Entertainment Originals As Capital Assets

Rachel Soloveichik

Why Does BEA Measure Entertainment?

- BEA accounts for short-lived items and long-lived items separately in the National Income and Product Accounts (NIPAs)
  - Factories, trucks, computers, etc. are classified as capital
  - Raw materials, electricity, advertising, etc. are classified as intermediate expenses.
  - BEA currently treats all entertainment as an intermediate expense.
- I measure long-lived entertainment designed for mass reproduction from 1929 to 2010
  - Theatrical movies, books, music, some television and some miscellaneous artwork is considered long-lived
  - Fine art like the Mona Lisa is not counted
  - BEA hopes to report annual investment, capital stock, and depreciation for each entertainment categories in the NIPAs
    - These numbers will be available online for researchers to analyze.

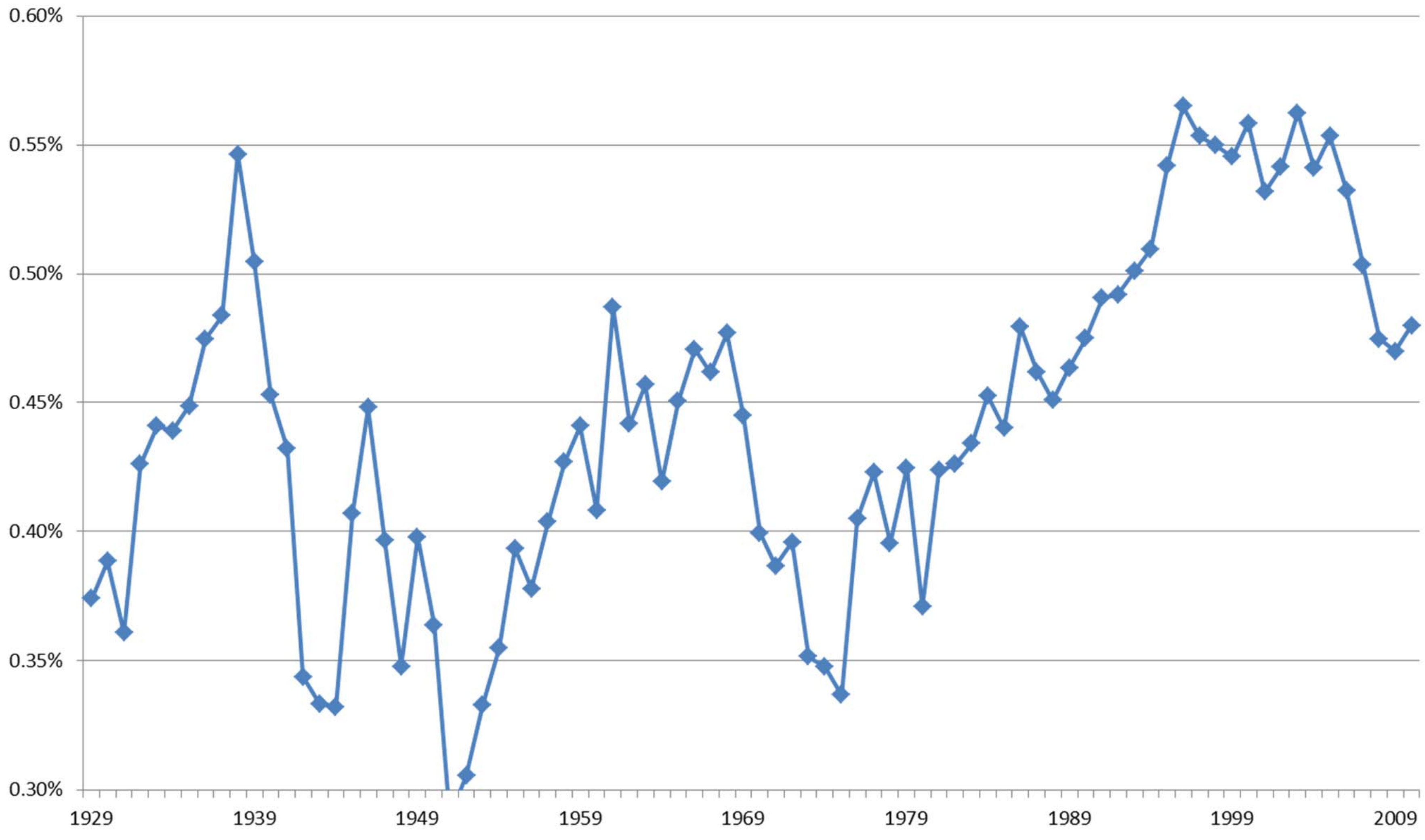
US Entertainment Investment in 2007

- $20.0 billion in theatrical movies
- $7.8 billion in original music
- $9.1 billion in original books
- $30.4 billion in long-lived television
- $3.2 billion in miscellaneous artwork
- We don't measure short-lived entertainment like news or reality TV
- Disclaimers:
  - All opinions and mistakes in this presentation are my own
  - The numbers in this paper are preliminary

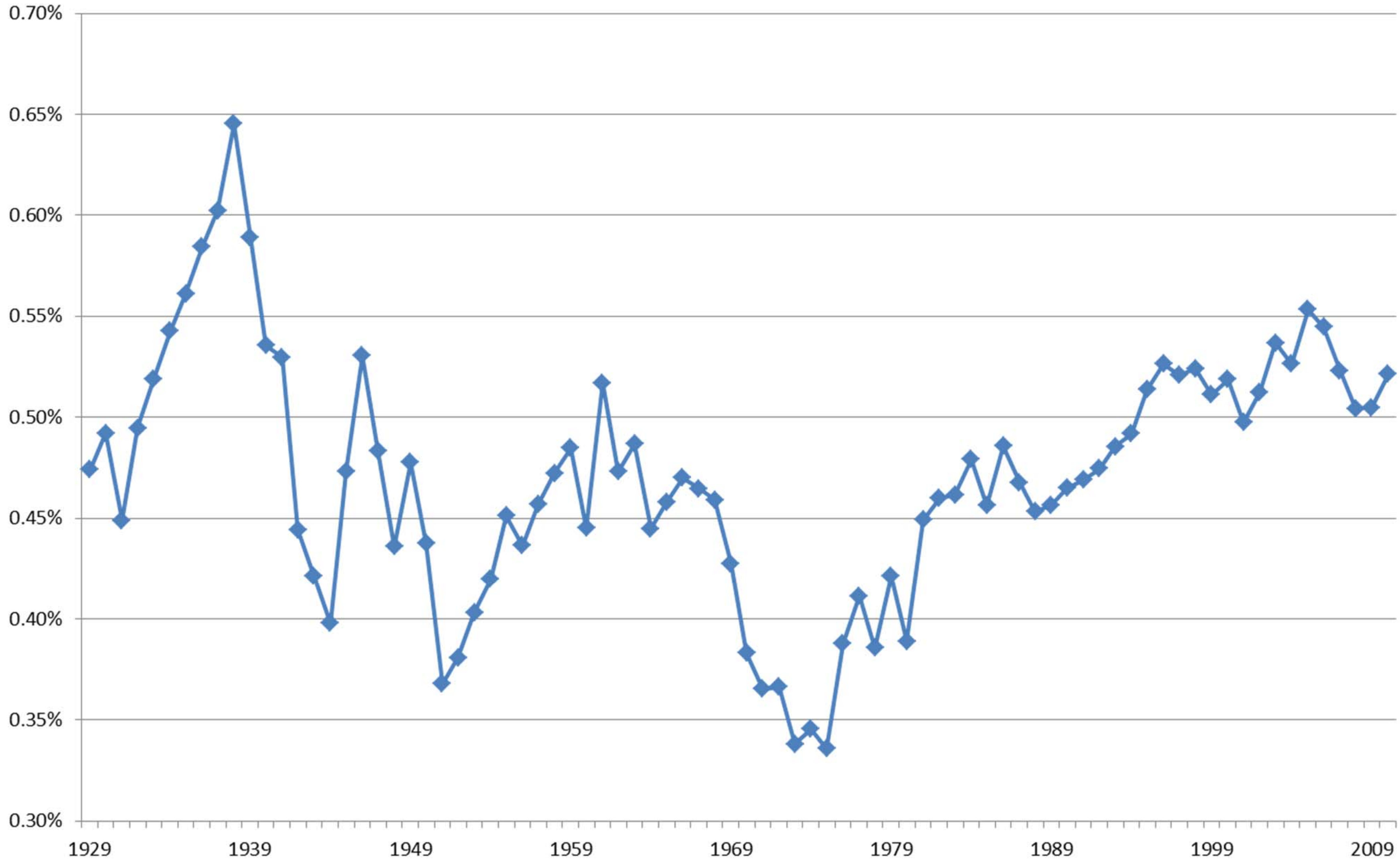
Economics Terms I use

- Price Index = Production cost for one unit of entertainment now vs. the production cost in 2005
  - 2005 is a commonly used year, but we could use any date we want.
- Nominal investment = Production cost for entertainment at **this** year's prices.
  - I estimate nominal investment from proxy data if I can't find direct measures of $'s invested.
- Real investment = Production cost at 2005 prices.
- Capital stock = Value of entertainment
  - BEA only tracks the monetary value, not the artistic value
- Depreciation = Decrease in Value over time
  - Entertainment may depreciate if all potential customers have already bought a copy.
  - It might also depreciate if consumer tastes change over time.

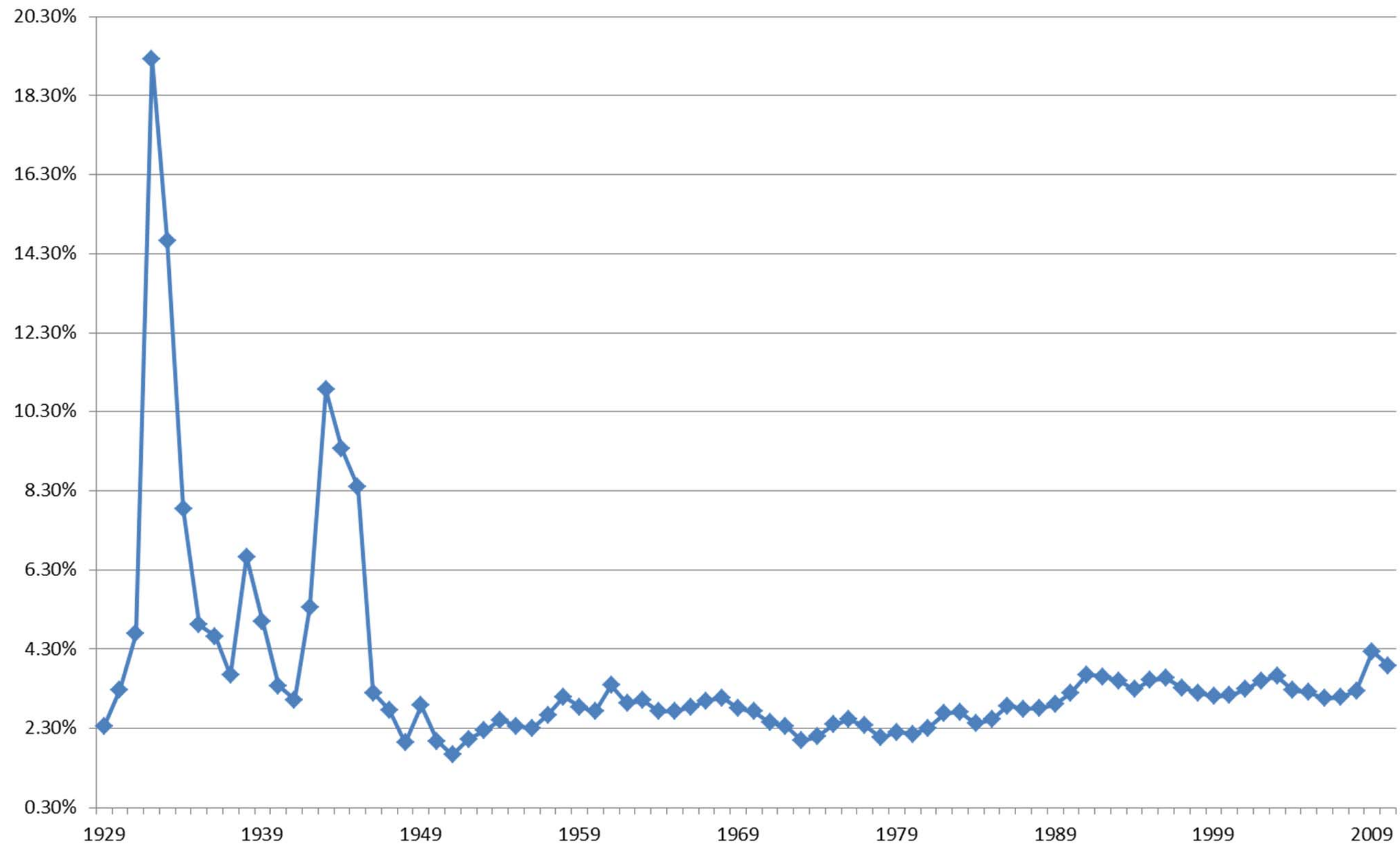
Entertainment Originals Relative to GDP (Nominal)



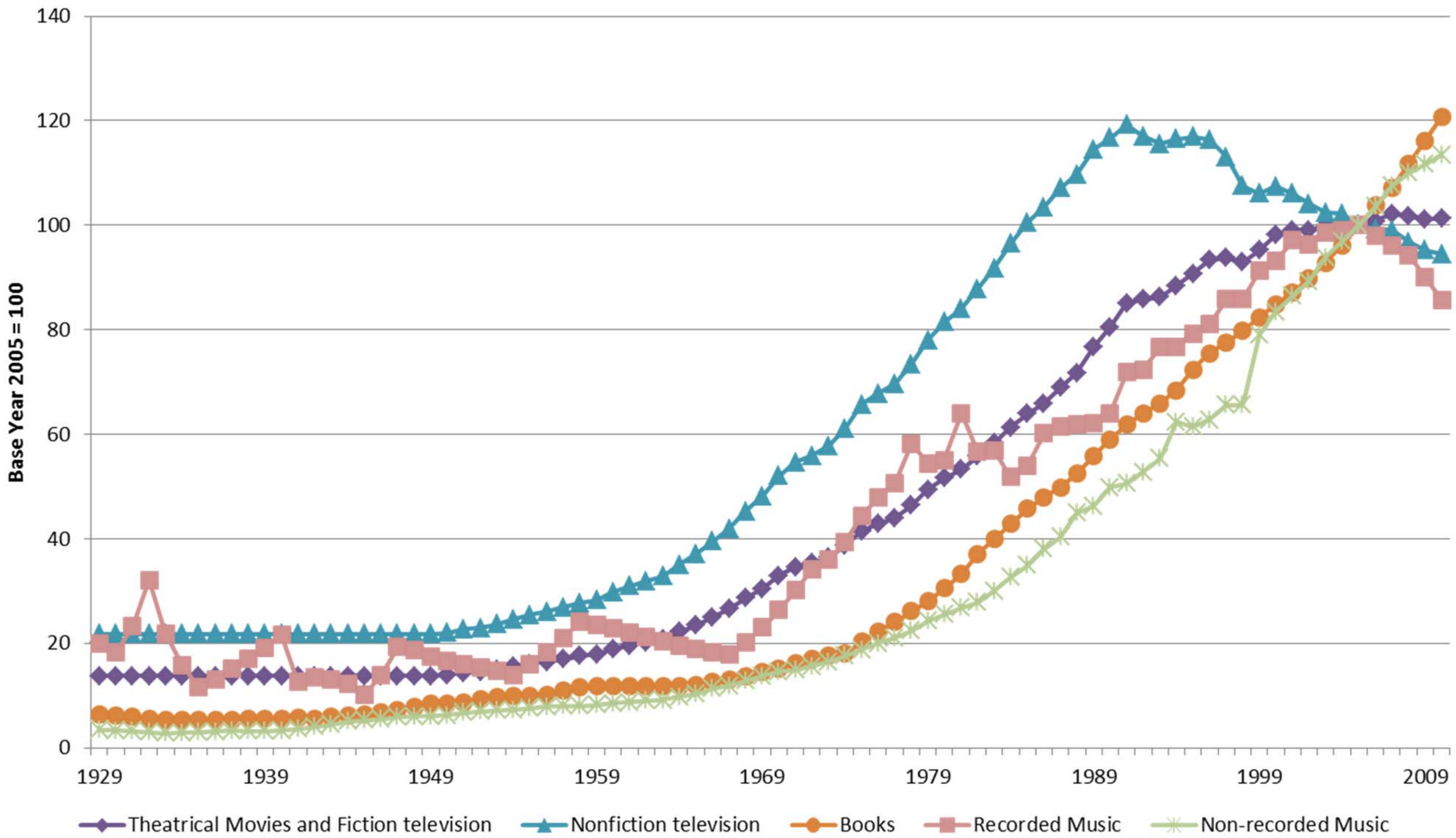
Real Entertainment Originals Relative to Real GDP



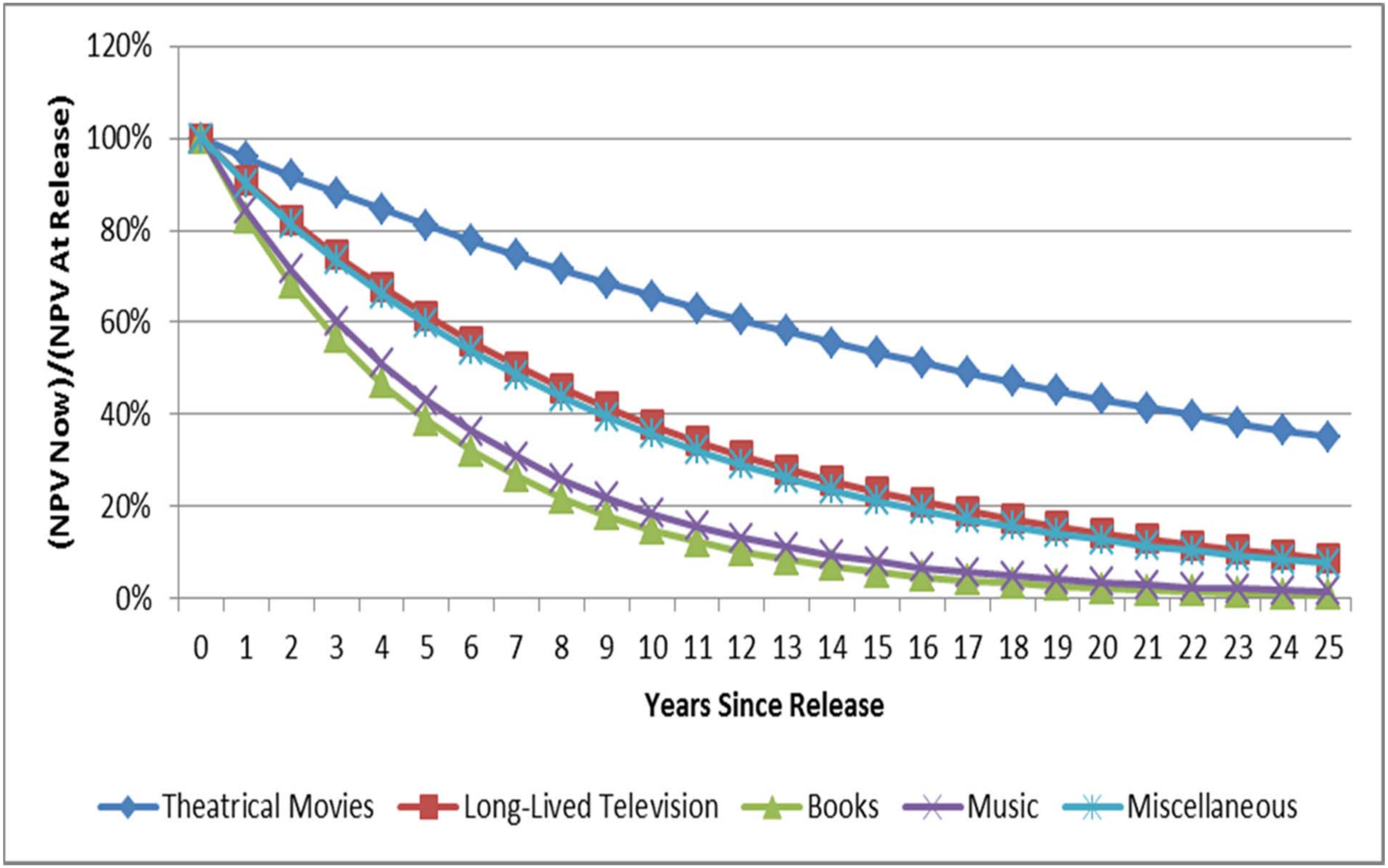
(Nominal Entertainment Investment)/ (Total Private Investment)



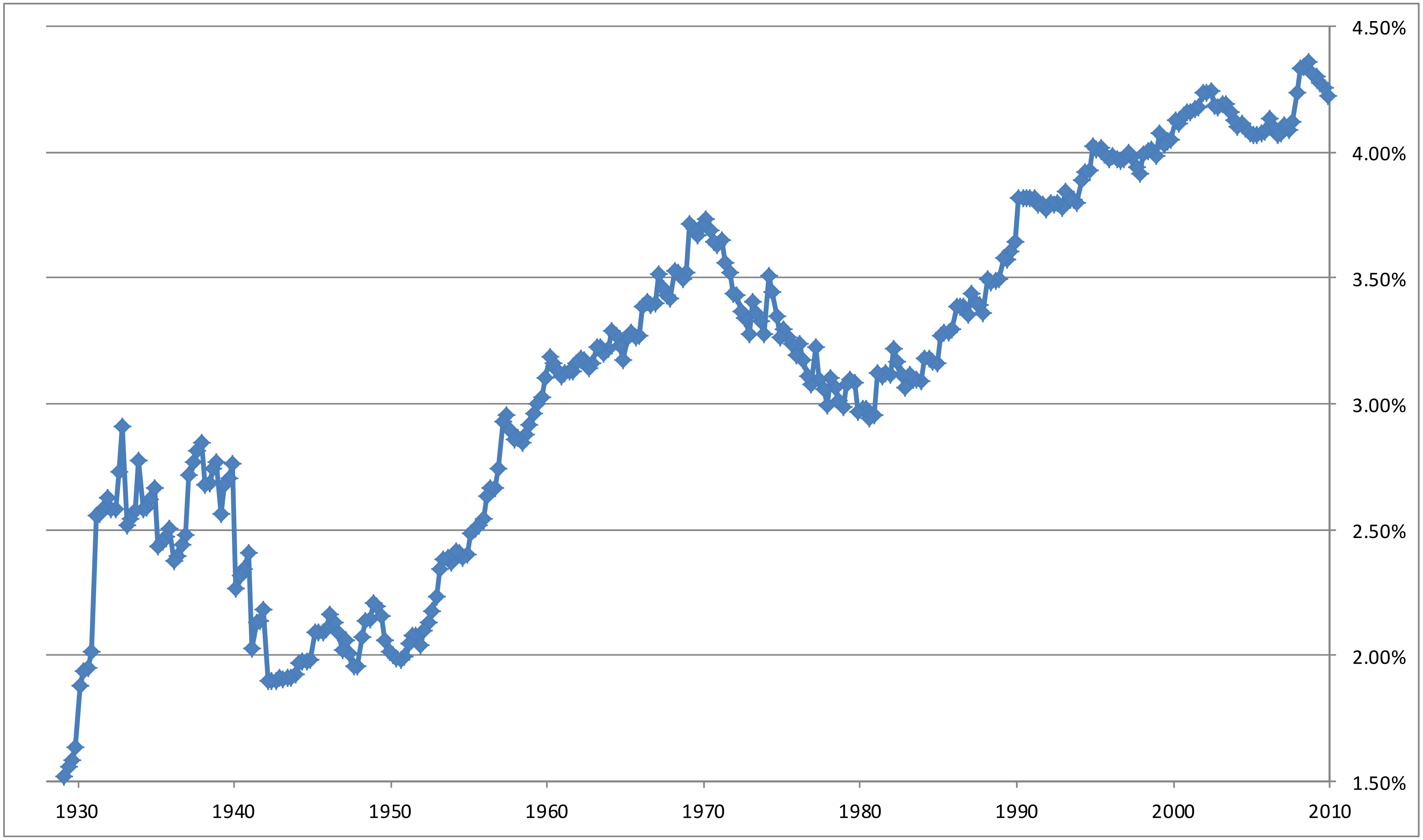
Price Index for Entertainment



Current Depreciation Schedules



Capital Stock of Entertainment Relative to GDP (Nominal)



Conclusions

- In this paper, I recalculated the NIPAs treating entertainment production as investment
- How does changing the treatment of entertainment affect GDP growth?
  - Between 1929 and 2007, entertainment investment hovered around 0.4% of nominal GDP
    - GDP growth does not change much when entertainment is capitalized.
- Entertainment is a long-lived capital asset
  - Theatrical movies depreciate by ~4% per year
  - Television programs depreciate ~10% per year
  - Music depreciates by ~19% per year
  - Books depreciate by ~15% per year