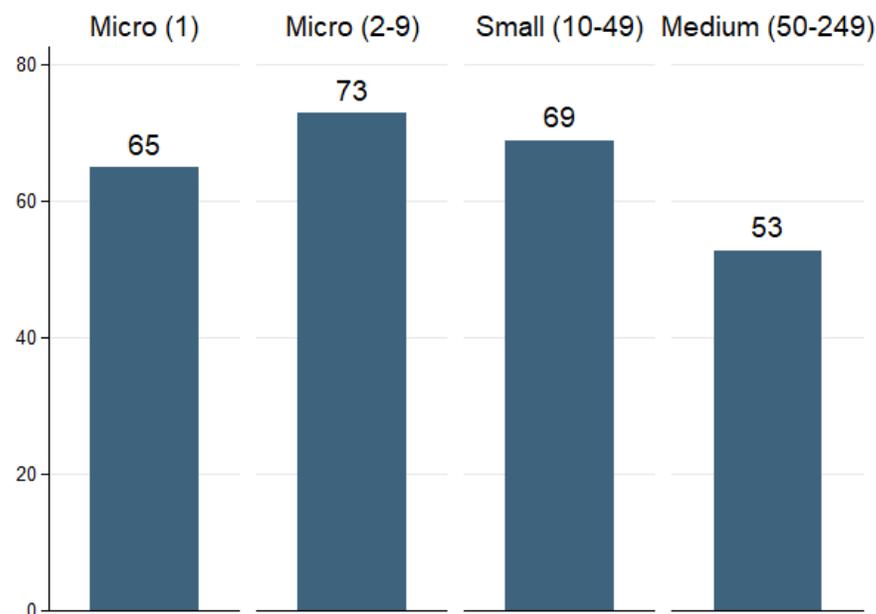
Statistical significance of correlations between characteristics of the business and most needed policies

	Monetary transfer	Deferral of loan payment	Access to new credit	Fiscal exemptions/ cuts	Tax deferral	Social security exemptions/ cuts	Social security contributions deferral	Wage subsidies
Size	(+) Small (+) Medium		(+) Small (+) Medium			(+) Micro (2-9) (+) Medium		(+) Micro (2-9) (+) Small (+) Medium
Sector				(+) Trade				
Exporting status			(-) Exporter					
Age of business	(-) Established		(+) Maturing (+) Established		(+) Maturing (+) Established			

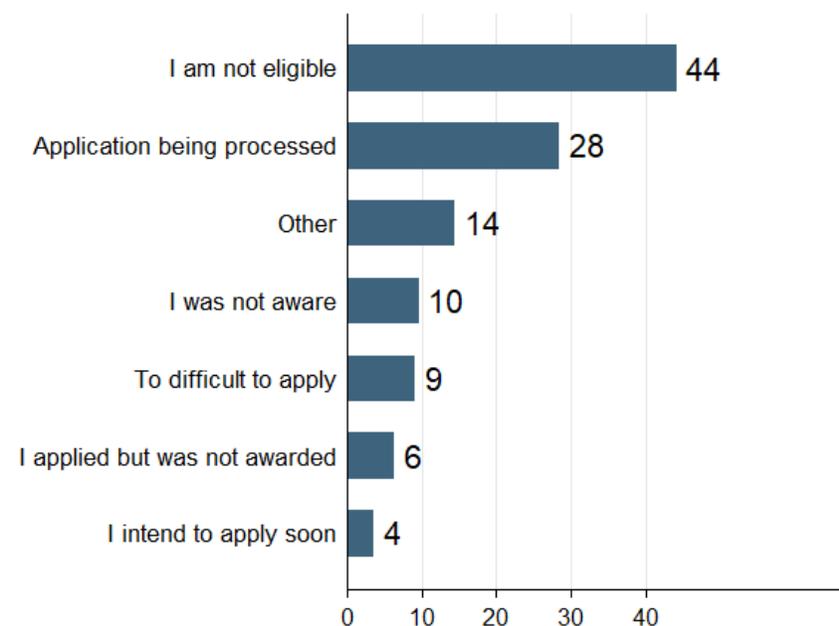
Two thirds of firms already received public support

- Around two thirds of firms reported that they have received public support in response to the COVID-19 shock.
- Among businesses that have not received the support, the main reason was ineligibility.
- 61% of state-support beneficiaries were granted **social security exemptions**, 56% obtained **money transfers*** and 9% obtained **wage subsidies**.

Self-reported public support received in response to the COVID-19 pandemic (share of firms)



Reason why businesses have not received public support (share of firms)



Annex

Structure COV-Business Pulse Survey

- Key business **characteristics**
 - **Dimensions of heterogeneity**
- Magnitude of **impact**
 - Distinguish channels
- Quantifying **uncertainty** shock
- Policy actionable information
 - Perceived needs
 - Access to Government programs
- Firms responses and adjustment
- Open modular structure
 - Tourism, medical instruments, value chains, digital

1. **Distribution of respondents** (Using Module COV0 and COV06)

- main sector of activity and product
- size (in terms of employment, revenue, capital base)
- trade integration (i.e. export)
- investment
- age
- gender dimension

2. **What is the on-going impact of COVID-19 on operations, employment and business results?** (Using Module COV1 and COV2)

- Status
- Demand shock
- Impact on employment (layoffs, furlough, reduction in hours, salaries, benefits)
- Supply shock (employees, inputs/materials)
- Access to finance shock
- Liquidity constraints

3. **What are firm's prediction about future impact?** (Using COV3)

- Expectations on revenue, employment, investment
- Uncertainty

4A. **What can the government do to help firms?** (Using Module COV4)

4B. **Access to programs and reason for lack of access** (Using Module COV4)

5. **How are firms adjusting to COVID-19?** (Using Module COV5)

- Online sales, digital platforms and digital technologies
- Technology adoption and innovation
- New products (health related)

Sample

The survey was implemented between 25th of May to 1st of July using CAWI and CATI methods. 1384 companies participated in the survey: 1005 companies in the telephone survey (CATI) and 389 in the internet survey (CAWI).

The sampling frame included micro, small and medium-sized enterprises in the industry, trade and services sectors. Large companies (i.e. employing more than 249 employees) and agricultural companies were excluded.

Distribution of firms in the final sample, by size and sector

	Industry	Trade	Services	Total
Micro (1)	22	55	177	254
Micro (2-9)	64	78	159	301
Small (10-49)	158	122	181	461
Medium (50-249)	217	73	88	378
Total	461	328	605	1 394

Source: Own elaboration, based on data collected by PARP and CEM.