Technical Change and Superstar Effects: Evidence from the Rollout of Television

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Top Incomes and Superstar Effects

- Why are many labor markets becoming winner take all markets?
- **Superstar effects** are a leading explanation

- This paper tests the superstar theory in the textbook entertainment setting
  - Natural experiment from staggered local rollout of television
The Rise and Fall of Local Television Filming

Phase I: pre TV
pre 1941

Phase II: local TV
c.a. 1941-1955

Phase III: National TV
1956 onwards
Rollout is unexpectedly interrupted
Impact of Television on Top Paid Entertainers

A. DiD with TV Stations

B. DiD with Placebo TV Stations

\[ Y_{mot} = \alpha_m + \delta_{ot} + \gamma X_{mt} + \beta TV_{mt} \cdot D_t^{local} + \epsilon_{mot}; \]

\[ m : CZ, \ t : \text{year}, \ o : \text{occupation} \]
Distinctive Effects of Superstar Model

- Superstar effects generate top income growth, but so does a standard demand shift

- Additional predictions of superstar theory distinguish the model

- When does a superstar model differ from ordinary demand models?
  - Same as demand model in cross-section
  - **Distinction:** visible during “Scale Related Technical Change”
Empirical Evidence of Superstar Effects

A. Theory of Superstar Effect

B. Estimates of Television Effects
Conclusion

- Causal evidence that access to bigger markets leads to top income growth
  - TV filming increases wages at 99th percentile by 18%
- Superstar effect generates rising top income inequality
  - Growing fractal inequality
  - Falling demand for mediocre workers
- Magnitude of superstar effects is sizable
  - Elasticity of pay at 99th percentile to market size is 0.16
  - Causal effect explains two-thirds of correlation