COMMENTS ON "LEVERAGE OVER THE LIFE CYCLE AND IMPLICATIONS FOR FIRM GROWTH AND SHOCK RESPONSIVENESS" BY DINLERSOZ, KALEMLI-OZCAN, HYATT AND PENCIAKOVA
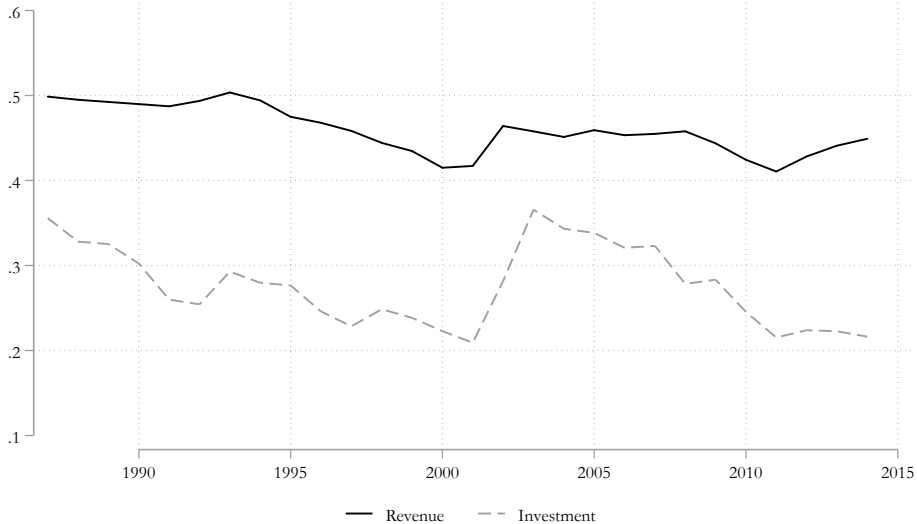
Nicolas Crouzet
Kellogg School of Management, Northwestern University

NBER Capital Markets
July 2018

- Private firms make up a large share of aggregate economic activity

An estimate of non-listed firms' share of activity
using Compustat data, the fixed asset tables, & KLEMS

THE CAPITAL STRUCTURE OF PRIVATE US FIRMS

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    No small task — analogous to creating a new Compustat-SSEL bridge

AGE DISTRIBUTION IN UNWEIGHTED VS. WEIGHTED SAMPLES
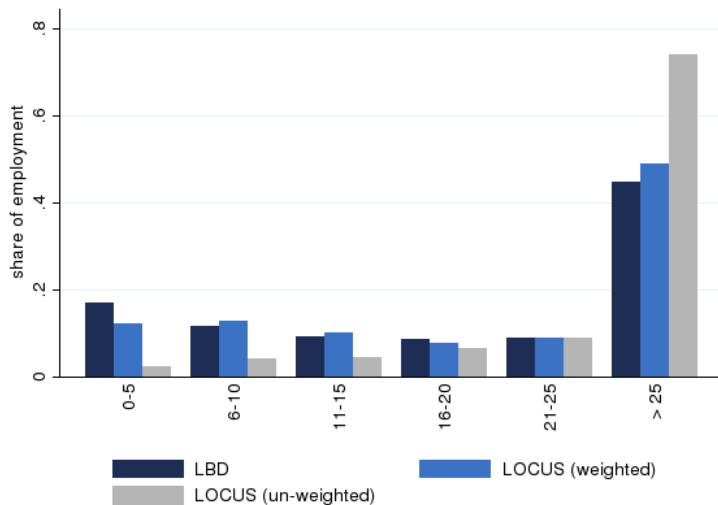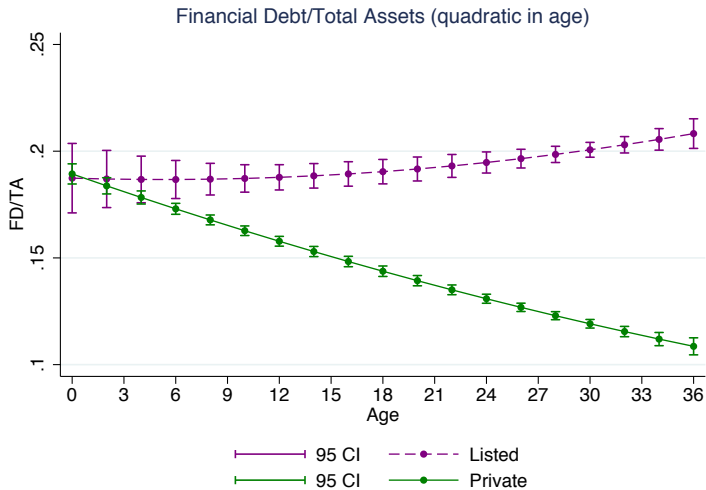
LEVERAGE, AGE AND SIZE

Cross-sectional regressions :

	Private firms		Public firms	
	Overall leverage	Short-term leverage	Overall leverage	Short-term leverage
Age	−	−	∘	∘
Size	+	+	+	∘

Time-series regressions :

	Private firms		Public firms	
	Overall leverage	Short-term leverage	Overall leverage	Short-term leverage
Size	+	+	∘	∘

Financial Debt/Total Assets (quadratic in age)

Short Term Loans/Total Assets (quadratic in age)
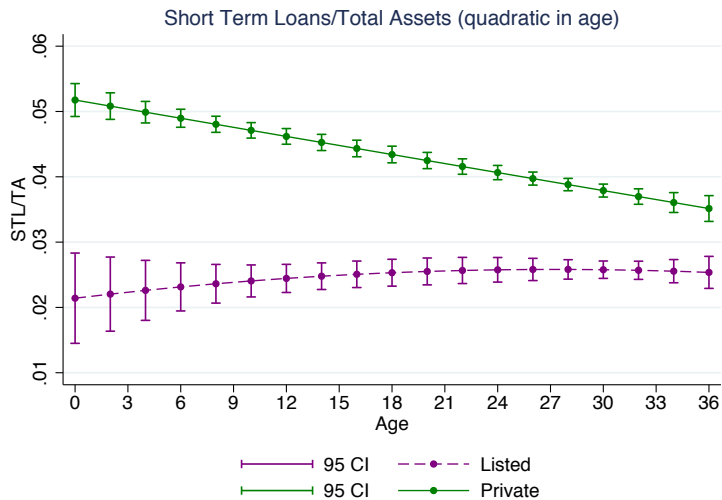
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- Age predictions seem fine for private firms, but not for public firms ...

	(1)	(2)	(3)
	Dependent variable: gross leverage $\frac{dlc+dltt}{at}$		
age	-.0010***	.0010***	-.0011**
	(.0002)	(.0001)	(.0001)
log(employment)	.0073***	.0060*	.0108***
	(.0026)	(.0035)	(.0034)
tangibility	.1275***	.1201***	.1239***
	(.0194)	(.0209)	(.0213)
profitability	-.1016***	-.13299***	-.1333***
	(.0126)	(.0397)	(.0397)
labor productivity	.0055	.0487**	.0498***
	(.0076)	(.0192)	(.0293)
obs.	29,112	16,557	16,557
industry $\times$ year F.E	yes	yes	yes

Heteroskedasticity-robust s.e. in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

- (1): years since first appearance in CRSP (IPO date)
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Leverage/age dynamics depend on time to IPO?

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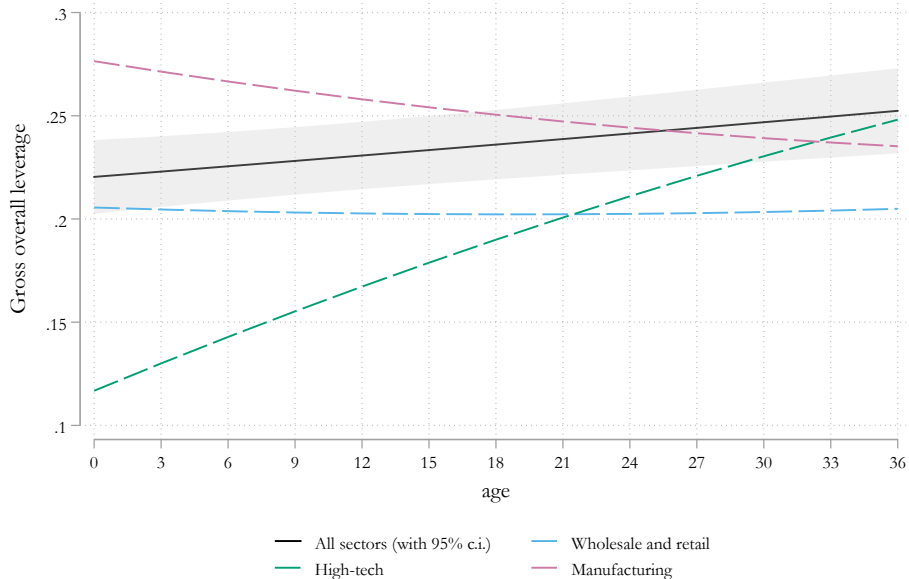
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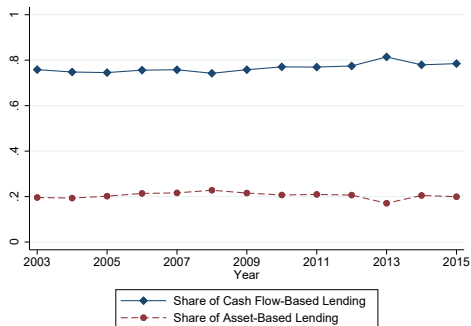
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THE PREVALENCE OF CASH-FLOW BASED LENDING AMONG LISTED FIRMS

	Large Firms	Rated Firms	Small Firms
Asset-based lending	12.4%	8.0%	61.0%
Cash flow-based lending	83.0%	89.0%	7.2%

From Lian and Ma (2018)

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    - Sensitivity of debt issuance to property values?

CONCLUSION

- Three (plus one) suggested additions:

    1. "IPO" vs. "founding" differences in age effects
    2. Heterogeneity across broad industries in the private firm sample
    3. Does it look like lending to private firms might be more asset-based?
    4. Report results with and without re-weighting; more on selection into ORBIS

- Excited to learn more from this data!