The Life-Cycle of Dual Class Firm Valuations
by M. Cremers, B. Lauterbach, and A. Pajuste

Discussion by

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Context

- What is the optimal allocation of control between inside and outside shareholders?
- How does this optimal allocation vary with economic variables?

- This paper
  - Control allocation mechanism: dual-class shares
  - Economic variable: firm life-cycle

Main findings

- DCF's valuation (relative to SCF) declines over life-cycle:
    - Initial premium, subsequent discount
- Wedge (voting minus cash flow rights) increases over life-cycle.
- Heterogeneity
    - Driven mainly by DCFs with initial premium. Those with initial discount remain discounted.
    - DCF's valuation improved post-2000 → market's learning
- Many DCFs fail to self-correct through unification→ Sunset provisions may be desirable

Comment 1: Age or listing age?

- The paper uses listing age (years sine IPO) to define life-cycle
- Theories on ΔQ_{LV} and ΔQ_{Agency} are about age (years since founding)

- ΔQ_{LV} and ΔQ_{Agency} move with life-cycle even before IPO.
  - Value of founder declines as startups move from R&D to commercialization & growth
  - Founder ownership declines across financing rounds

Comment 1: Age or listing age?

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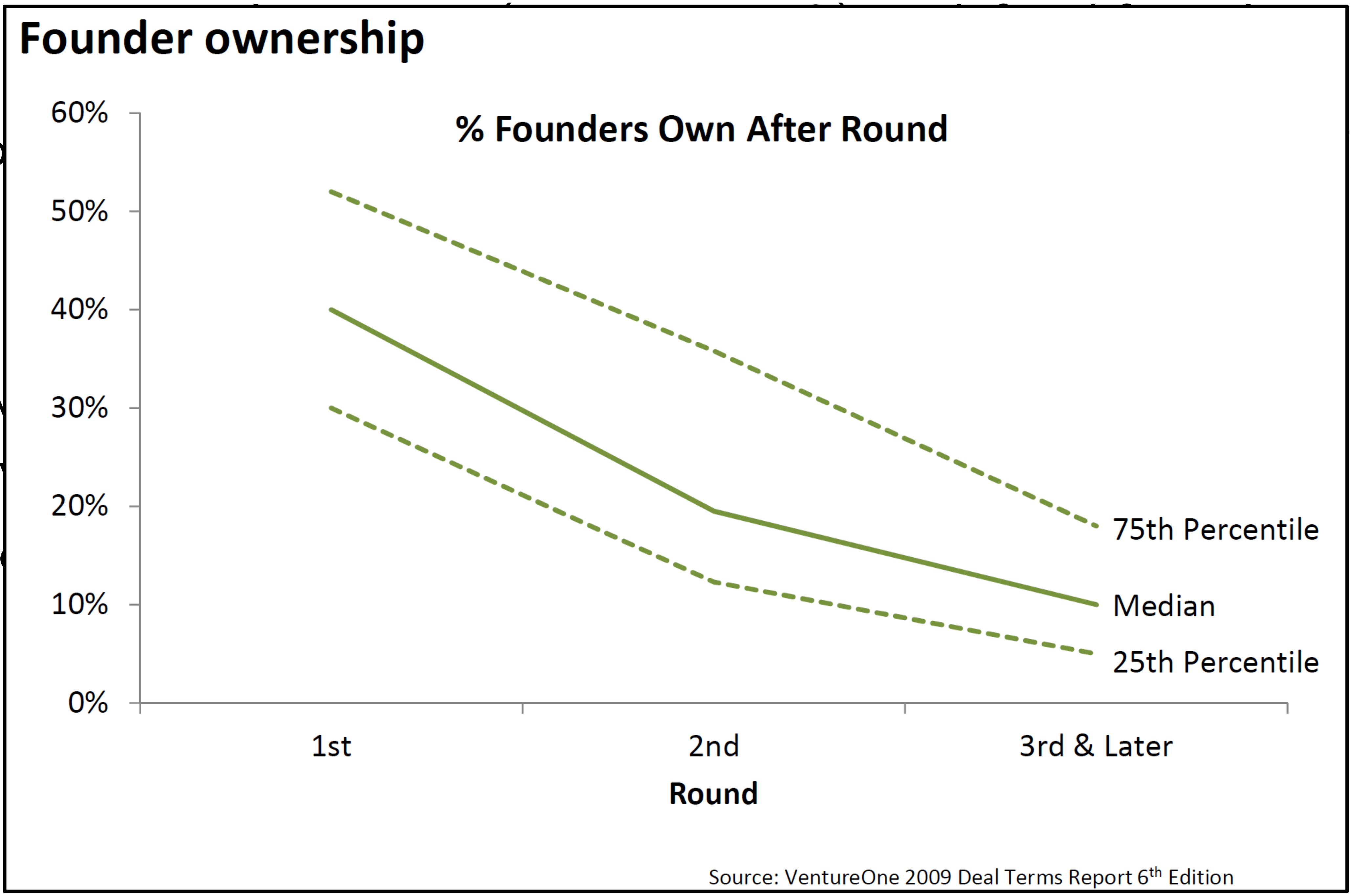

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- Firms that went pubic later are more advanced in their life-cycle

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  - only focus on within-firm variation, or
  - age at IPO is homogeneous across firms

- But there is substantial heterogeneity in when firms go public
  - Dual- vs single-class firms
  - Different industries
  - Over time

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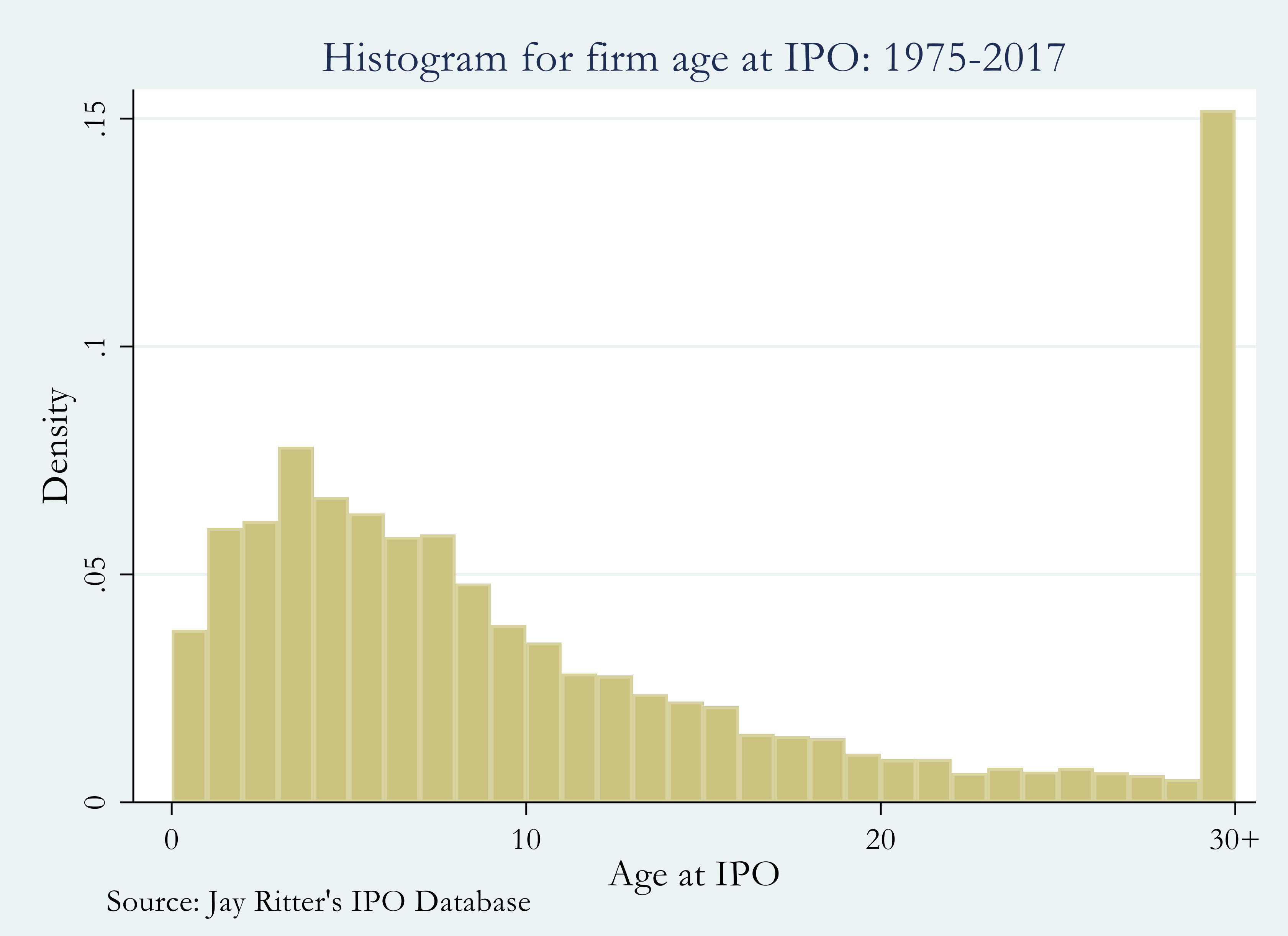

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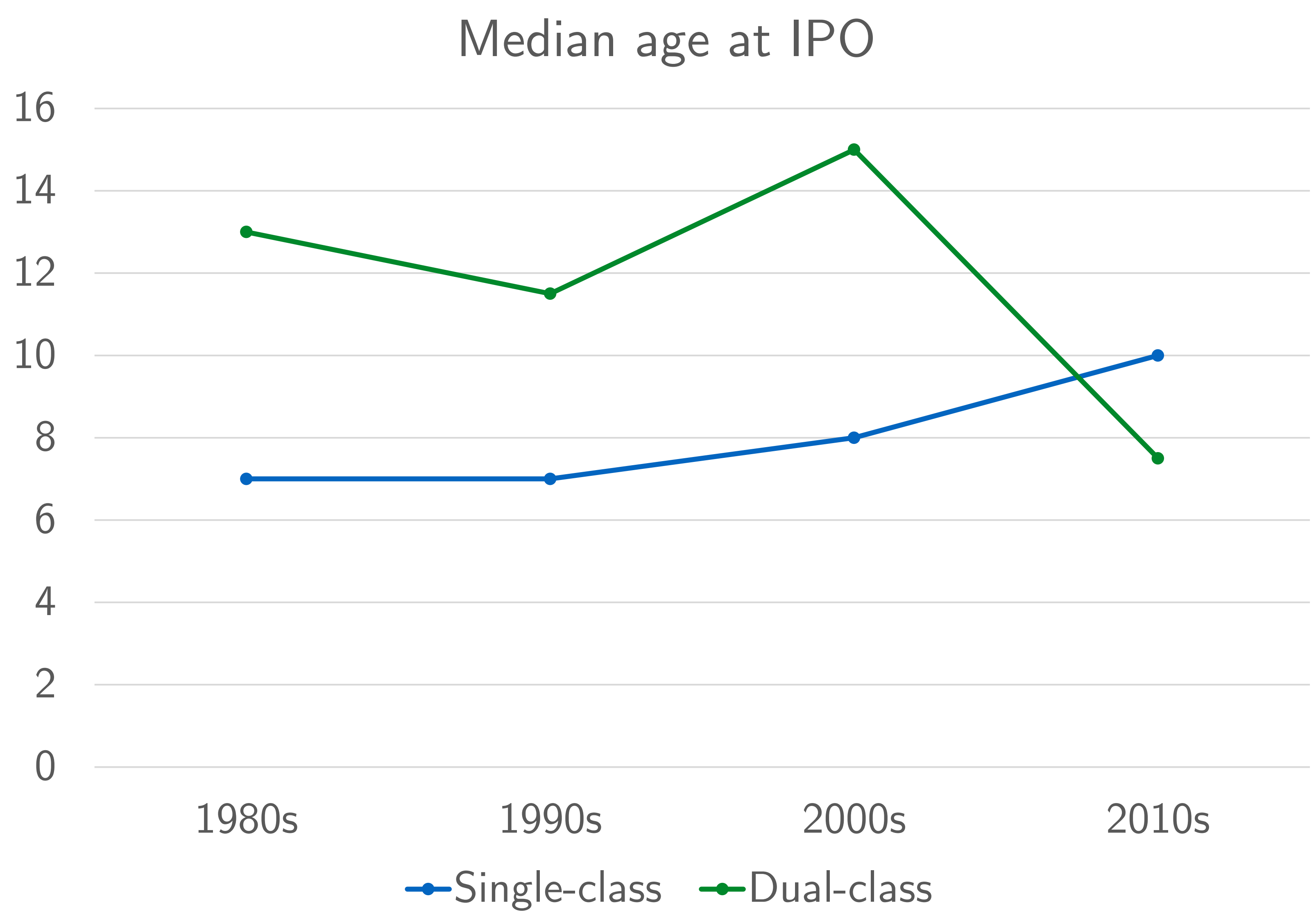
Median age at IPO: dual-class vs single-class



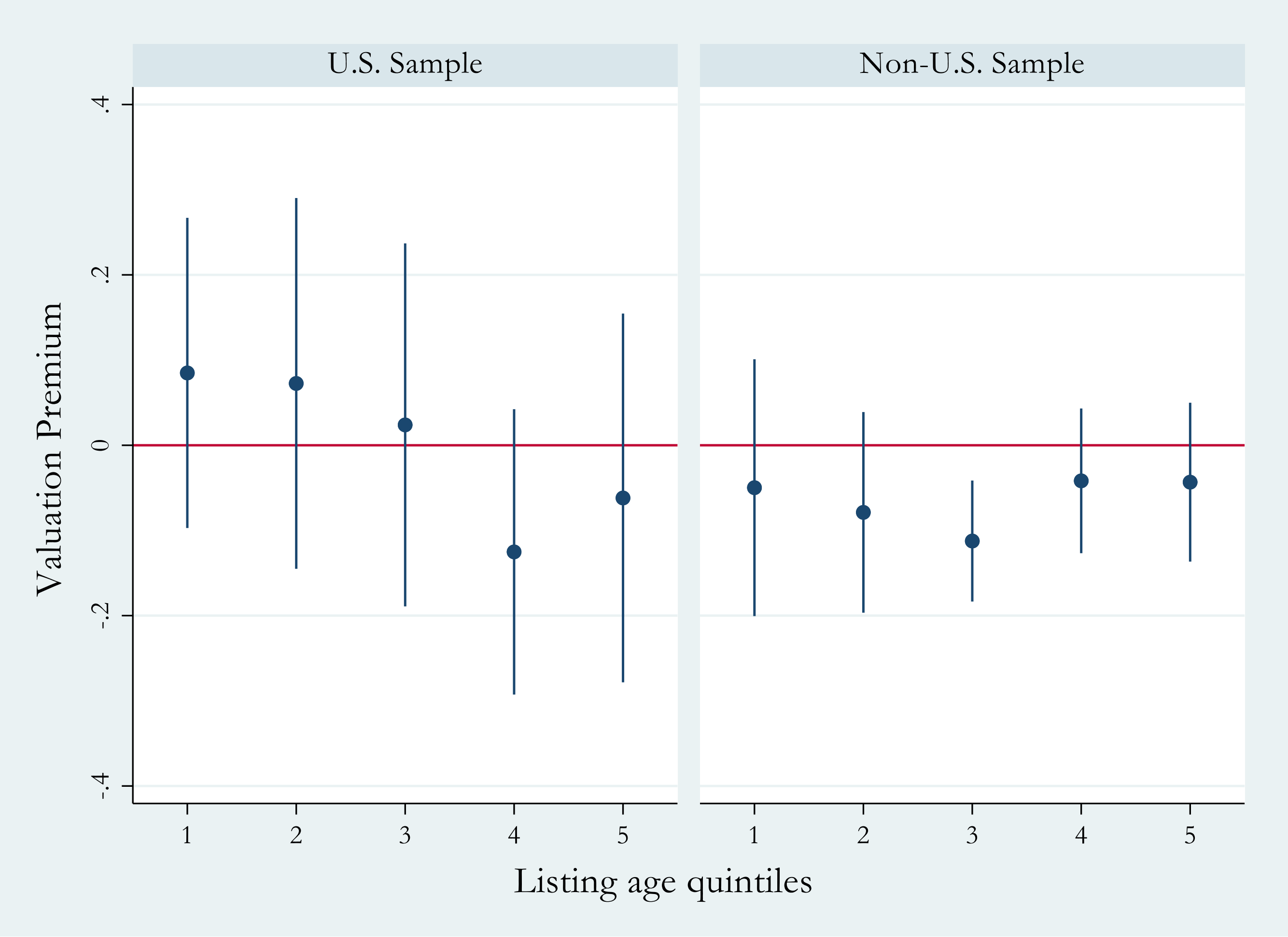
- DCFs go public much earlier in recent decade
- May explain why their valuation is higher in recent years (less advanced in life-cycle)

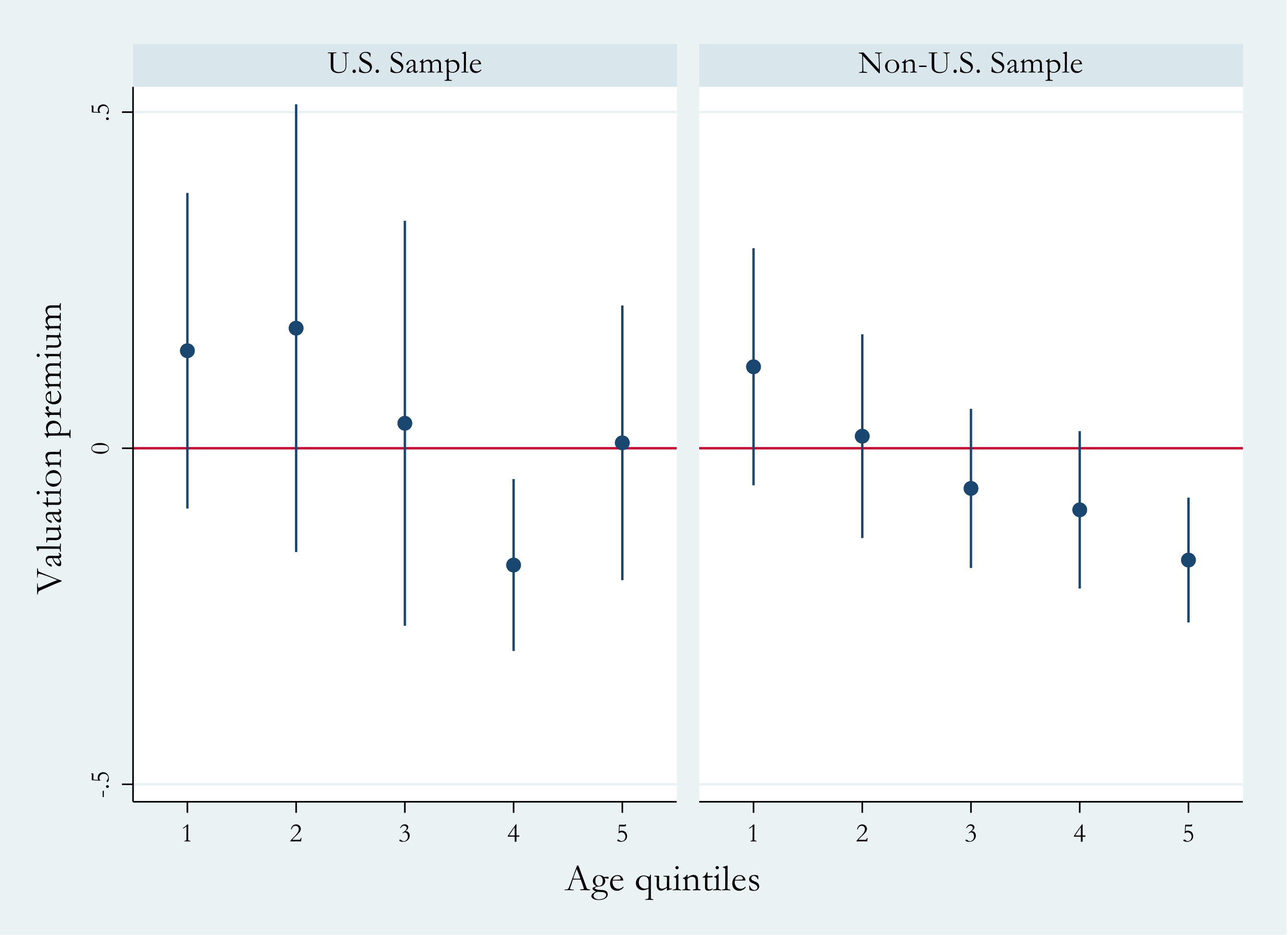
Age vs. listing age: matters outside of the U.S.

Dependent variable: TOBIN_Q	U.S.	U.S.	Non-U.S.	Non-U.S.
	(1)	(2)	(3)	(4)
MULTI_CLASS	0.085	0.138	-0.094*	0.003
	[0.078]	[0.094]	[0.050]	[0.051]
MULTI_CLASS × MATURE_ListingAge	-0.160*		0.039	
	[0.092]		[0.048]	
MULTI_CLASS × MATURE_Age		-0.203*		-0.125**
		[0.107]		[0.058]
MATURE_ListingAge	-0.102***		-0.076***	
	[0.028]		[0.011]	
MATURE_Age		-0.132***		-0.008
		[0.028]		[0.013]
LN(TOTAL_ASSETS)	-0.032***	-0.032***	-0.016***	-0.021***
	[0.010]	[0.010]	[0.005]	[0.004]
LEVERAGE	-0.261***	-0.254***	-0.478***	-0.468***
	[0.091]	[0.092]	[0.040]	[0.040]
R&D	1.331***	1.324***	1.552***	1.569***
	[0.114]	[0.114]	[0.151]	[0.152]
TANGIBILITY	-0.297***	-0.296***	-0.299***	-0.304***
	[0.067]	[0.068]	[0.027]	[0.027]
SALES_GROWTH	0.005***	0.004***	0.001***	0.001***
	[0.000]	[0.000]	[0.000]	[0.000]
ROA	0.027***	0.027***	0.035***	0.036***
	[0.002]	[0.002]	[0.002]	[0.002]
DIVIDEND_YIELD	-0.006	-0.005	-0.078***	-0.079***
	[0.007]	[0.007]	[0.003]	[0.003]
Country FE	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes
Observations	35,044	35,044	150,913	150,913
R^2	0.216	0.217	0.265	0.264

Age vs. listing age: matters outside of the U.S.

Valuation premium by age vs listing age quintile: U.S. and non-U.S.





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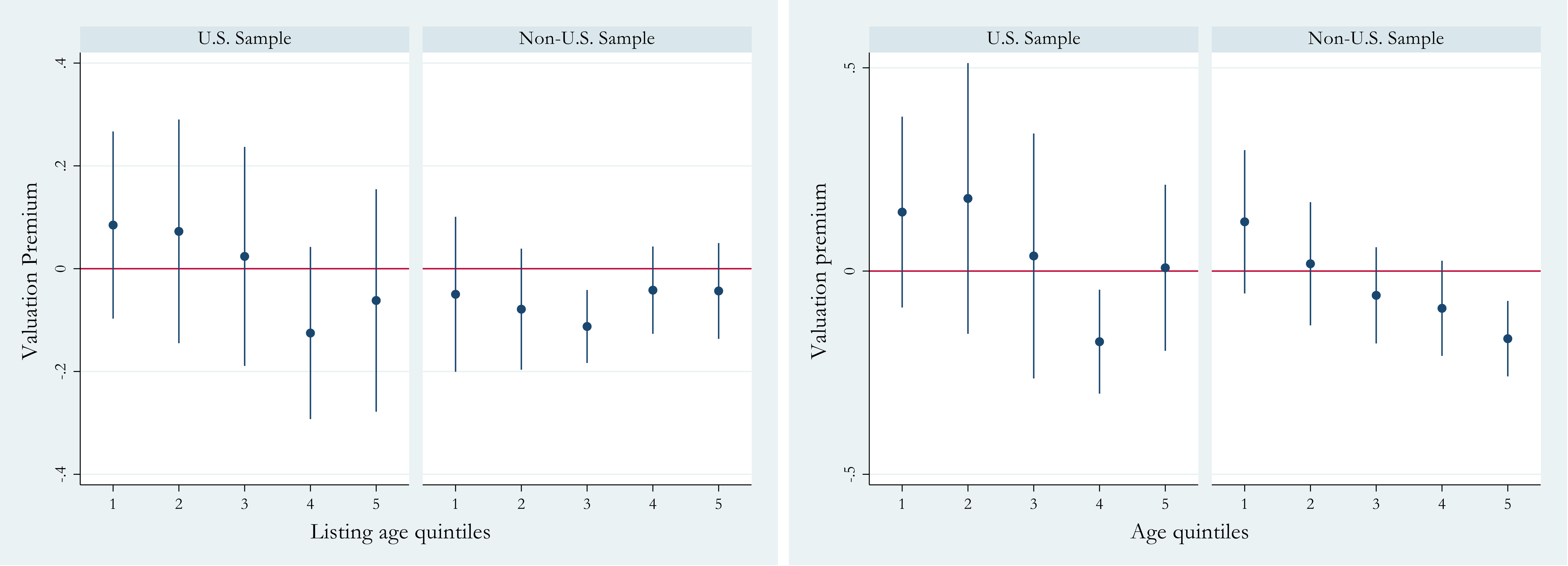

- Would like to see more discussion on age vs listing age. Show robustness to using age.

Comment 2: A tale of two types of DCF?

Are there two types of dual-class firms?

- Group 1: Initial premium, subsequent discount
- Group 2: Discount throughout

- Would like to know more about these two types of DCFs:
  - Is group 1 more prevalent in recent years?
  - Is group 1 tech and group 2 old family firms (tobacco, media...)?
  - Is group 1 younger than group 2 at IPO?

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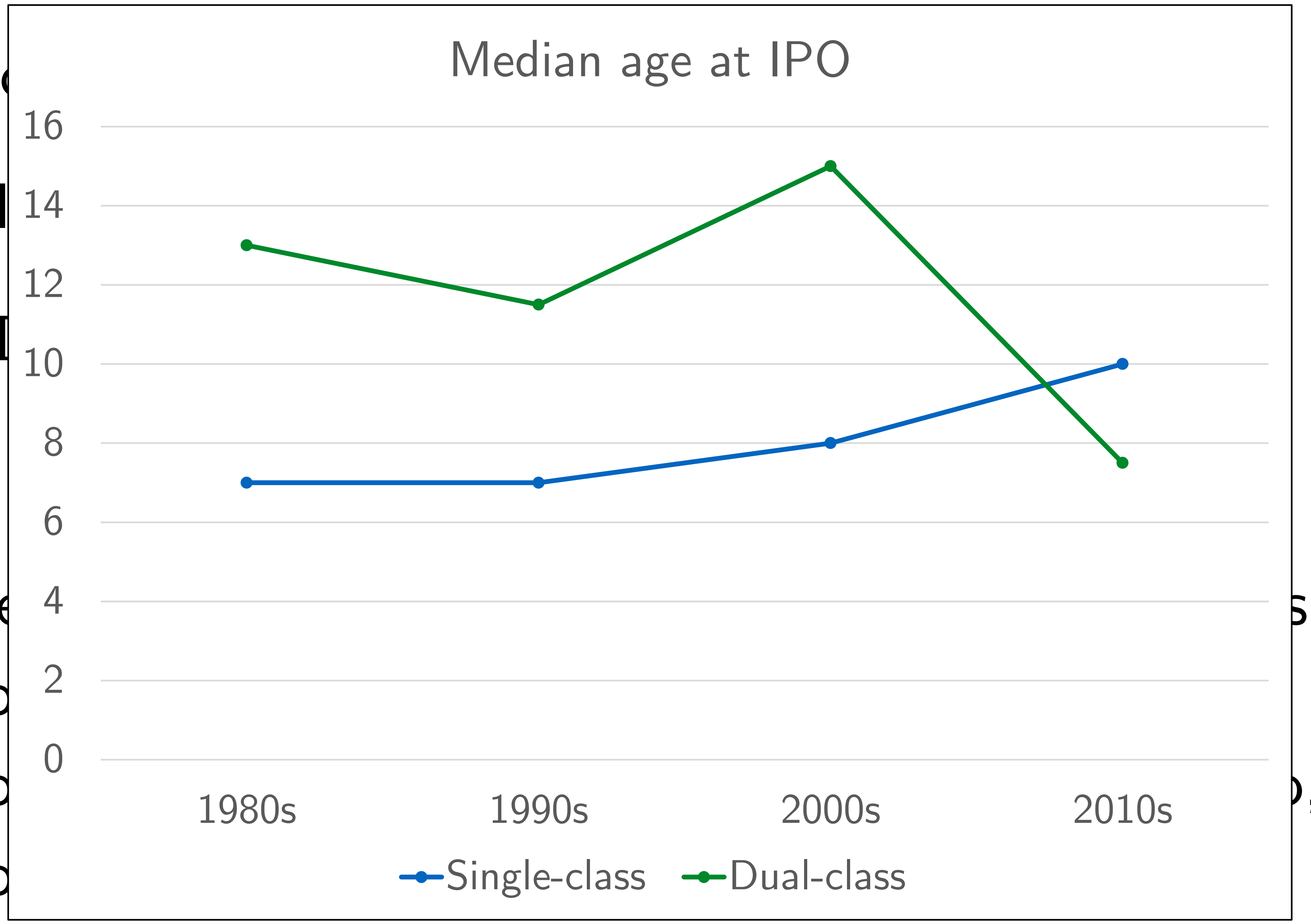
- Group 2: I



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  - Is gro … , media...)?
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Comment 2: A tale of two types of DCF?

- A cohort effect?

	Years relative to the IPO				
	All	1-3	4-5	6-8	9+
Dual dummy	-0.012	0.22**	0.21	-0.15	-0.17*
	(-0.18)	(2.08)	(1.60)	(-1.18)	(-1.67)

More tech firms here?

More family firms here?

- Suggestions:
  - Use firm fixed effects
  - Separate tech and non-tech firms
  - Separate by IPO cohorts

Comment 3: Identification

- Need to match on
  - Inside ownership: DCFs typically have higher inside ownership
  - Owner type: DCFs typically are founder or family controlled
- Make sure not driven by managerial ownership or owners' identity

- Still, could be driven by selection on unobservables
  - More likely to adopt dual-class if initial rent is high
  - Rent declines faster for these firms
- Use firm fixed effect?

Comment 4: Policy-making — not easy

- Forced sunset:
  - On Oct 24, 2018, CII petitions NYSE and NASDAQ to require sunset of dual-class shares within **7 years** of IPO, **citing this paper**.
  - One size fits all? Is 7 years the optimal point for all firms?
    - Again, age at IPO matters
    - Should examine heterogeneity across industries

- Index exclusion:
  - FTSE, S&P 1500 will exclude firms with limited-voting shares starting July 2017. MSCI stayed put after a 10-month consultation.
  - If dual-class firms are priced correctly (examine returns!), why not let investors self-sort?
  - Adverse impact on entrepreneurs' incentives and investor diversification – need to think about general equilibrium effect.

Smaller comments

Additional tests:

- How does the likelihood of unification/multiplication vary with firm age?
- Examine how the valuation effect of unification/multiplication depends on firm age?
- Use IPO as a setting to test life-cycle theory? Prediction: firms more likely to adopt dual-class if going IPO at a younger age.

Summary

- Great paper with huge policy relevance (already cited by BlackRock, SEC, CII, CFA)
- Nicely executed
  - Identification can be improved further
- Would like to see more discussion on
  - age vs listing age
  - potentially two distinct types of dual-class firm

"The advantage of a dual-class share structure is that it protects entrepreneurial management from the demands of shareholders.

The disadvantage of a dual-class share structure is that it protects entrepreneurial management from the demands of shareholders."

-- Financial Times, July 18, 2011

Thank you!