"Investment Hолwing Out" by Alexander/Eberly
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Summary

\[ I(q, \ldots) \downarrow \]

- Point 1: Not a GFC but a 2000 fact
- Point 2: Parallels labor market’s timing and developments
  - Off-shoring
  - Intangible K displacing Tangible K
Point 1
Two explanations for failure of $I(q, \ldots)$

- Off-shoring
  - $q$ doesn't tell a global firm WHERE to locate the tangible investment
- Substitution for Intangible $K$
  - $q$ doesn't tell a firm WHICH kind of investment to make
Suggestion/Request

- Presumably we care about Investment drop for at least two reasons:
  - Drop in Aggregate Demand
  - Impact on supply side of economy

- It is very hard for outsiders to this important literature to map Intangible investment and its many measurement issues to Income and Wealth Accounts.

- Paper would provide a great service if it helped us to get a sense of whether we need to worry about $I(q,..) \downarrow$ or not, and connect these worries (or not) to AD and AS statements.
Measurement is tricky…

- A substantial share of it happens In-House
  - How do we measure private investment in tangibles?
  - Hard to measure by output, so it is mostly measured by input… but even this is hard. Which share of CEO’s time allocated to creative activities? Etc.

- Nakamura, Corrado, Hulten and others give it a try building on work by Griliches
  - “Advertising, marketing, and brands become more important in the rapidly evolving world of Internet” and a source of wealth
  - Fundamentally non-rival
  - Expenditure in education? The rule of law?

- Traditional measure plus: software (BEA 1998), R&D from BEA’s satellite account, advertising and training expenses associated with new products
Some figures from Nakamura

Four views of US Private Business Investment: View 1
Old Definition -- Excludes Software
Investment near post-war low

Nominal Investment relative to Nominal GDP

Tangible ex software
Some figures from Nakamura

Four views of US Private Business Investment:
View 2 Current Official Definition
Investment Near Postwar Average

Nominal Investment relative to Nominal GDP

Tangible ex software
Private Nonres
Some figures from Nakamura

Four views of US Private Business Investment:
View 3 With Private R&D from Satellite Account
Investment above Pre-1977

Nominal Investment relative to Nominal GDP

percent of GDP

19.0%
17.0%
15.0%
13.0%
11.0%
9.0%
7.0%
5.0%

Tangible ex software
Private Nonres
Priv NR Plus R&D
Some figures from Nakamura

![Chart: Four views of US Private Business Investment](image)

**Four views of US Private Business Investment**

**View 4: All Intangibles Included**

**Investment Near Postwar High (Excluding Internet Bubble)**

- **Nominal Investment relative to Nominal GDP**
  - Total
  - Tangible ex software
  - Private Nonres
  - Priv NR Plus R&D

- Y-axis: percent of GDP
- X-axis: Nominal Investment relative to Nominal GDP
Private Investment in the United States as a Proportion of Output

Private Investment in Intangibles and Tangibles
1970-2013
As a Proportion of GDP
Perhaps q-theory is not so wrong after all? (Nasdaq)