

Firms and Technology



**Introductory course:
The Economics of COVID-19 in Developing East Asia and the Pacific
November 2021**

Roadmap of the Presentation

- Do crises weed out the worst & leave the best firms?
- What is the impact? Within firms, across firms, across sectors?
- How can policy help?

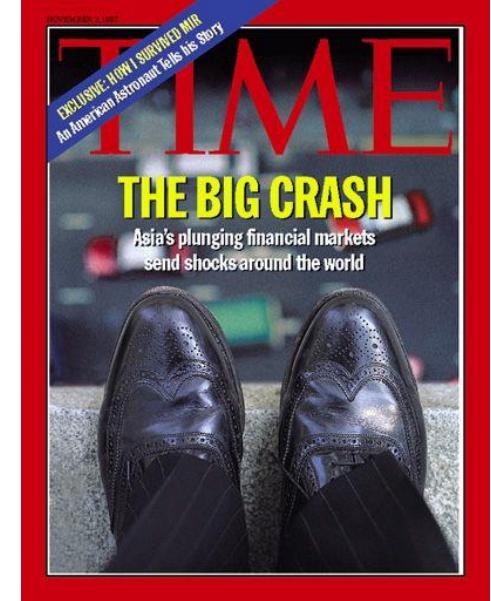
How pandemic affected private sector?

- Multipronged negative shock:
 - Supply shock
 - Demand shock
- Mitigated by:
 - Public support
 - Technology

Is a crisis a good selector?

- Not necessarily!

- In the past, strong firms have been weeded out along with weaker firms



- Exit of good firms/job losses may mean loss of intangible assets

Is this time different?

How has the pandemic affected sales, employment & technology adoption?

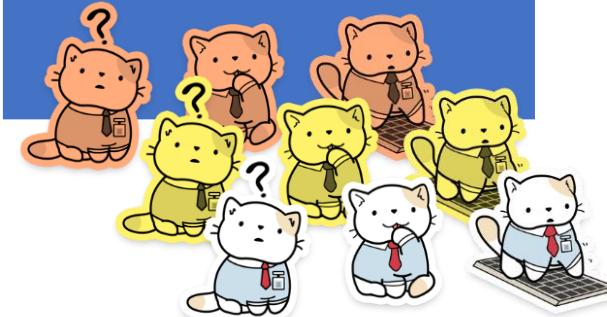
Within firms



Across firms,
within a sector

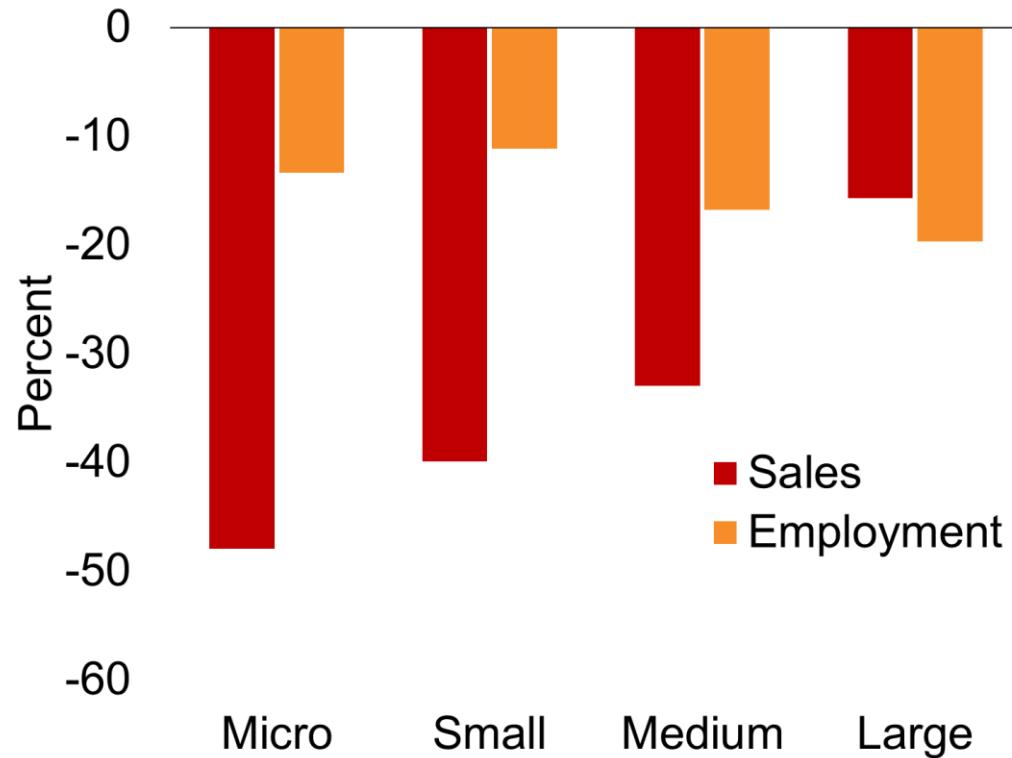


Across sectors

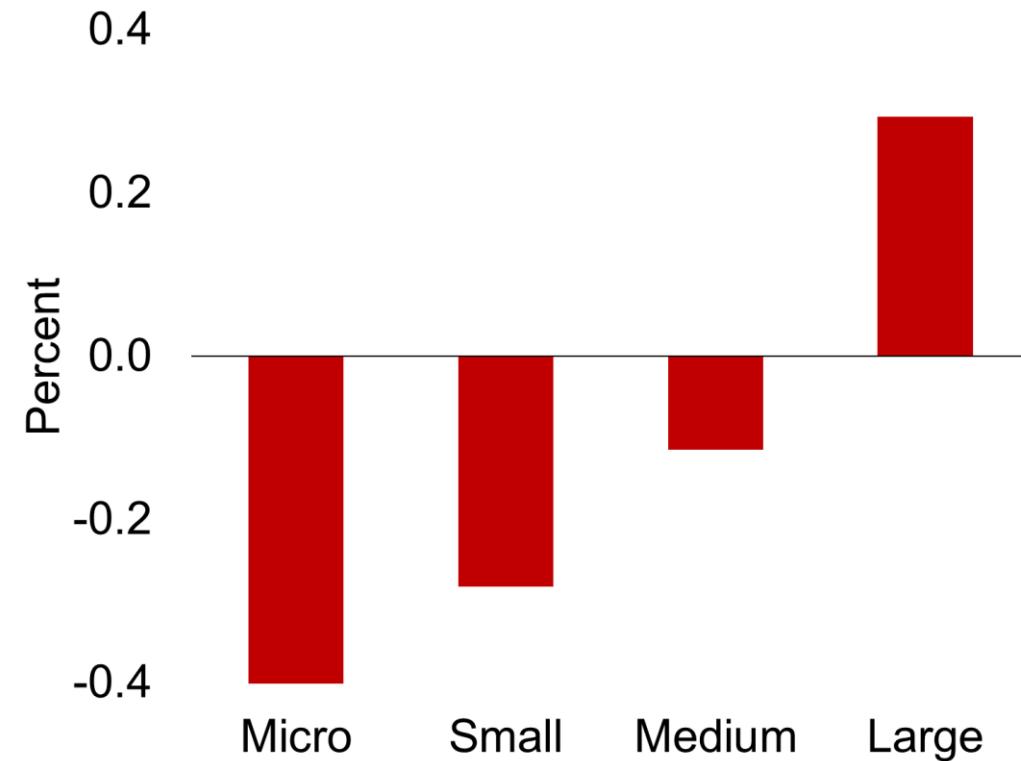


Within firms: Smallest firms were hardest hit, larger firms more resilient

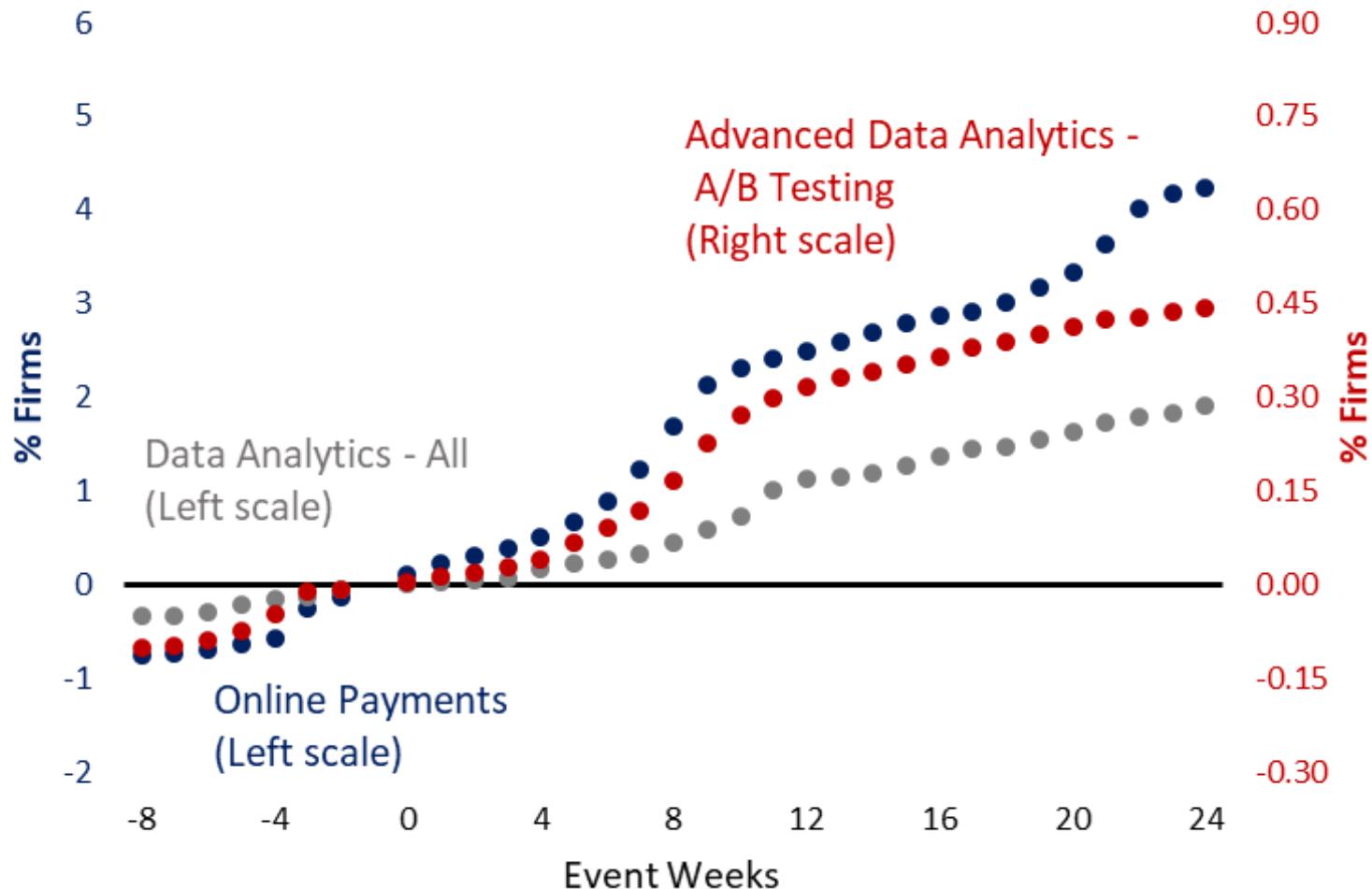
Changes in sales and employment



Changes in labor productivity

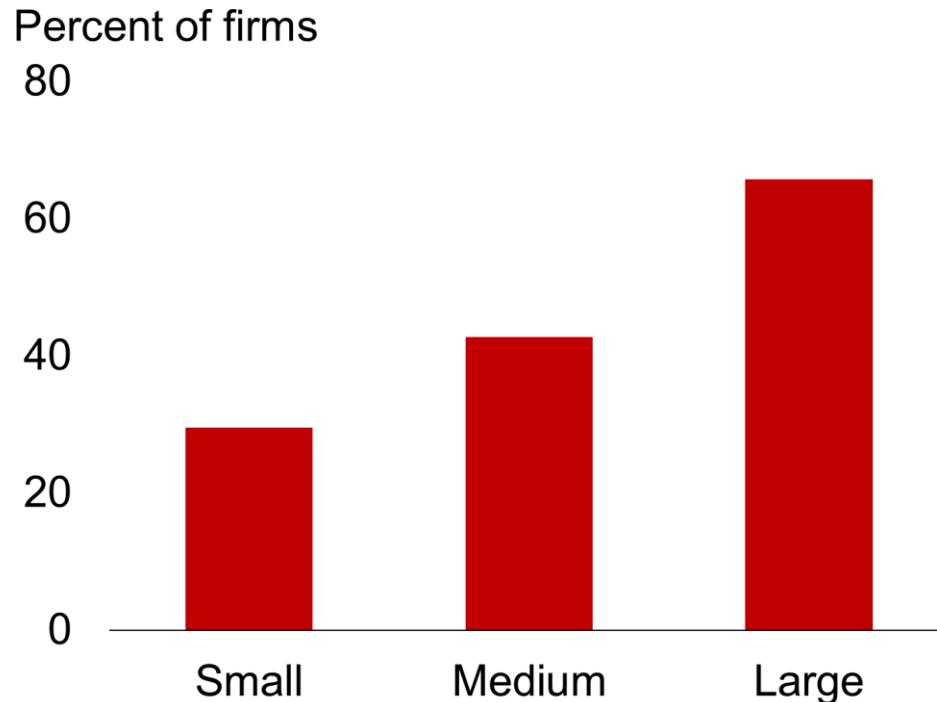


Within firms: Rapid adoption of technology...

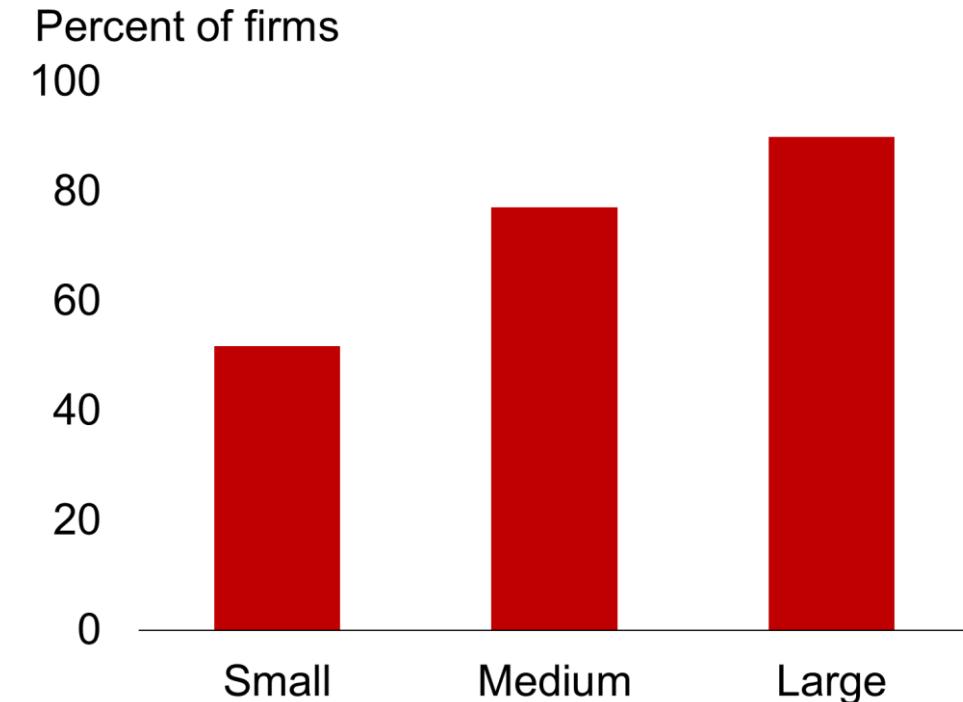


Within firms: ...but technology is not equally adopted

Use of platforms for supply chain management



Use of platforms for internal processes



Across firms: Least productive firms fire more and hire less over the pandemic

Job destruction contribution

- 25% least productive firms
- Quartile 2
- Quartile 3
- 25% most productive firms

%

0

-10

-20



East Asia & Pacific

Job creation contribution

- 25% least productive firms
- Quartile 2
- Quartile 3
- 25% most productive firms

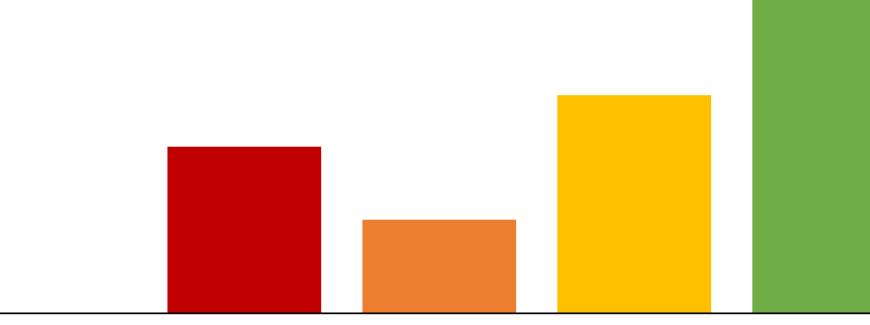
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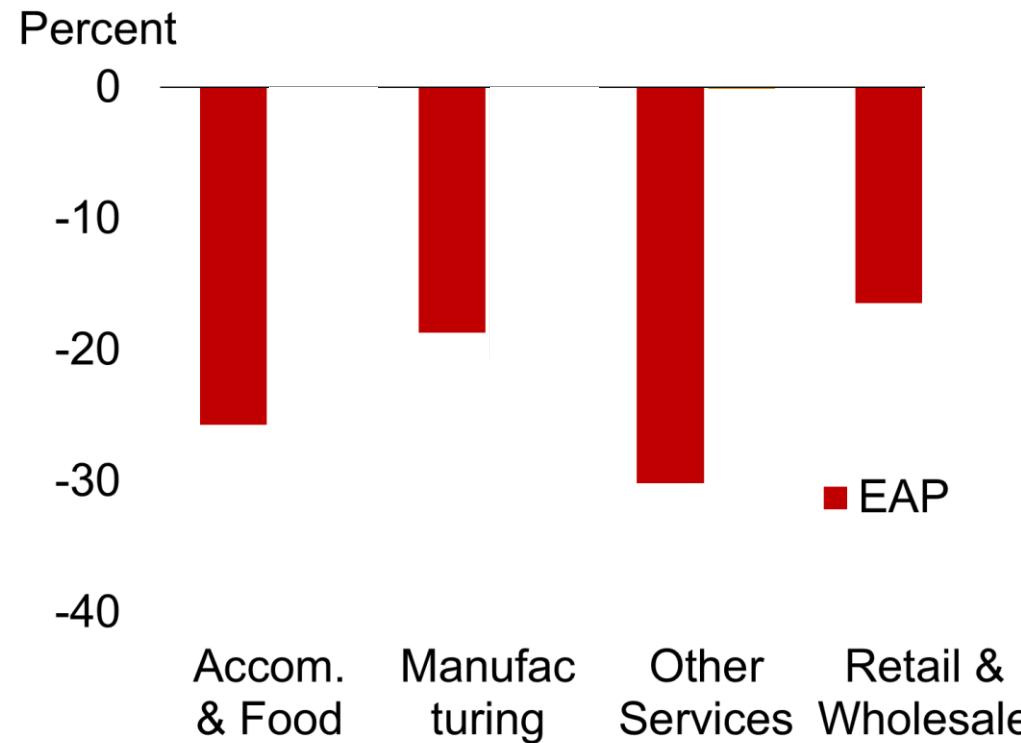
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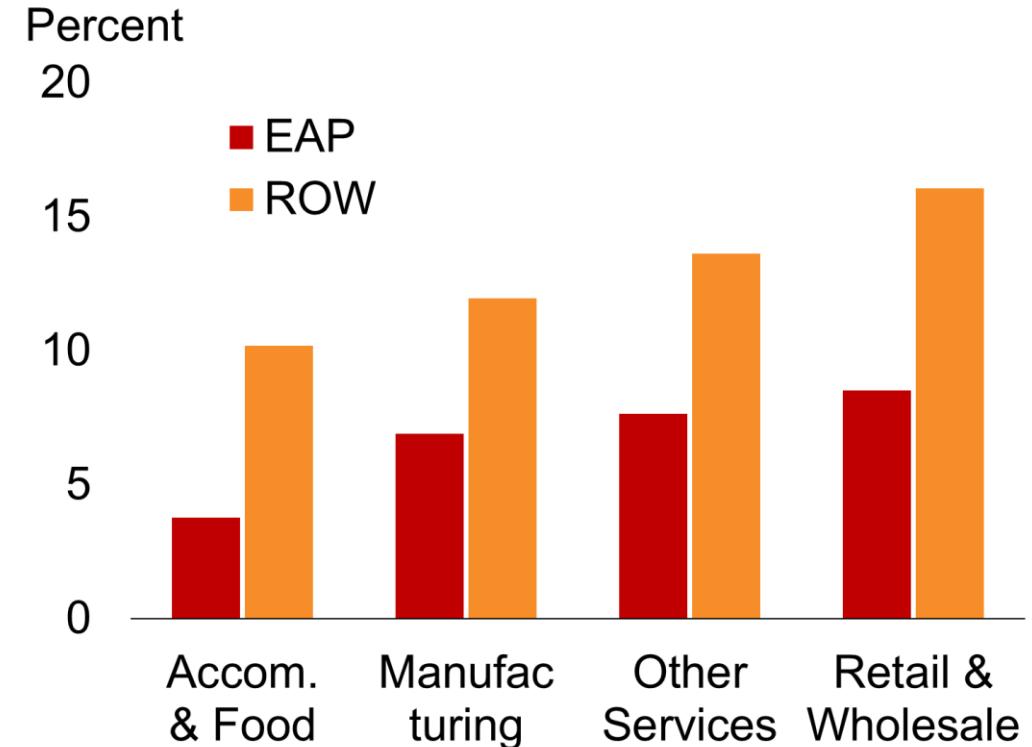
East Asia & Pacific

Across sectors: East Asia & Pacific firms create fewer jobs over the pandemic

Job destruction rate

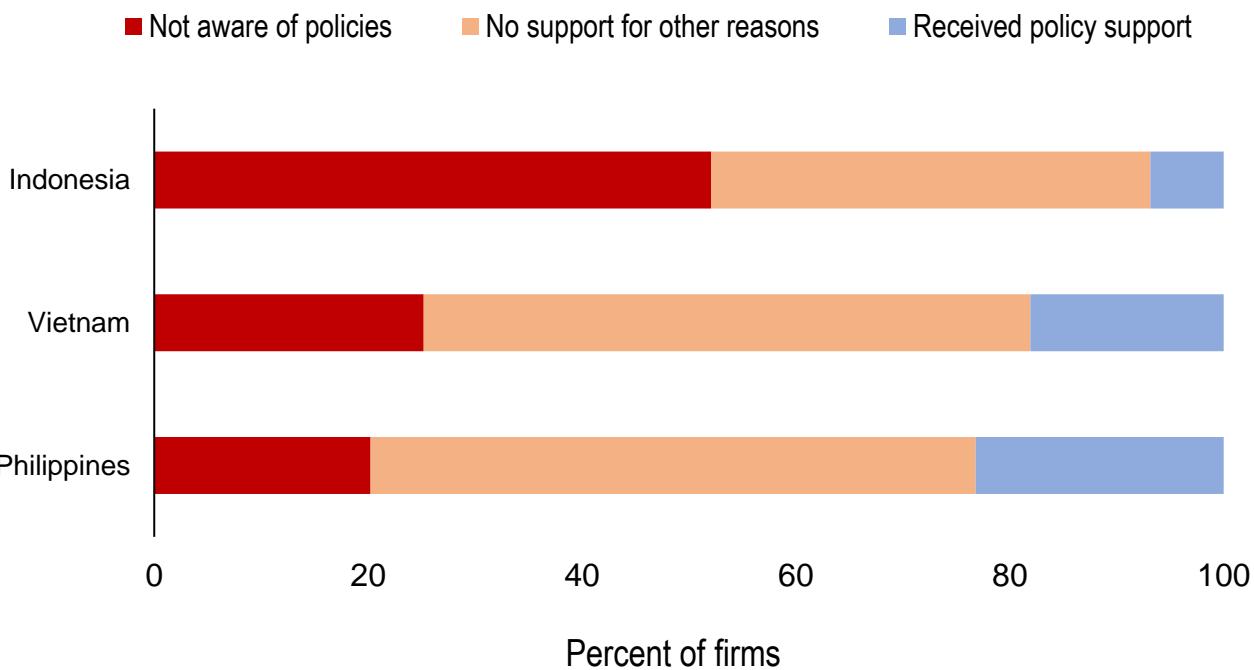


Job creation rate

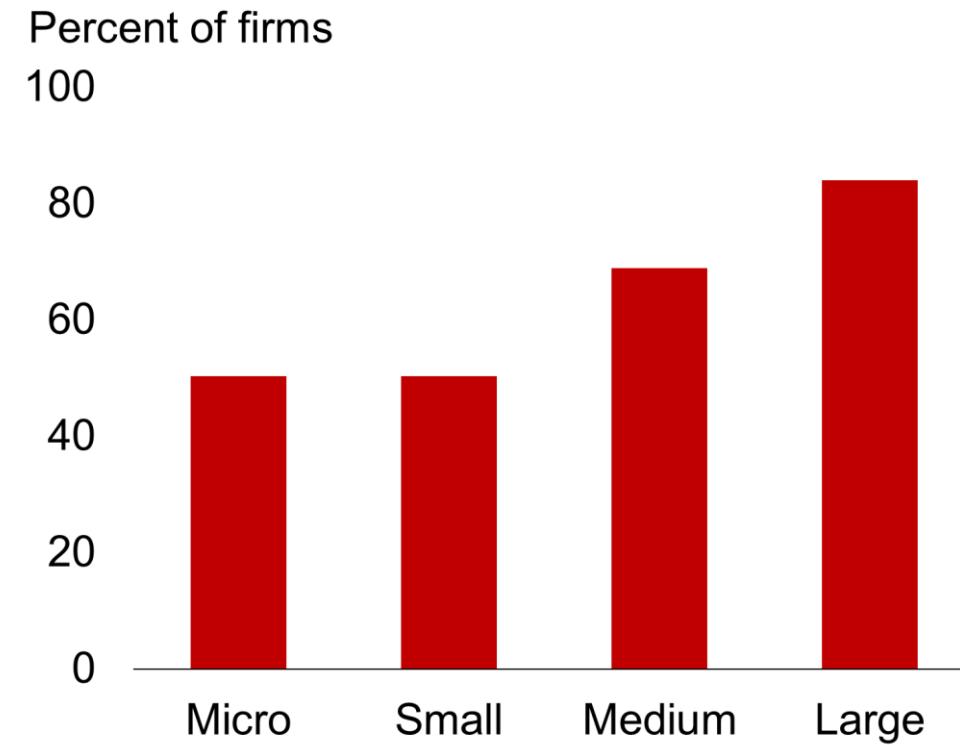


Who receives policy support?

- Many firms unaware of available support even by summer 2020



- Reach of support is uneven



What can be done?

- Which firms should be supported?



Know-How



- How to support firms and not slow down reallocation of resources to more productive uses?

Conclusion

- Historic crises don't always promote productive reallocation
- COVID hit the smallest firms the hardest
- Accelerated digital adoption – but best firms adopting more sophisticated technologies
- Policy support should minimize misallocation

References

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