Do Public Markets Have a Future?

René M. Stulz



Eclipse of the Public Corporation

Michael C. Jensen

Jensen's argument

- Jensen was focused on the decline of the public corporation.
- His argument was that it was in decline because agency costs were poorly managed.
- In contrast, private ownership through LBO organizations was on the rise.
- So, private markets were winning, and public markets were losing.

Insert in Jensen's paper from Jay Light

The last share of publicly traded common stock owned by an individual will be sold in the year 2003, if current trends persist. This forecast may be fanciful

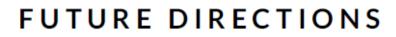
After Jensen's article

- The US had 6,727 listed firms in 1989.
- Doidge, Karolyi, and Stulz (DKS), The U.S. listing gap, Journal of Financial Economics (2017):

Peak of listings is in 1996 with 8,025 listings.

- The number of listed firms falls below the number when Jensen's article was published in 2001.
- It is 4,135 in 2023, which is 39% less than when Jensen's article was published and 48% below the peak.
- Was Jensen right but too early? Or was he just plain wrong?

Let's look first at some new data

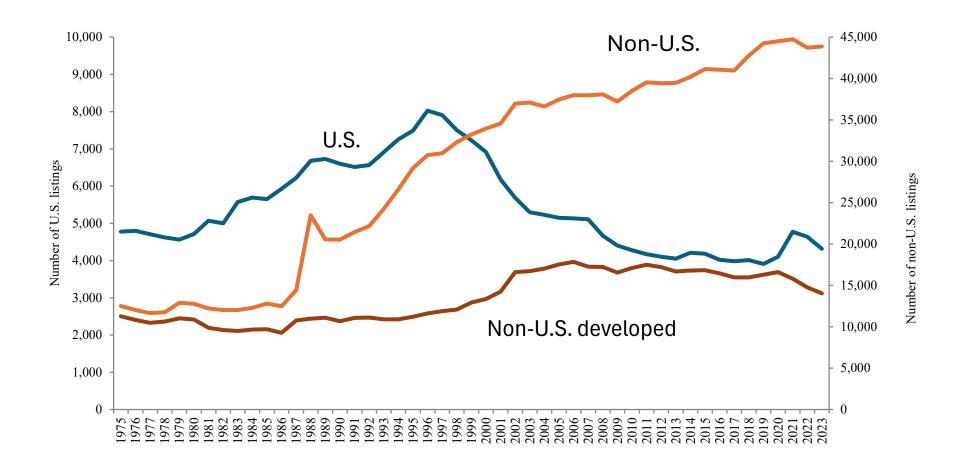




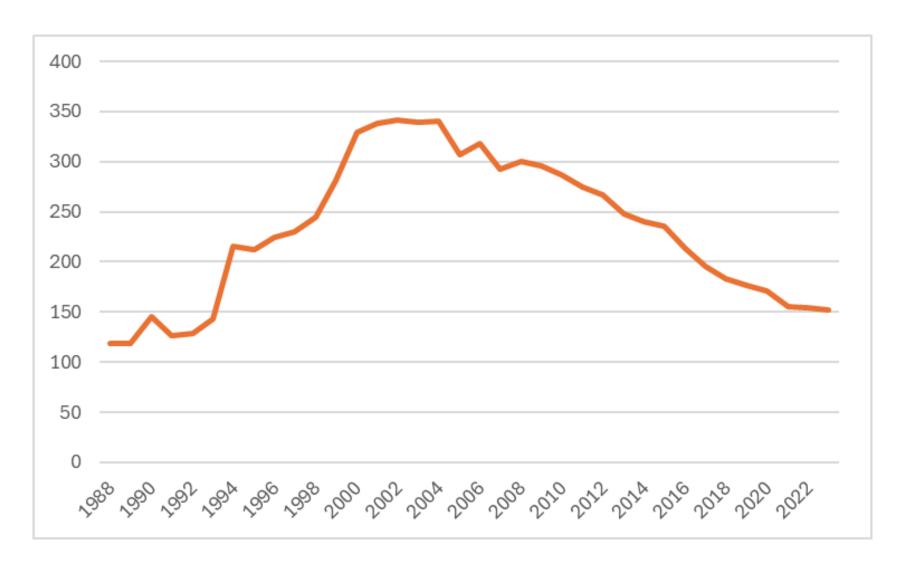
Are there too few publicly listed firms in the US?

Craig Doidge¹ George Andrew Karolyi² Kris Shen³ René M. Stulz⁴

Number of listed firms



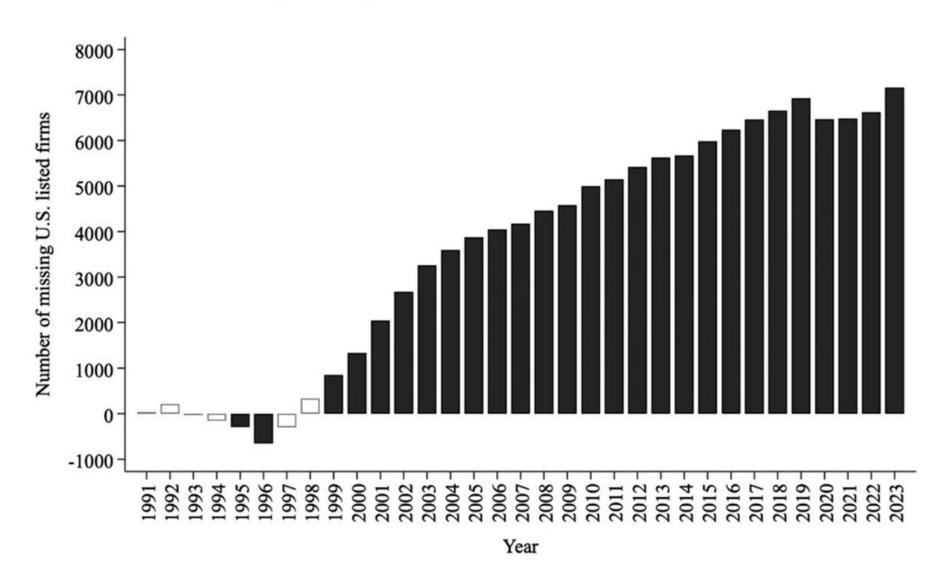
Listed firms in Greece



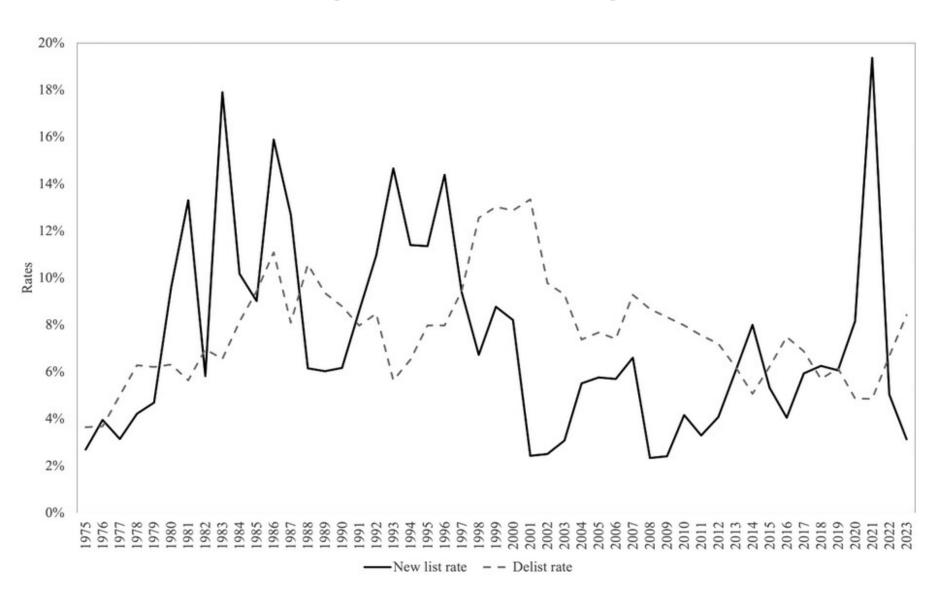
The figure understates the U.S. problem

- Population increased, so that listings per capita have fallen more.
- In 1975, the number of listings per million inhabitants is similar for the U.S. and other developed countries: 22.1 versus 23.9.
- In 2023, that number is 12.9 for the U.S., while in other developed countries it has increased slightly to 24.5.
- DKS estimate a model to predict listings.
- The U.S. has fewer listings than predicted by that model. They
 call the deficit the listing gap. The listing gap keeps increasing.

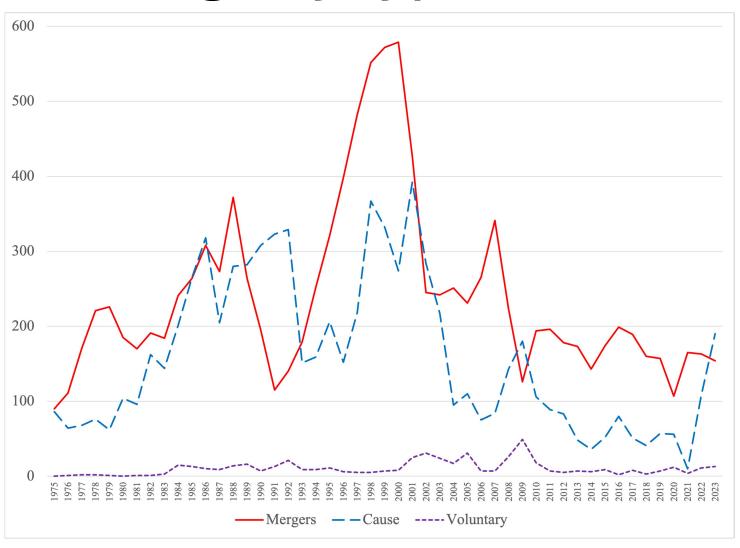
The US Listing Gap



New Listings & Delistings



Delistings by type over time



Reluctant to list

- Too few new lists to offset the impact of mergers.
- One way to measure the reluctance to list is through the propensity of firms to list.
- About half of the firms with 1,000 employees or more are listed in 2023. 80% were fifty years ago.

Goldman Sachs chief David Solomon questions start-ups' need to list

Investment bank boss says depth of private capital removes imperative to go public



"Goldman Sachs chief David Solomon questions start-ups' need to list," by George Hammond, Financial Times, January 25, 2025.

Solomon's argument

"If you are running a company that's working and it's growing, if you take it public, it will force you to change the way to run it and you really should do that with great caution," he added.

Jensen

- Agency argument.
- Private markets are better for firms subject to agency costs of free cash flow
- Public markets may be better for firms not subject to agency costs of free cash flow
- Public markets are better for growth firms with high funding requirements

Solomon

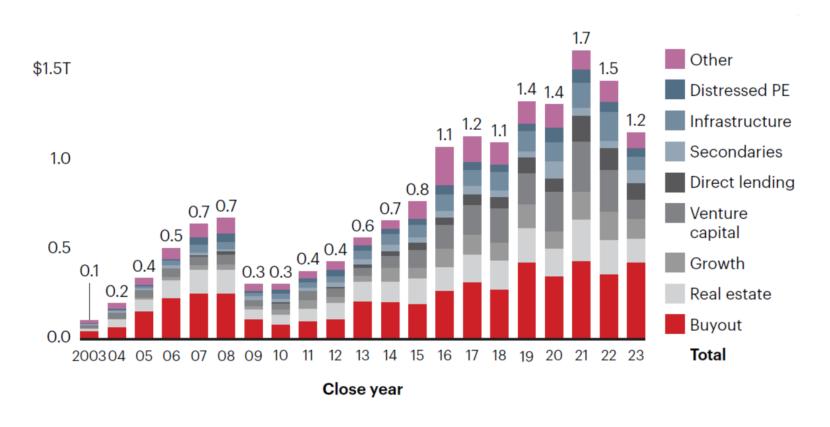
- Efficiency argument.
- Highly successful large startups should not go public
- They don't have to go public for funding reasons because private markets funding is abundant
- They would have to change too much how they thrive

The agency cost explanation lost its power

- Institutionalization of investment after Jensen's article led to a more active role of institutions and the emergence of active institutional investors.
- Institutional pressure forced firms to pay more attention to capital allocation and to pay out cash they could not invest profitably.
- Kathy Kahle and I provide evidence that payout rates are much higher in the 2000s and are much more sensitive to firm characteristics.
 - Kahle and Stulz, Why are payouts so high in the 2000s? Journal of Financial Economics, 2021.

Massive increase in private markets funding

Global private capital raised, by fund type



Funding is necessary but not sufficient

- Does NOT explain why startups stay private.
- If startups <u>maximize value</u>, they stay private if their value is higher if they stay private than if they go public.

Why do highly successful startups shun public markets?*

Daria Davydova

Ecole Polytechnique Fédérale de Lausanne (EPFL)

Rüdiger Fahlenbrach

Ecole Polytechnique Fédérale de Lausanne (EPFL), Swiss Finance Institute, and ECGI

Leandro Sanz

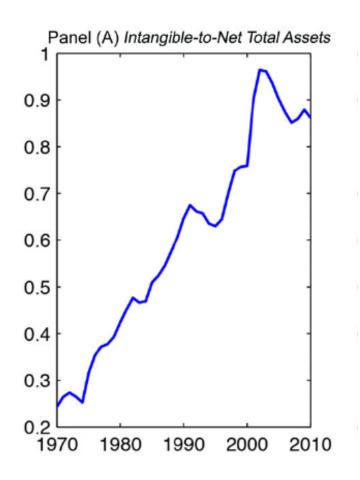
Mendoza College of Business, University of Notre Dame

René M. Stulz

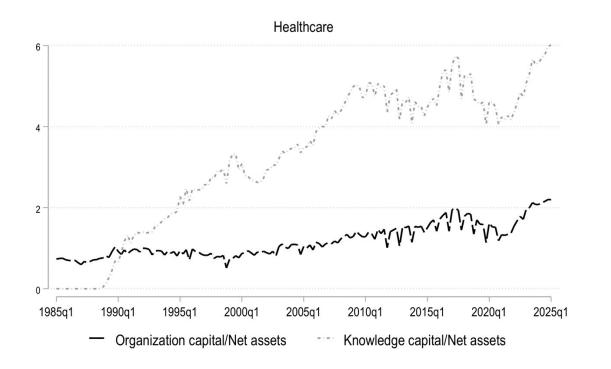
Fisher College of Business, The Ohio State University, NBER, and ECGI

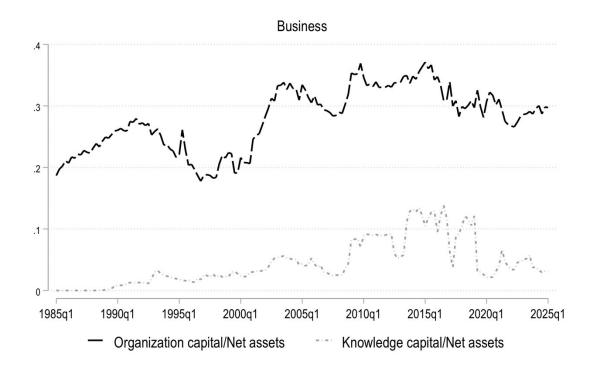
A key trend

- Importance of intangible capital has increased enormously.
- Two types of intangible capital: Knowledge capital and organization capital.
- Organization capital: Spending on corporate culture, organization practices, advertising, customer capital, IT, human capital.
- The importance of the two types of capital differs across firms.



Falato, A., Kadyrzhanova, D., Sim, J. and Steri, R., 2022. Rising intangible capital, shrinking debt capacity, and the US corporate savings glut. *The Journal of Finance*, 77(5), pp.2799-2852.





- Two industries: Healthcare and Business Services.
- Big increase in intangibles.
- Organization capital is more important than knowledge capital for business services; opposite for healthcare.

Knowledge versus organization capital

- Very different properties.
- Knowledge capital can be patented. If patented, the rights to a discovery can be exploited by another firm for appropriate compensation.
- Organization capital cannot generally be patented. Part of it is firm-specific human capital. Can walk out of the door.
- Organization capital is fragile for young firms, but less for established firms. For established firms, much of it is standardized and codified (Holmstrom, 1989; Rajan, 2012).

Private, public, and the fragility of organization capital

- Immature organization capital is difficult to protect compared to physical or knowledge capital.
- A startup that relies on organization capital to exploit economies of scale and network effects has little value unless it can build the requisite organization capital.
- It must find the safest institutional environment to build that organization capital.
- We argue that the return to investment in organization capital, when organization capital is immature, is higher in private markets than in public markets.

Fragility of immature organization capital

Private markets

- Less disclosure, so harder for potential competitors to mimic and borrow.
- Less poaching of employees because output is harder to evaluate.
- Less liquid wealth for employees, so harder to leave.

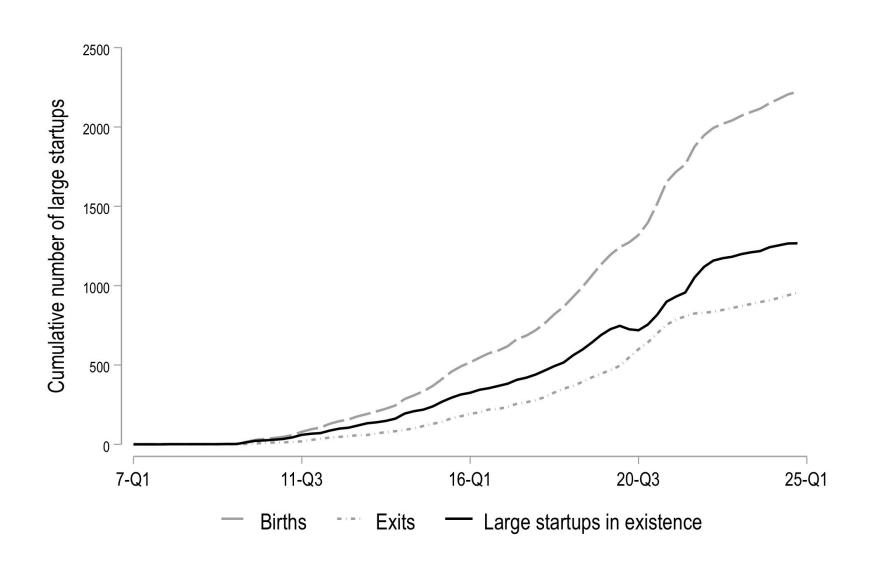
Public markets

- Less focus on scaling because of public market distractions and requirements.
- Less stability of employees as they get more information about the market's assessment of the firm.

Prediction

- Reasons often discussed for why startups do not go public are:
 - Disappearance of specialized IBs, regulation FD, SOX, decimalization.
 - Economies of scope (Gao, Ritter, and Zhu).
- These reasons cannot explain why startups with private market headline valuations of \$300 million or more do not go public.
- We call these startups large startups.
- Large startups are more likely to exit through IPO than acquisition.
- We expect large startups to be organization capital intensive and to stay private as long as their organization capital is immature.
- We construct a database that has all startups from 2010 to 2024 that reach \$50 million in headline valuation.

Growth of the universe of large startups



Results, Part I

- The probability that a startup is a large startup is much higher if small public firms in its industry have high organization capital intensity.
- A one standard deviation increase in organization capital intensity corresponds to a 24% increase in the probability that a startup is a large startup.
- We construct a startup-specific variable that takes value 1 if scale/network effects are important for that startup. The probability that a startup is large if the value is 1 is 37% higher than the unconditional probability.

Results, Part II

- To get at causality, we use the Defend Trade Secrets Act of 2016, which provides a uniform federal cause of action for trade secret misappropriation, as a shock that increases the profitability of investments in organization capital.
- The shock impacts states differently depending on how they enforce non-compete agreements.
- We find that the shock makes it more likely that a startup becomes a large startup.

Conclusion, Part I: Firms changed

- Jensen was right that the public firms were going to become less important, but he was wrong as to the reason.
- Improved governance has decreased the importance of agency costs of free cash flow.
- Propensity to list has decreased sharply, but that is because the nature of firms has changed.
- Organization capital has become much more important for firms and for many firms the expected return of investing in organization capital is higher when they are private than when they are public.

Conclusion, Part II: Too few public firms?

Cause

- Organization capital intensity increase
- Mergers
- IPO regulation
- Public firm regulation

Impact on public firms

- Reduction; not problematic
- Reduction; problematic with competition-reducing mergers
- Reduction; problematic
- Reduction; problematic

To improve the future of public markets, the U.S. should stop discriminating against public firms.

Conclusion, Part III: Global perspective

- Questions remain as to why the dynamics of listing differ across countries, with listings falling sharply in the U.S., moderately in developed countries, and not in developing countries
- One explanation: U.S. is ahead in how firms are changing.
- Another explanation: U.S. has more private markets funding.
- Probably both factors are at play, but their importance across countries remains to be determined.