Half the Firms, Twice the Profits

Market Power vs. Corporate Law Explanations

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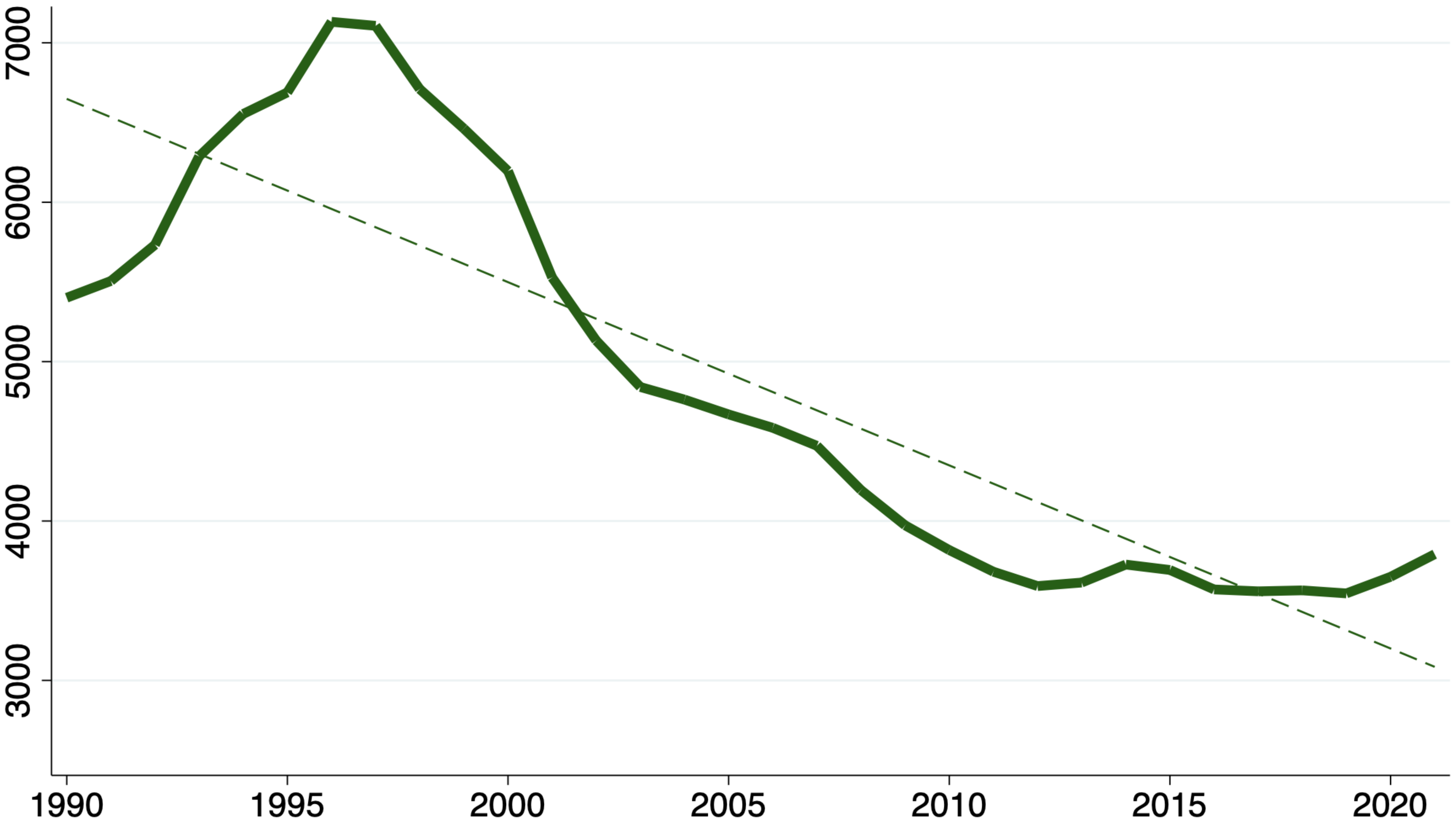
Figure 1: Number of American Public Firms, 1990-2021



Two propositions in the paper

- First proposition, question: what's happening to the public firm sector overall?
  - Halving in numbers. Numbers peaked in 1996.
  - By every (every?) other measure, they are more important to the economy
  - Package?: Fewer, more profitable, more valuable, larger
- Second proposition, question: why?
  - I.O. Hypotheses
    - Two varieties
  - Seeking to explain two phenomena: (i) why public firms look the way they do and (ii) the declining number of public firms
    - If (i) is a package . . .

Motivation: At the SEC

- Since 2012, there have been 16 SEC commissioners, 13 of whom spoke on the declining number of public firms
    - All 13 had a legal explanation
    - About half agreed with the WSJ: over-regulation, esp Sarbanes-Oxley
    - Half looked to deregulation of private capital flows, e.g., Reg D. Better private capital flow means fewer companies need to go public to get good access
        - (Cf. Coates, Coffee, de Fontenay, Georgiev)
- We'll call these two, combined, the **Legal Explanation** for the morphing public firm sector

Meanwhile, across town in D.C.

At the Federal Trade Commission:

- We examined the statements of FTC commissioners and ass’t attorneys general in the Antitrust Division
- For why there is so much more concentration in the US economy
- Not identical issue
  - Fewer public firms (SEC) vs. more concentration among larger US firms (FTC)
- But the two (SEC and FTC) are examining a similar, overlapping phenomenon
  - More concentration consistent without fewer firms
  - But that’s not the prime thinking.
- I.O. Explanations:
  - #1: Antitrust
  - #2: New efficiencies from scale. “Winner-take-all” economy
  - We’ll call the two the “I.O. Hypotheses”

The First Proposition

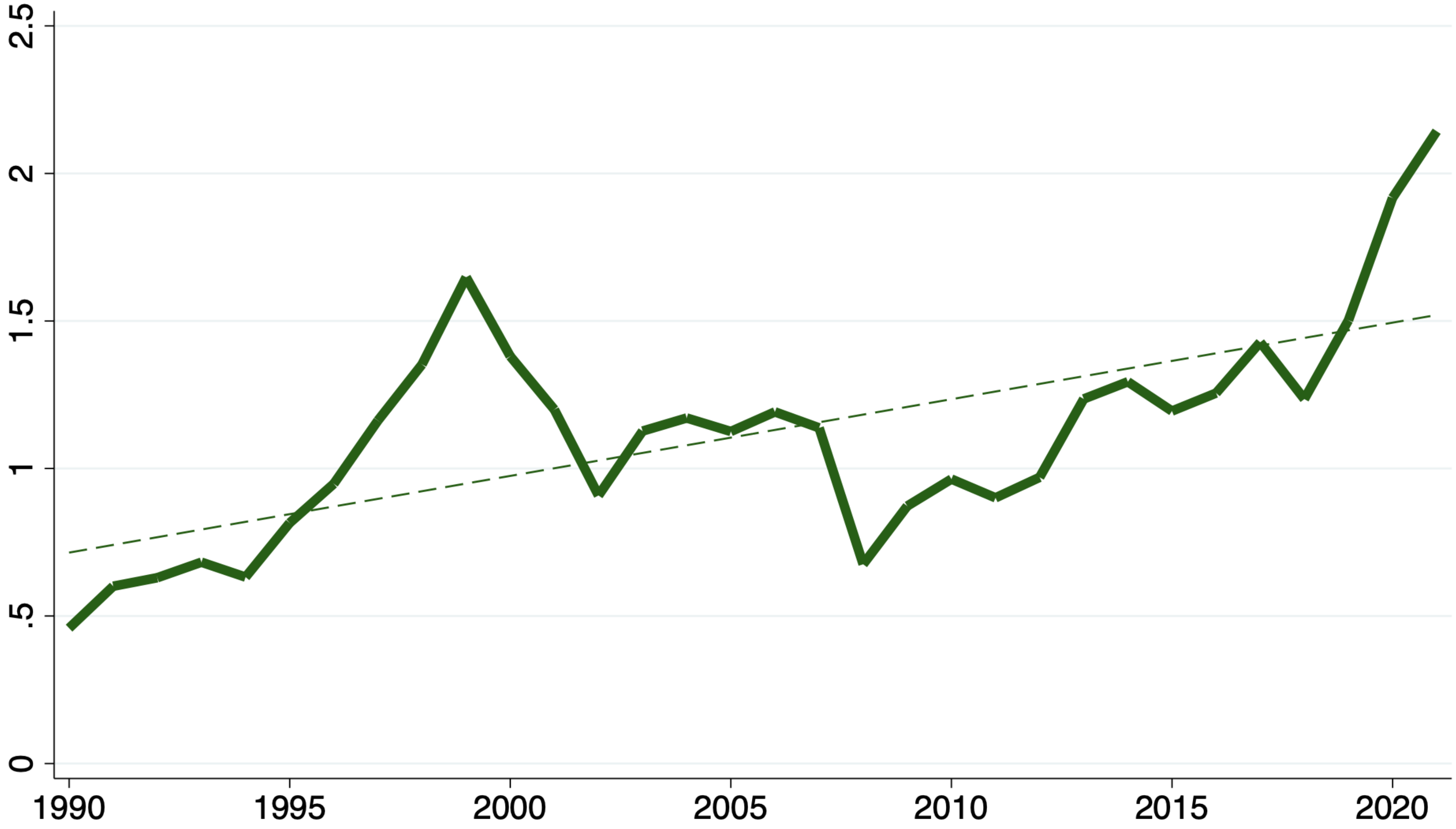
Morphed structure: fewer firms, more profitable.

Sector much more valuable.

Measures of public firm weight in the economy

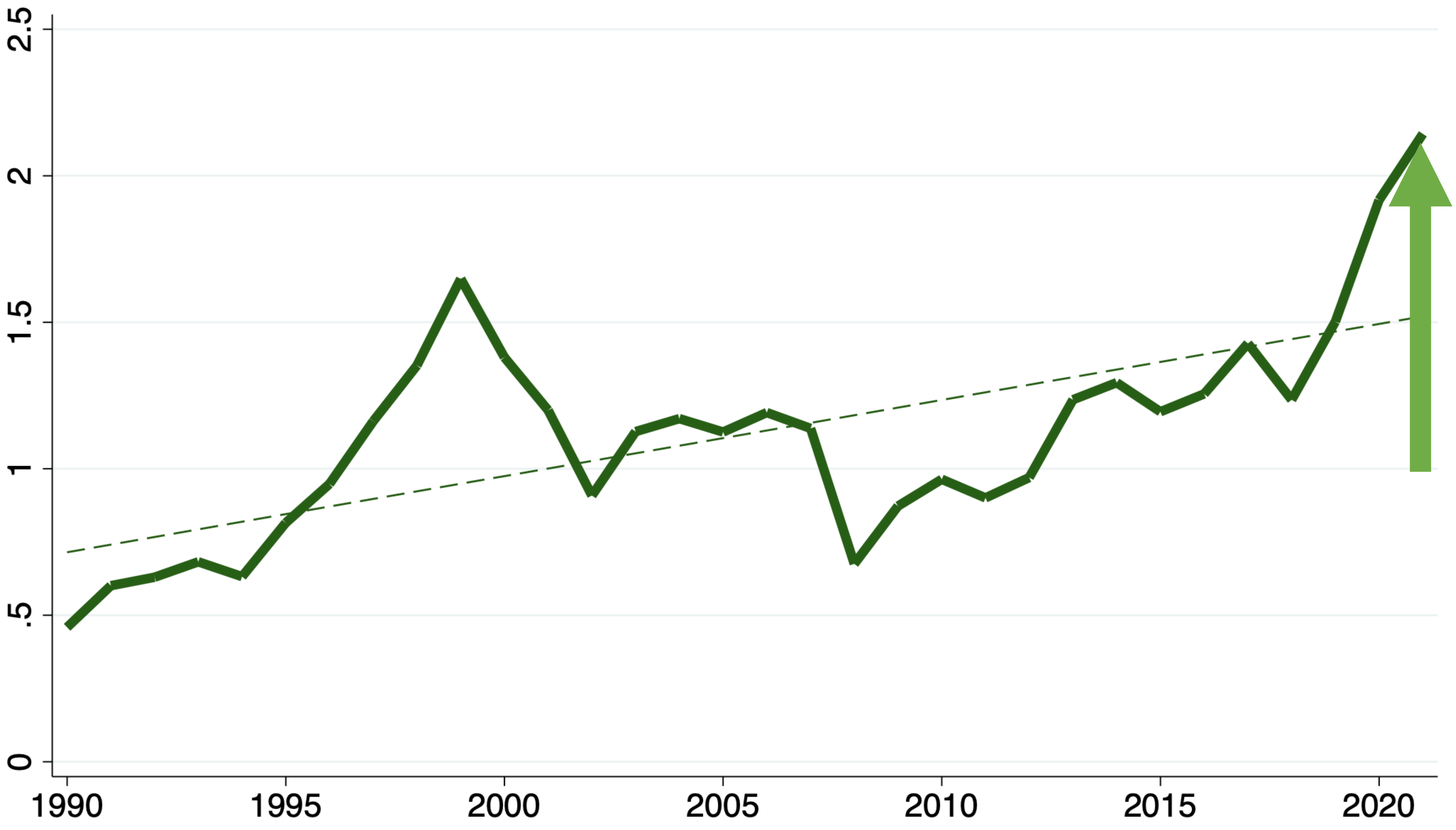
- Total number of public firms. Total number of IPOs.
- Total value (Stock market cap/GDP).
- Total profits/GDP.
- Total capital spending/GDP.
- Total revenue/GDP.

Figure 3: Total Value: Rising Stock Market Capitalization / GDP, 1990-2021



Cf. Blair (2020); Cheffins & Reddy (2022); Georgiev (2021); and Gözlügöl, Greth & Tröger (2023).

Figure 3: Rising Total Value: Stock Market Capitalization / GDP, 1990-2021



Cf. Blair (2020); Cheffins & Reddy (2022); Georgiev (2021); and Gözlügöl, Greth & Tröger (2023).

Figure 4: Rising Public Firm Profits / GDP, 1990-2021

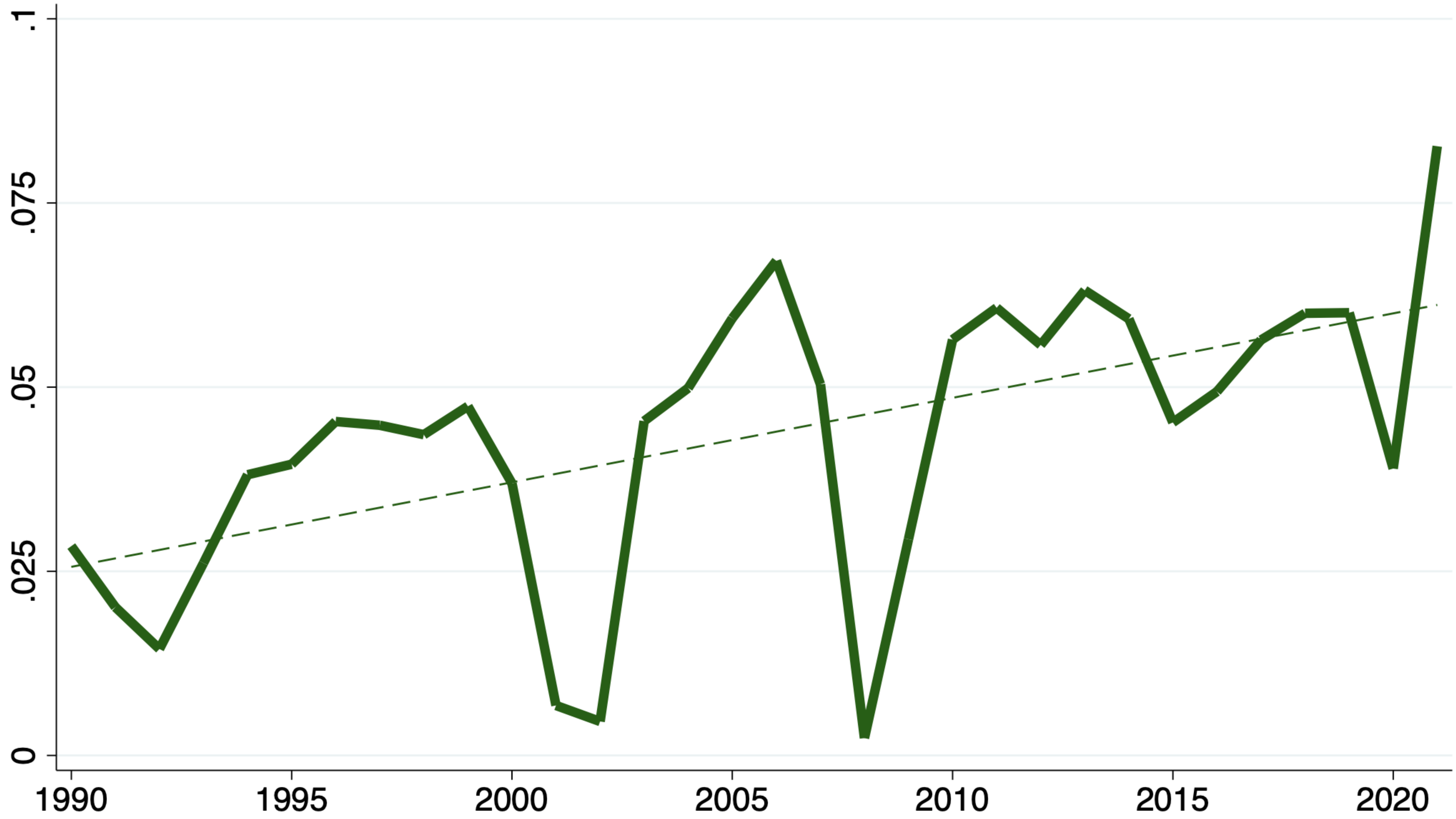


Figure 5: Rising Public Firm Capital Spending / GDP, 1990-2021

measured by CAPEX+R&D

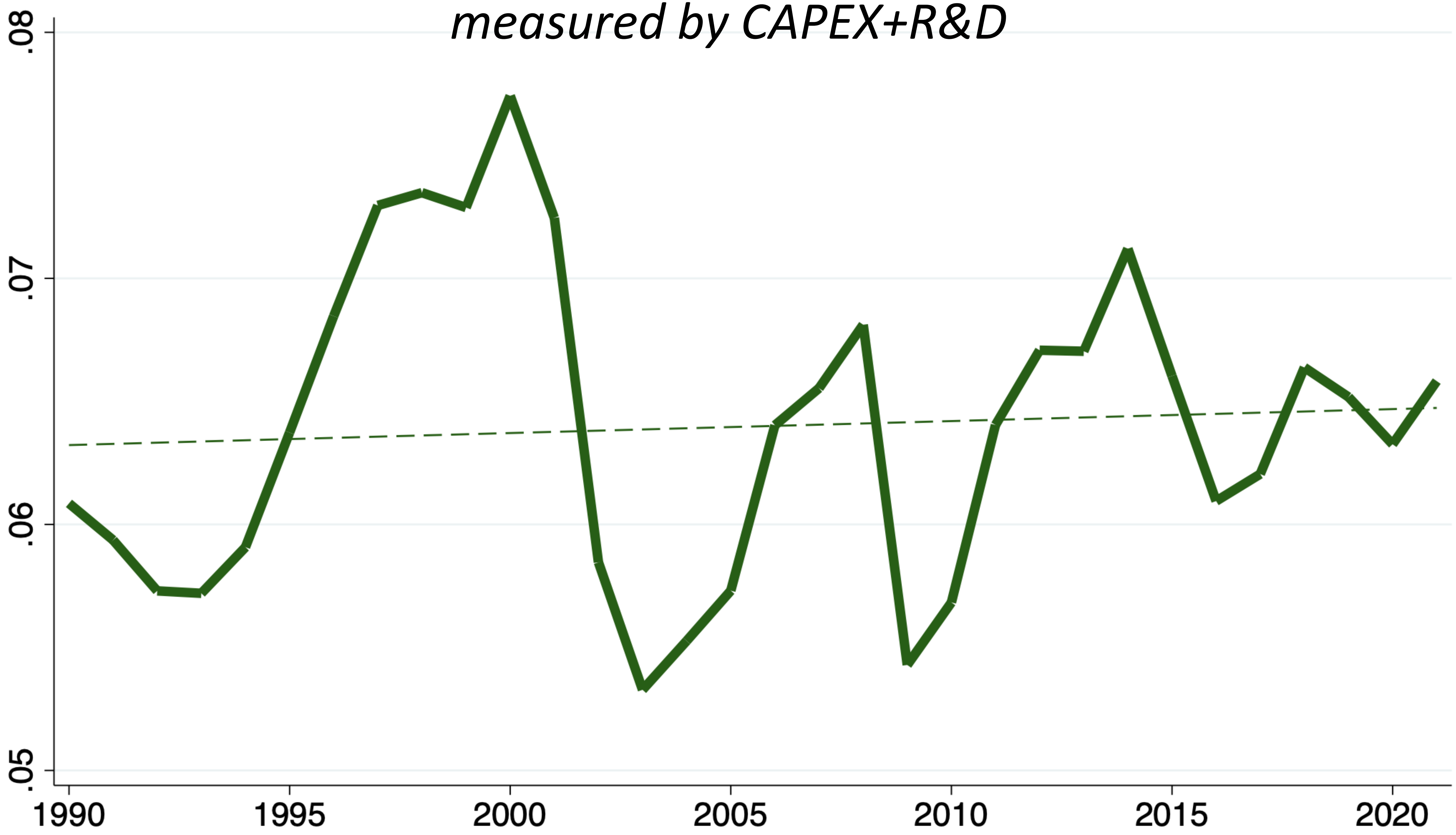
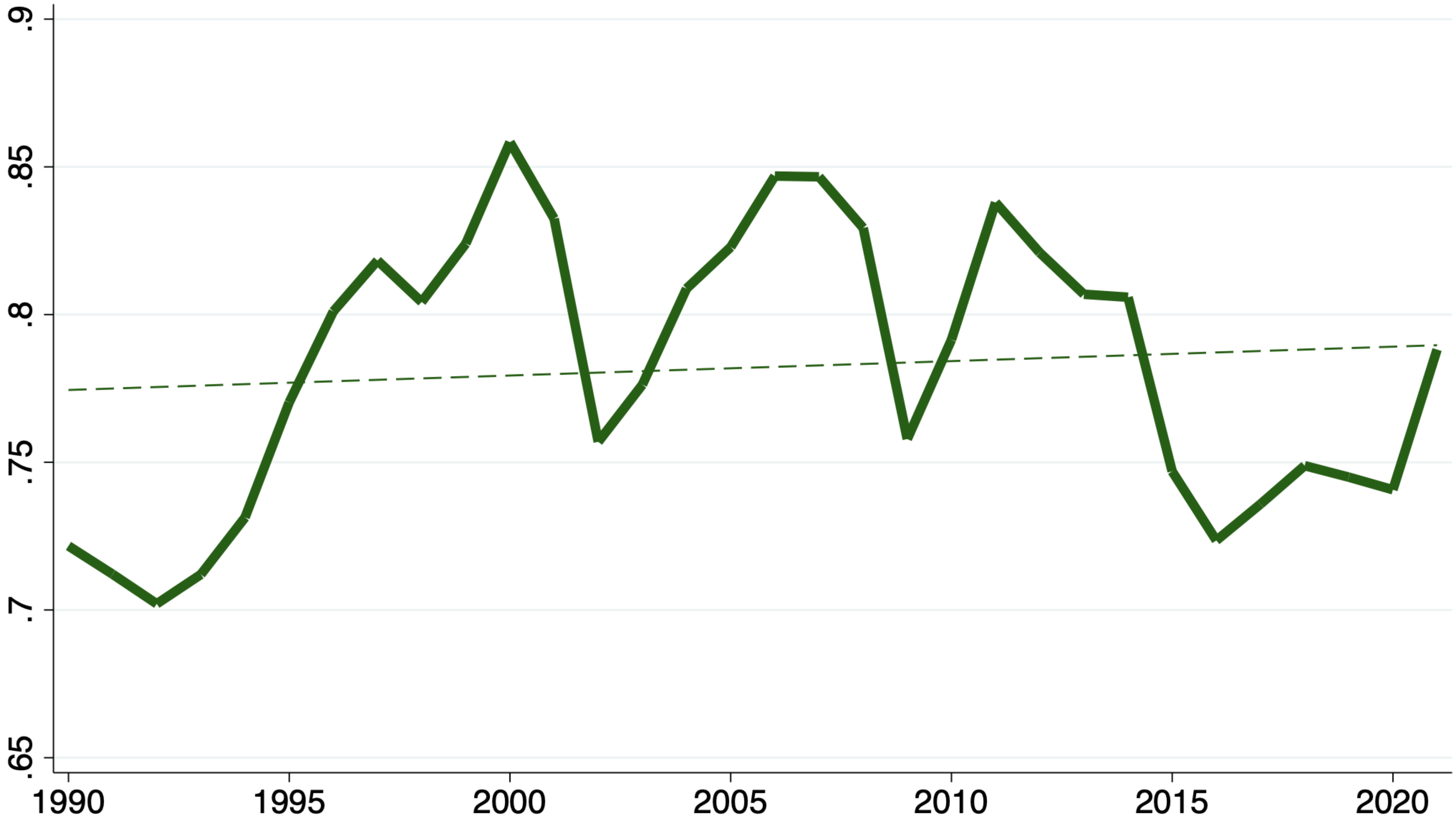


Figure 6: Rising Public Firm Revenues / GDP, 1990-2021



Basic evaluation

- By all characteristics other than number of firms, public firms are weightier in the economy today.

The Second Proposition

Why?

Fewer but larger: why?

- Legal Explanation
  - Over-regulation of public firm; less regulation of private firms
- I.O. Explanations
  - Less antitrust
  - Changing economies of scale (and related I.O. configurations)

Assessment

- Public firms play a larger economic role than in 1996.
- Fewer firms
  - Regulatory/litigation costs, disclosure costs
  - But direct costs are in the several-million-dollar range, annually
    - These legal costs could explain disappearance of small firms, not large ones
      - But large firms are disappearing too. See next slide.
    - Rise in profit and value is measured in a ***trillion*** dollars. Rise in costs is a matter of ***billions*** of dollars.

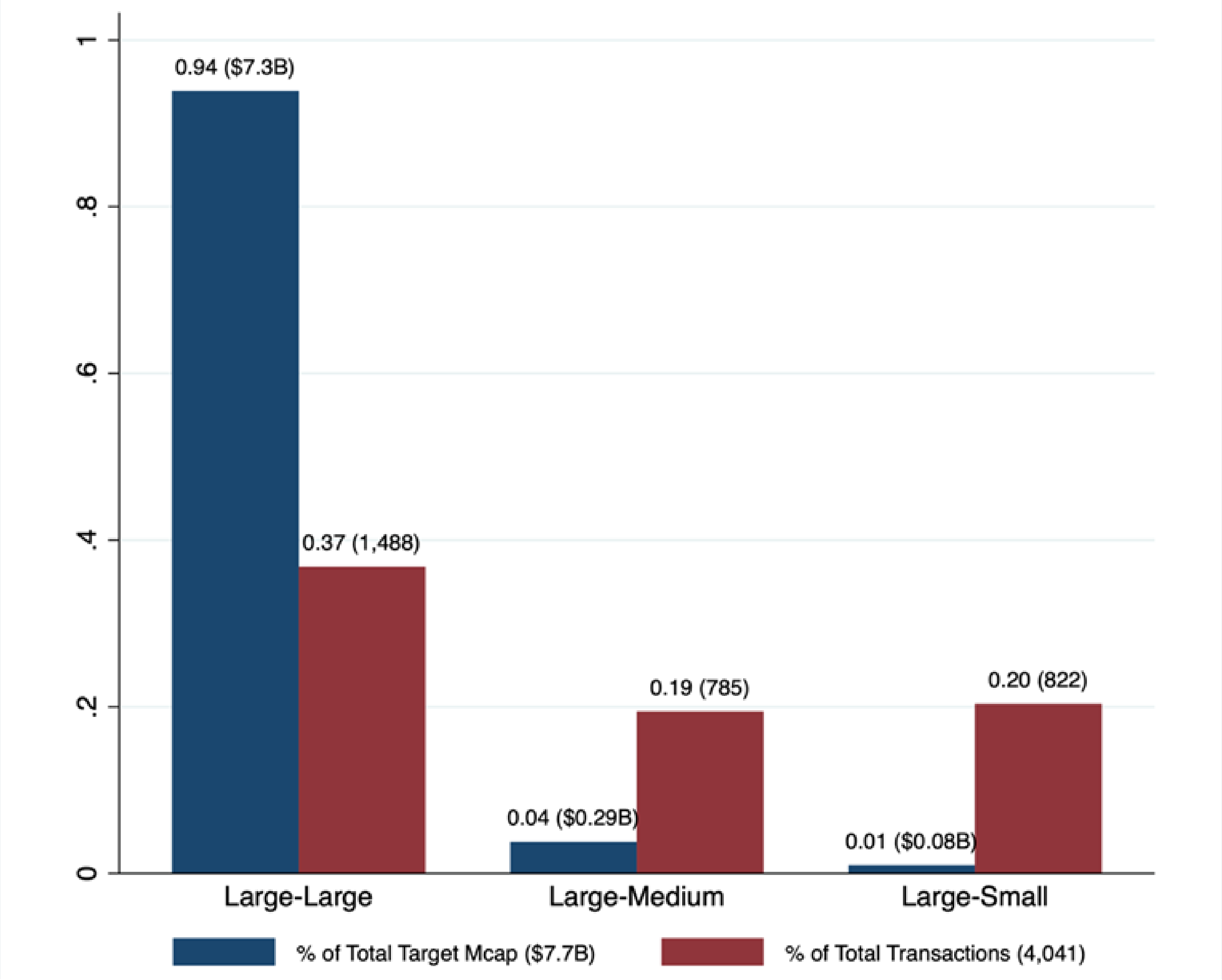


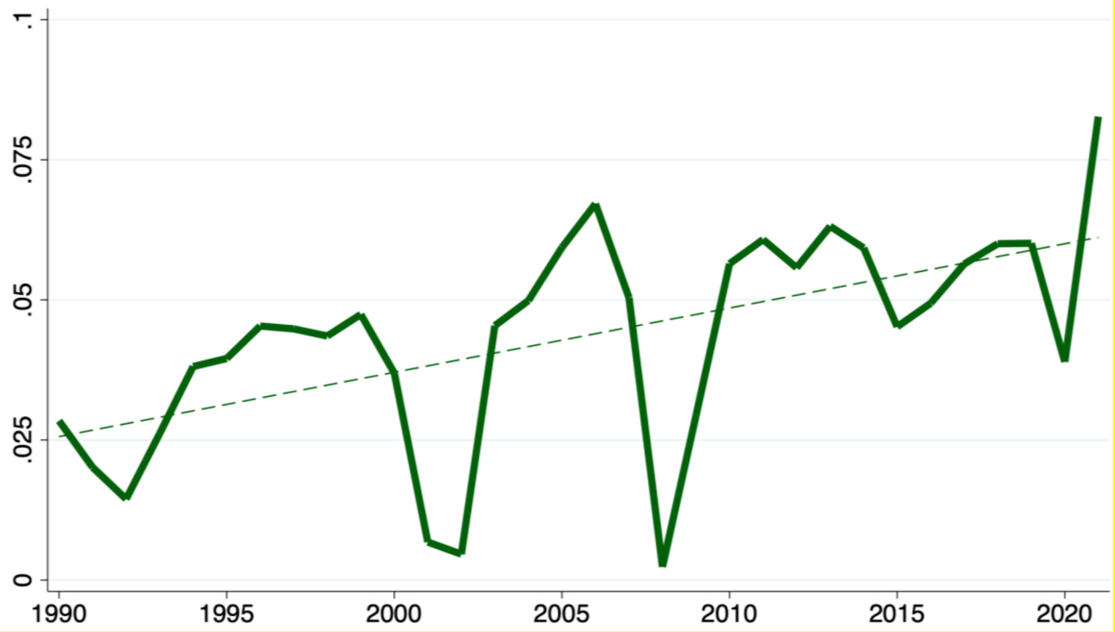
Figure 8. Large Firms Acquired More Large Firms than Small Firms, 1997-2021

Legal Explanation would fit well with a sharp decline in small firms, via mergers.

But look at distribution of merging firms.

Large-large not just in $$, but in numbers.

Rising Profits



Rise in profits/GDP in public firm sector

- Implausible that Legal Explanations explain tripled profits. Trillion-dollar issue.
  - Legal Explanation: Public firm is a more costly place to do business
  - Is it plausible that activism is killing public firms ***<u>while total public firm profits are rising</u>***?
  - Profits are rising faster than revenues and other basic corporate measures
- For tripling, need more than compliance cost to be in play
  - I.O. Explanation, of some sort

---Likely to contribute to declining # of firms too.

Note different I.O. Explanations

- Simple but big: weakened antitrust, more mergers
- Simple but big: economies of scale (I.T.? Telecommunications?)
- Others
  - Holding pen perspective
  - Dotcom burst and then bust
  - Small firms need to get big faster now than before (Jay Ritter)

Public Policy Implications: I

- First: tone in SEC pronouncements is that (i) public firms are disappearing and (ii) we need to do something---alter regulatory landscape.
- Disappearance should not be a major rationale to deregulate (or further regulate private firm sector)
  - (1) Public firms are as economically important today as they've been in the past quarter century.
  - (2) I.e., the legal structure ***<u>still supports major economic operations in the public sector. As much as ever. Actually, more than ever.</u>***
  - (3) So, yes, cut costly regulation. But do not say, "public firms' disappearance needs to be reversed." They're not disappearing. The public firm sector isn't shrinking. Do not say "weakened public sector is evidence of over-regulation of securities markets."

Public Policy Implications: II

- I.O. Explanation plausibly in play. We cannot, however, exclude every Legal Explanation channel.
- BUT: Can impact corporate/securities law policy overall
  - SEC commissioners bemoan the diminishing number of public firms
  - They think the SEC might have had a major impact on this decline
    - (By burdensome regulation, by being too loose with private markets)
  - Implication of the analysis: stop worrying (so much). It's not your fault to the extent the I.O. propulsion is more powerful than either Legal propulsion

Conclusion

- Public firms are decreasing
  - In number, but *NOT* by any other measure
- Why? SEC thinking ignores the I.O. Explanations
- Trends fit better with I.O. than Legal Explanations
  - E.g., Profits rising faster than anything else, consistent with rising efficiency (e.g., rising return on sales) or rising rents from other sources
  - Legal Explanations can't explain rising profits.
- I.O. Explanation should affect SEC's thinking
  - Decreasing number should not automatically be attributed to Legal Explanations

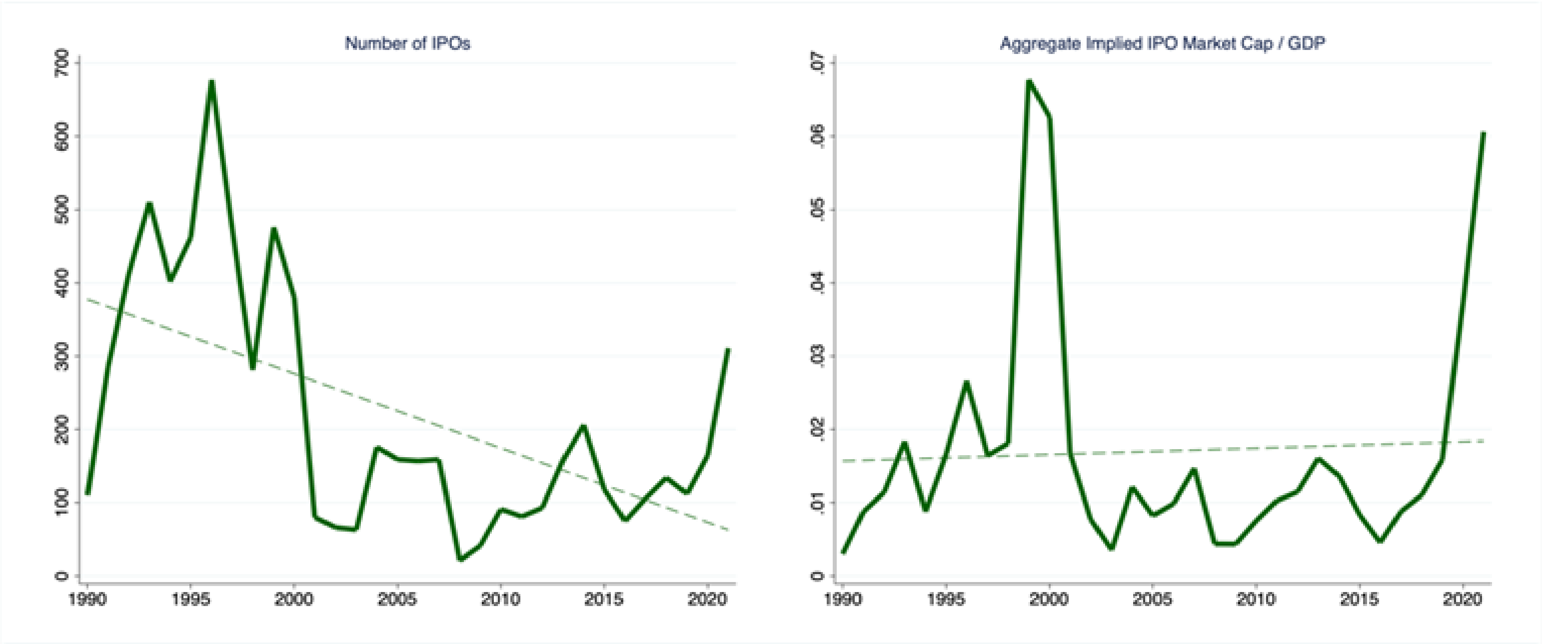


Figure 9. IPO Numbers and IPOs' Value as a Proportion of GDP, 1990-2021

Decreasing number of IPOs

- Do not readily explain the “missing” 3,500 firms
- Can only explain a portion
- I.e., take Ritter’s IPO average pre-1996 as norm
  - It would predict more firms would IPO post 1996
  - But not enough to account for the missing 3,500

Sarbanes-Oxley

- Seen as a major, maybe the MOST major, increase in compliance costs
  - Despite analysis of Coates, Coffee, de Fontenay, Georgiev, others
  - E.g., decline in number of firms was already occurring, **before 2004**

- We add to this, the diminishment trend

→ The rate of decline in IPOs flattened out some time after 2004

→ I.e., SarBox was NOT associated with a bump up in the rate of disappearance

→ Implications: other major factors were involved beyond SarBox
- I.O. Hypothesis, P/E explanation
- Suggestion: if the **heaviest** Legal Cost did not deepen the decline, something else is going on and is a dominant/important factor

PGIM

MEGATRENDS

THE NEW DYNAMICS OF PRIVATE MARKETS

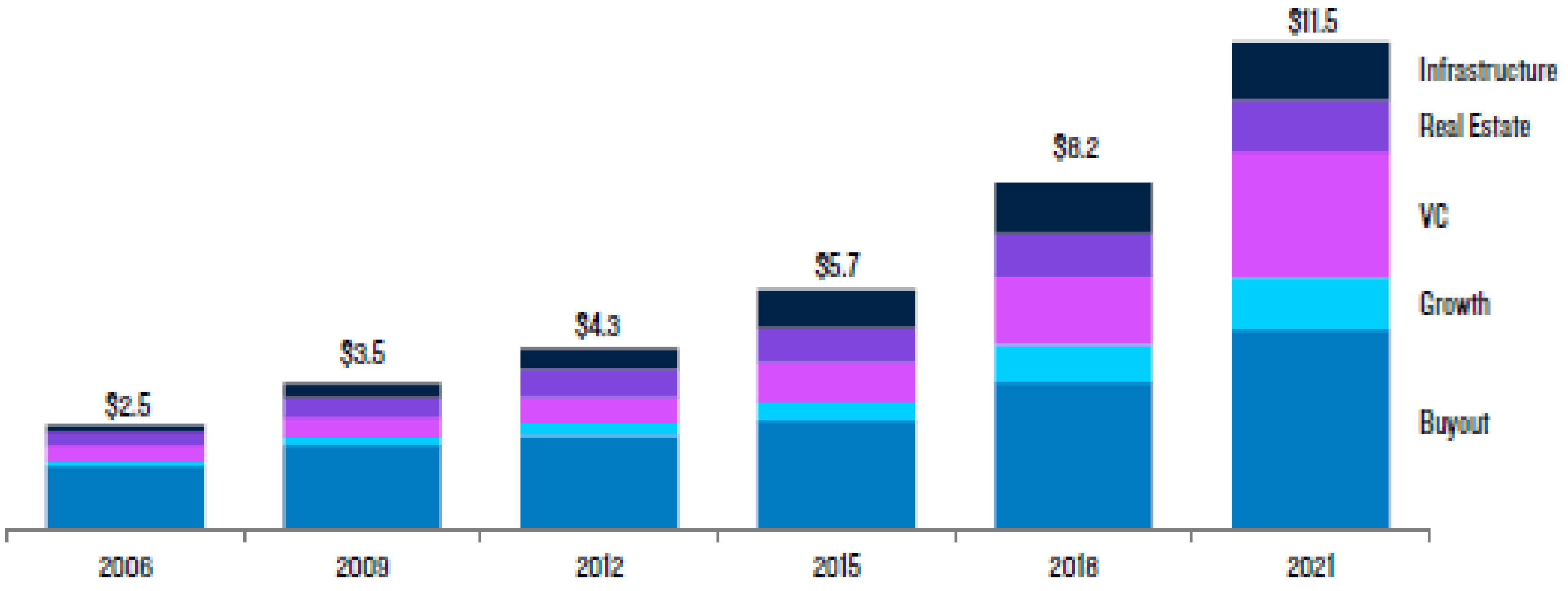
Investment Risks and Opportunities

FALL/WINTER 2022

For professional investors only.
All investments involve risk,
including possible loss of capital.

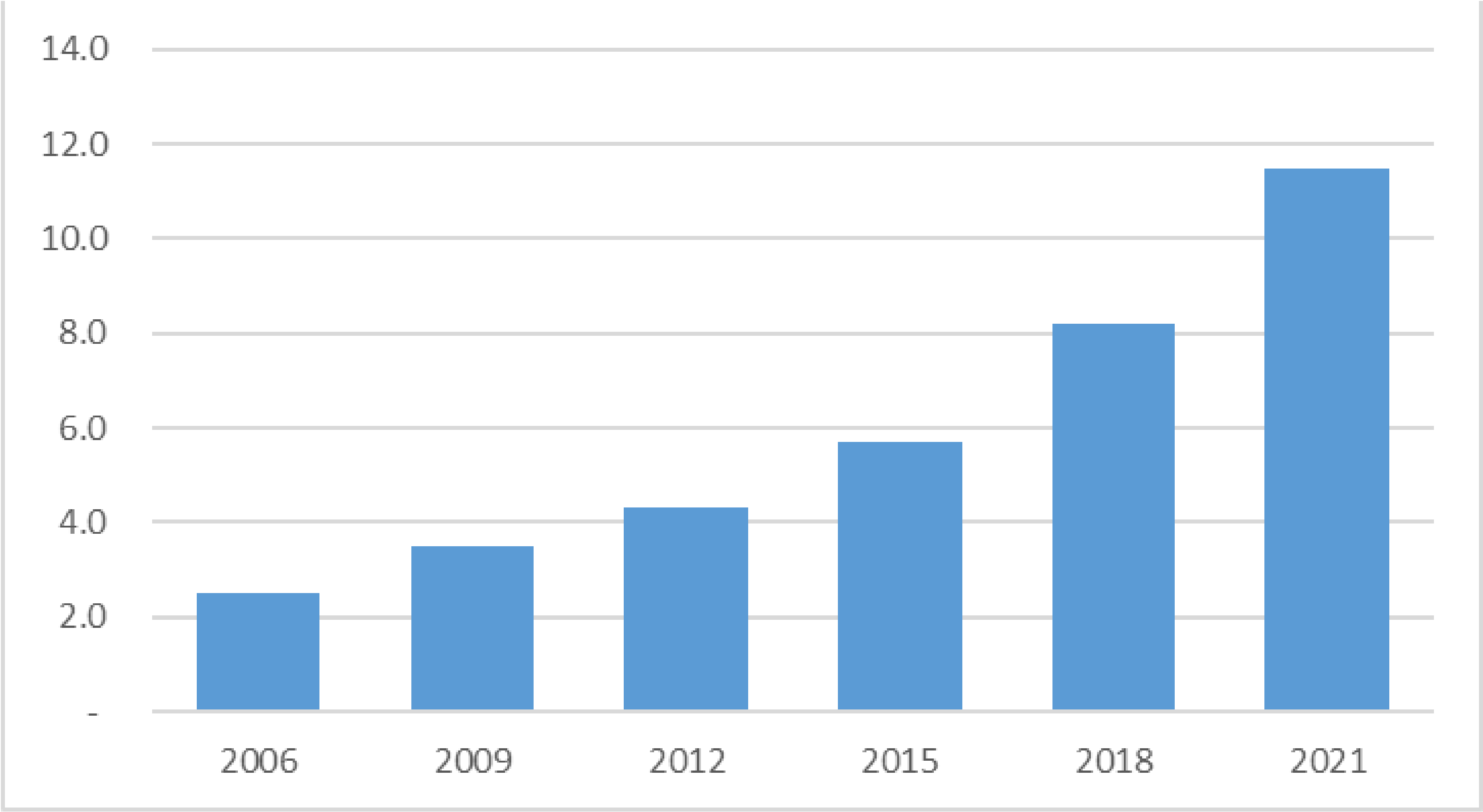
Exhibit 15: Private equity assets more than doubled in the last decade

Total net asset value and dry powder, including real assets, US$ Trillion

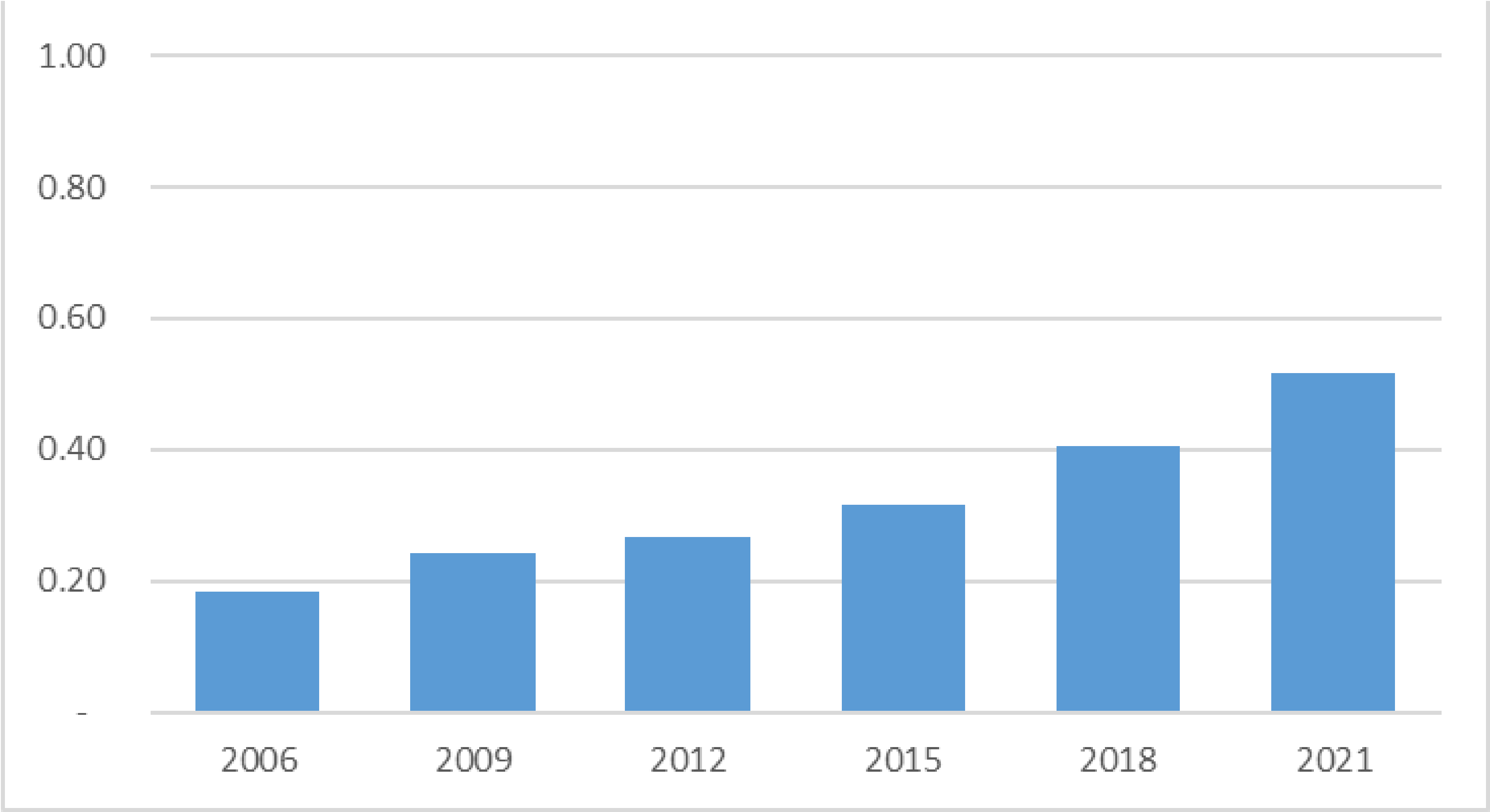


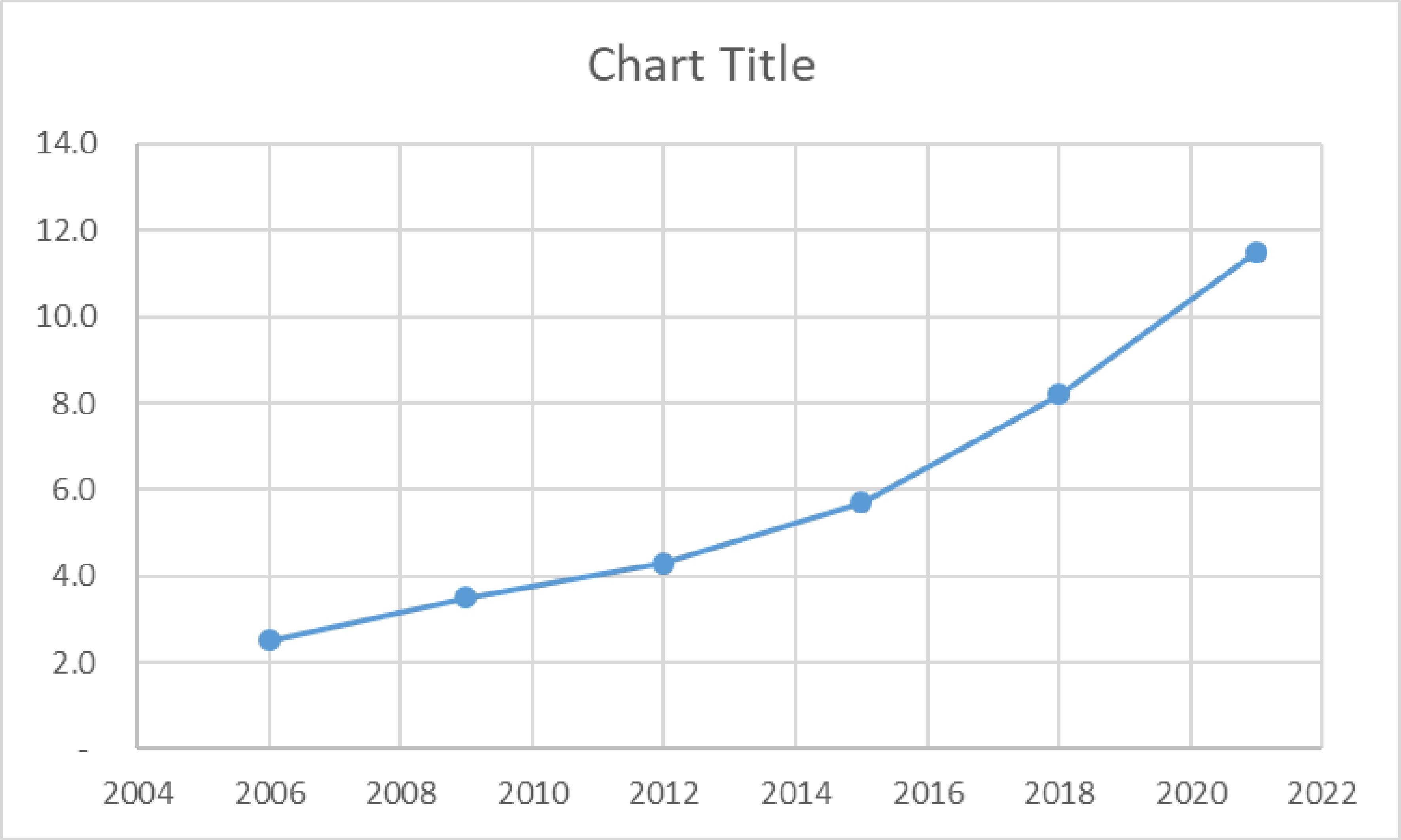
Source: Pitchbook

The growth of private equity's net asset value



Scaled to GDP: dampens

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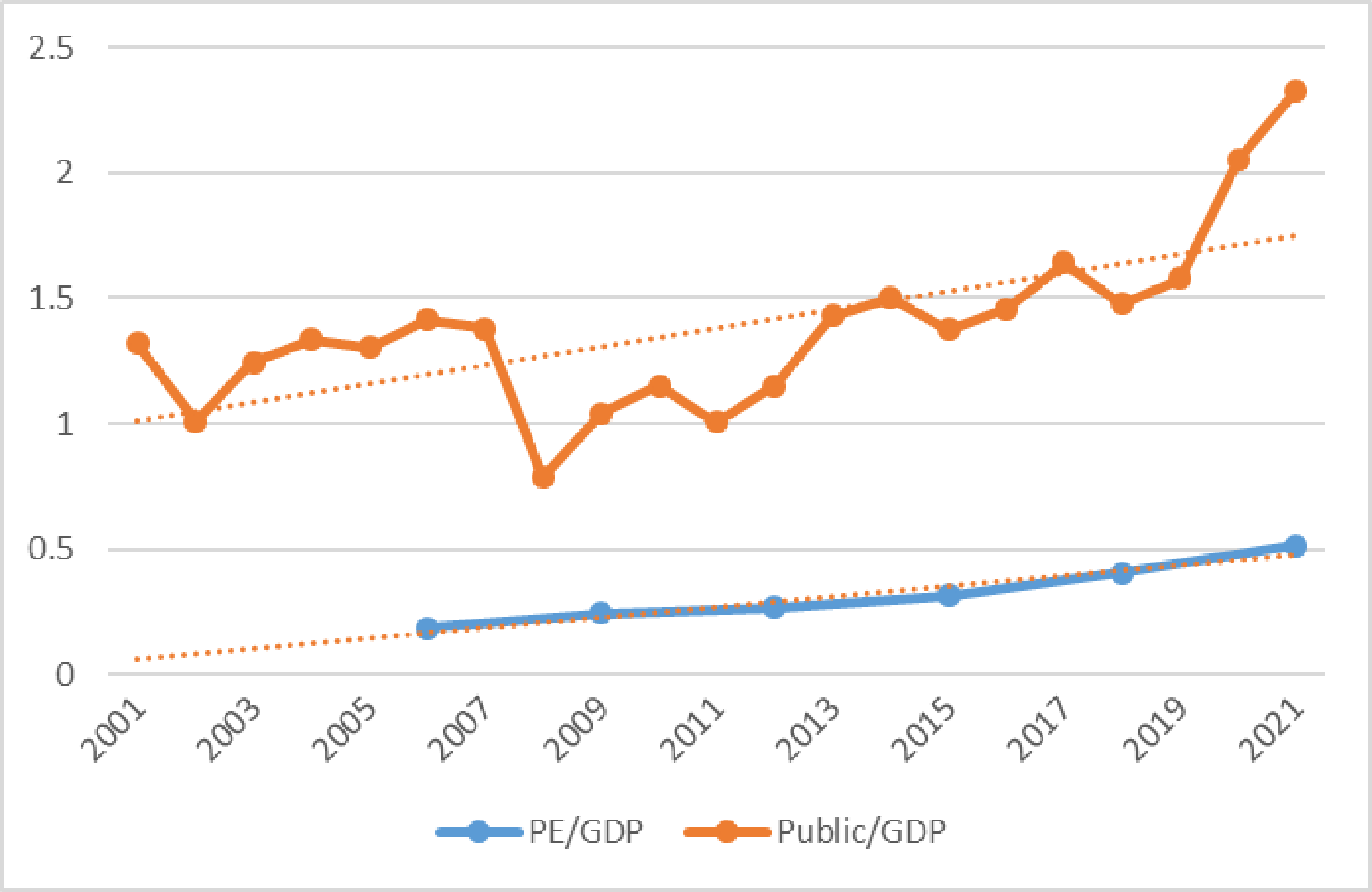
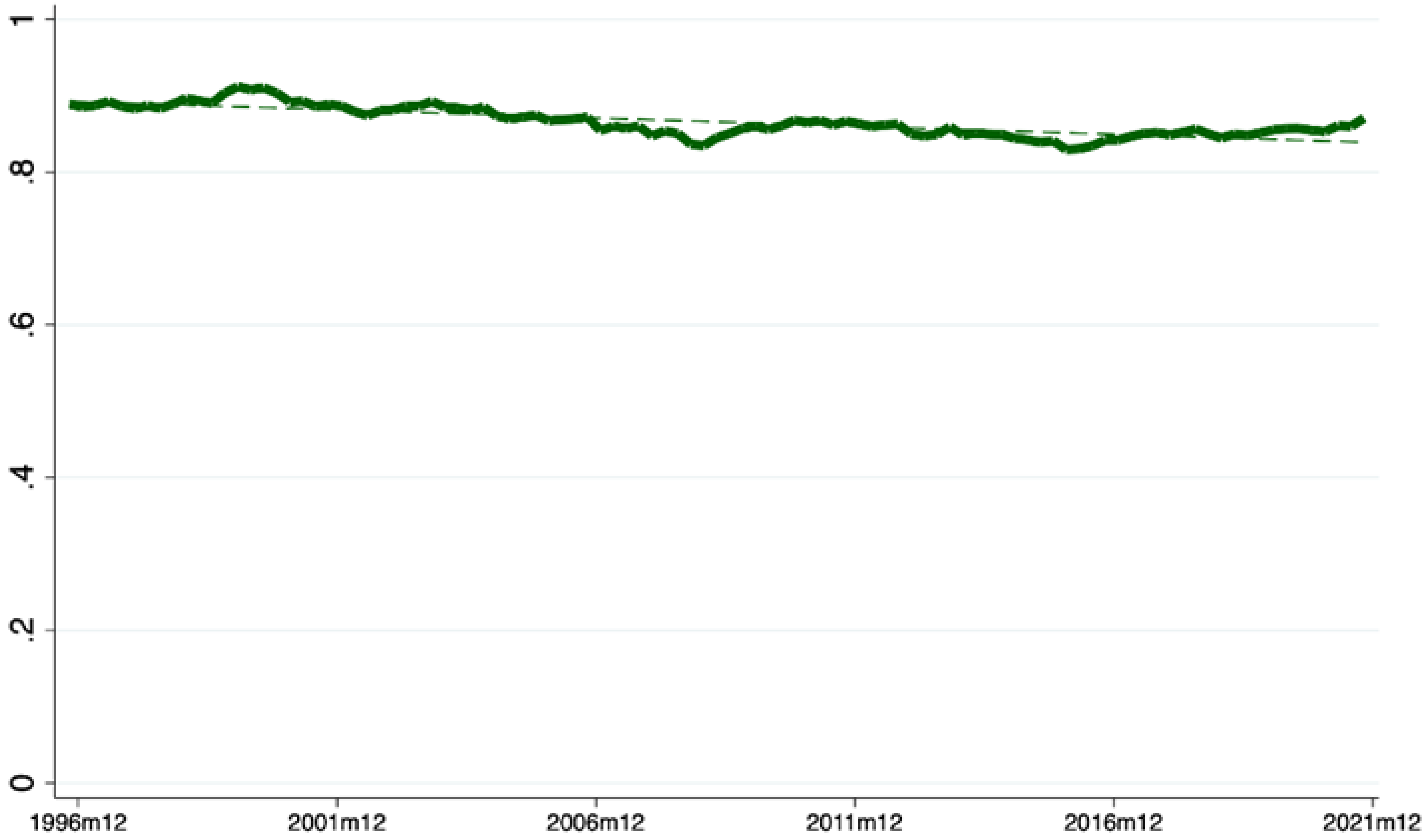
PE is not growing faster than the public stock market (2001-2021)



Public Company Equity as Portion of Public and Private Company Equity



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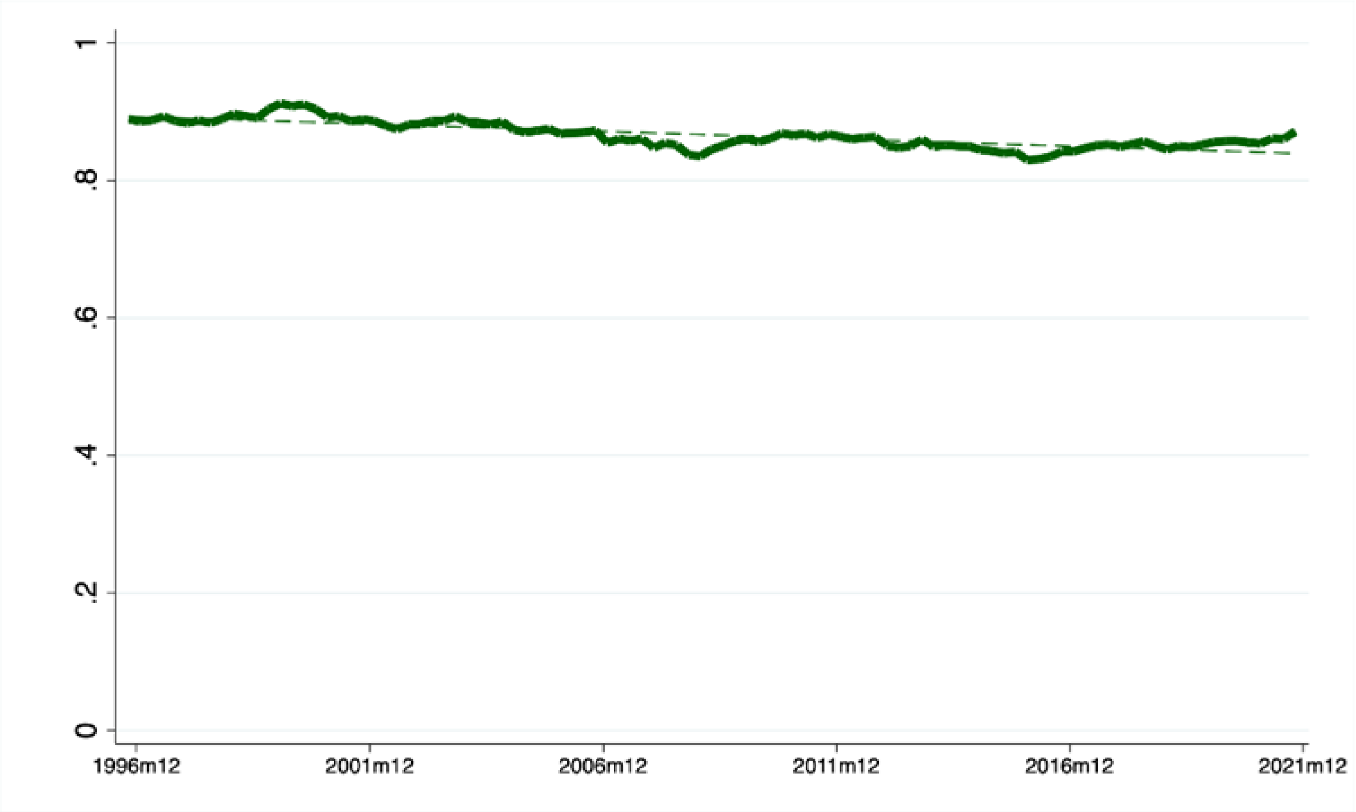

The figure shows the market equity of all public firms as a proportion of the equity value of all domestic public and private firms. The data on all domestic firms' equity market values comes from the Board of Governors of the Federal Reserve System (US), All Domestic Sectors, Corporate Equities; Liabilities, Market Value Levels [BOGZ1LM883164105Q], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BOGZ1LM883164105Q, November 29, 2022. The data on all domestic private firms' equity market values comes from the Board of Governors of the Federal Reserve System (US), All Domestic Sectors; Closely Held Corporate Equities; Liability, Level [BOGZ1FL883164125Q], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BOGZ1FL883164125Q, November 29, 2022. These figures are based on estimated market values for private firms (C-corporations and S-corporations). The market value of S-corporations is estimated by multiplying the net worth data of S-corporations in each industry (identified by 2-digit NAICS codes) from the IRS, SOI Table S-Corporation Returns: Balance Sheet and Income Statement Items, by Major Industry, by the average ratio of market value to net worth from Standard and Poor's Compustat for public companies in the same nonfinancial industries. The market value of C-corporations is estimated by multiplying the revenue data of companies that appear on Forbes' annual list of America's Largest Private Companies by the ratio of total market value to total revenue of public companies from Standard and Poor's Compustat with similar industry, employment, and revenue profiles. The total market value of C-corporations and S-corporations is adjusted downward by 25 percent to reflect the lack of liquidity of closely held shares.