



**(Digital) Technology Adoption  
in the times of COVID:  
*Policy Implications for Recovery***

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# Outline

**1**

**“Digital explosion”**

**2**

**Emerging digital divide**

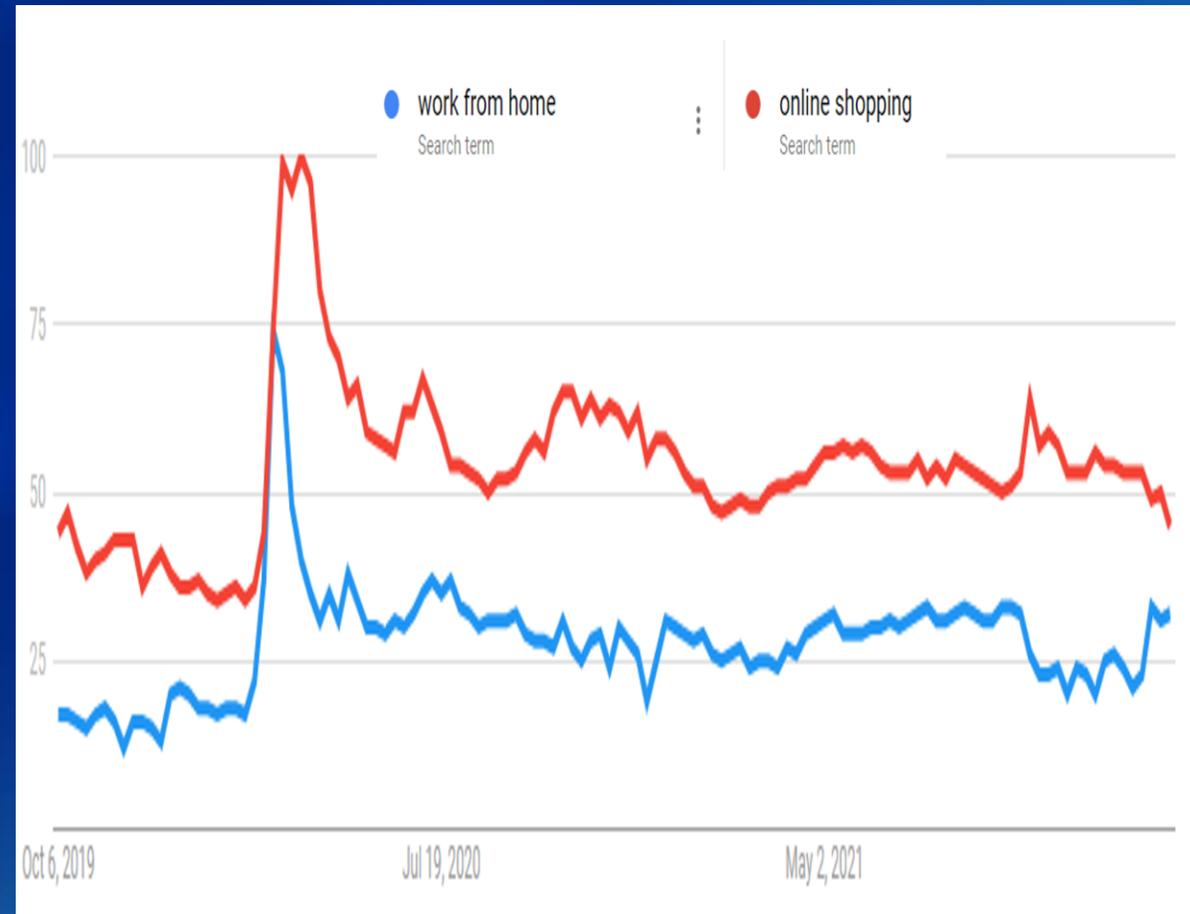
**3**

**Understanding what are the drivers**

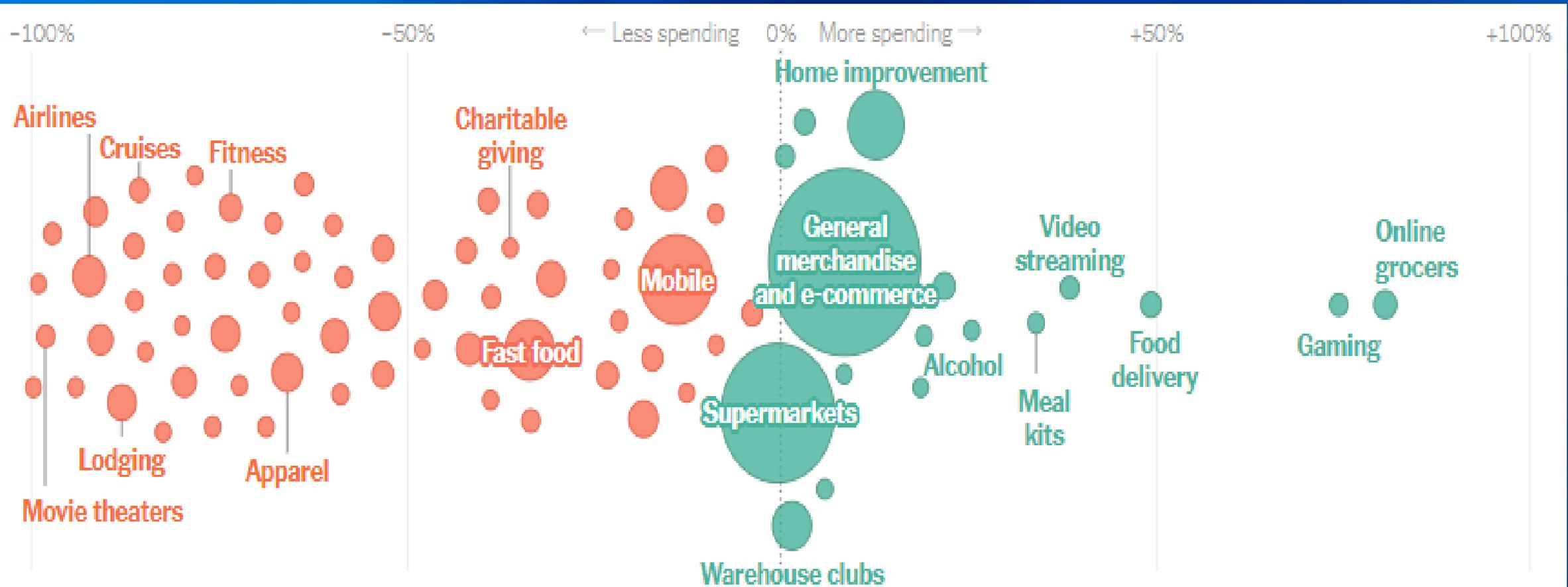
**4**

**Policy implications**

# “Digital” explosion

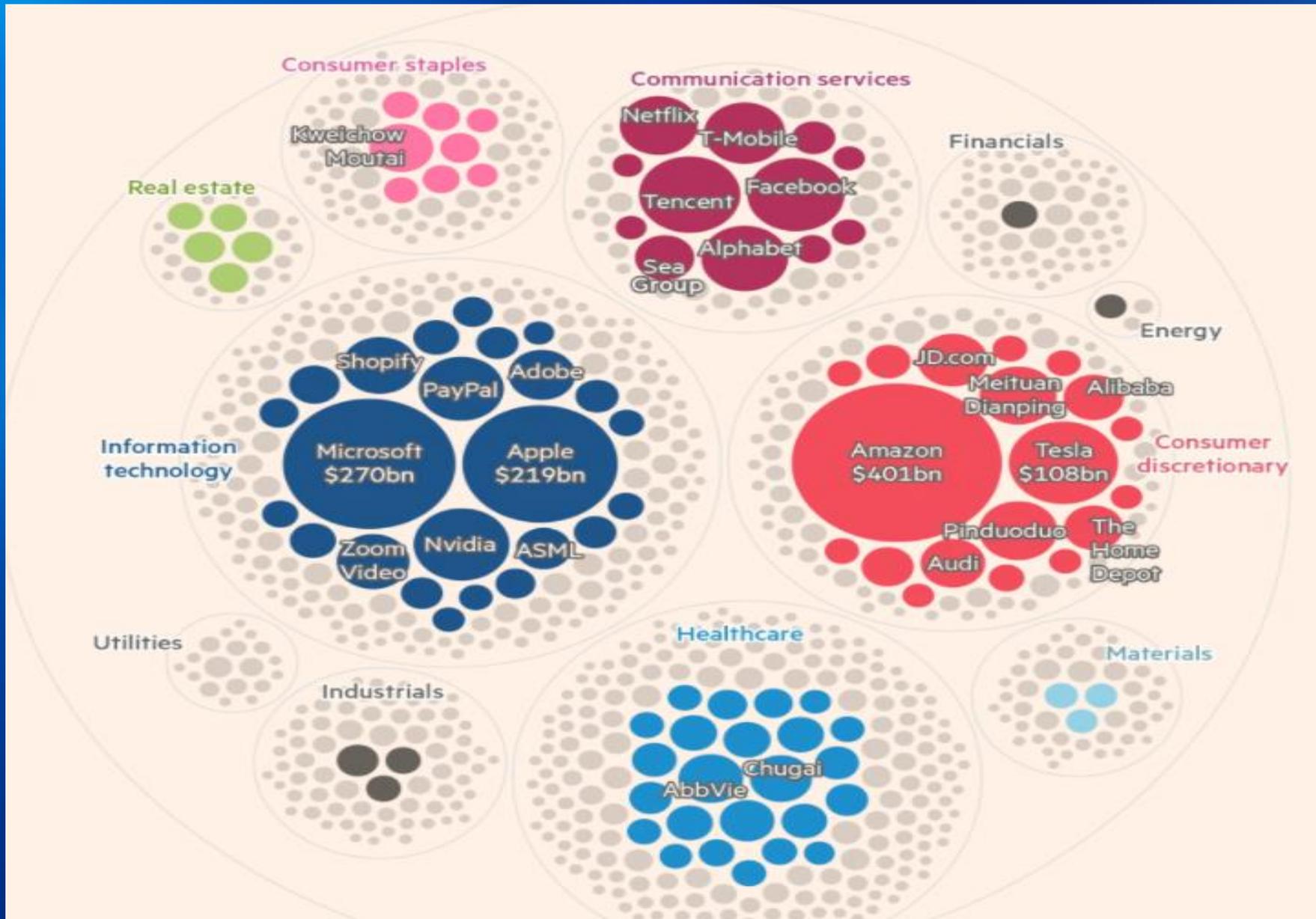


# With strong distributional effects across sectors...

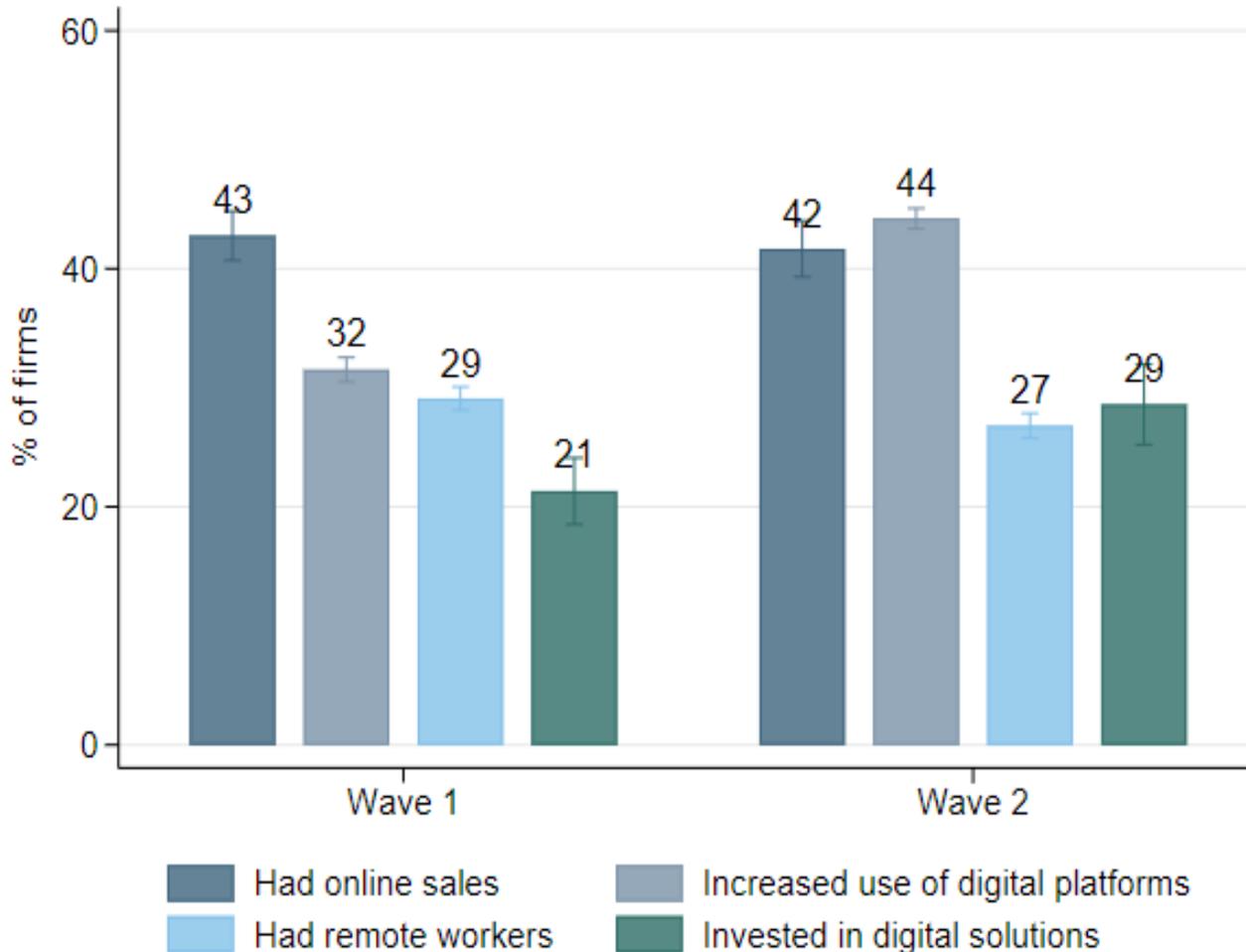


Change in spending from 2019 for the week ending April 1. Bubbles are sized by industry sales.

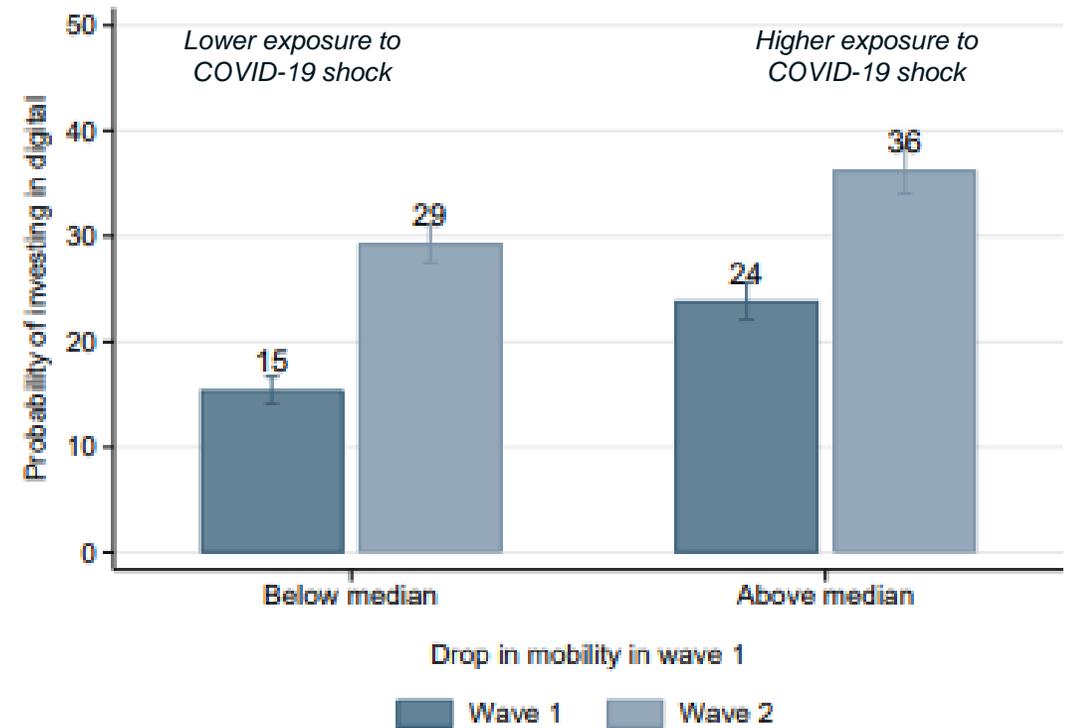
# ...and across firms



# During COVID we observed an unprecedented wave of digitalization...clearly correlated with intensity of the shock

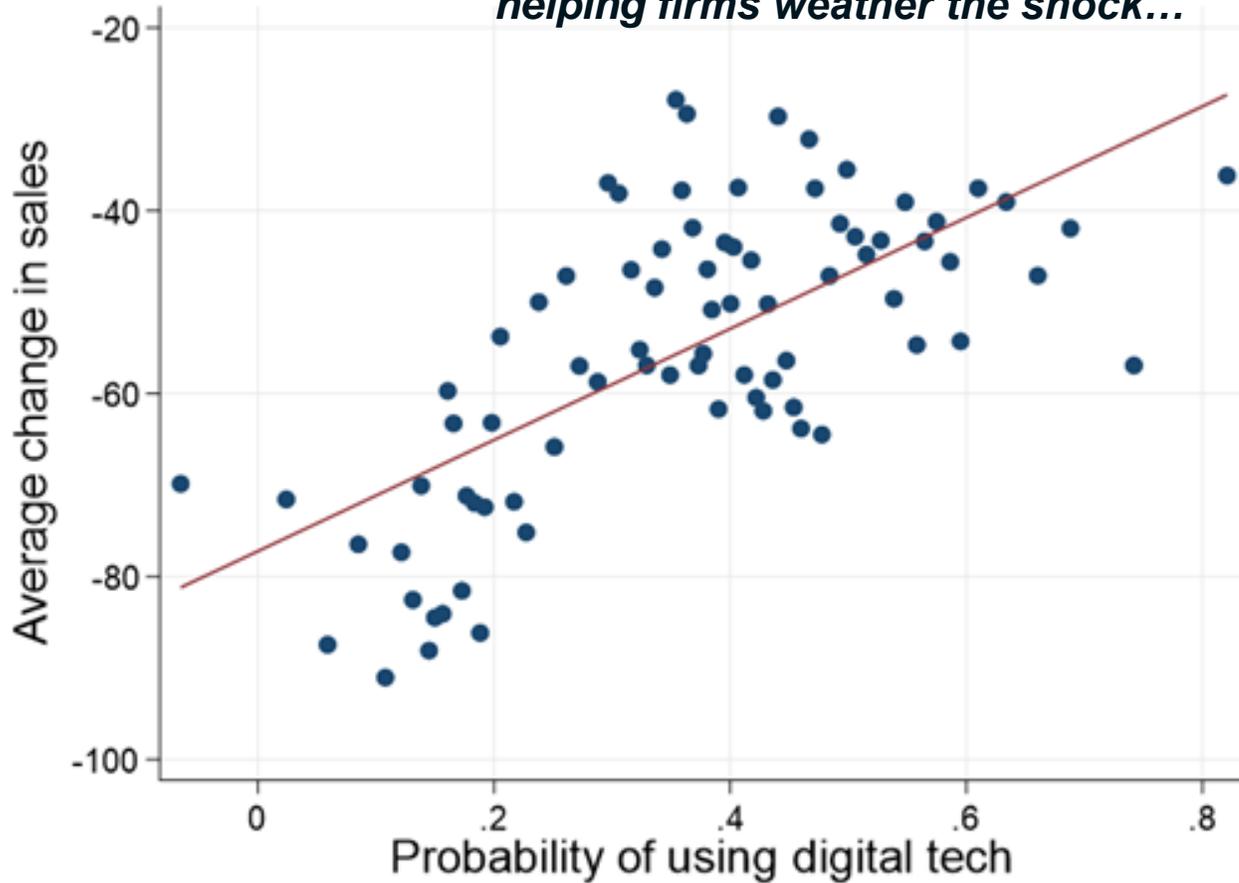


(b) Investment in digital solutions

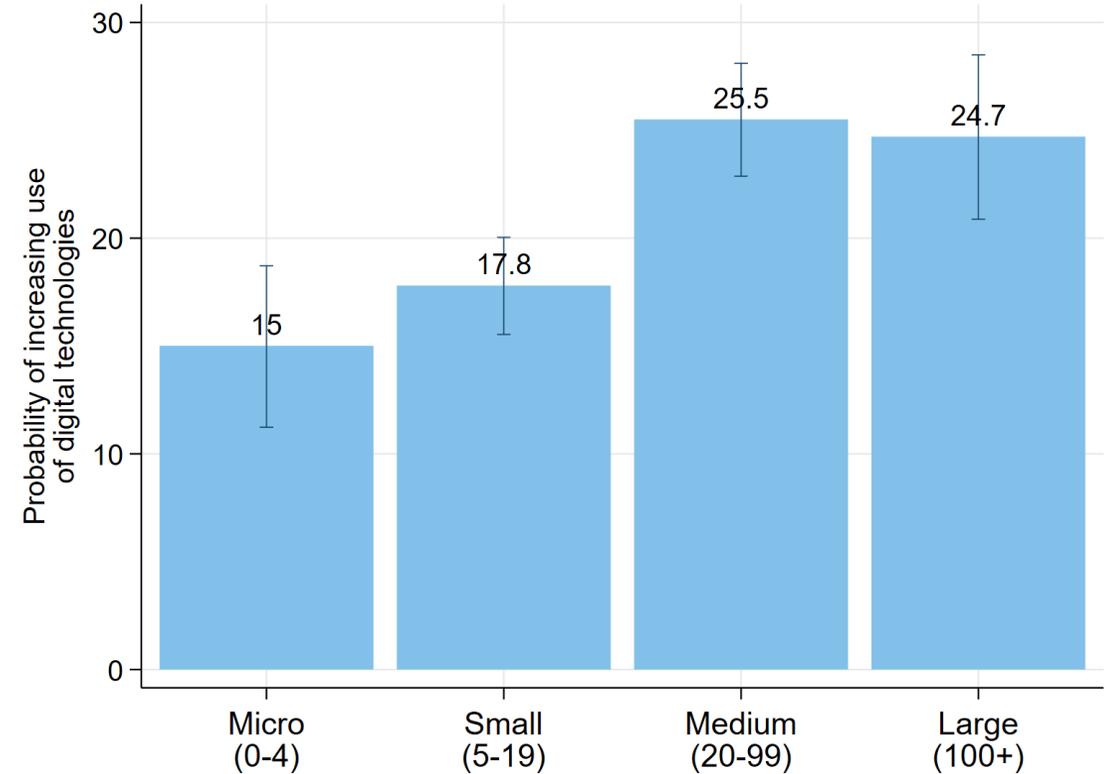


# Digital technology could be a silver lining...but risks of a growing digital divide between smaller and larger firms

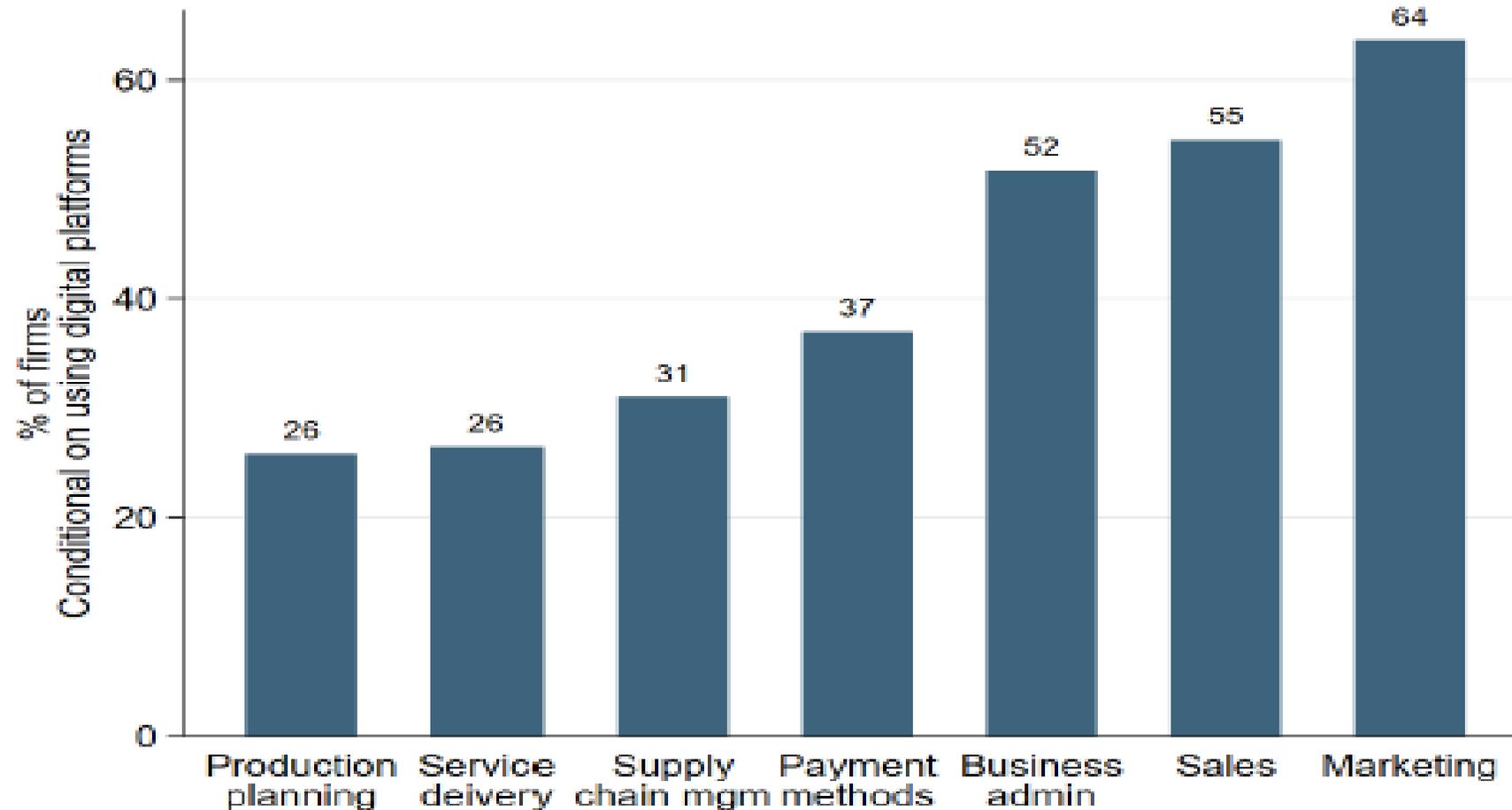
*Digital technology adoption is helping firms weather the shock...*



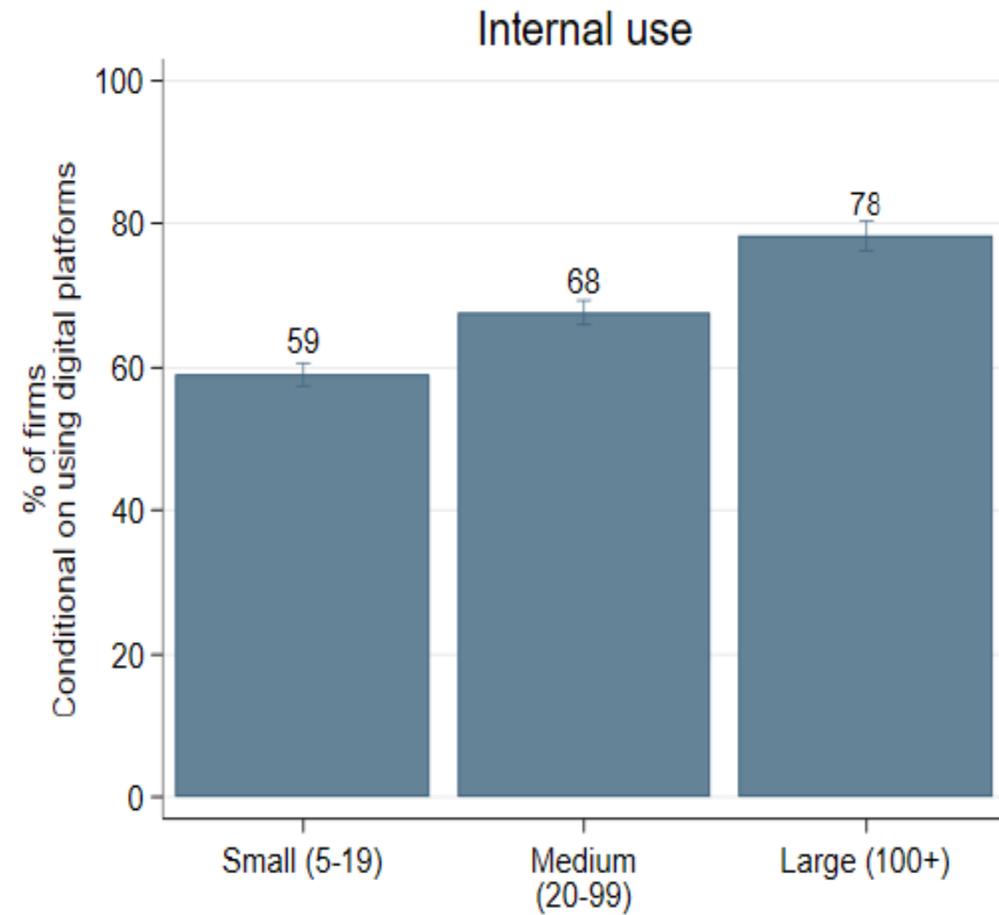
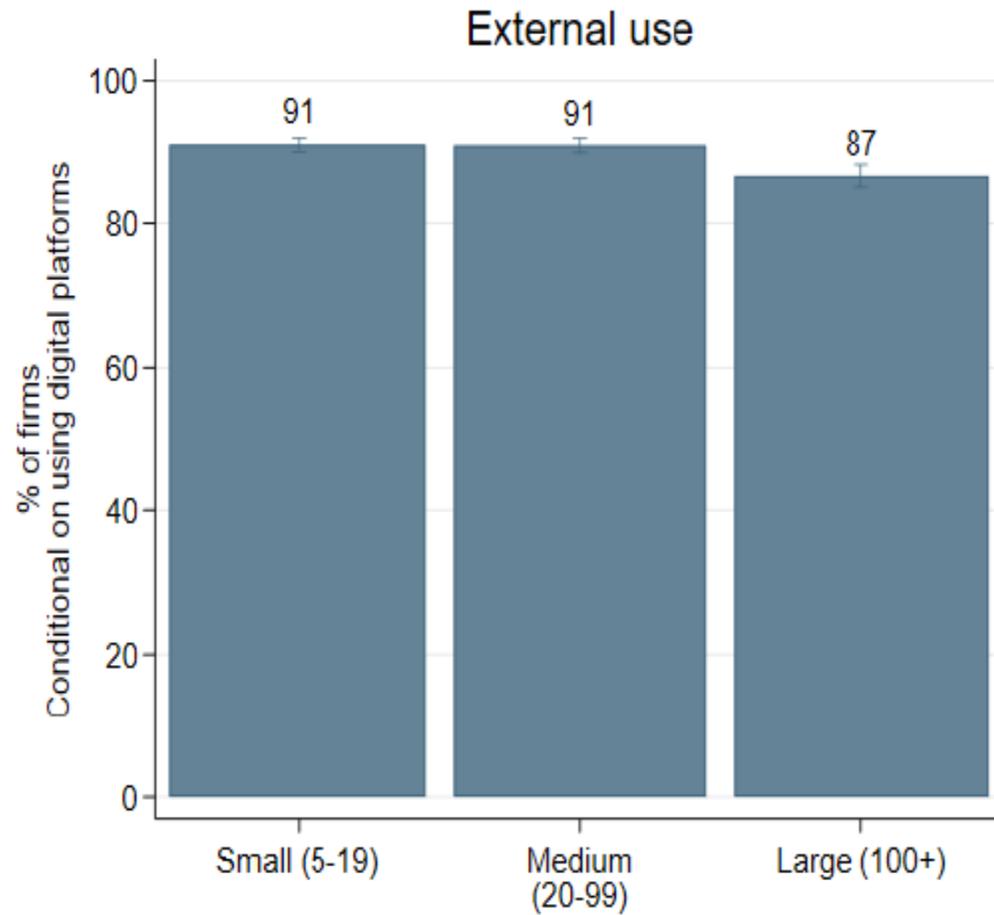
*Smaller firms are much less likely to*



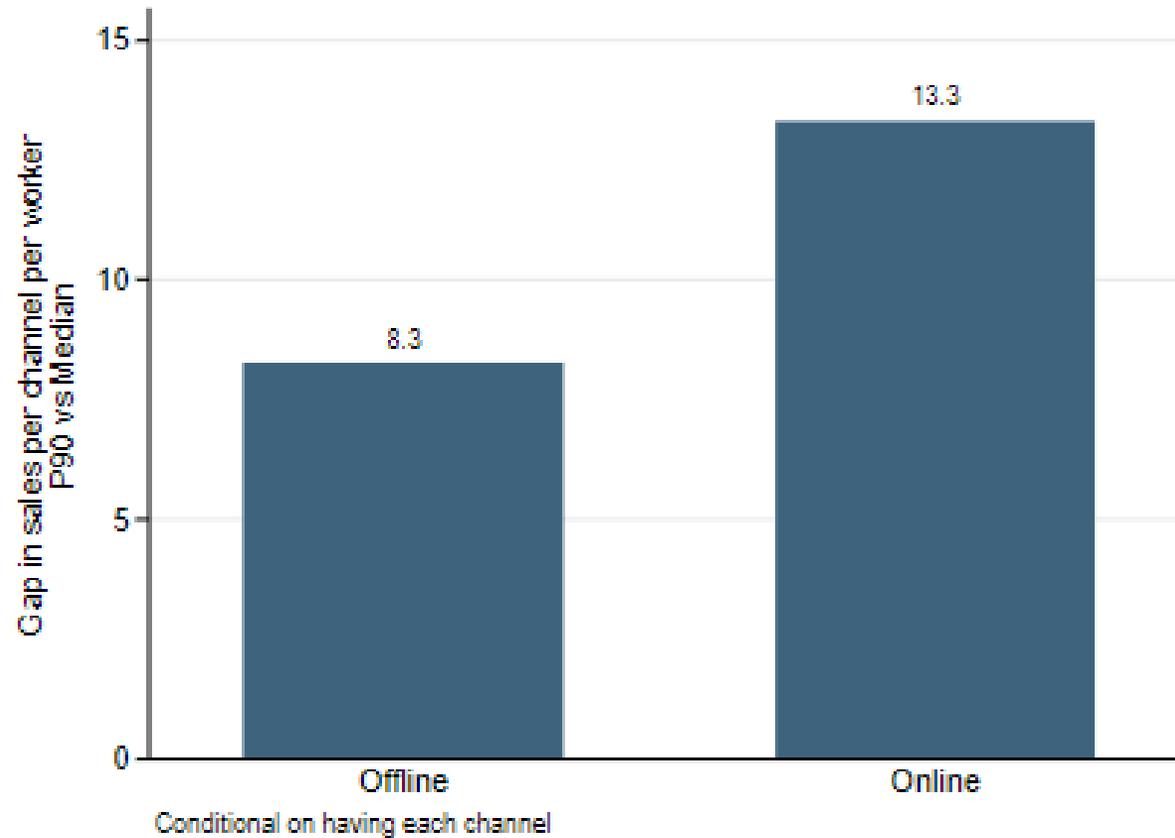
# Firms seem to be focusing on the “low hanging fruits” of digital adoption...potential limited impact on productivity



# Smaller firms focused on “low hanging fruits” and risks of productivity-less recovery

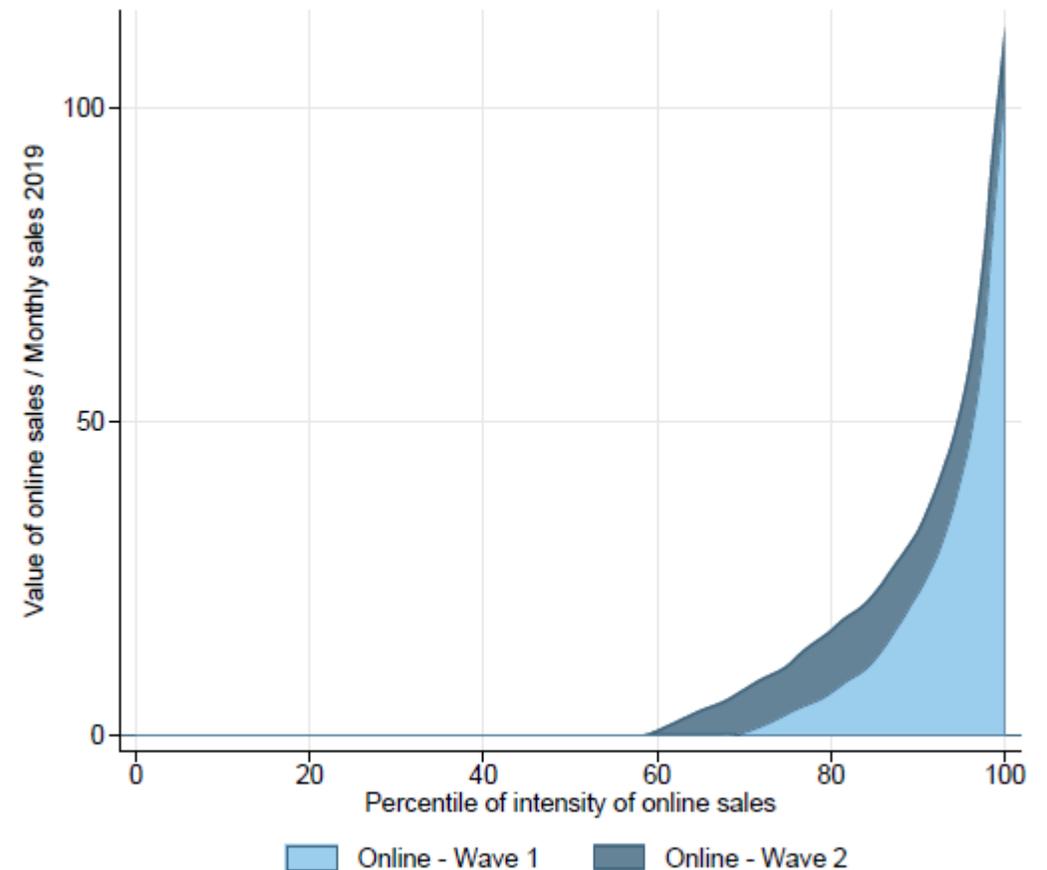


# Confirming fears of emerging digital divide the “online” world is significantly more unequal than the “offline” world



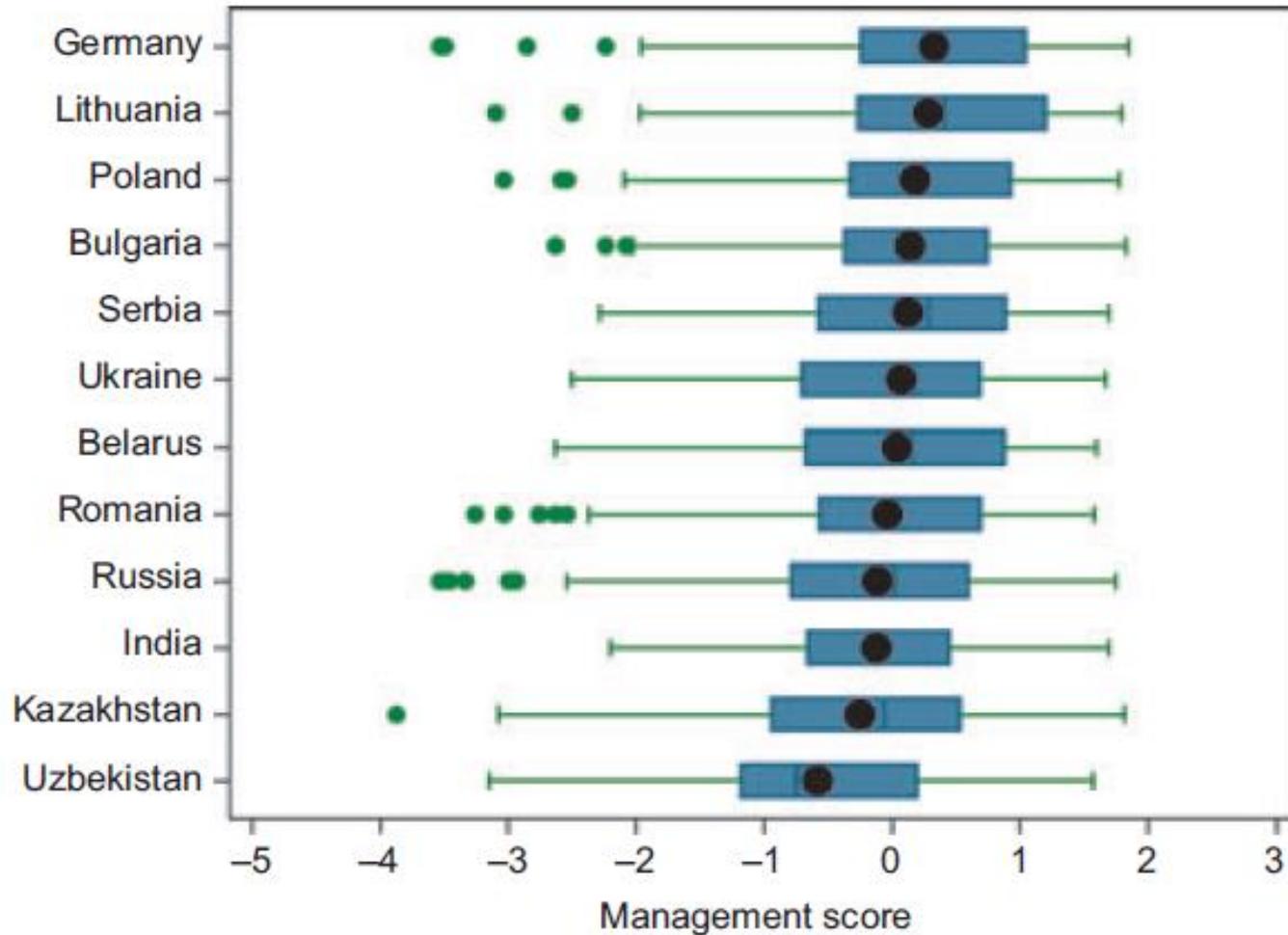
# And concentration of online sales not only is high but has been growing during the COVID-19 crisis

- Increase in the share of online sales over total sales
- Share of online sales within the firm increased by 3.5 between waves
- Increase is higher for firms with larger share of online sales in wave 1



**What could be driving this digital divide and limiting technology adoption?**

# Driver 1: Management and organization



## Economics of Transition

Economics of Transition  
Volume 20(4) 2012, 593–635  
DOI: 10.1111/j.1468-0351.2012.00444.x

## The land that lean manufacturing forgot?

*Management practices in transition countries*<sup>1</sup>

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### Abstract

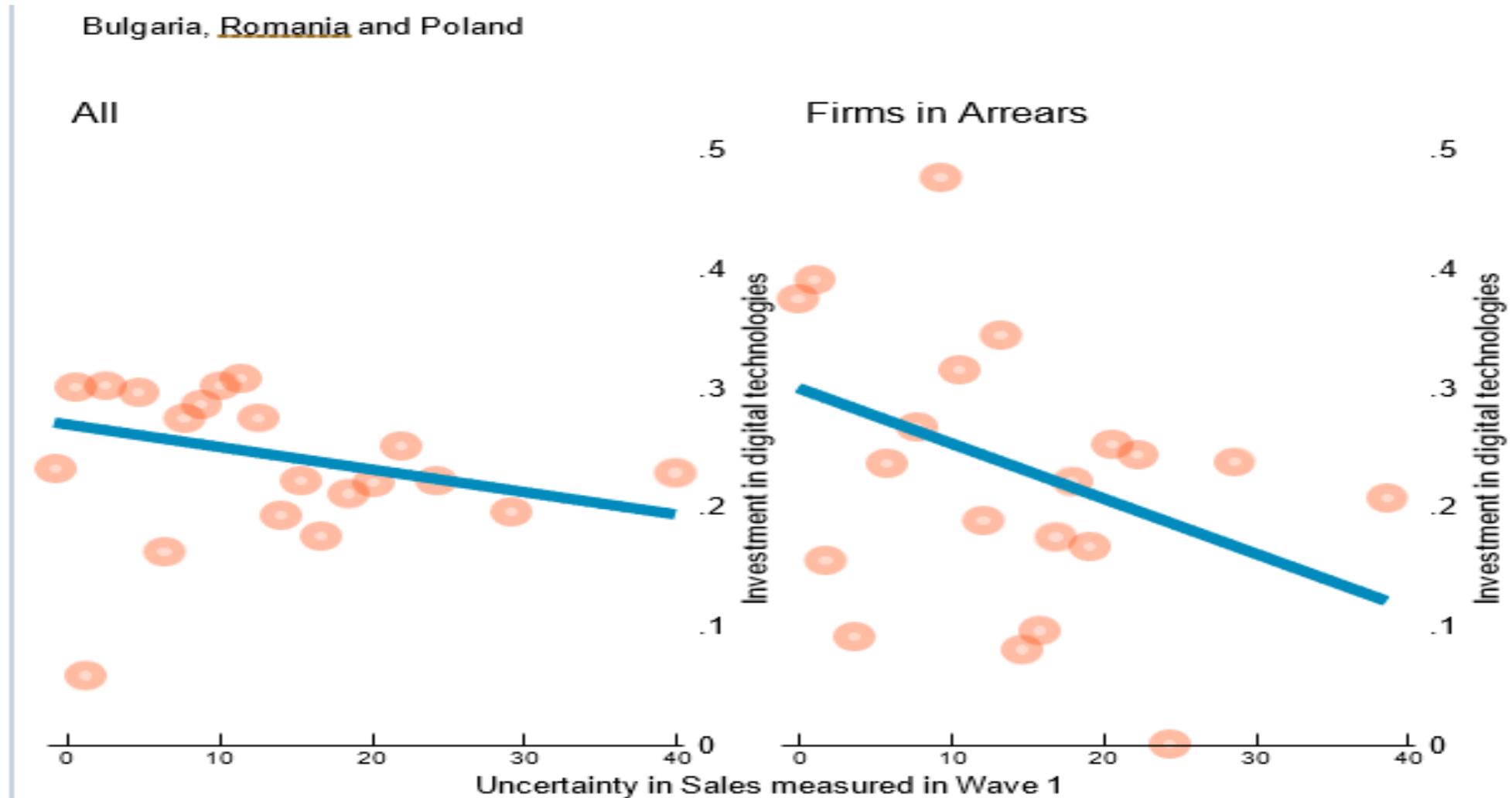
We have conducted the first large-scale survey on management practices in transition countries. We found that Central Asian transition countries, such as Uzbekistan and Kazakhstan, have on average very poor management practices. Their average scores are below developing countries such as India. In contrast, the Central European transition countries such as Poland and Lithuania operate with management practices that are only moderately worse than those of Western European countries such as Germany. As we find these practices are strongly linked to firm performance, this suggests that poor management practices may be impeding the development of Central Asian transition countries. We find that competition, multinational ownership, private ownership and

# Driver 2:

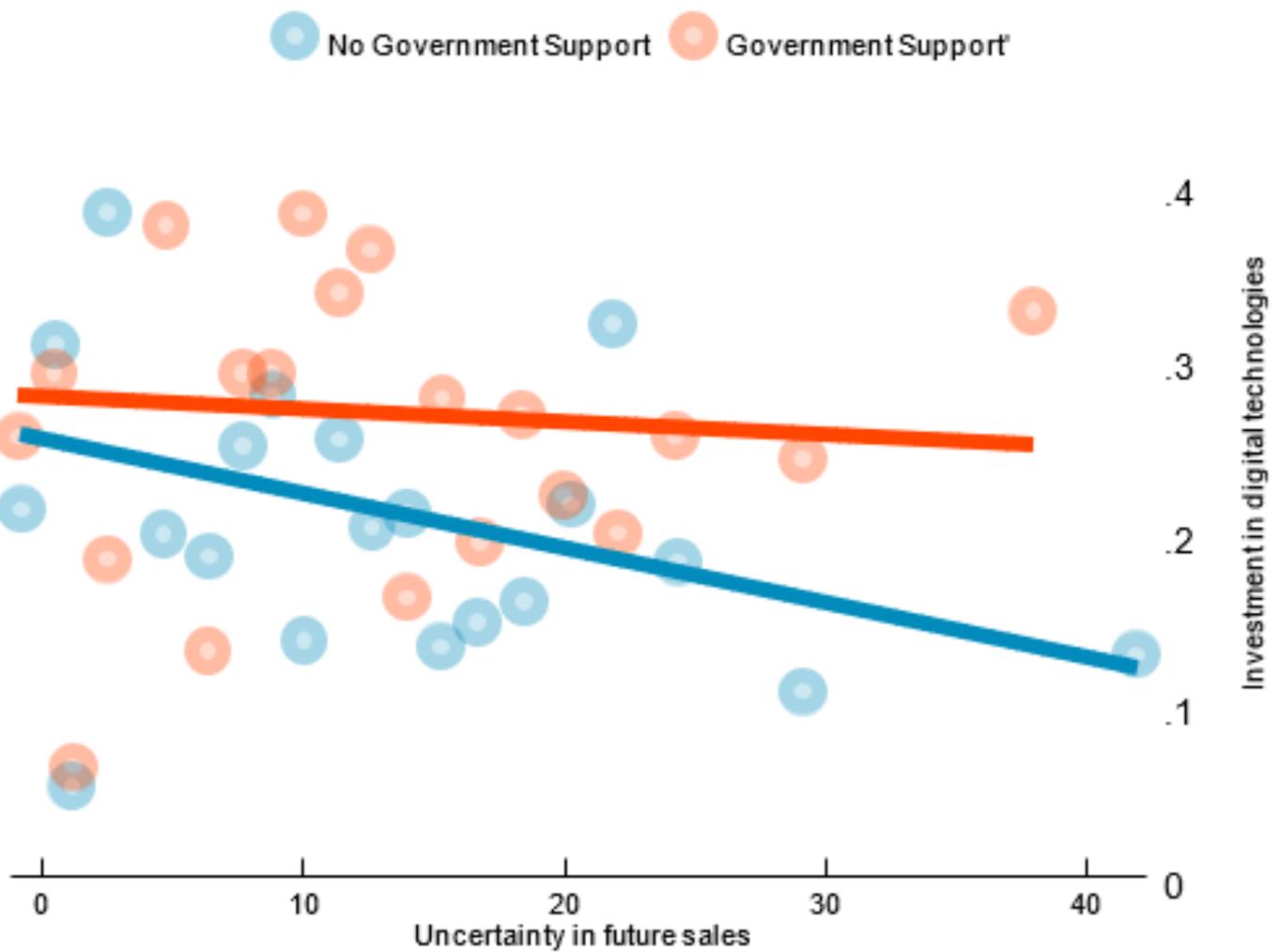
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	Using digital technologies			Having remote workers		
	(1)	(2)	(3)	(4)	(5)	(6)
Having own website	0.100*** (0.012)	0.100*** (0.012)	0.094*** (0.011)	0.024** (0.010)	0.024** (0.010)	0.018* (0.010)
Spending on RD	0.033*	0.034*	0.029	0.082***	0.082***	0.078***

# Driver 2: Uncertainty and financial problems...but Government can help

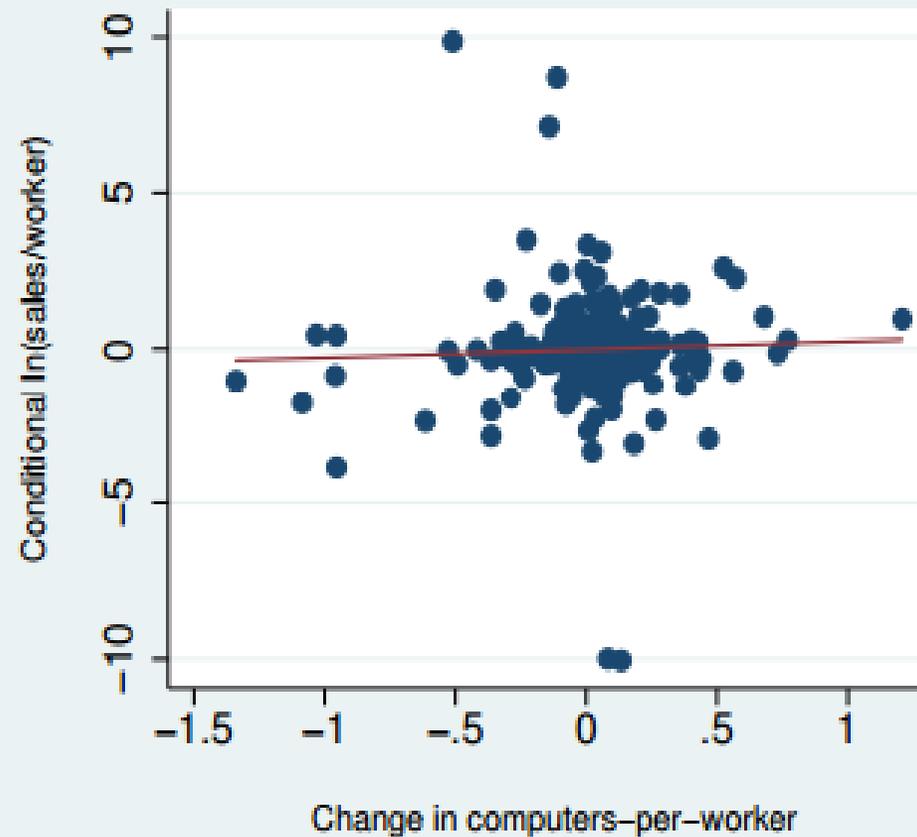


# Driver 2B: ...but Government can help

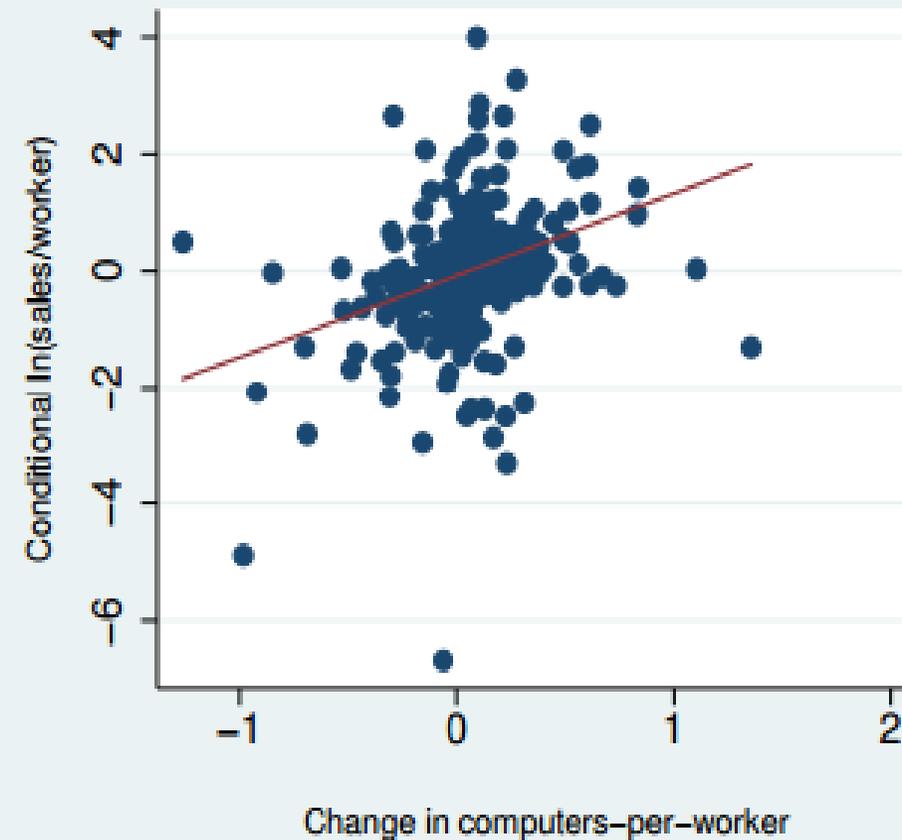


# Driver 3: Incentives and market integration

Low competition with China



High competition with China



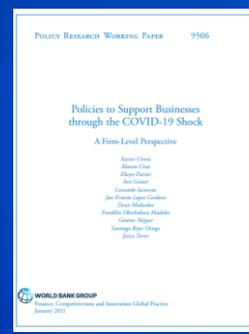
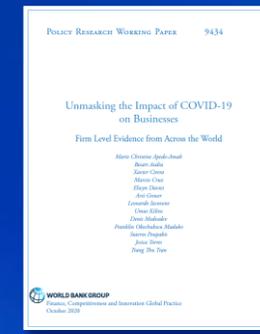
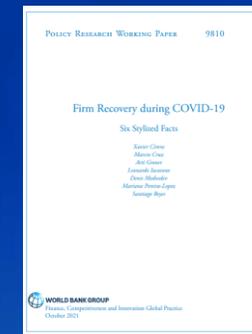
# Conclusions and policy recommendations

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1. COVID-19 shock was widespread and severe but it also led to an accelerated process of (digital) technology adoption – BUT
  - i. The adoption still is limited with many firms...smaller especially...potentially being left behind
  - ii. Adoption seems focused on “low hanging fruits” and may not lead to productivity driven recovery
2. Key challenge: How to deepen technology adoption to promote an inclusive and productivity driven recovery?
  - i. Lower uncertainty
  - ii. Expand and support access to finance
  - iii. Support improvement in management and organization
  - iv. Deepen integration and support contestable markets

Thank you for your attention  
and look forward to your questions

Find more research in this area [here](#)

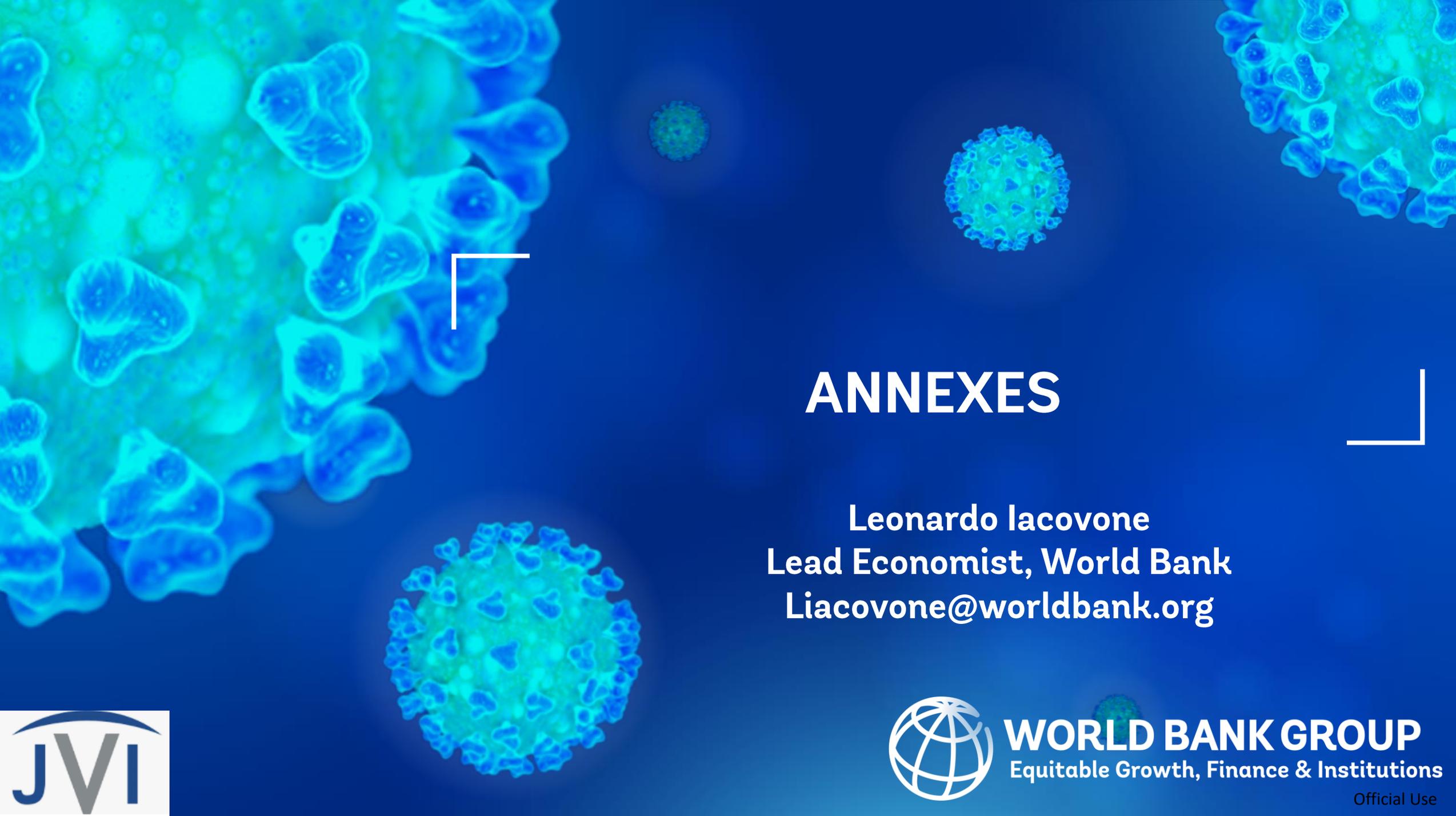


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A microscopic view of cells and viruses. The background is a dark blue gradient. On the left, there is a large, detailed view of a cell with a nucleus and various organelles. In the center and right, there are several spherical virus particles with a textured surface. Two white L-shaped corner brackets are positioned on the left and right sides of the slide.

# ANNEXES

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