

# 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



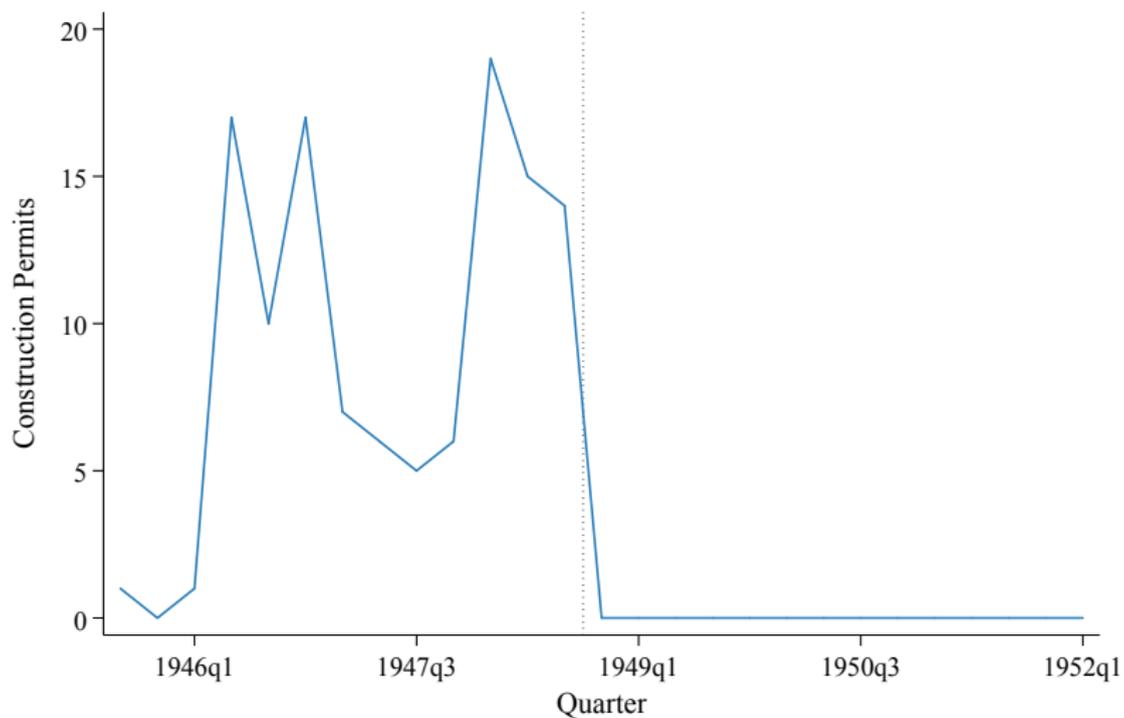
ca. 1941-1955

Phase III:  
National TV



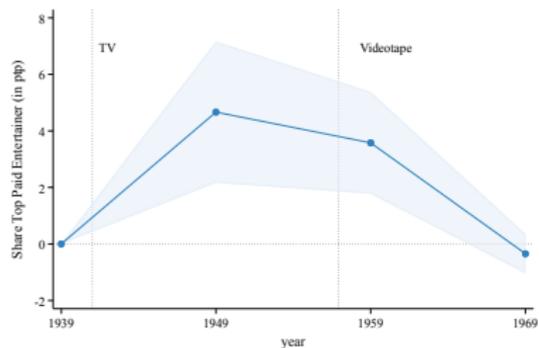
1956 onwards

## Rollout is unexpectedly interrupted

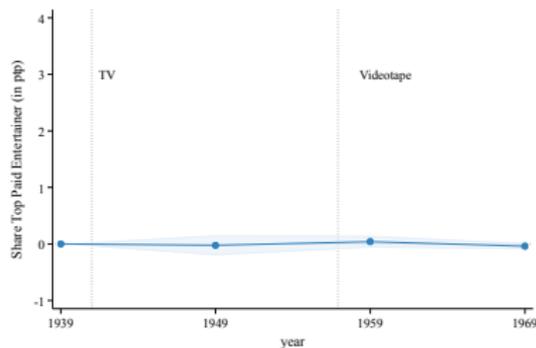


# Impact of Television on Top Paid Entertainers

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,  $t$  : year,  $o$  : 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