

# A morning dilemma

# Superstar Incentives: Collaborations, awards and their impact on the development of economic science

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# motivation

- Generation of new ideas
- Recognition of idea quality
  - Experts
  - Outsiders
- Endorsement of quality
  - Effects of such endorsements on direction of future research

# approach

- Scientific publications as ideas
  - economics
- Prizes as endorsements of quality
  - Two well-known prizes
    - “Nobel Prize” for economic science
    - Clark Medal
- Analyzing changes in citations to prize-winners’ articles (exogenous treatment = winning the prize by the author)

# data

- Data from ISI Web of Science
- Top economics journals
  - 44
- Publication records from 1956-2005
  - 170,432 / 105,787
- Citations to these publications 1956-2010
  - Coming from all scientific fields
  - Publication records of these citations (8 000+ journals)
  - 2.2mln
- Prize winners
  - 90 (69/33)

# methodology

- An observation – publication-citation pair
  - Count data
- Matching articles
  - (coarsened) exact matching
    - Journal, publication year, main JEL code – number of citations as of treatment year
- Control for
  - Journal specific age effects
  - Vintage-specific time trends
  - Article-specific fixed effects
- Poisson quazi-maximum-likelihood
  - Robust standard errors

# results

## Nobel.Prize,.All.citations,.aggregate.effects

	1956%1965	1966%1975	1976%1985	1986%1995	1996%2005
<b>1981\$1985</b>	0.23 *** (0.063)	0.28 *** (0.114)	0.15 (0.196)		
<b>1986\$1990</b>	0.11 (0.175)	0.04 (0.209)	0.18 ** (0.107)		
<b>1991\$1995</b>	0.80 *** (0.161)	0.04 (0.100)	0.32 * (0.199)	0.24 ** (0.114)	
<b>1996\$2000</b>	0.71 %	0.15 ** (0.073)	0.17 *** (0.044)	0.12 (0.078)	0.18 (0.150)
<b>2001\$2005</b>		0.02 (0.140)	0.18 *** (0.043)	0.00 (0.120)	0.08 (0.095)

# results

- We have to aggregate one way and decompose another way
- Results are even more heterogeneous
- General result is a upward jump in citations



# results

- Can we say why this happens?
  - Is it quality assurance?
  - Is it raising awareness about the research?
- Split citations in three parts: “pure economics” “interdisciplinary economics” “other fields”
- Run same regressions using only one of the three types of citations
- Nobel citations come from “other fields”
- Clark citations come from “pure economics”

# Conclusions

- Effects are much more intricate, complex and idiosyncratic than we initially thought
- A lot more work needs to be done
  - Running individual winner regressions
  - Running co-author regressions
  - Running field decompositions
  
  - Better identifying articles for which authors got prizes and those for which they did not
  - Identifying corresponding co-authors
  
  - Ultimately, identifying non-star articles from the fields awarded prizes and checking for the effect on the field