The listing gap

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The U.S. listing gap☆

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FUTURE DIRECTIONS

The Financial Review WILEY

Are there too few publicly listed firms in the US?

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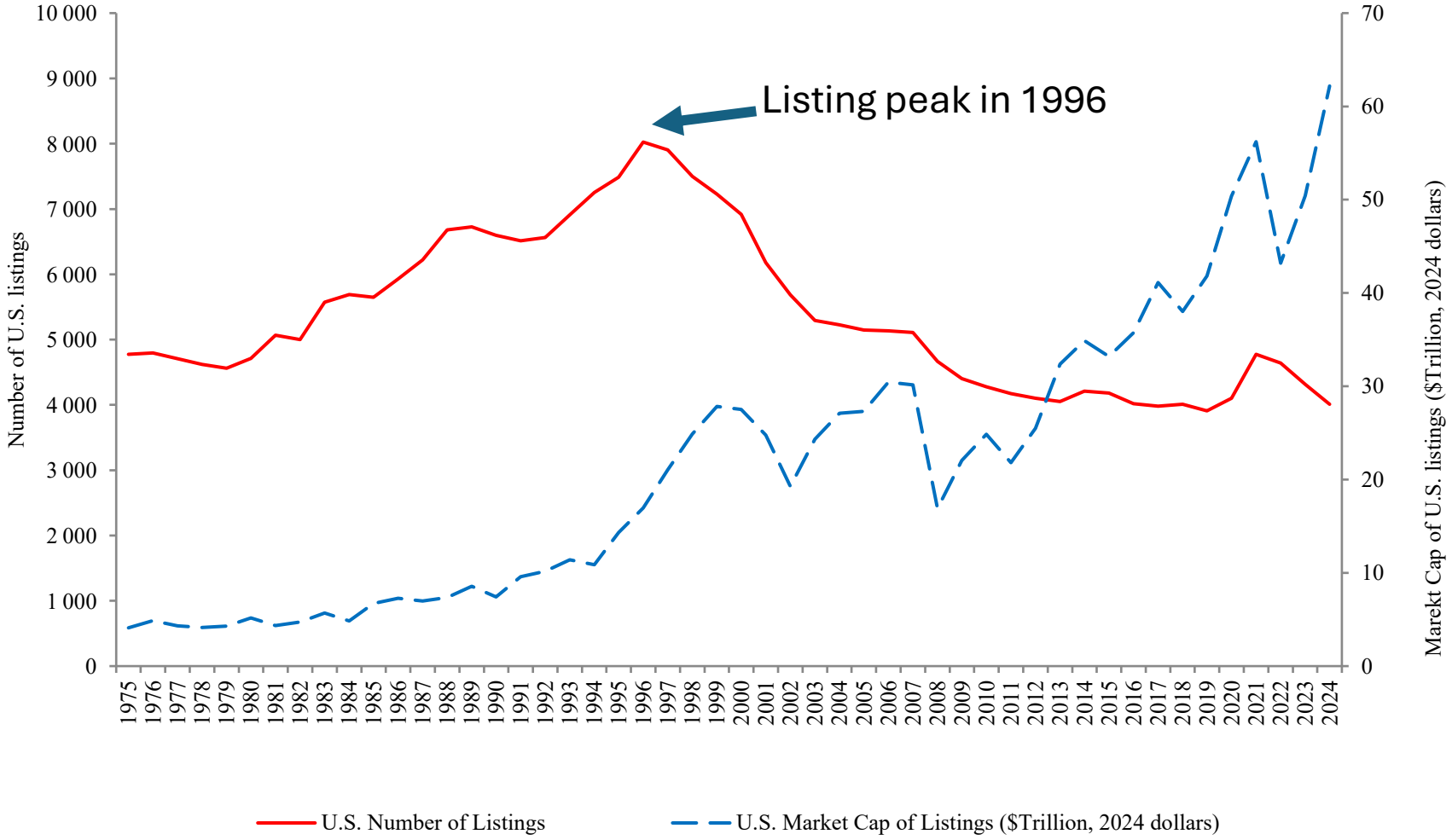
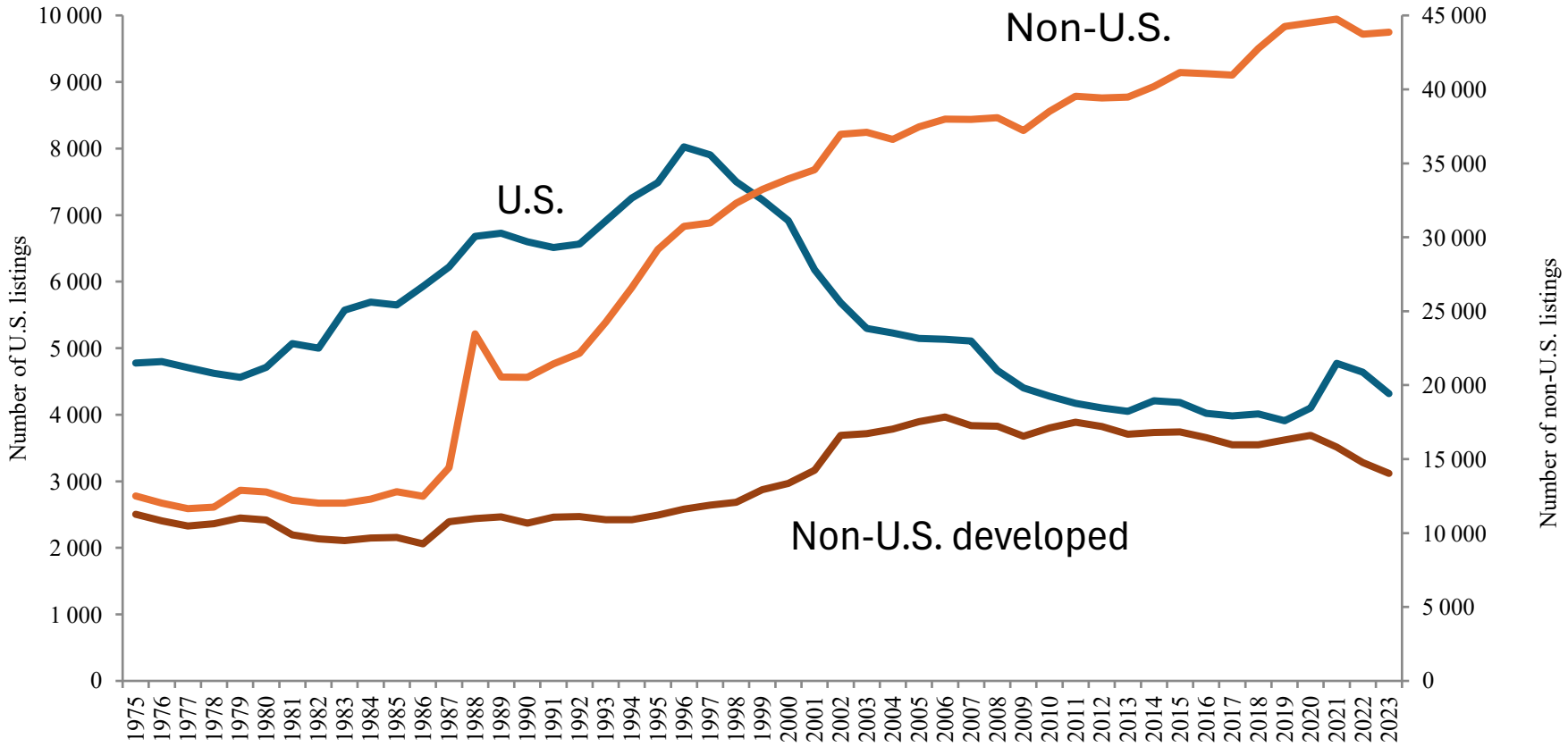
Agenda

- Evolution of public listings in the U.S. and abroad
- Measuring the listing gap of the U.S.
- Where does that gap come from?

U.S. listings and U.S. aggregate market cap



Number of listed firms in the U.S. and elsewhere



What about France?

- Peak around 2000.
- Data for recent years seems problematic.
- However, using WDI, France has 724 listing in 1975, peak listings in 2000 of 1,185, and 457 in 2018 when WDI stops.

Table 1 - Listing counts, population, and listing counts per capita for select years

Panel A: U.S.

Year	Number of Countries	Listing Counts	Population (millions)	Listing Count Per Capita
1975		4,775	216	22.1
1980		4,711	227	20.7
1985		5,650	238	23.7
1990		6,599	250	26.4
1995		7,487	266	28.1
1996		8,025	269	29.8
2000		6,917	282	24.5
2005		5,145	296	17.4
2010		4,279	309	13.8
2015		4,182	321	13.0
2020		4,103	332	12.4
2023		4,315	335	12.9
%Change: 1996-2023		*-46.2%*	*24.3%*	*-56.7%*

Panel B: non-U.S. developed countries: constant sample

Year	Number of Countries	Listing Counts	Population (millions)	Listing Count Per Capita
1975	13	11,149	470	23.7
1980	13	10,803	483	22.4
1985	13	9,713	492	19.7
1990	13	10,687	504	21.2
1995	13	11,482	515	22.3
1996	13	11,948	517	23.1
2000	13	13,918	524	26.6
2005	13	18,482	537	34.4
2010	13	18,303	550	33.3
2015	13	18,449	560	33.0
2020	13	18,819	569	33.1
2023	13	16,331	[illegible]	28.4
%Change: 1996-2023		*36.7%*	*11.1%*	*23.1%*

The bottom line

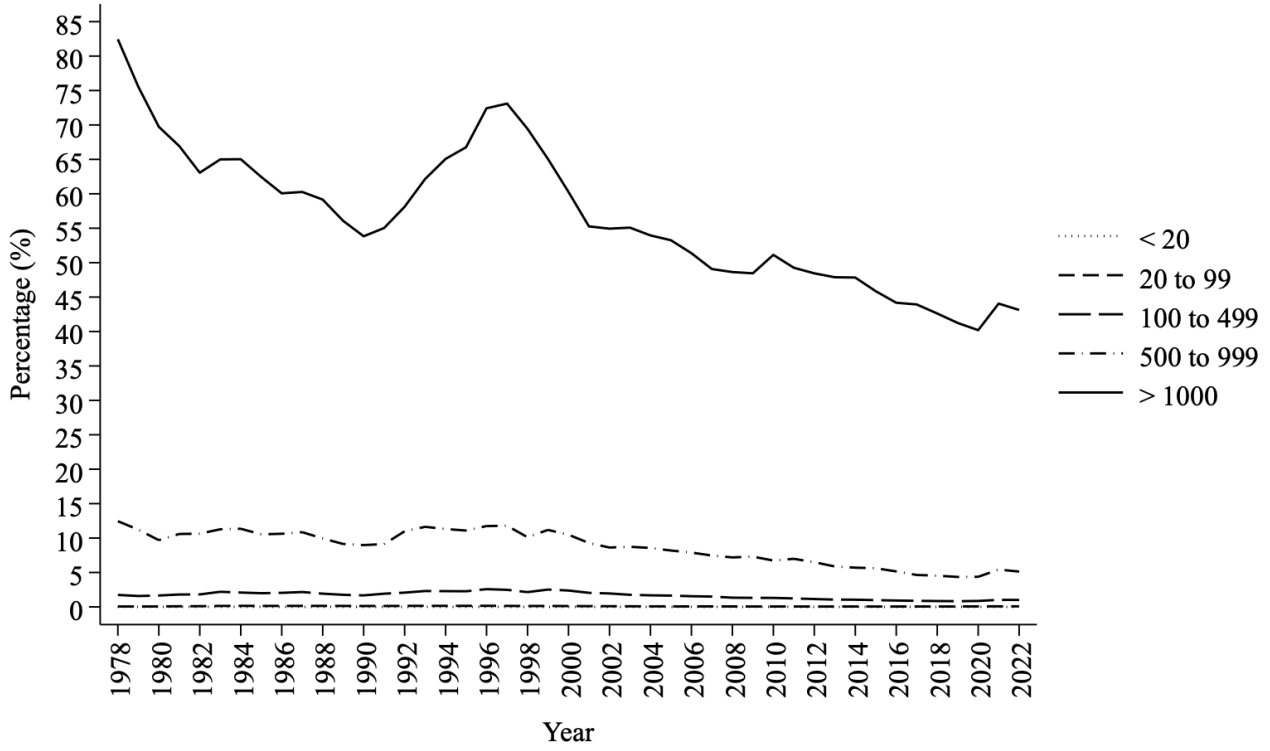
- Population increased, so that listings per capita have fallen more.
- In 1975, the number of listings per million inhabitants is similar for the U.S. and other developed countries: 22.1 versus 23.7.
- In 2023, that number is 12.9 for the U.S., while in other developed countries it has increased slightly to 28.4.

Decrease in propensity to list

- Almost all firms are private. It has always been that way.
- 6 million firms. 21,000 have more than 500 employees.
- The important trend is the decrease in the propensity of firms to list.
- Likelihood that a firm with 20 employees or more is listed is half what it was fifty years ago.
- Likelihood that a firm with 1,000 employees or more is listed is about 50%. It was more than 80% fifty years ago.
- Corporations are less likely to be public now than at almost any time over the last fifty years.

Figure 5 – Firm size, industry, and listing propensity

Panel A. Firm size and listing propensity



Does the US have abnormally few listed firms compared to other developed countries?

- One way to get an answer is to compare listings per capita for the US to other countries that have similar economic development and institutions.
- DKS1 use a regression of listings per capita on GDP per capita and an index for shareholder rights, the anti-self-dealing index.
- The number of listings is positively related to both variables.
- DKS2 estimate the regression extending the sample to 2023. The results are similar.

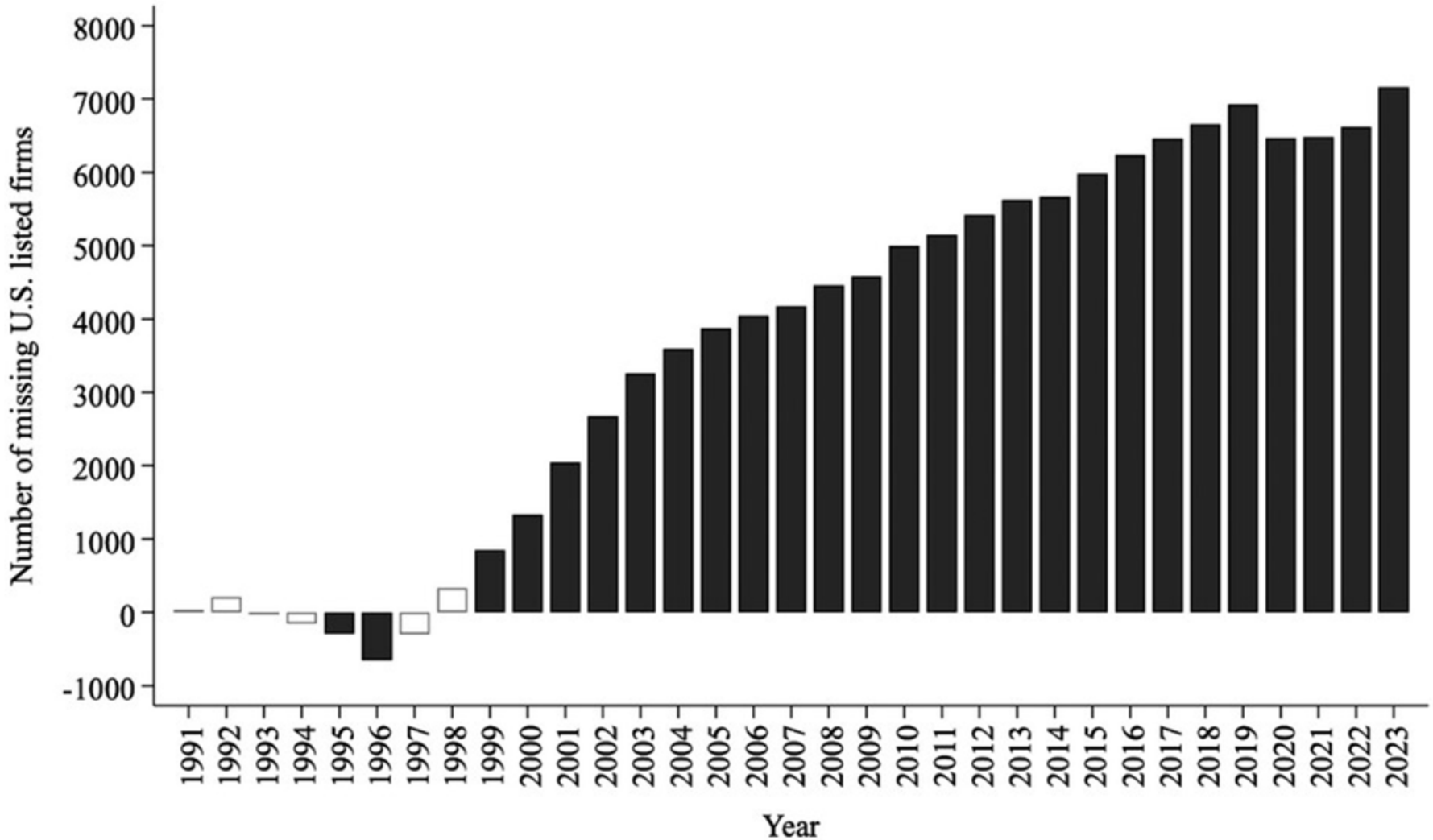
Table 2 - Institutions, economic development, and listings per capita

	Panel A: cross-sectional regressions			Panel B: panel regressison		Panel C: panel regressions	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	1990	1996	2023	1990-1996	1997-2023	1990-2023	1990-2023
Constant	-2.656***	-3.012***	-4.640***	-3.786***	-4.676***	-4.540***	-4.235***
	(-3.42)	(-4.17)	(-5.47)	(-4.30)	(-5.69)	(-5.70)	(-5.39)
Anti-self-dealing index	1.416***	0.974**	1.466***	0.853*	1.465***	1.358***	1.358***
	(2.97)	(2.19)	(2.89)	(1.72)	(3.22)	(3.11)	(3.09)
Log(GDP per capita)	0.516***	0.586***	0.688***	0.636***	0.629***	0.656***	0.656***
	(5.87)	(6.77)	(7.53)	(6.59)	(7.99)	(8.40)	(8.33)
GDP growth				0.039	-0.000	0.003	0.003
				(1.16)	(-0.00)	(0.18)	(0.18)
Non-U.S. dummy				0.175	0.799***	0.721***	0.409**
				(1.10)	(4.50)	(4.39)	(2.40)
Year FE				No	No	Yes	Yes
Year FE x non-U.S. dummy				No	No	No	Yes
N	51	67	72	422	1,938	2,360	2,360
Adjusted R-squared	0.485	0.426	0.479	0.453	0.470	0.482	0.475

Using the regression to estimate the listing gap

- DKS1 define the listing gap as the difference between the predicted listing per capita of the U.S. minus the actual listing per capita of the U.S.
- The regression can be used to predict a country's listings per capita given the country's characteristics.

The US Listing Gap



Why a listing gap?

- Is the US unique or is the US ahead of other countries in the decrease in the number of listings?
- Understanding why there is a listing gap in the US helps answer the question.

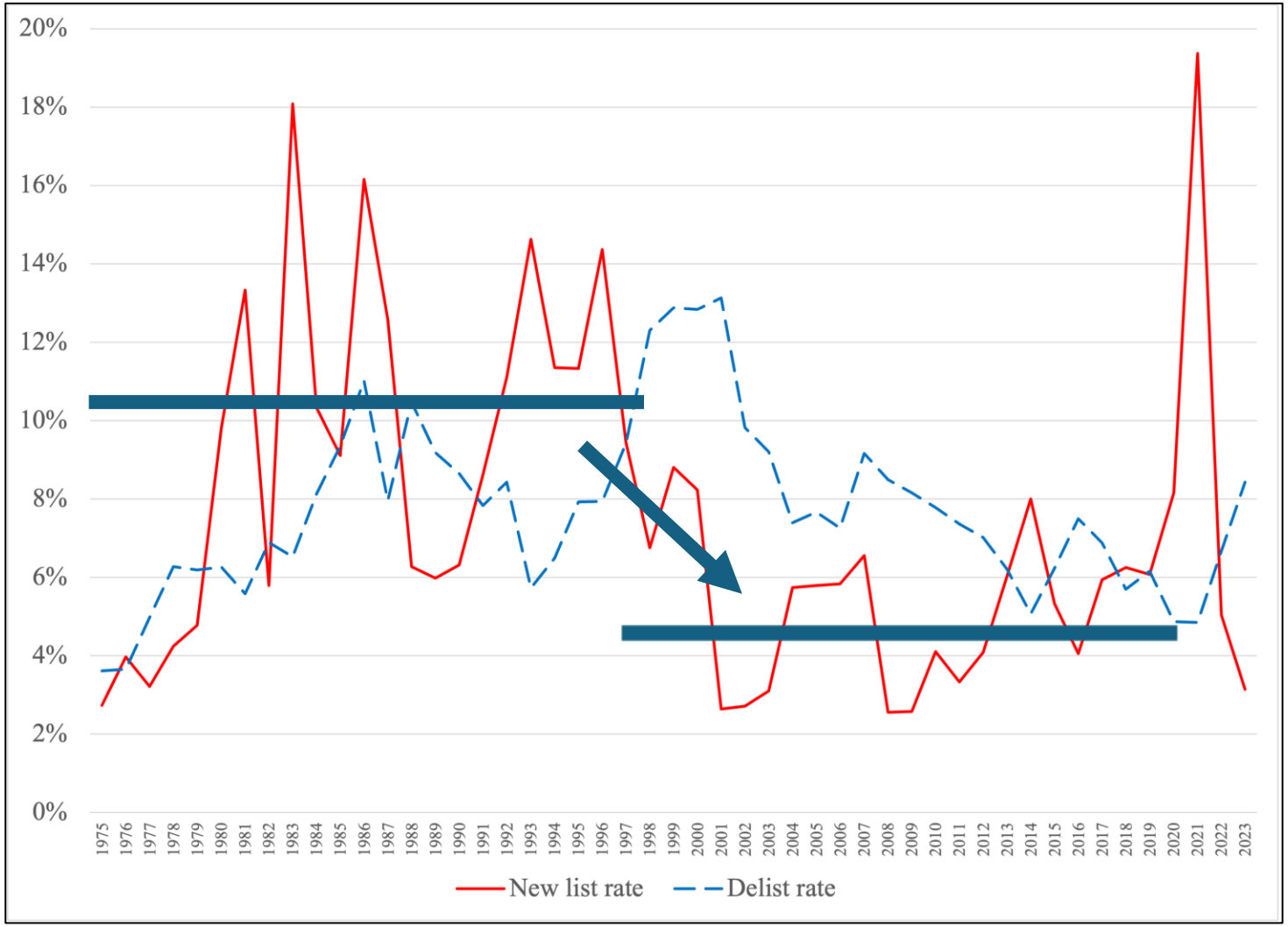
Listing arithmetic

Net new lists = New lists – Delists

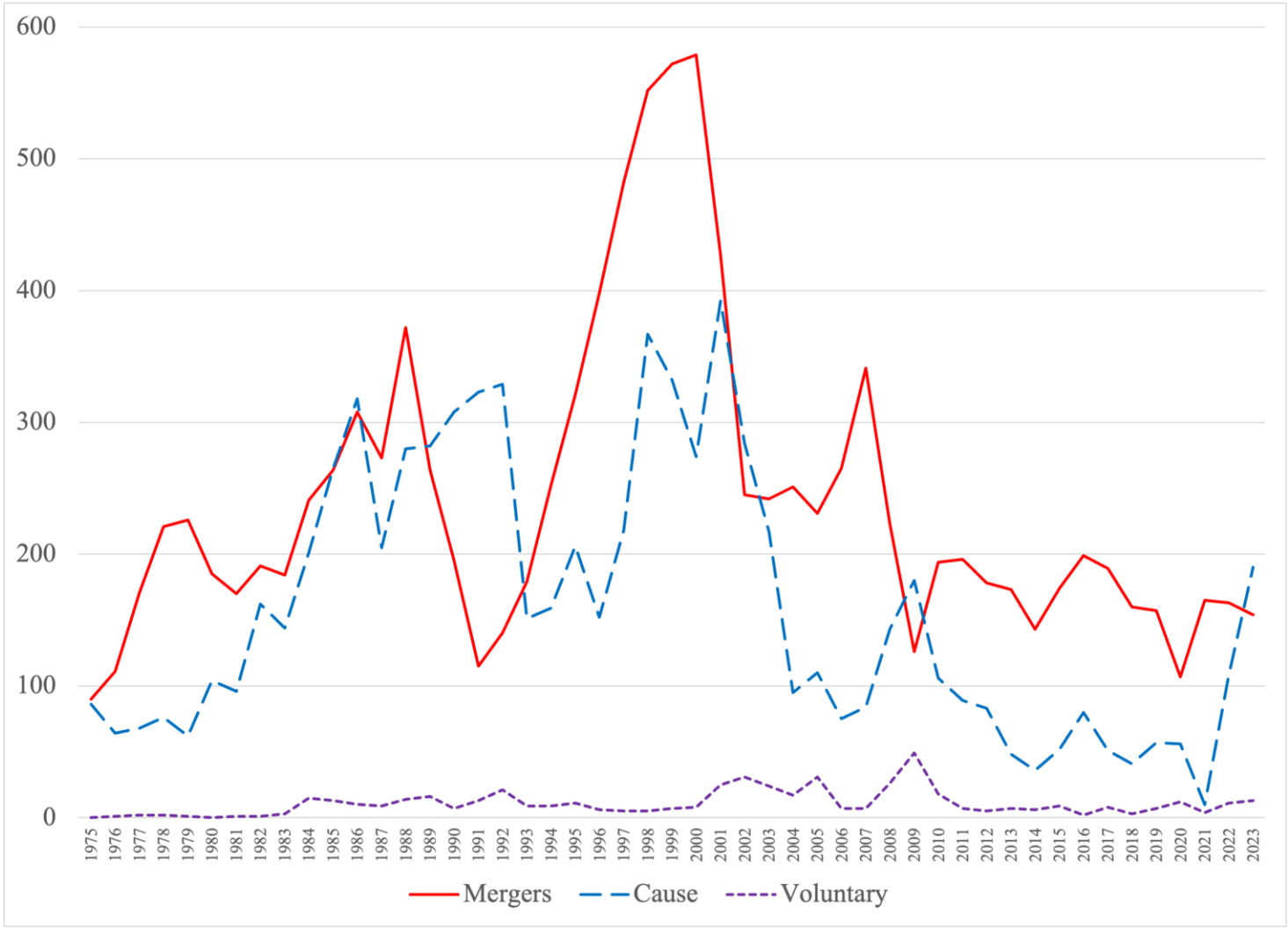
New lists = IPOs +…

Delists = Mergers + Delists for cause + Voluntary delists

New list rate vs. delist rate (U.S.)



Delistings by type over time



How did we get to where we are from the peak?

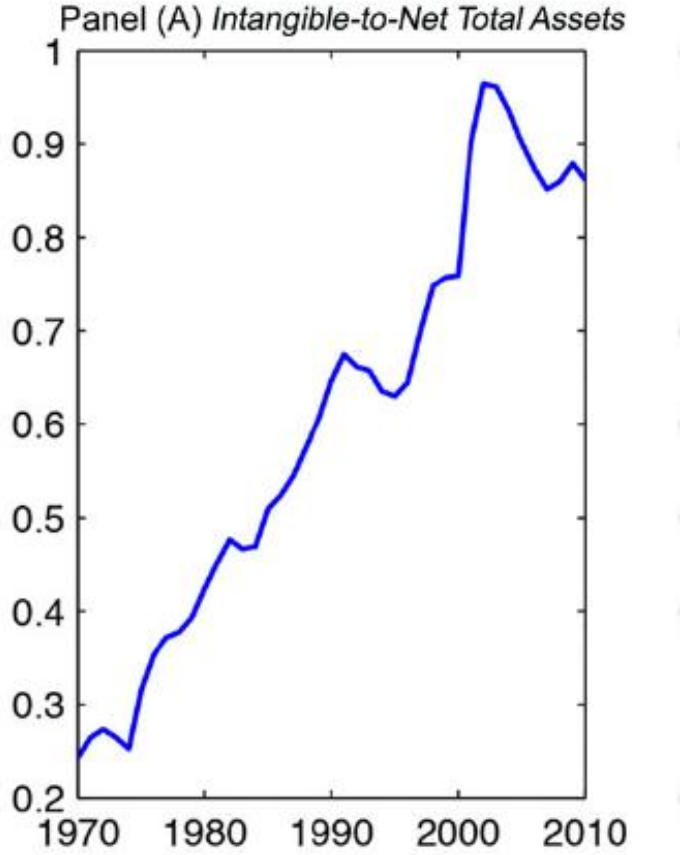
- Drop in new lists.
- But delist rate stays high.
- As a result, more delists than new lists.
- Mergers are the biggest contributor to the high delist rate.
- Voluntary delists – i.e., going private transactions – are not important to the story, but those transactions do not include acquisitions by merger vehicles.

Why? Part I

- Firms have changed: Intangible assets have become more important.
- Public markets are better at funding tangible than intangible assets.
- Easier to build intangible assets initially by being private.
- Agency costs are heightened by information asymmetries. They may be especially large for firms with large investments in intangible assets.
- Private firm investment with private equity intermediation is better at controlling agency costs.

A key trend

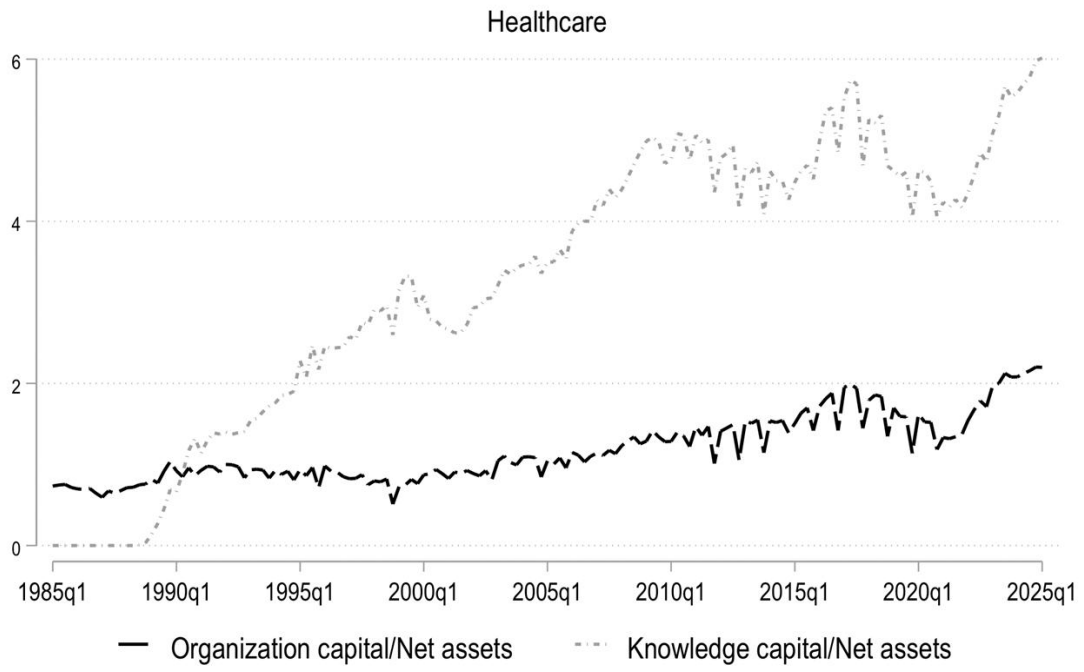
- Importance of intangible capital has increased enormously.
- Two types of intangible capital: Knowledge capital and organization capital.
- Knowledge capital results from R&D.
- Organization capital: Spending on corporate culture, organization practices, advertising, customer capital, IT, human capital.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

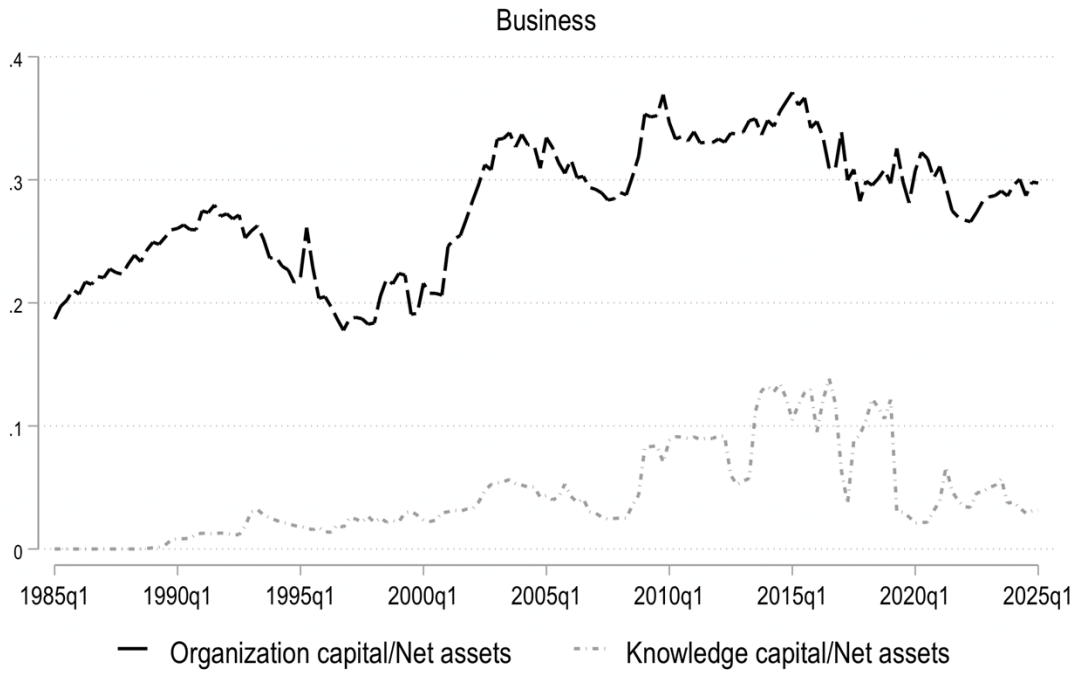


Falato, A., Kadyrzhanova, D., Sim, J. and Steri, R., 2022. Rising intangible capital, shrinking debt capacity, and the US corporate savings glut. *The Journal of Finance*, *77*(5), pp.2799-2852.

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).



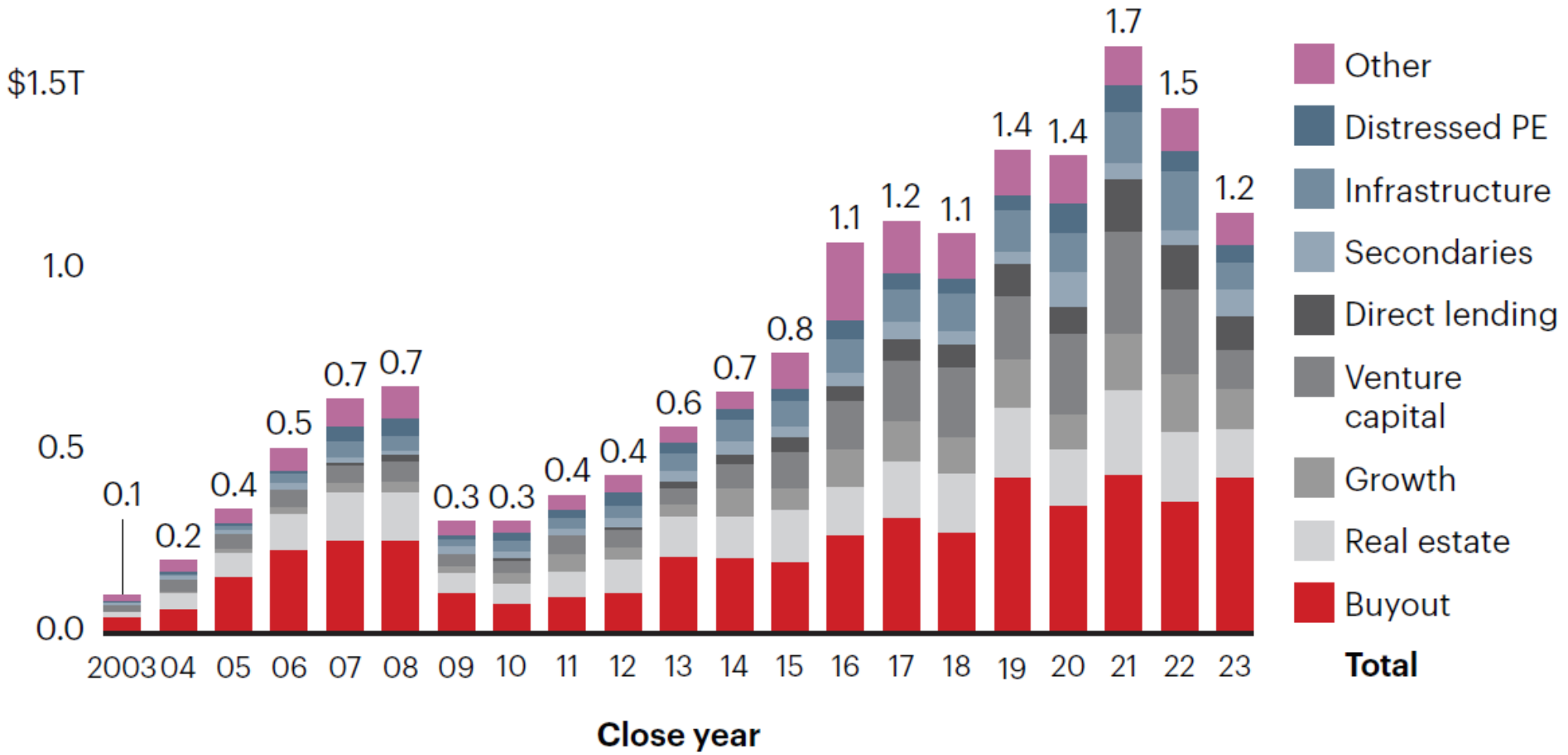


- Two industries: Healthcare and Business Services.
- Big increase in intangibles.
- Organization capital is more important than knowledge capital for business services; opposite for healthcare.

Why? Part II

- Become much easier to raise capital without being public because of the growth of private markets.
- Dramatic growth in private equity.
- This growth was helped by deregulation (NSMIA in 1996).
- Private equity claims have become more liquid, so the liquidity advantage of markets has fallen.
- BUT: We cannot short PE.

Global private capital raised, by fund type



Bain, Global Private Equity Report 2024

Why? Part III

- Much talk about regulation of corporations.
- In the U.S., drop in IPO and drop in listings start before regulatory changes affecting corporations.
- Does not get worse with regulatory changes.
- No clear evidence of an important role for regulatory changes.

Should we be concerned?

- In a market economy, prices direct economic activity.
- For the allocation of resources to be efficient, prices must be visible and efficient.
- Public market prices are visible and relatively efficient on average.
- Private market prices are not as visible and not as efficient.
- Hence, there is a resource allocation cost. Research should help us understand better the size of that cost.
- However, at the same time, private markets are better for some types of firms and we have more of those firms.

Conclusion

- Listings in U.S. peak in 1996. They peak later in developed countries.
- For U.S., a listing gap emerges. The gap increases steadily since the 1990s, but at a slower speed over recent years following a drop in 2021.
- The gap is the result of low IPO activity and high merger activity.
- The low propensity to list can be explained, at least in part, by changes in firms and private markets.