

Insights from **The Covid-19 Digital Merchant Survey**

*Citation: World Bank, Covid-19 Digital
Merchant Survey, 2021*

*The views expressed in this work do not
necessarily reflect the views of Shopee.*



About the survey

1. A 20-minute survey
2. Blasted through Shopee In-Apps
3. Target population: merchants with 30 or more (or 100 or more) transactions since joining the platform to match the previous survey's target population (Bukalapak's "super sellers" and merchants with 100 or more transactions)
4. Opened between Dec 21-25, 2020
5. Collected response from 15,238 respondents
6. Analyzed the survey using calibration rake weighting techniques (see Annex) using Shopee data to represent the target population by:
 - Provincial location
 - November 2020 sales on Shopee (proxy for online business size)
 - Highest-selling product category in November 2020

We acknowledge and thank Shopee and Sea Insights for their collaboration in this survey.

Highlights

Who are the e-commerce sellers we surveyed through Shopee?

- Young, slightly more female dominated, mainly micro and SMEs
- The pandemic has attracted a particular segment of the population into e-commerce: youth, students/not working/full-time workers, with senior high school education, using e-commerce as an alternative income

How has their business performed?

- During the pandemic, e-commerce grew at both the extensive and intensive margins: 25% of merchants surveyed joined during the pandemic (extensive). By November, average online sales exceeded the pre-pandemic level in February (intensive).
- Online sales appeared much more resilient than offline sales but were not able to fully offset the decline in offline sales during the height of the pandemic in April
- Signs of recovery were evident by November, with total sales recovering to the pre-pandemic level and online sales growing stronger than the pre-pandemic level
- Merchants adjusted the products they sold in order to meet changing consumers' demand. Those who were more versatile (by switching product categories) appeared to weather the pandemic better.
- Close to 80% of businesses have kept their business open throughout the pandemic compared to 40% of general firms, reflecting the ability to switch to sell online to keep their businesses going.
- Perceptions around business sustainability improved in December compared to May/June

Highlights (2)

What types of support programs are wanted by digital merchants?

- Digital skills/knowledge/training, sales & marketing and cheaper & reliable logistics services are the top three areas in which sellers need support, while cash transfers remain the most popularly demanded government assistance by far for mitigating the pandemic's impacts

What kind of government assistance have they received?

- One in five merchants who answered our survey received government assistance and largely (62%) received cash transfers regardless of their business size; among those who received a cash transfer, most received it in the form of pre-employment cards and *BLT produktif*

How did they learn about these government programs?

- Half of merchants received government assistance by applying for it and three-quarters of them learned about government assistance from online news

How did they utilize cash transfers received from the government?

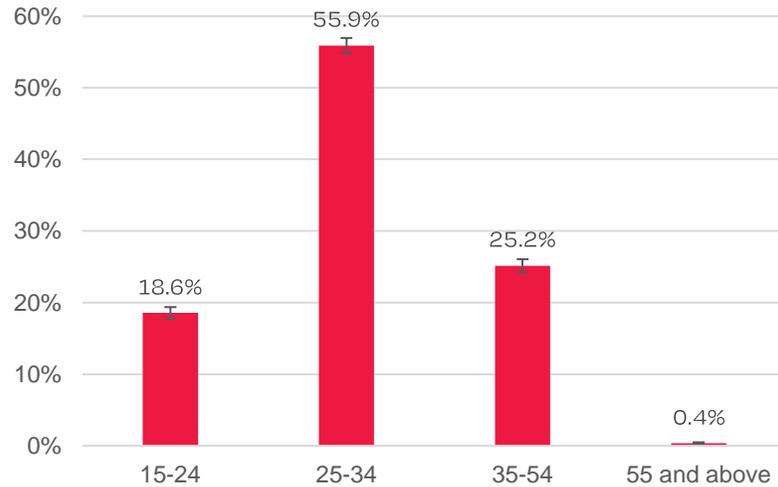
- Based on the survey, sellers used different types of cash transfers in different ways and to a large extent, according to expectations of the government. For example, *BLT produktif* was used by most merchants for business purposes and food vouchers for consumption. However, use varied by employment status. The self-employed tended to use cash transfers for business purposes and homemakers for consumption.

**Who are the
merchants?**

01

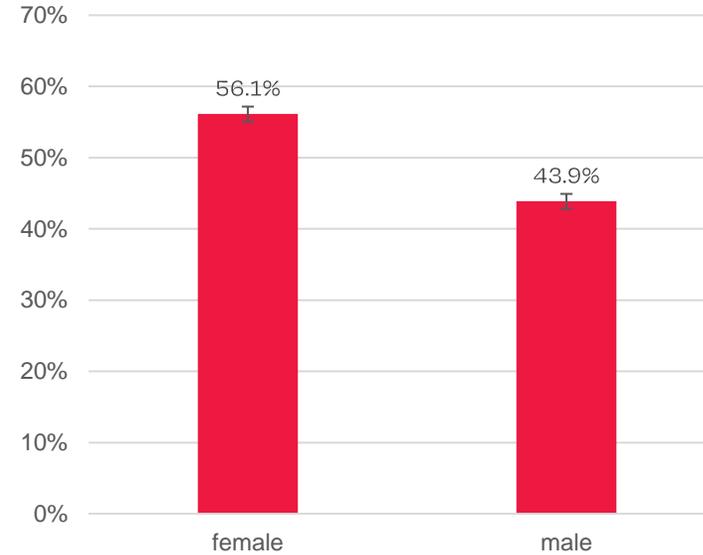
Young adults, slightly more female, more educated than national average

Age



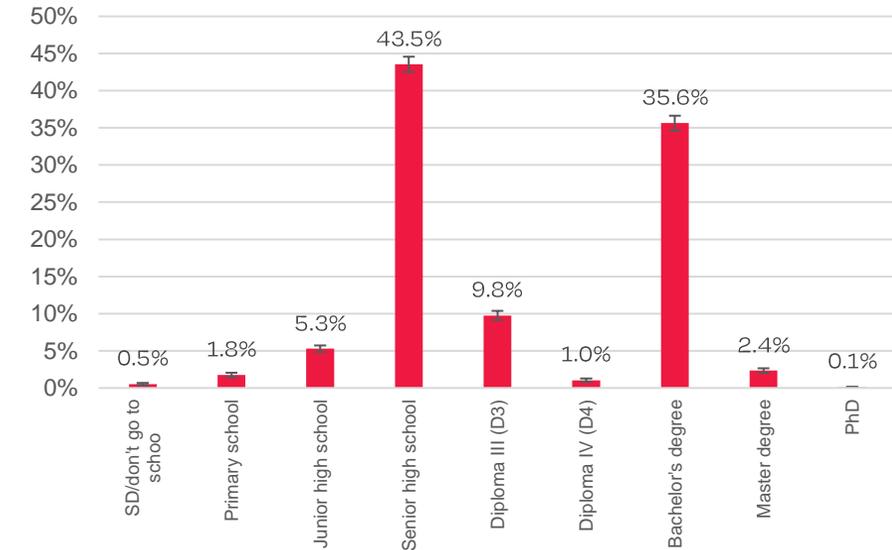
The majority are young adults, between 25-35 years old (60%)

Gender



Almost even gender split, leaning towards females, in contrast to only 39% female employment in the labor force

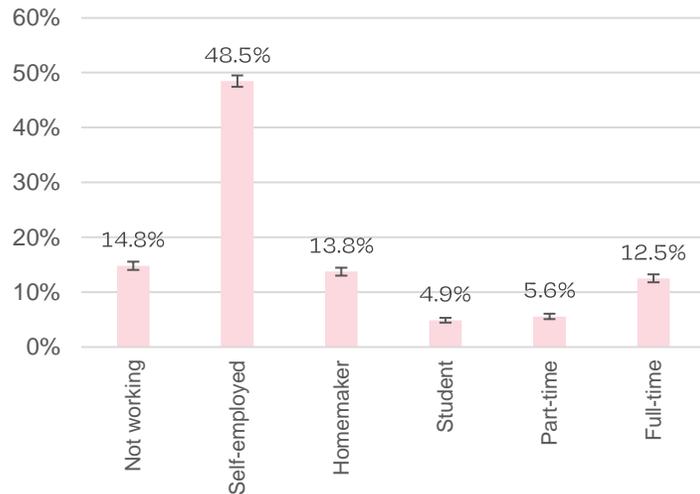
Highest education attained



More educated than the national average with only 8% with less than senior high school education, compared with 60% in the labor force

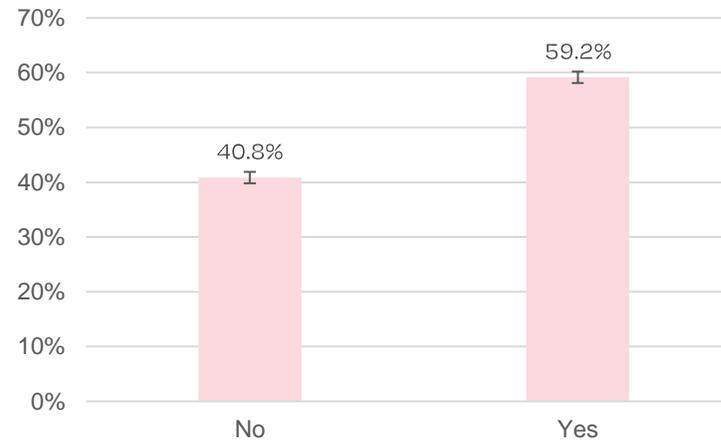
Large majority are primary earners while three-fourth rely on e-commerce as a primary source of income

Employment status

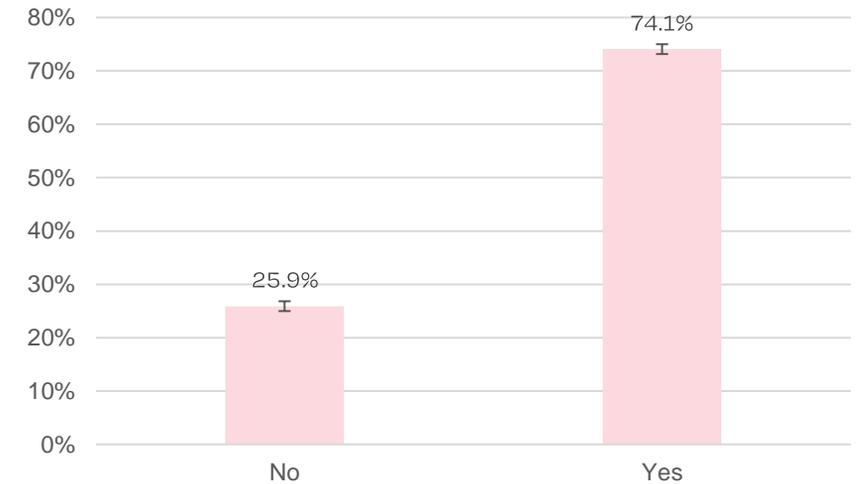


Almost half are self-employed, while 14% are homemakers. 79% have 2 or more dependents

Primary earners/bread winners in the household?



Online selling is primary/main income?



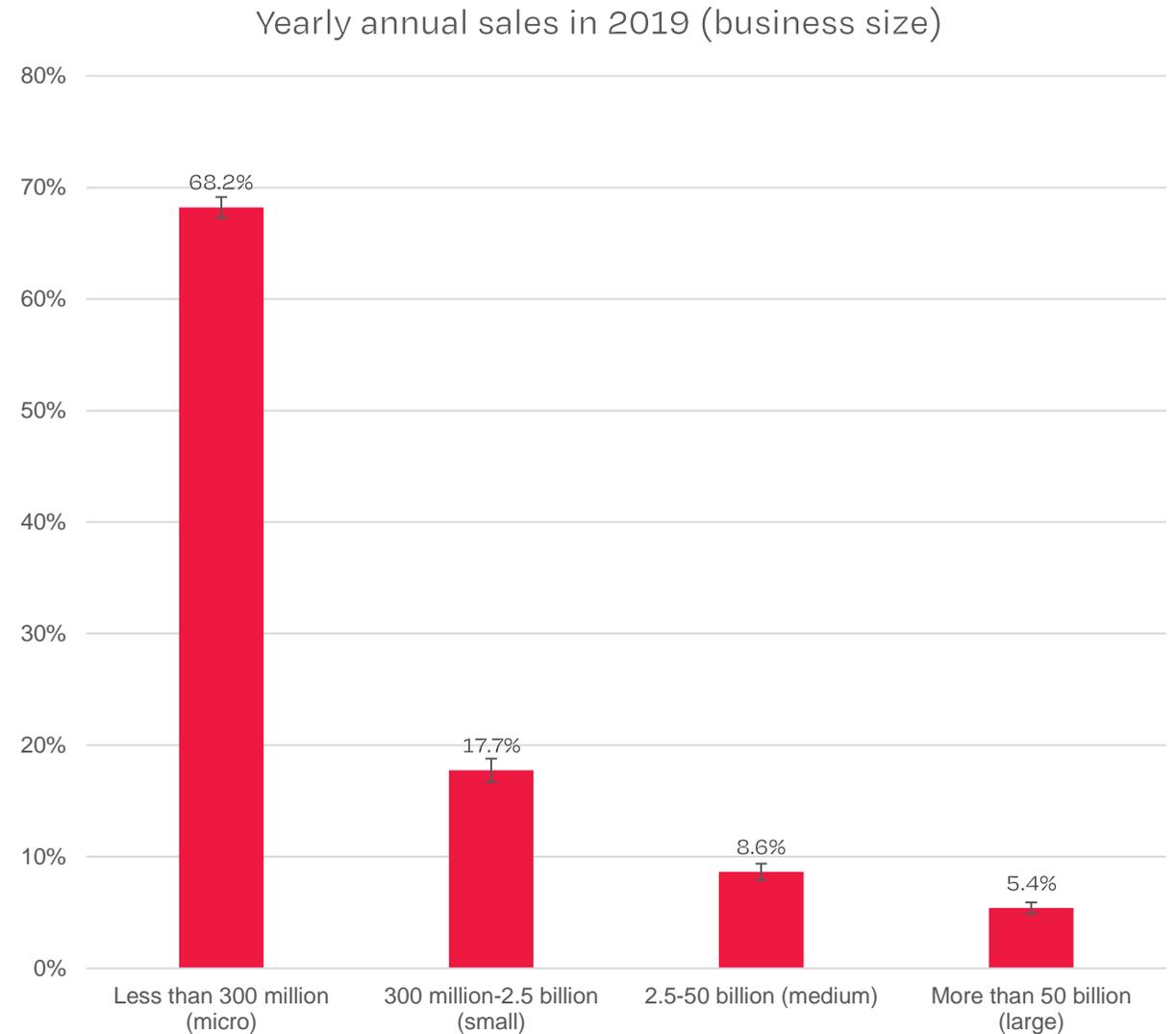
From 1,000 merchants who answered both this survey and Shopee's 2019 survey, a net of 6.7% switched to become primary earners and 12% switched to use e-commerce as a primary source of income in 2020.

Note: Merchants might perceive themselves as "not working" if they spends less than one hour per week selling online

Business Profiles

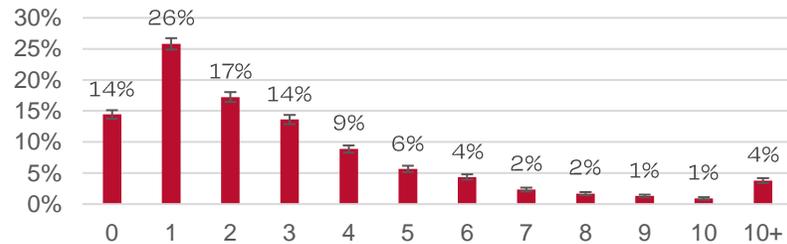
Q2

The vast majority of businesses that were in operation before 2020 (pre-pandemic) are MSMEs



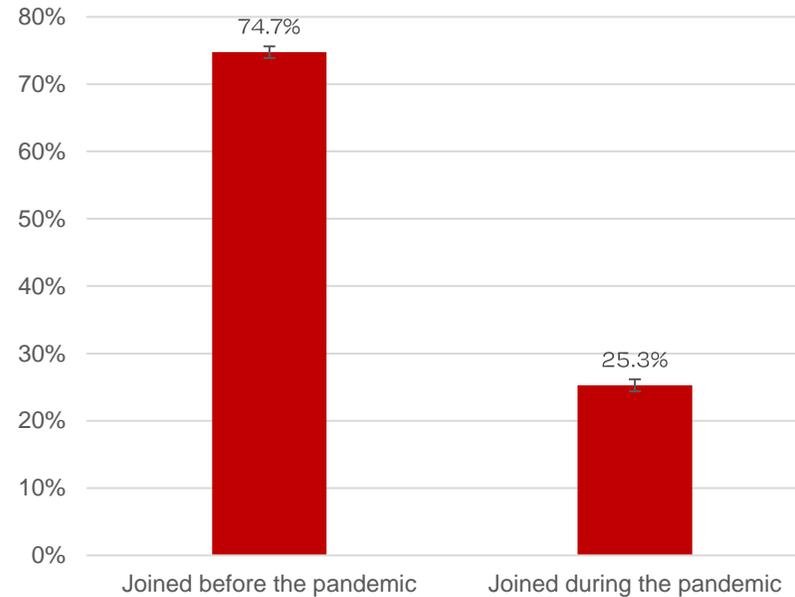
More than half are young businesses, with a quarter just joining during the pandemic, and half joining more than one platforms

Years of selling online



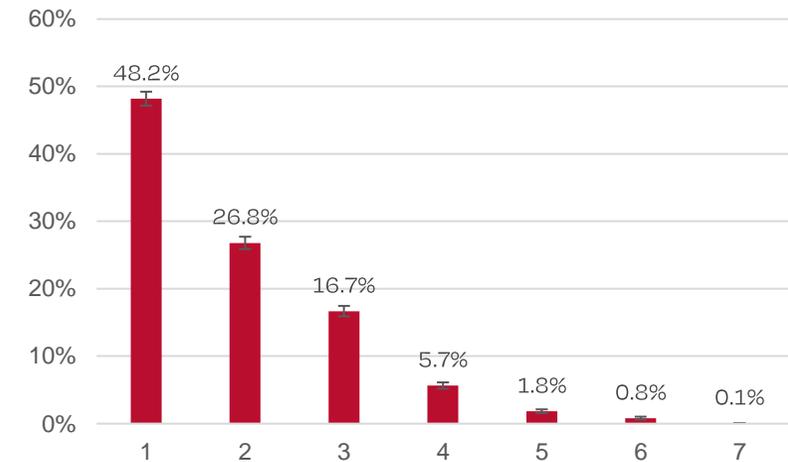
More than half are young businesses, 2 years old and below.

Joined online business during the pandemic?



A quarter started their online business during the pandemic.

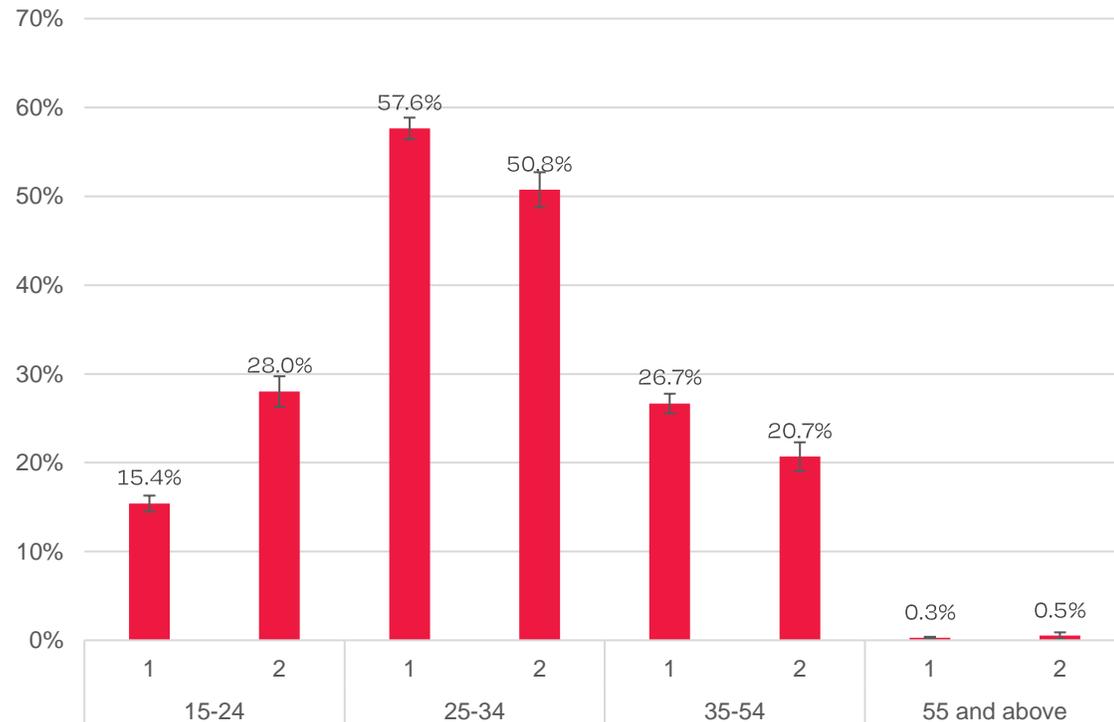
How many e-marketplaces joined?



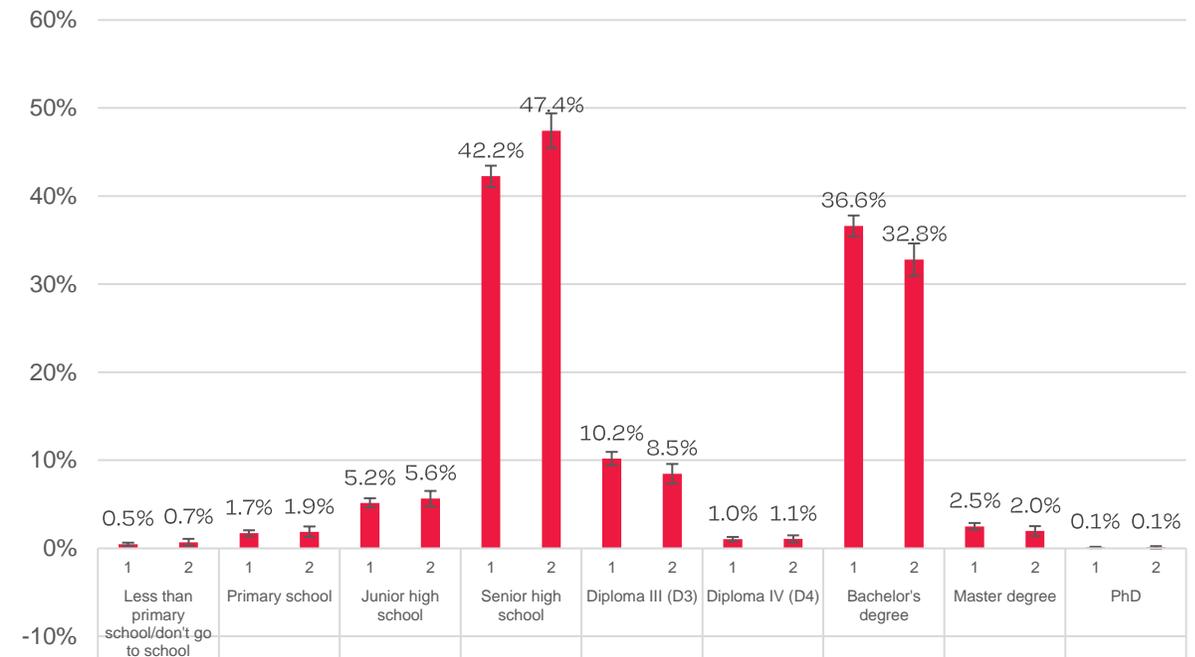
Digital merchants typically join one or two e-commerce platforms.

Merchants who joined e-commerce during the pandemic are more likely to be youth (15-24), senior high graduates (less likely college graduates),...

Age group



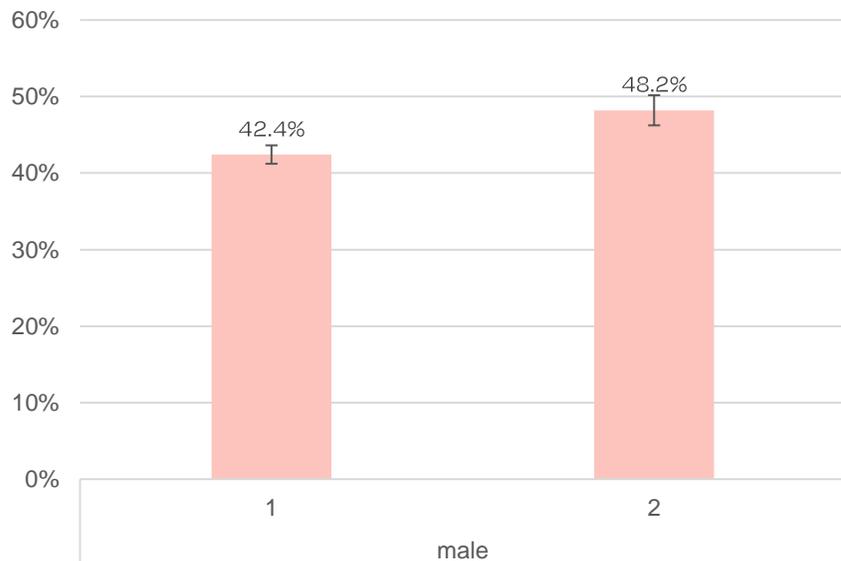
Highest education attained



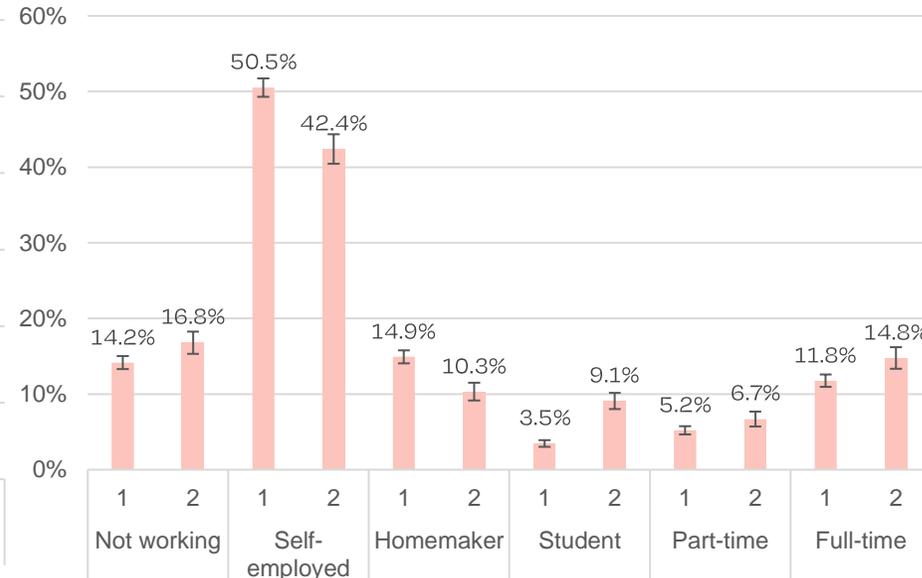
1= started online business before the pandemic; 2=started online business after the pandemic

....male, students/not working/full-time, and to use e-commerce as an alternative income source, relative to merchants who joined before the pandemic

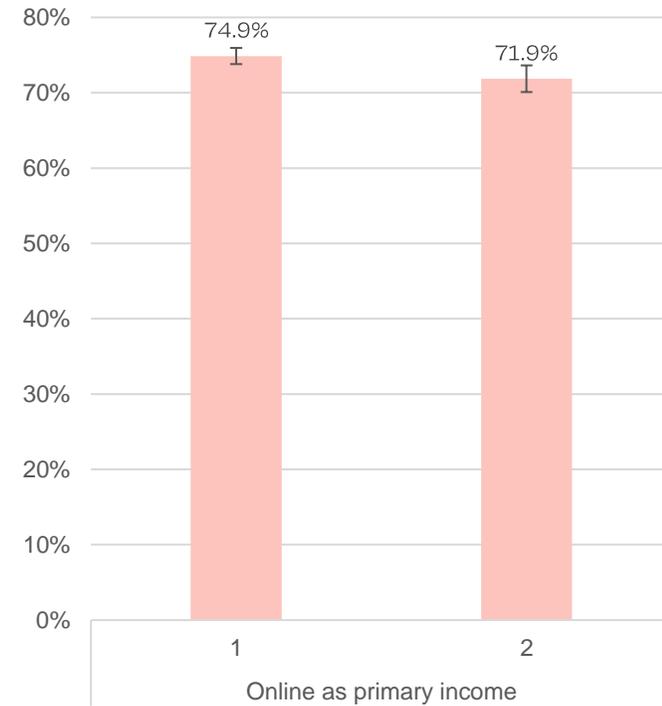
Gender



Status of employment



Online selling is primary/main income?



1= started online business before the pandemic; 2=started online business during the pandemic

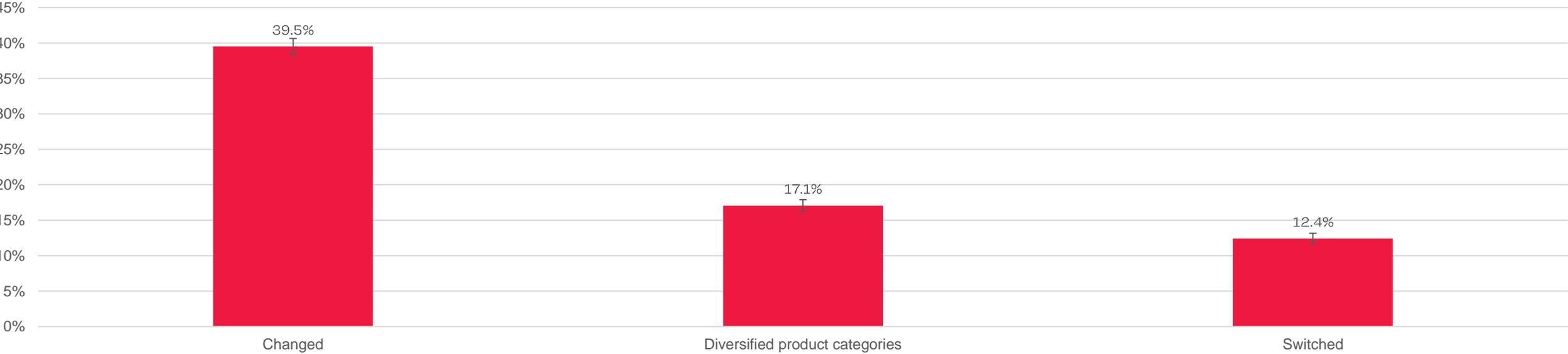
Effects of Covid-19 & Coping Strategies

03

Merchants adjusted to Covid-19 and continuously evolving consumer preferences by changing, diversifying, and switching product categories

Merchants are adjusting to continuously changing consumer demand during the pandemic, especially toward hygiene-related and home-living products associated with WFH*

Changing, diversifying and switching product categories (February-November 2020)



Close to 40% start and/or stop selling a product category

17.1% increase the number of product categories they sell, while 14.6% decrease

More than one in ten merchants stop selling what they used to sell *and* start selling a new product category ("switch")

*Source: Sea Limited Q2 2020 Earning Call Transcript

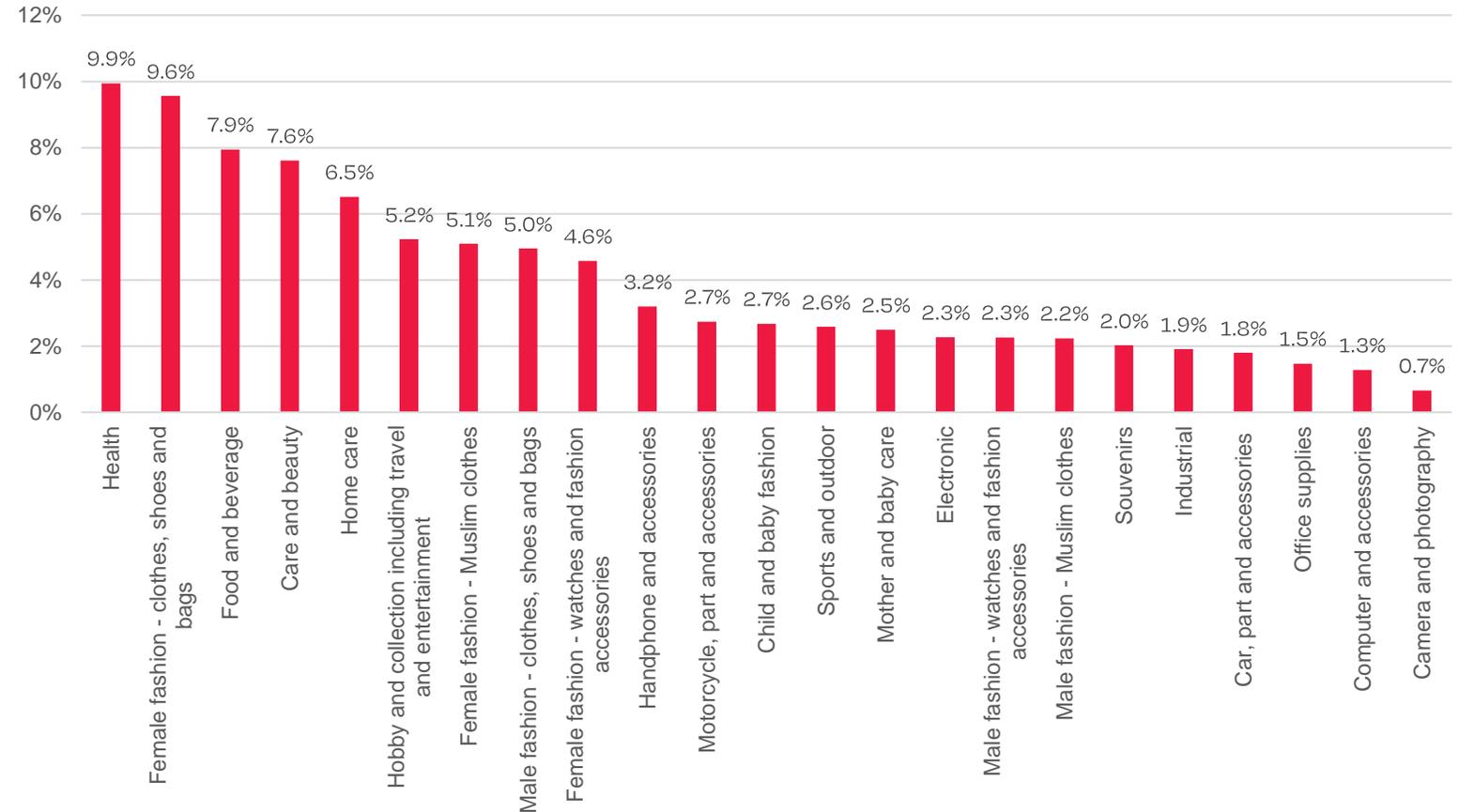
Health is the most popular product category to switch into

The most popular product categories to switch into *after* a merchant switches out of a product category:

- Health
- Fashion woman – clothes, shoes, bags
- F&B
- Care and beauty (e.g. hand sanitizers, wet tissues)
- Home care

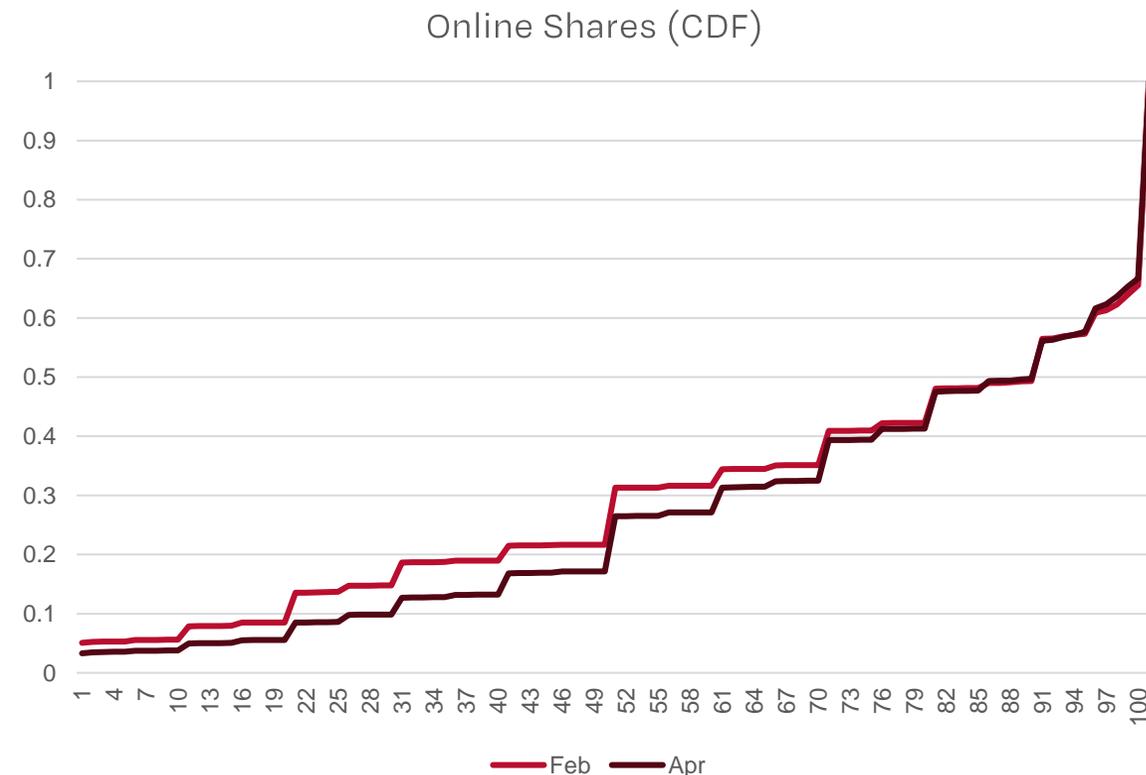
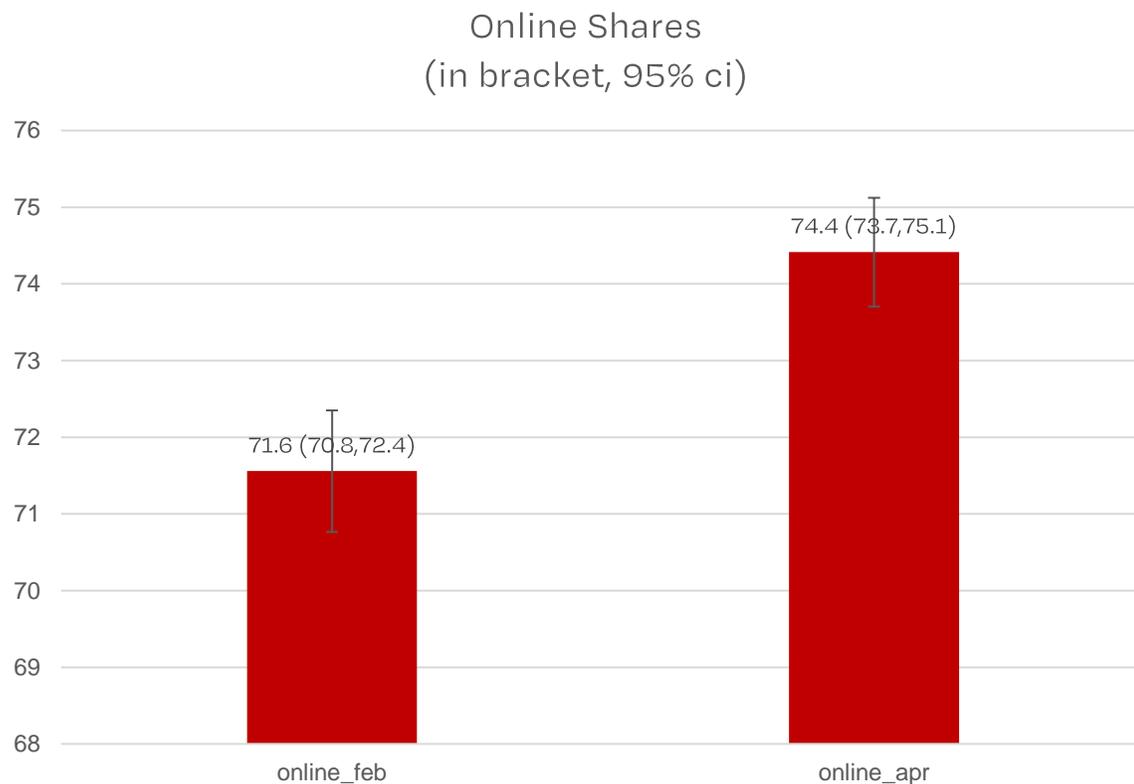
For example, on average, merchants have a 9.9% chance to switch into and start selling health products, regardless of what product category they switched out of.

Average probability of switching into a product category after switching out of a product category



Merchants shifted online to cope with the strict lockdown

Online shares of total sales rose up at the height of the pandemic in April



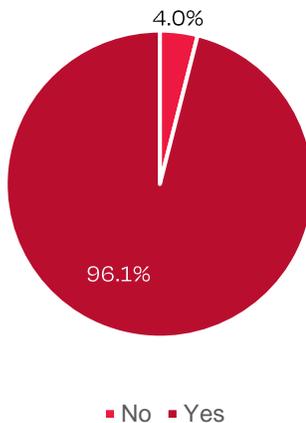
Resilience & Sustainability

04

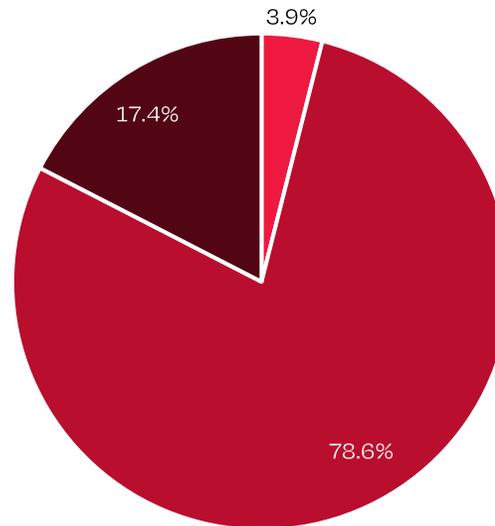
Digital merchants are more resilient than general firms:

Close to 80% have kept business open during the pandemic, while 17% managed to resume business after some time. *This could also reflect the ability to switch to sell online to keep business going.*

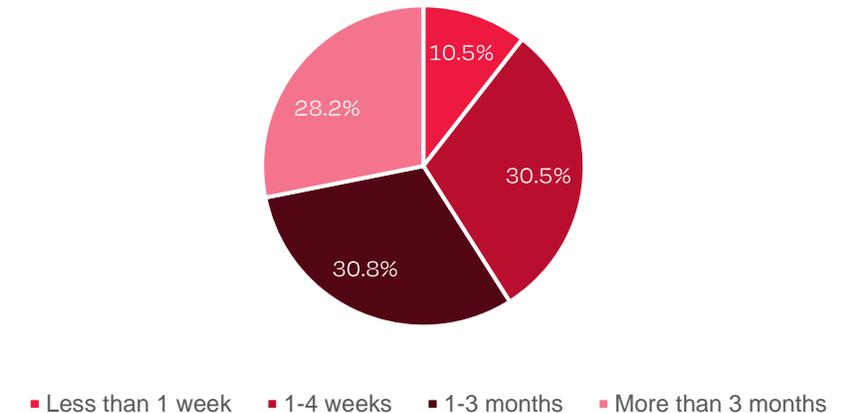
If still closed (3.9%), do you plan to open again?



Business operations during the pandemic



If closed temporarily (17.4%), how long did your business close?

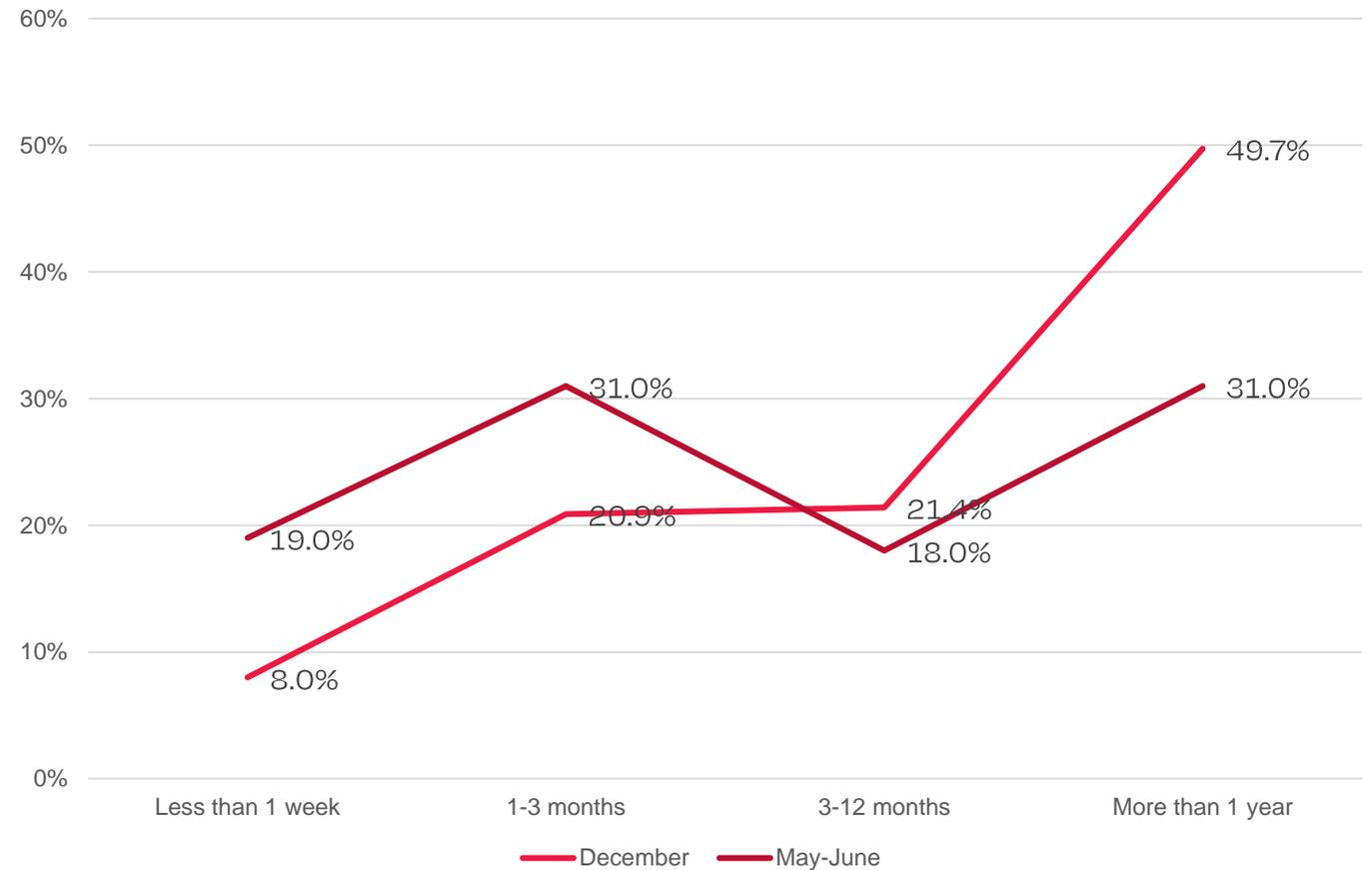


■ Still closed ■ Always opened ■ Closed temporarily

*Compared to the World Bank's representative Business Pulse Survey (BPS) Round 1 (June 15-23, 2020) and 2 (October 16-November 4, 2020), which surveyed 4,000 general firms across multiple sectors in mostly Java and Bali, six out of ten firms in BPS had been or were closed by June although by October/November, nine out of ten were already opened.

Business sustainability perception has improved in December from May/June

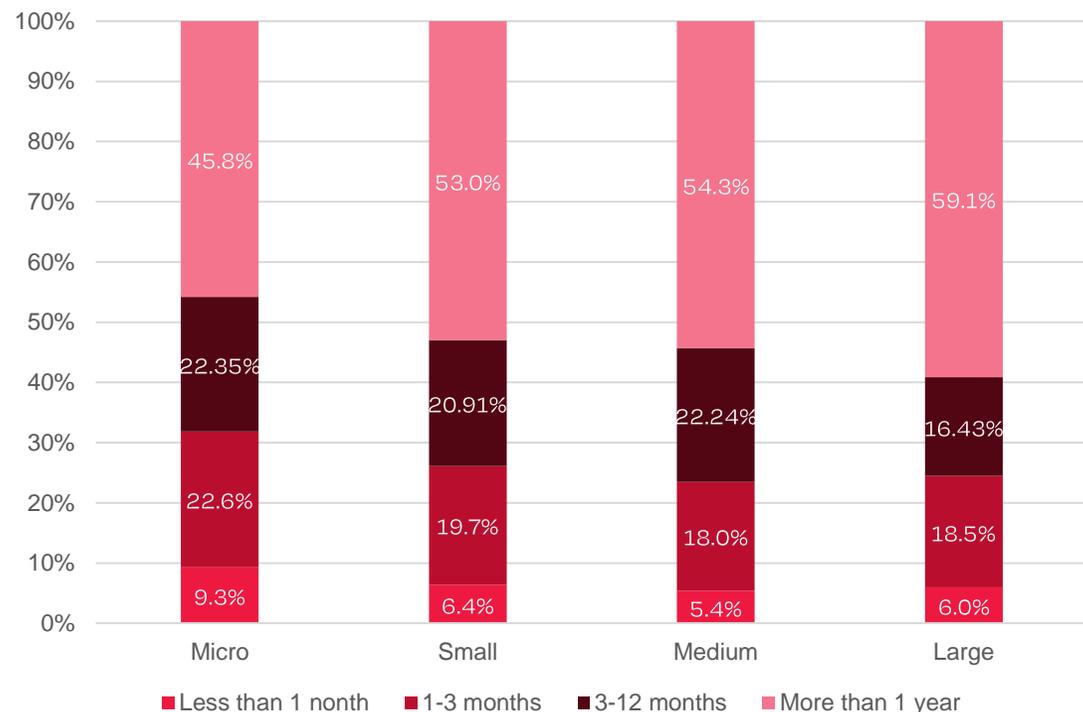
Business sustainability perception:
May/June vs. December 2020



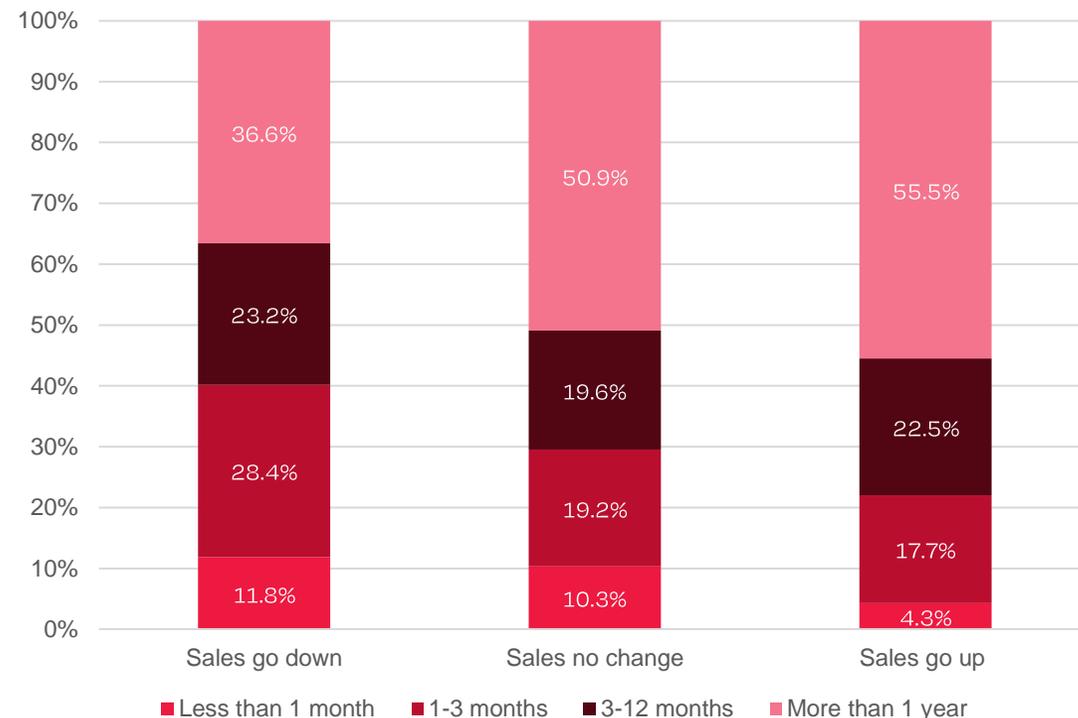
Note: The May-June and December data are based on two different surveys.

Large businesses and businesses with improving sales are more likely to sustain their business for longer

Business sustainability perception by business size



Business sustainability by total sales performance (April-Nov)

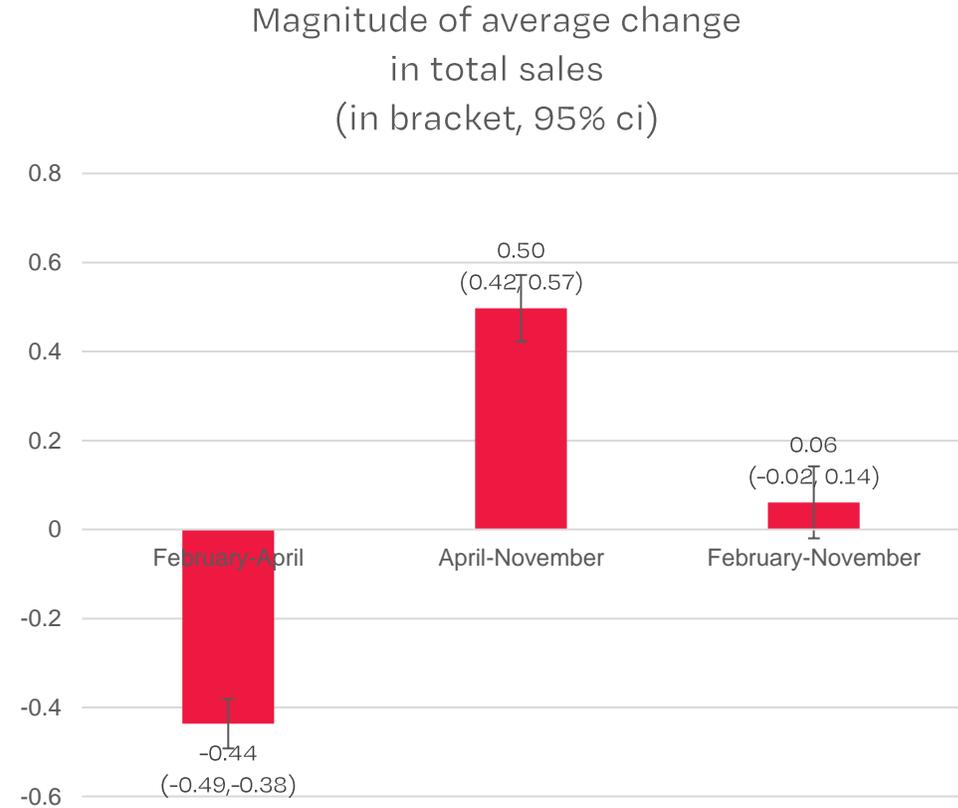
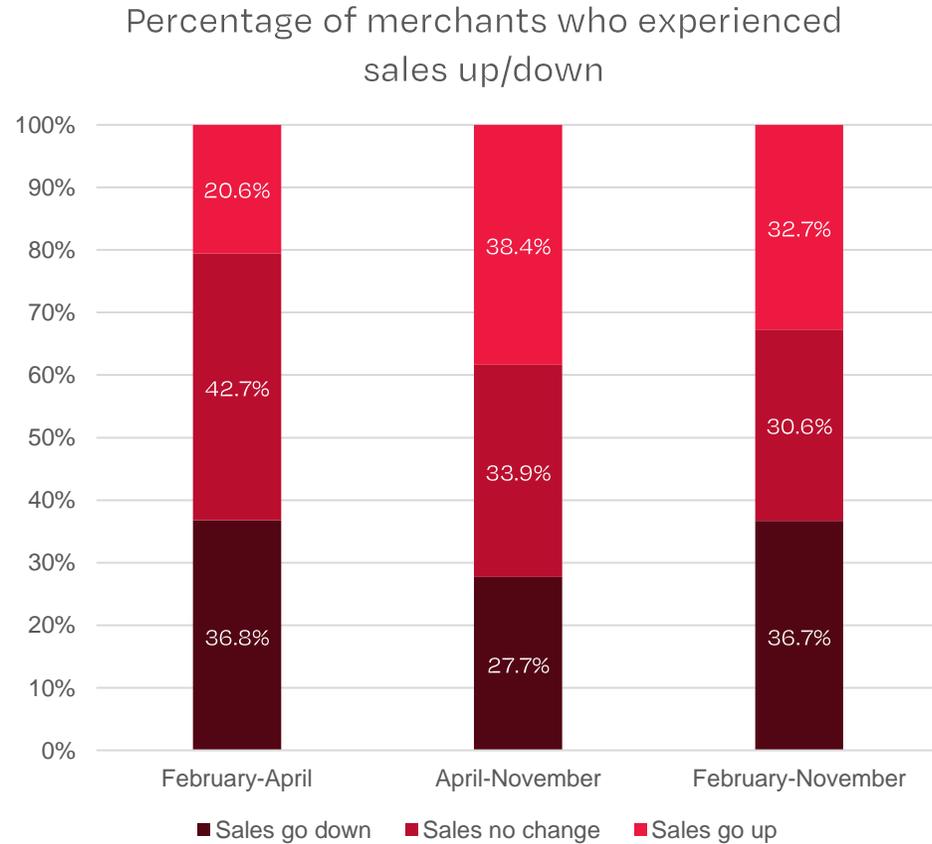


**Sales
performance**

05

Merchants' average total sales went down between February and April, ...

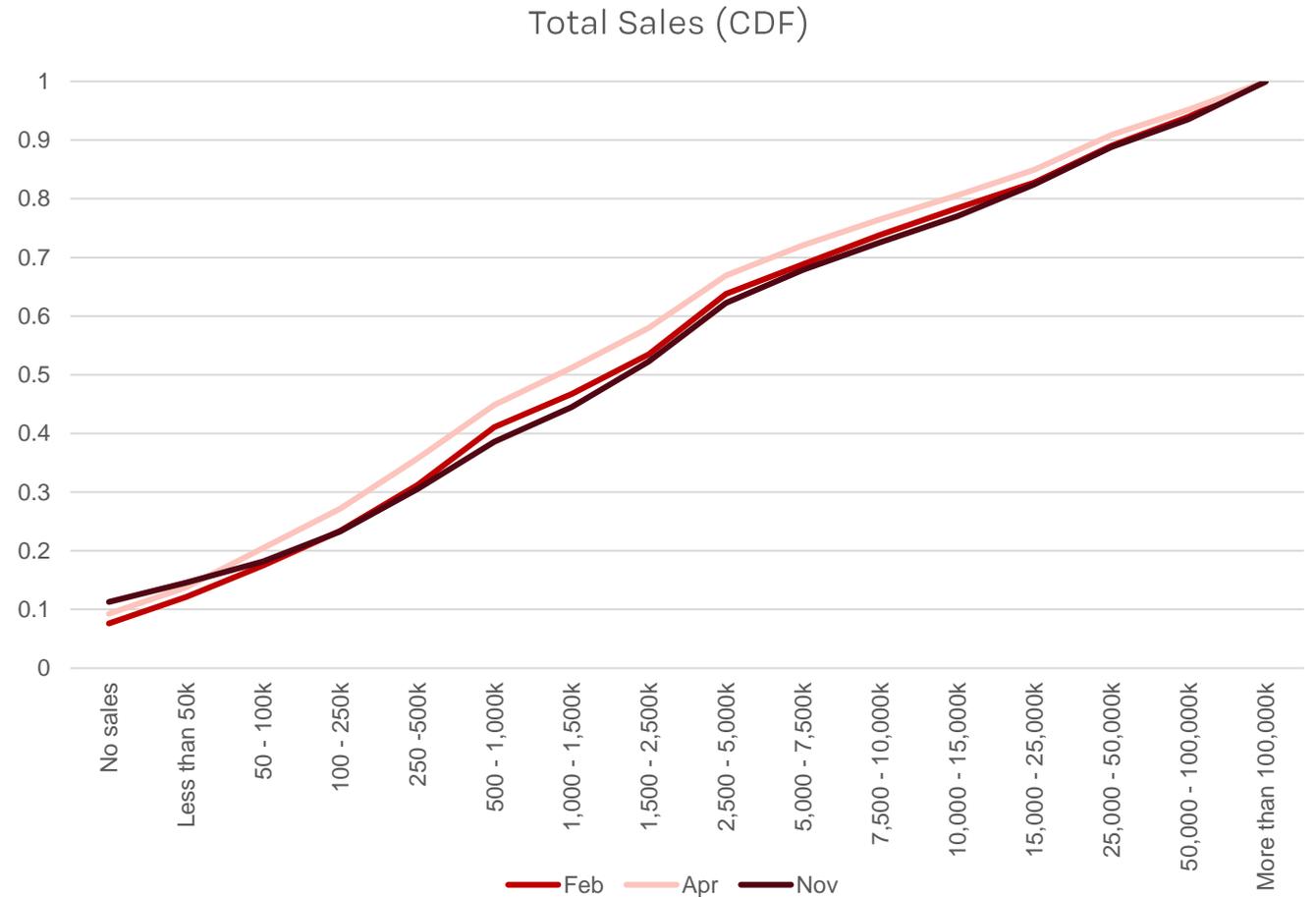
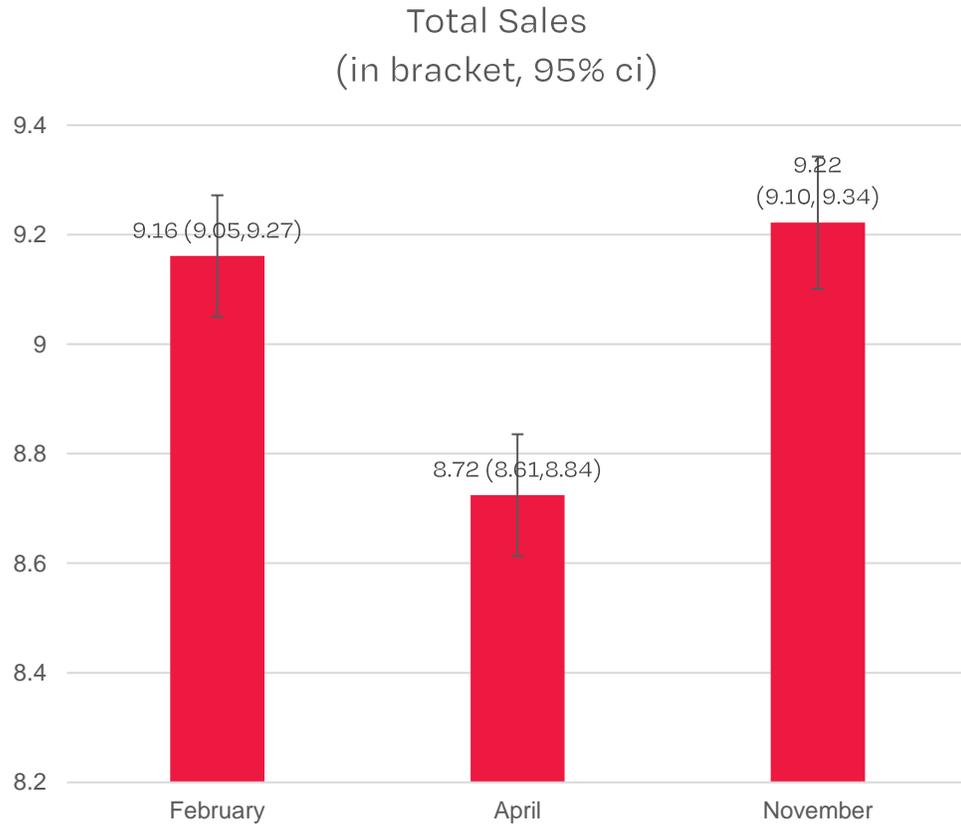
Total Sales: February (pre-pandemic) – April (lockdown) – November (lockdown eased)



Note: y-axis is the average change in the sales grouping (higher group number, higher sales). See Annex for the sales grouping.

....but recovered to the pre-pandemic level by November

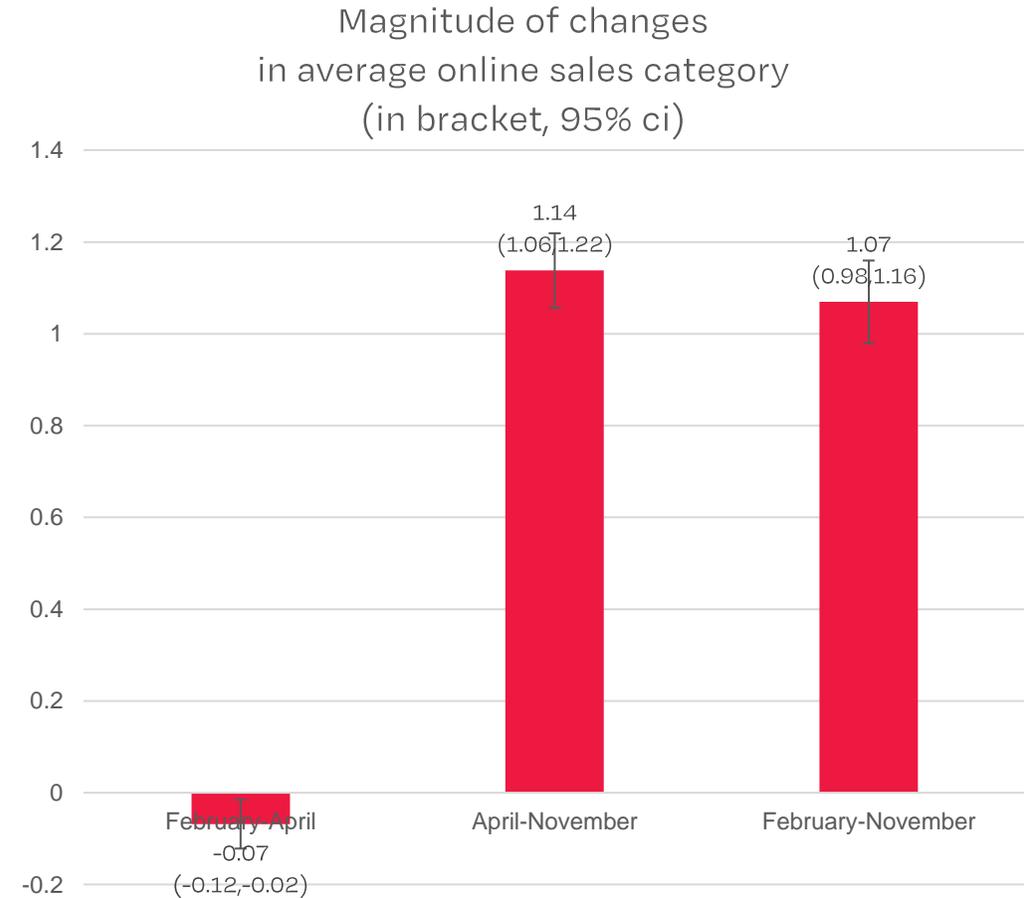
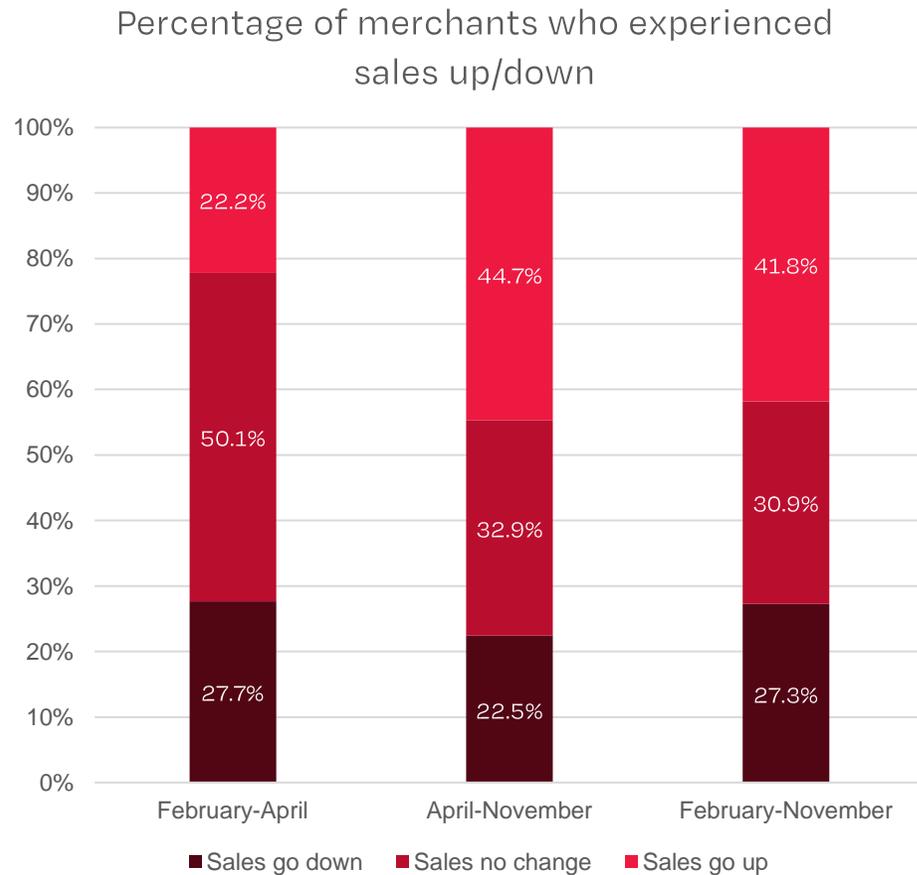
Total Sales: February (pre-pandemic) – April (lockdown) – November (lockdown eased)



According to the World Bank's Business Pulse Survey Round 2, three quarters of firms have not recovered to the pre-pandemic level in October 2020 based on a y-o-y change.

Merchants' average online sales only went down *slightly* in April, but came back *stronger* than the pre-pandemic level by November

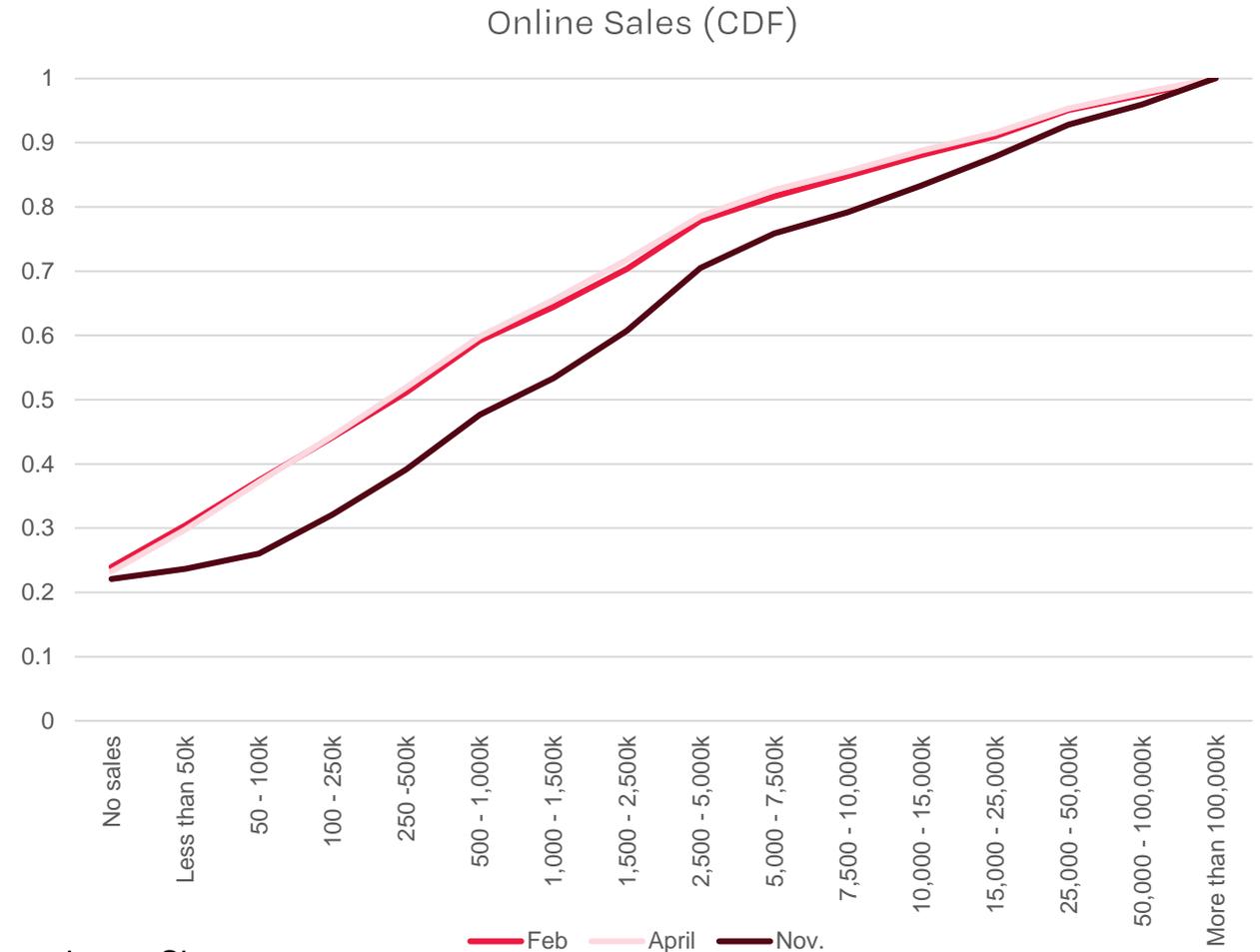
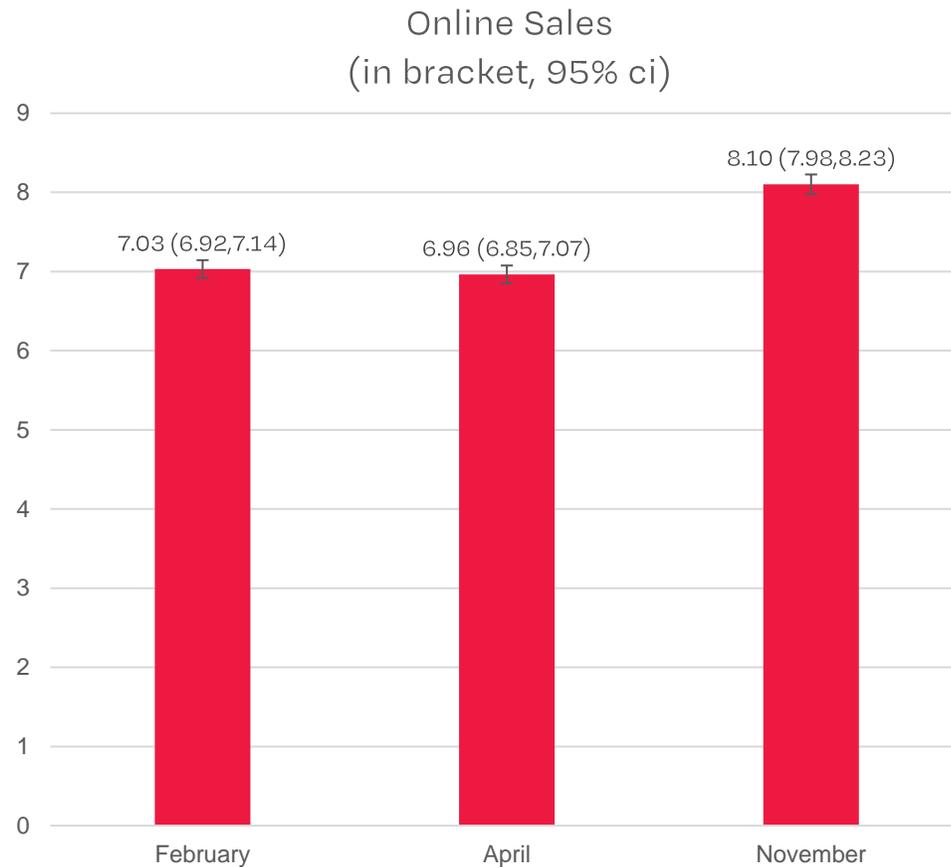
Online Sales: February (pre-pandemic) – April (lockdown) – November (lockdown eased)



Note: This is just online sales on Shopee.

Online sales rose in November compared with February and April

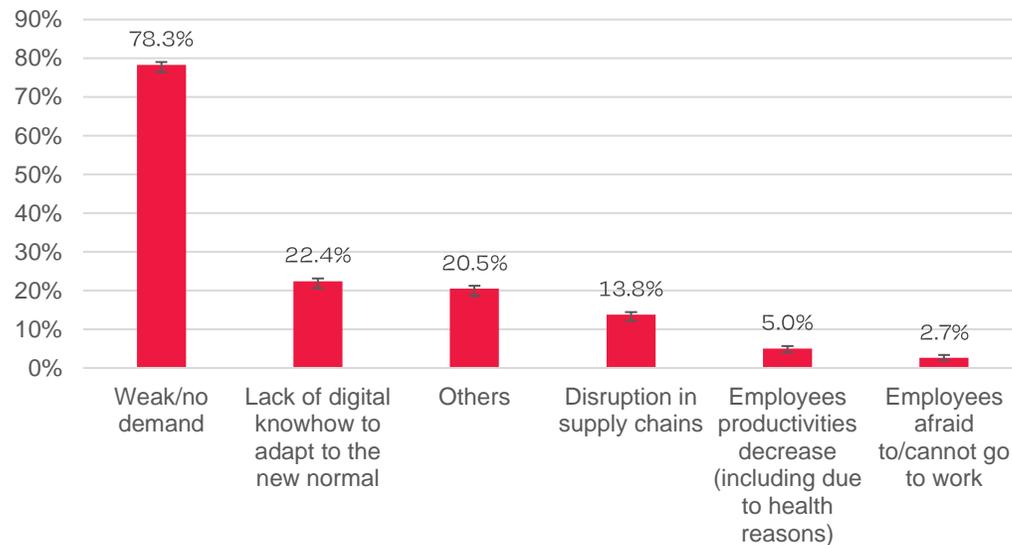
Online Sales: February (pre-pandemic) – April (lockdown) – November (lockdown eased)



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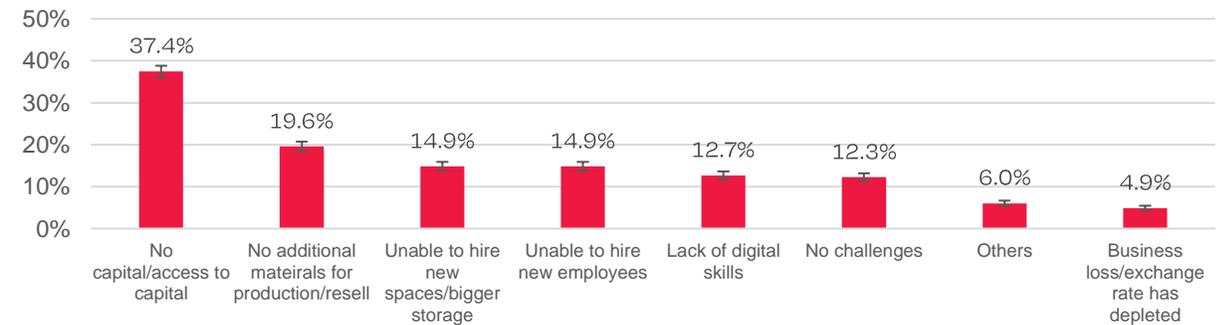
Weak demand was the biggest challenge for merchants experiencing declining sales

Reasons for sales going down between April-November



Lack of access to capital was the top constraint for business expansion (or recovery)

Challenges if total sales going up between April and November



Lack of digital knowhow was quoted as the challenge for both sustaining business and expanding business. Note: The top reasons for sales going down and up between April and Nov. are consistent with those of Feb. and April (from the Bukalapak-World Bank survey).

Merchants who switched product categories experienced stronger sales performance between February and November, controlling for other factors

Change in total sales category performance between February and November	Coef.	[95% Conf.	Interval]
yearly sales in 2019 (business size)	-0.13	-0.22	-0.05
online share pre-pandemic	0.01	0.007	0.01
years selling online	-0.05	-0.07	-0.02
total platforms joined	0.04	-0.03	0.11
switch product categories between February-November	0.42	0.16	0.69

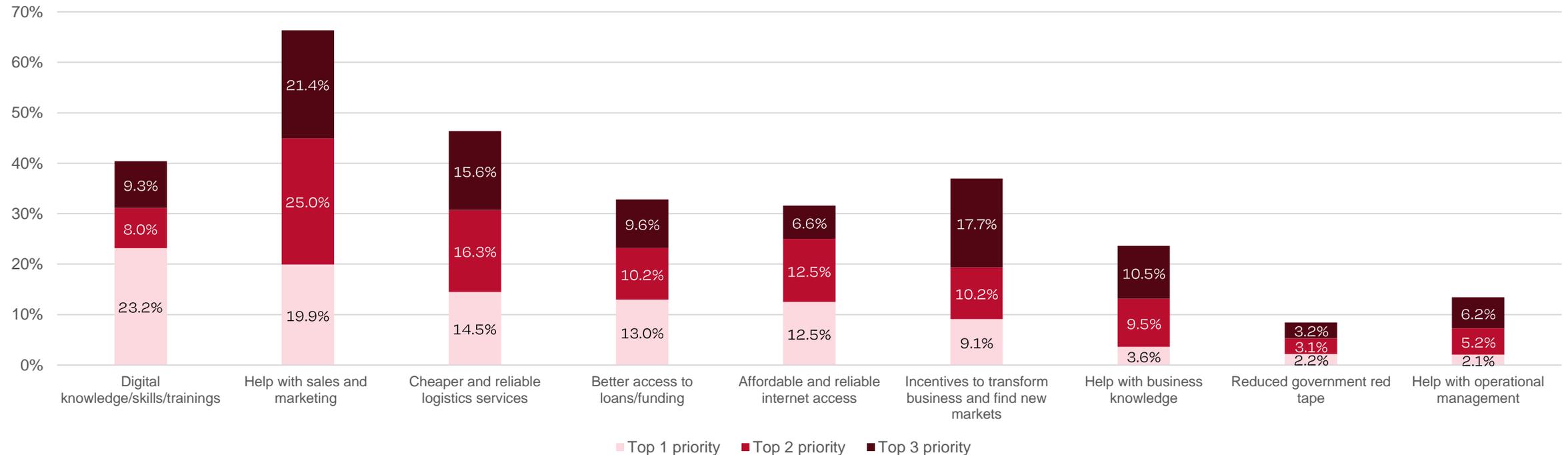
Note: Regression controls for product category sold in February (pre-pandemic)

How to Support Digital Merchants?

06

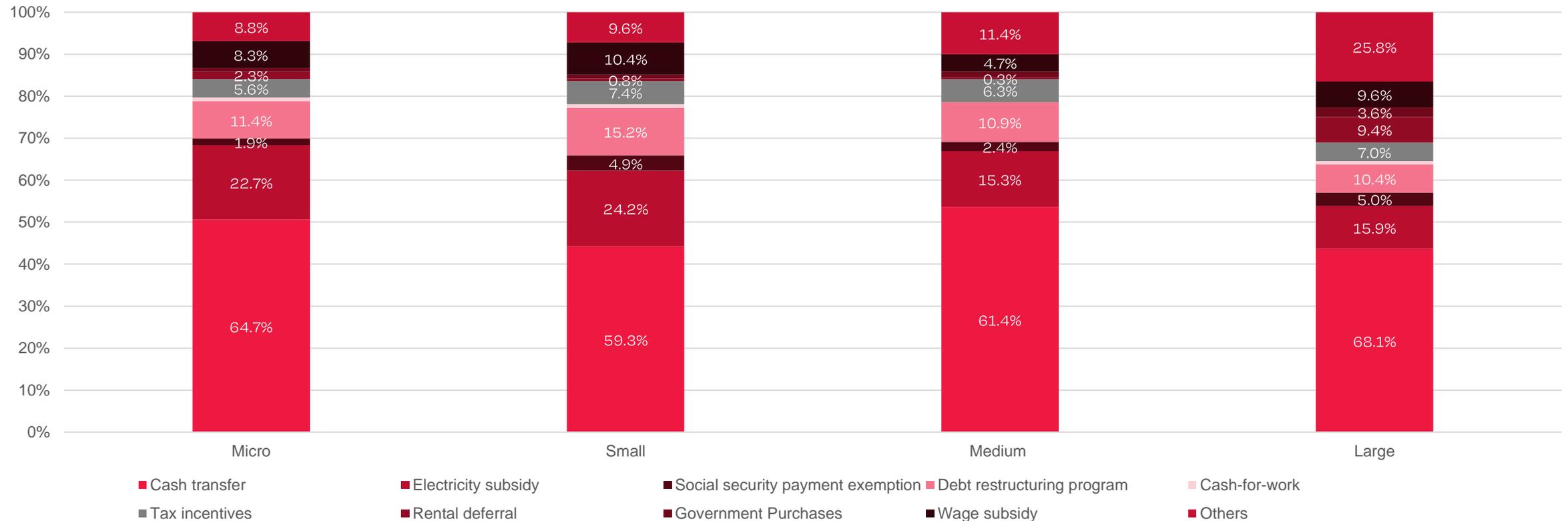
Digital skills training, sales & marketing, and cheaper & reliable logistic services are the top 3 business supports wanted by sellers

What are the top three programs that would be most useful going forward?
(percentage of merchants)



Among 1 in 5 merchants received government assistance, around two thirds of them received it via cash transfers, regardless of business size

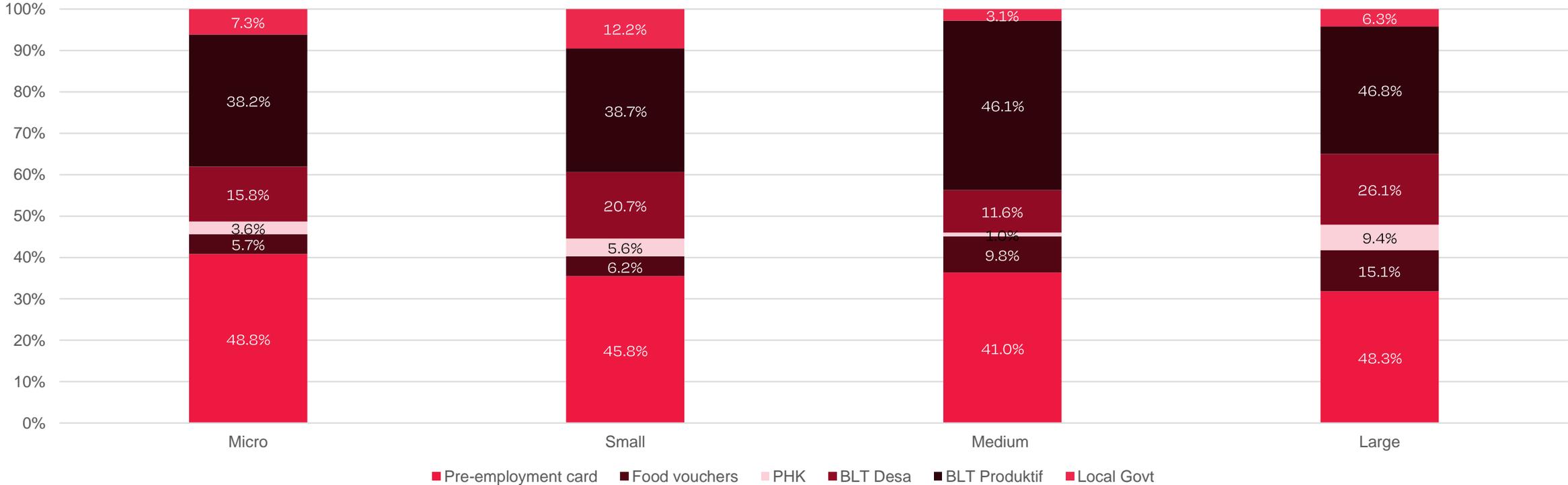
What types of government assistance did merchants of different business size received?



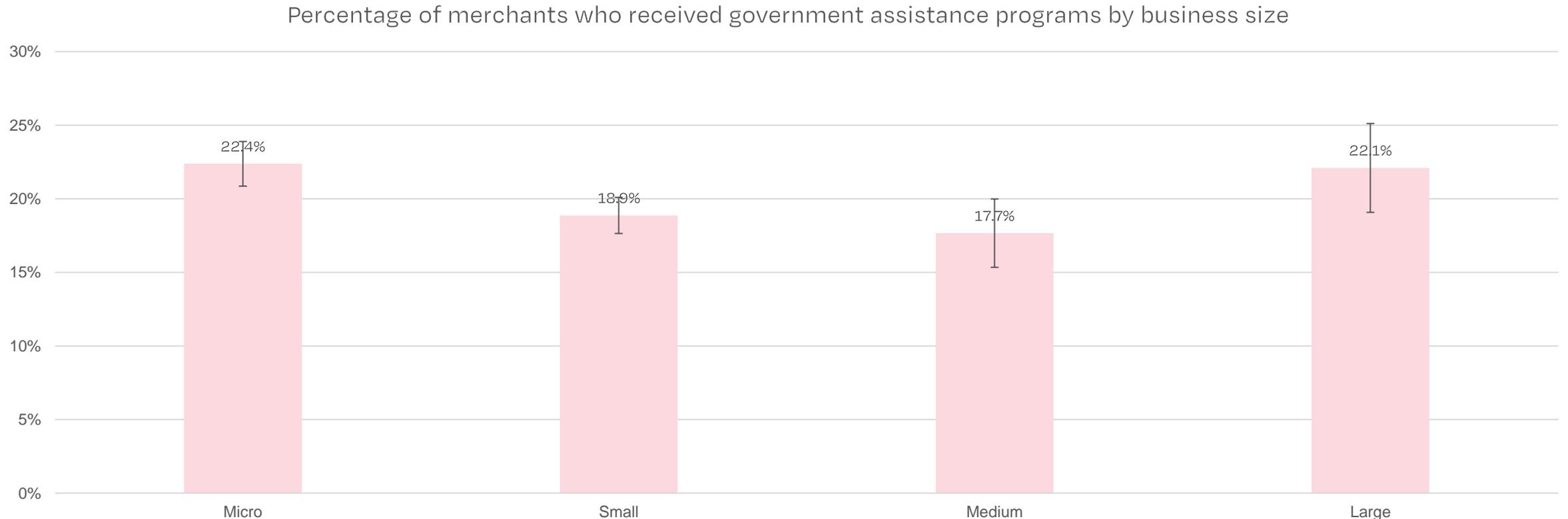
Large and medium businesses were less likely to receive electricity subsidies (although not significantly different within 95% ci). The results are mixed for all other government programs in terms of variations across different business sizes.

Merchants who received cash transfer largely received it via Pre-Employment Card and *BLT Produktif*

What types of cash transfer programs did merchants with different business size receive?



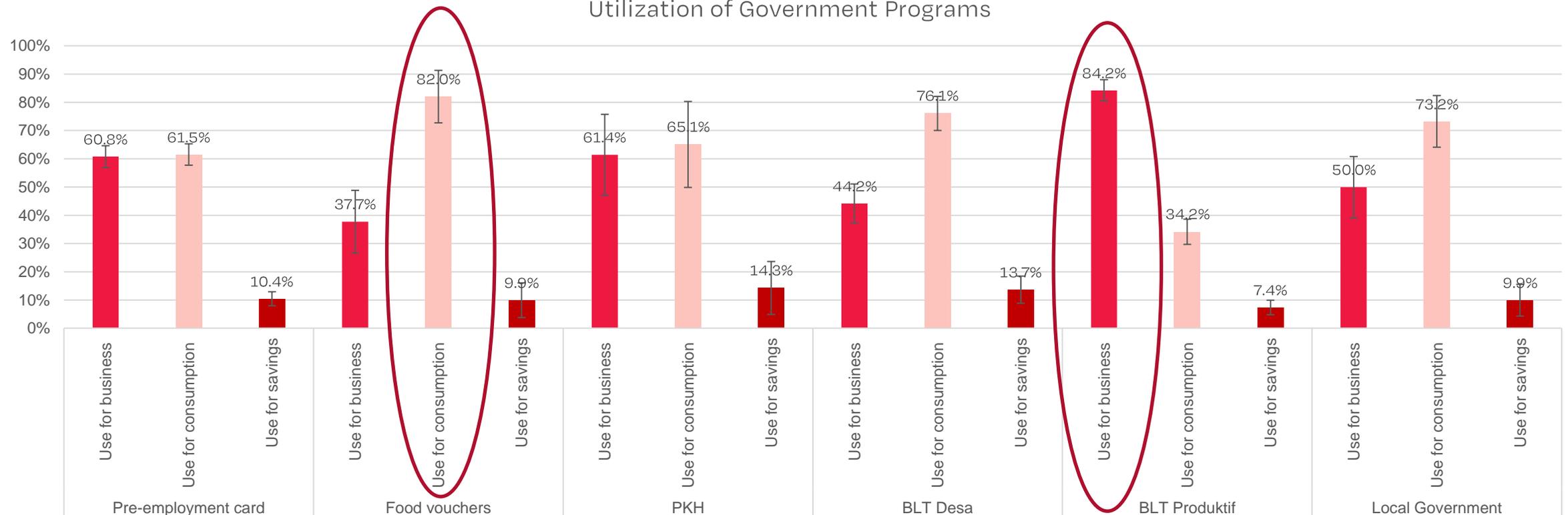
By November, merchants across business size received government assistance with almost the same probability



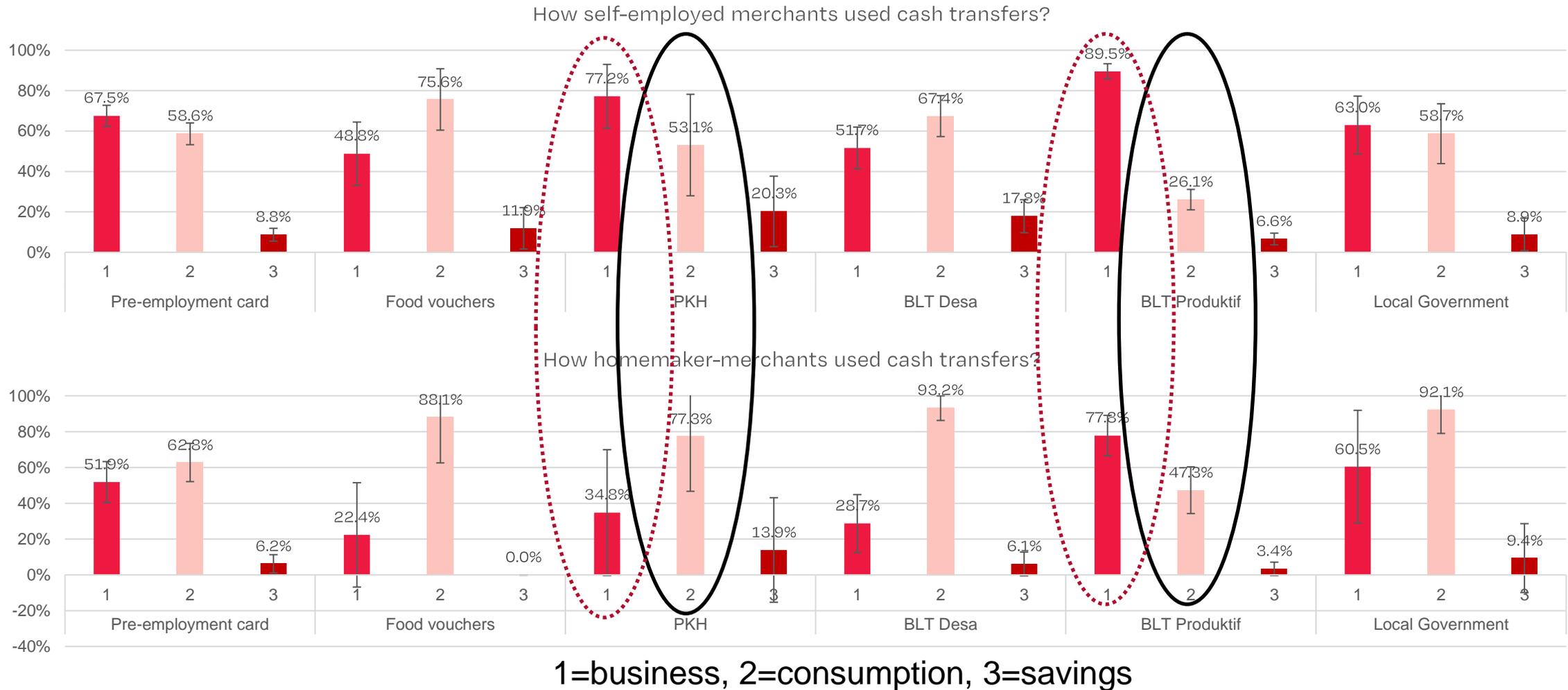
Government assistance is also not associated with selling online longer

Sellers are using the different types of cash transfers in different ways and according to expectations of the government, e.g. *BLT Produktif* for business & Food Voucher for consumption

Utilization of Government Programs

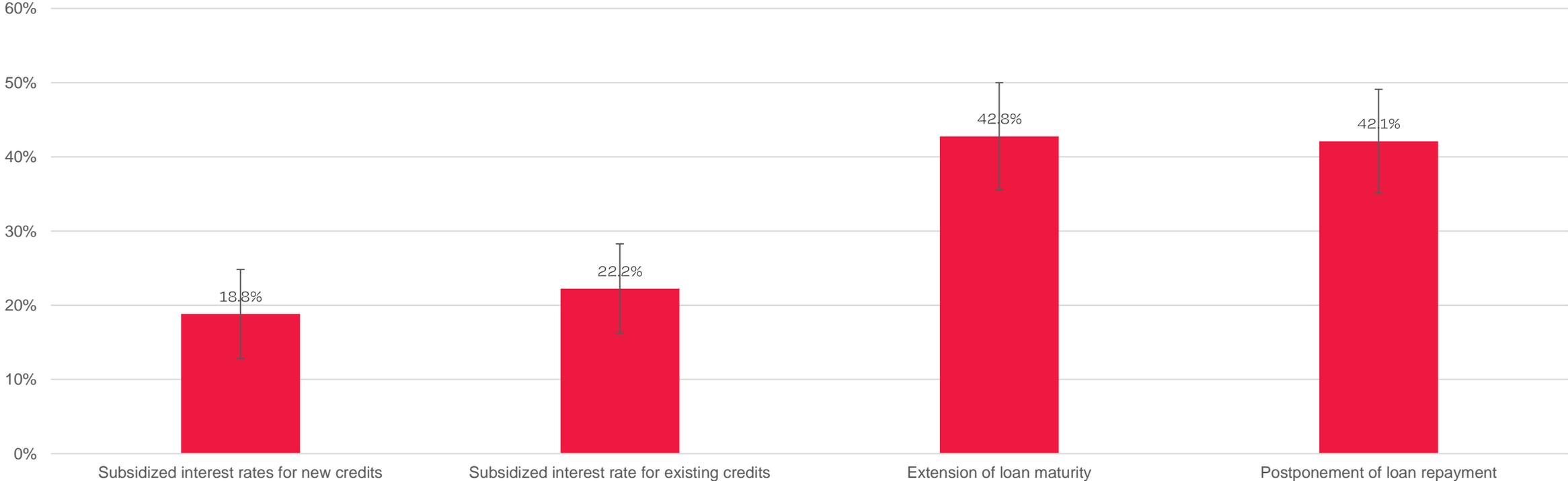


Moreover, self-employed tended to use cash more for business, and homemakers for consumption



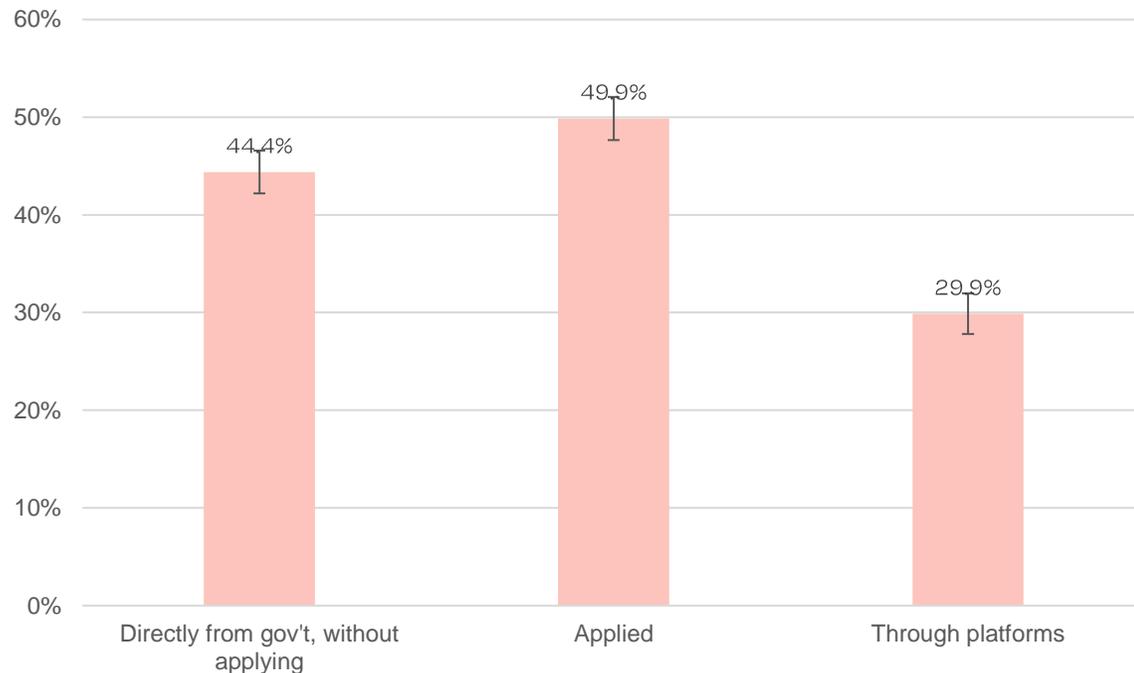
Merchants who received debt-restructuring programs were more likely to receive extension to loan maturity and postponement of loan repayments than subsidized interest rates (either for new or existing credits)

If received debt restructuring programs, what types of programs?

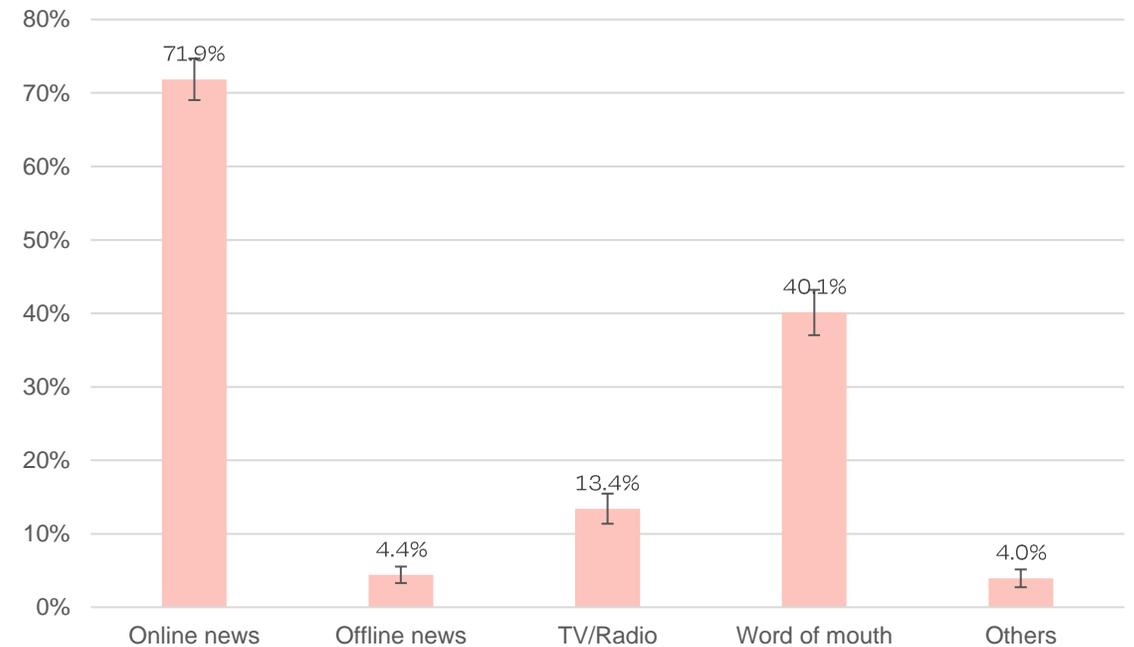


Half of merchants received government assistance by applying, and before applying, 72% of them learned about government assistance from online news

If received government assistance, how did merchants receive it?

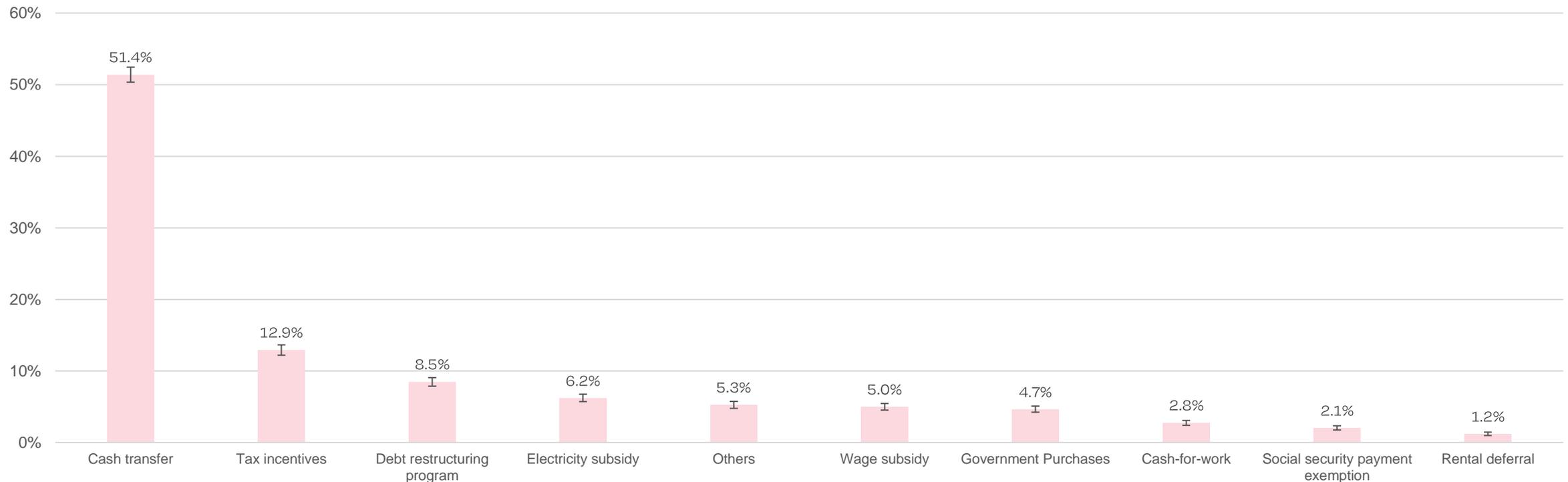


If applied for government assistance, from where did merchants learn about the government assistance?



Cash transfers are still the most popular government assistance to help merchants in the future, by far, compared to other programs

Most useful government assistance in the future?



Annex

Calibration Rake/RIM Weighting

Due to the high rates of non-responses and attrition in online surveys, the distribution of responses is often quite different from that of the target population.

A cell weighting approach (e.g. provincial location in the column and business size in the row) can be used to assign a weight to each cell in the sample of the online survey so that the weighted total of each cell becomes identical to the target population.

Rake/RIM weighting is used to reweight sampled when the cell-level values of the true distribution are unavailable, but row and column totals are provided. It is an iterative procedure that focuses on one feature at a time to make the marginal distribution of the sample in terms of that feature identical to that of the target population, then proceeding to the next features, and repeating the process until convergence is achieved:

Step 1: Calculate the weighted totals of the cells from the survey

Step 2: Compare those totals against the total from the auxiliary data

Step 3: Rake across by dividing the total of the rows in the auxiliary data by the total from the survey data. Multiply the values in each cell of the respective rows. The total in the rows now match those in the auxiliary data

Step 4: Rake down (similar to rake across by using columns instead of rows)

Step 5: Repeat process until convergence is reached

Step 6: Divide the raked totals by the weighted totals from the survey data. Apply these weights to each cell.

Due to sensitivities to ask directly about sales and hence merchants' reluctance to fill-in the survey, and the higher likelihood of merchants to report inaccurate figures, we asked sales performance using categorical questions:

	(Total or Online) Sales category
1	Business not yet started
2	No sales
3	Less than 50k
4	50 - 100k
5	100 - 250k
6	250 -500k
7	500 - 1,000k
8	1,000 - 1,500k
9	1,500 - 2,500k
10	2,500 - 5,000k
11	5,000 - 7,500k
12	7,500 - 10,000k
13	10,000 - 15,000k
14	15,000 - 25,000k
15	25,000 - 50,000k
16	50,000 - 100,000k
17	More than 100,000k