

# Firm Adaptation in Production Networks: Evidence from Extreme Weather Events in Pakistan

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# Introduction



# Thoughts I

- ▶ Forward looking adaptation hard to show empirically given data limitation but they do reasonably good job. Questions:
  - ▶ They disentangle forward looking adaptation from mechanical adaptation by showing that they are also shifting away from other non-flooded suppliers who have flood risk? But can this also be mediated by the mechanical adaptation since now you employ different routes or you just choose a group of suppliers instead of each supplier separately? It is hard to show this since they do not observe goods supplied by a given supplier but just the PKR amount of purchases from that supplier.
  - ▶ The adaptation is very quick? Does this mean something for adaptation channels? Could it be that same old suppliers are helping their purchasers source from other suppliers?
  - ▶ What is evidence in the literature in general on frictions to adaptation or just general optimizing frictions? Kleven and Waseem (2013) optimizing frictions?

# Thoughts II

- ▶ External Validity: Could it be that these Pakistani manufacturing firms are producing very basic goods and therefore it is easy to adjust? If you are producing more complex goods, it is harder to adjust as you would need very specific suppliers i.e. case of transistors in global supply chain disruptions?
- ▶ The mechanical adaptation also has many channels such as it could be just that your old supplier cannot supply or that prices and economic environment has changed and hence you re-optimize?
- ▶ People also asked how does a flood shock compare to other shocks such as financial shocks?
- ▶ Similarly, where is this adjustment coming from? Are they trading off resilience to some other shocks in order to be more resilient to flood shocks?
- ▶ Technically firms could also search for new buyers or customers in response to shocks to places where they make sales? They do not study this!

# Thoughts III

- ▶ Similarly, what are effects on the firms up the supply chains?  
Low power to study this!
- ▶ What is government's response in terms of investments in flood shock resilient infrastructure?
- ▶ It would good to study characteristics of new destinations and new suppliers.
- ▶