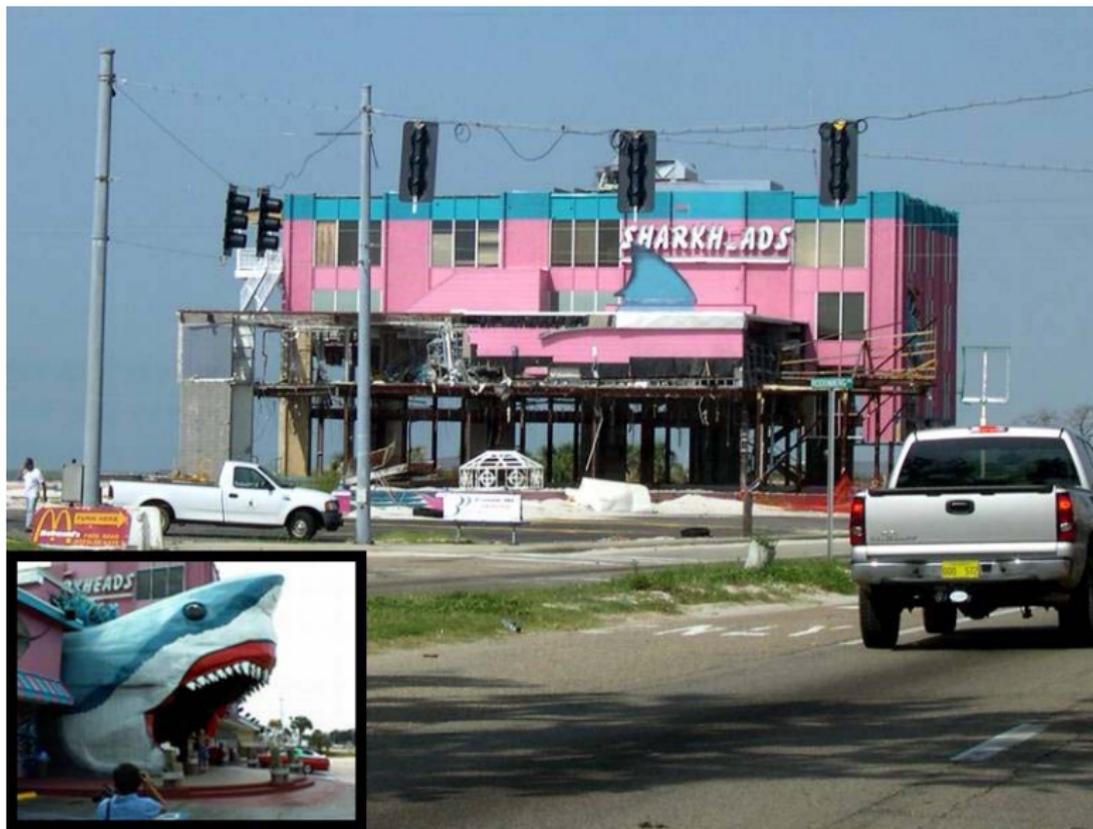# Taken by Storm: Business Survival in the Aftermath of Hurricane Katrina[*]

Emek Basker and Javier Miranda

Fifth Annual Microeconomics Conference
Federal Trade Commission
November 2012

Sharkheads Souvenir Store, Biloxi, MS

Which Businesses Survived the Storms?

- Damaged vs. undamaged
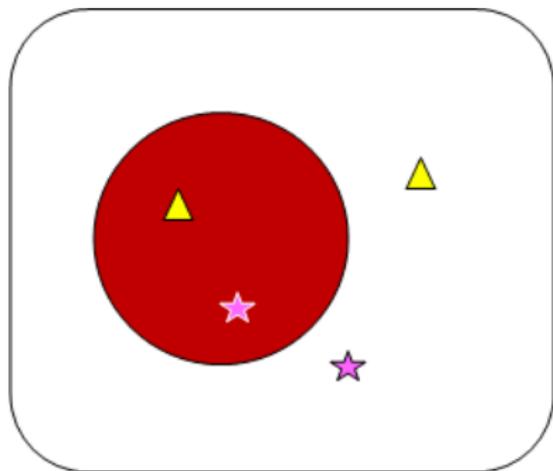
Which Businesses Survived the Storms?

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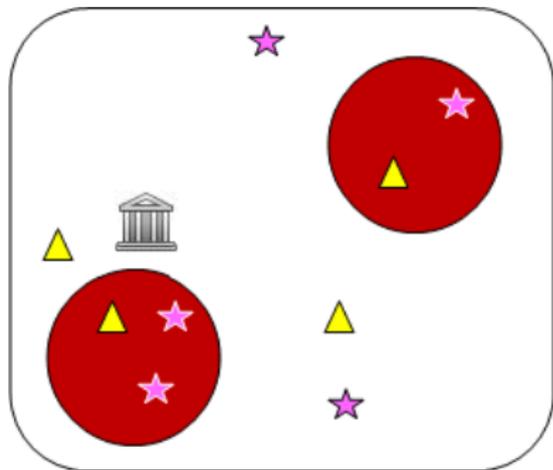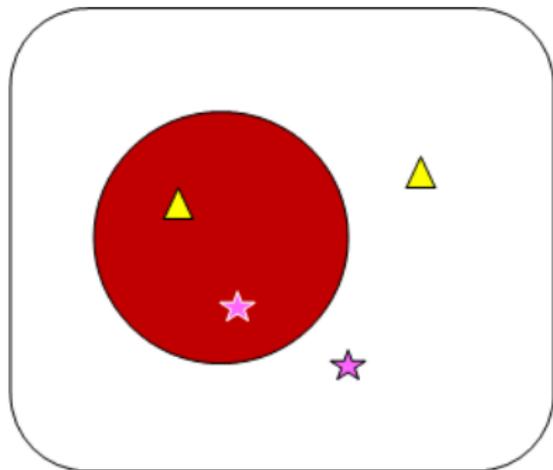- ▶ Small firm vs. large firm

Which Businesses Survived the Storms?

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- ▶ Small firm vs. large firm
- ▶ Far from bank vs. near bank

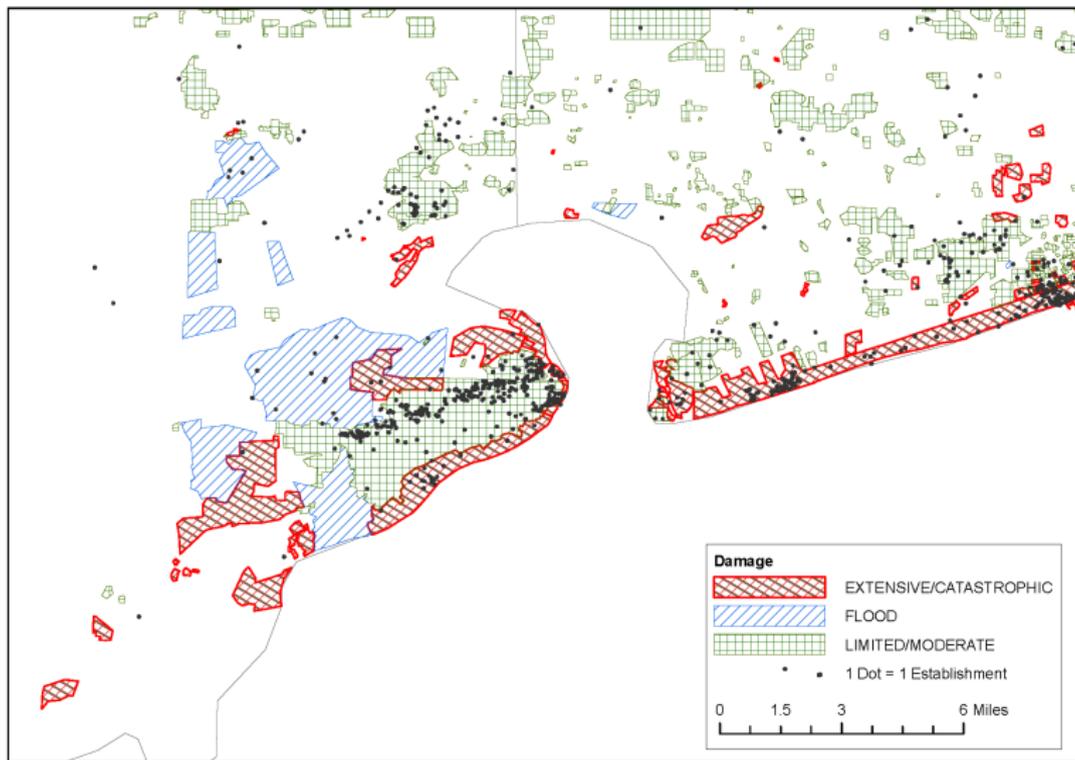# Which Businesses Survived the Storms?

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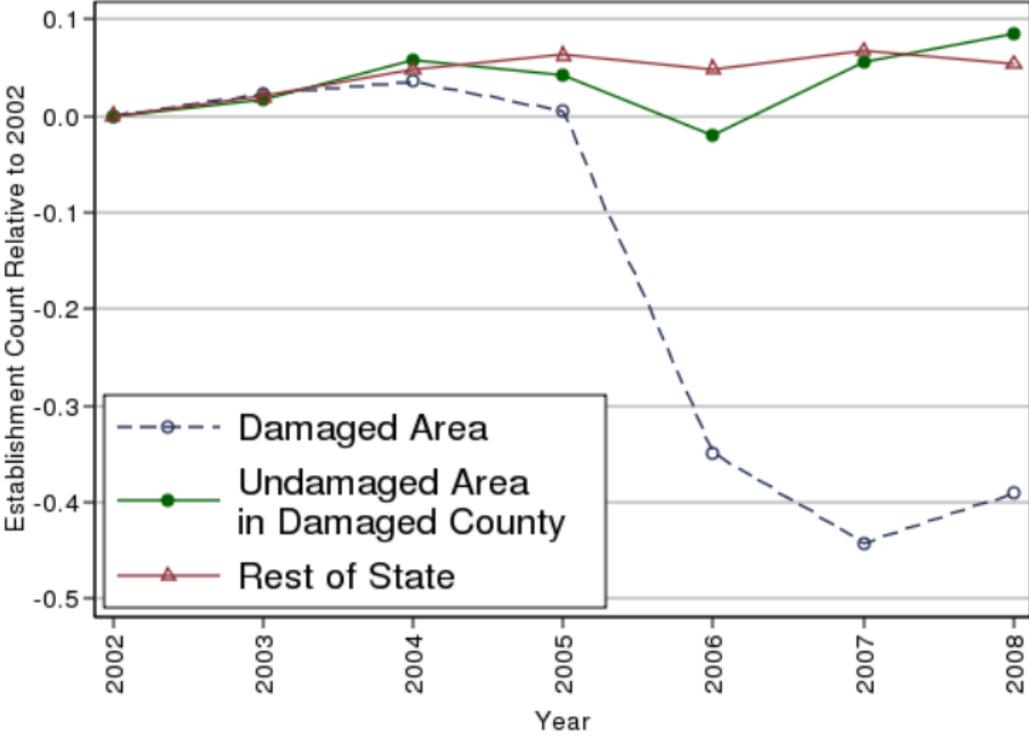
- ▶ Far from bank vs. near bank

Data Sources

- Longitudinal Business Database (LBD)
  - Geocoded all MS stores, restaurants, and hotels

- Federal Emergency Management Administration (FEMA)

- Economic Census

Katrina Damage: Hancock & Harrison Counties, MS

Damage

- EXTENSIVE/CATASTROPHIC
- FLOOD
- LIMITED/MODERATE
- 1 Dot = 1 Establishment

0   1.5   3   6 Miles

Mississippi Trends

Exit Models

- Cross-sectional linear probability models
- Damage vector:
  - Limited/moderate damage
  - Extensive/catastrophic damage
- Firm size interacted with damage vector
- Additional controls: establishment age and employment, productivity, productivity×damage, 82 county FE, 110 six-digit NAICS FE
- Three time periods:
  - 2004–06 (short run)
 - 2004–08 (long run)
  - 2002–04 (falsification exercise)

Prob(Exit | Extensive or Catastrophic Damage) − Prob(Exit | No Damage)
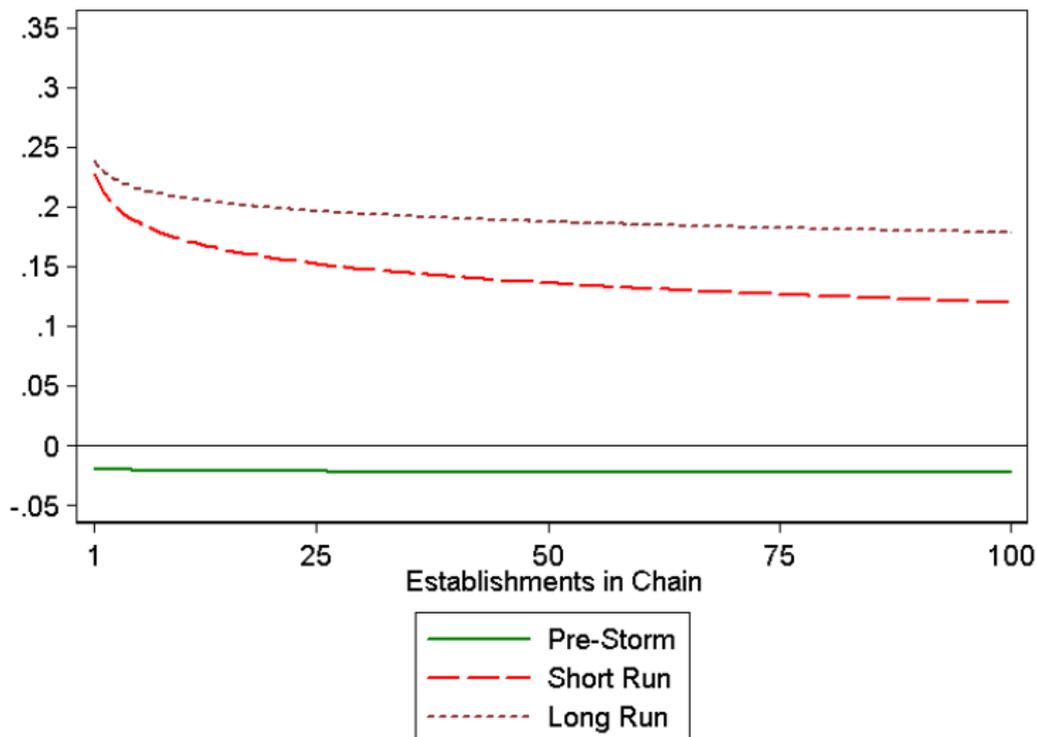
Bank Proximity

- Geocoded all MS banks, calculated distance to nearest bank or bank branch (LBD)

- Triple-difference regression: interact distance with damage vector, firm size, and damage×firm size
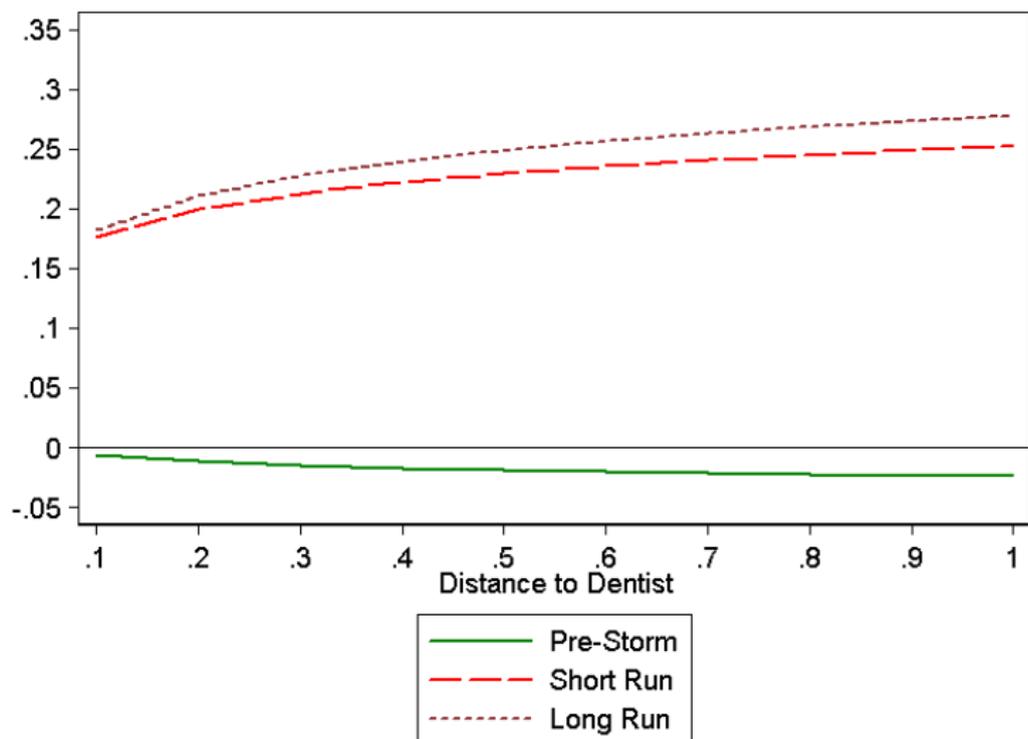
- Continue to control all other covariates

Prob(Exit | Extensive or Catastrophic Damage, FirmSize=1) − Prob(Exit | No Damage, FirmSize=1)
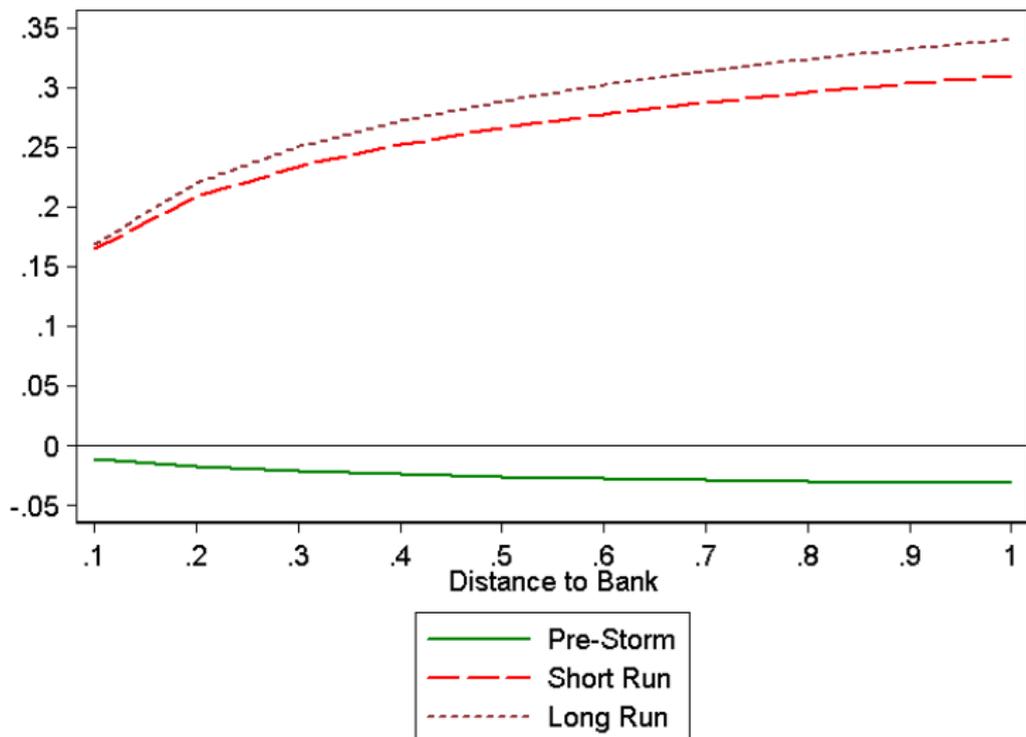
Counterfactual?

Prob(Exit | Extensive or Catastrophic Damage, FirmSize=1) − Prob(Exit | No Damage, FirmSize=1)

Summary

- Vulnerable establishments are more likely to exit immediately following damage
  - Establishments in small firms
  - Establishments located far from banks
  - Establishments in small firms located far from banks

Summary

- Vulnerable establishments are more likely to exit immediately following damage
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- Evidence consistent with credit/resource constraints
  - Credit?
  - Insurance?
  - Information?
  - Skill?

Sharkheads Souvenir Store, Biloxi, MS

Thank you