

# The Rate of Return on Everything, 1870-2015

NBER Working Paper 24112

# New Study on Long-Term Economic Data

- Paper published in Dec 2017
- Authors collected data on 16 advanced economies from 1870 to 2015
- For each country, they crafted a long-term series showing annual rates of return (adjusted for inflation), taking into account investment income and capital gains for gov bonds, short-term bills, equities and housing
- Similar approach to collecting GDP data

# Results

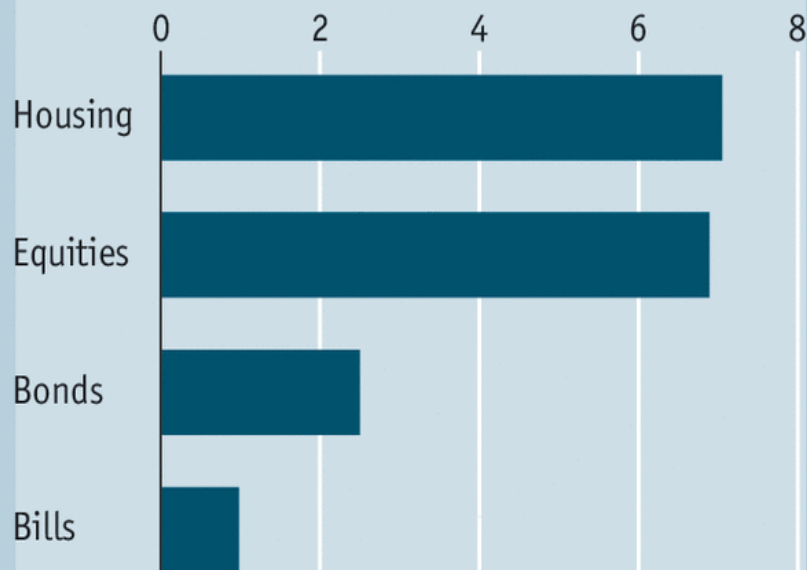
- Over the very long-term, investment in “housing” provided the best return, ~7% per year, over the 145 years studied
- Equity returns also provided ~7% but returns were more volatile
- Average real return on wealth about 6% per year
- Average real growth in GDP about 3% year

# Rate of Investment Return vs. Growth in GDP

## Home economics

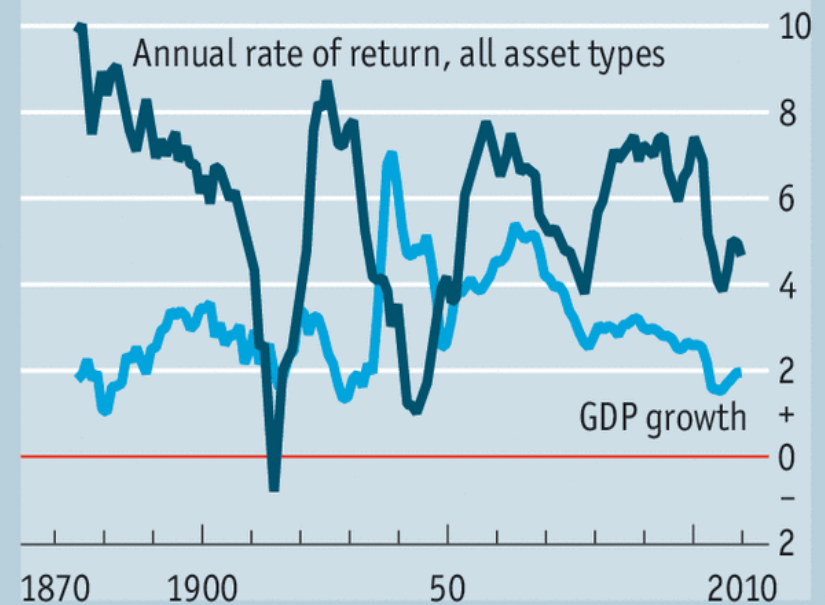
### Annual global rates of return\*

By asset, 1870-2015, %



Source: National Bureau of Economic Research

### Ten-year moving average†, %



\*16 countries unweighted †16 countries weighted by GDP

# Main Findings

- Risky returns: Housing and equities had similar returns with differences in volatility
- Safe returns: More volatile than expected over the long-term; returns on average low (1-3%)
- Risk Premium (Risky-Safe): In most peacetime eras, stable around 4-5%
- Returns-Growth: Confirms earlier work on GDP and wealth inequality while extending finding to more countries and longer time period

# Implications

- Changes in wealth inequality
- Tax policy
- Expectations for rate of return on government bonds

# Paper

- Title: The Rate of Return on Everything, 1870-2015
  - NBER Working Paper No 24112, Dec 2017
- Authors: Òscar Jordà (San Francisco FRB), Katharina Knoll (Bundesbank), Alan Taylor (UC Davis), Dmitry Kuvshinov (University of Bonn) and Moritz Schularick (University of Bonn).
- Countries: Australia, Belgium, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States

Note: Messrs Jordà, Schularick and Taylor have spent years compiling historical macroeconomic and financial data, according to The Economist