Institutional Ownership and Investment by Private Companies

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Motivation and research question

- Institutional investment in private companies has been growing in recent years, and the reasons for this development are unclear.
- One hypothesis is that institutions alleviate funding constraints in investee companies, directly by buying newly issued shares themselves, or indirectly by facilitating investment or lending by other financiers**.** Easier access to external funds is recognized as an advantage of being listed on a stock market, and institutional ownership could provide a similar benefit, serving as a substitute for a listing.
- However, existing evidence on whether institutions do in fact promote investment and alleviate constraints is limited to the case of leveraged buyouts (LBOs) (Bernstein, Lerner and Mezzanotti, 2019; Boucly, Sraer and Thesmar, 2011; Cohn, Hotchkiss and Towery, 2021).
- **We investigate the impact of institutional ownership on investment and financing of private companies, extending the evidence to a broader spectrum of institutional owner types and to ownership positions that include minority as well as controlling stakes.**

Data, sample, and variables

- **Source of financial and ownership data**: We use data on UK-registered private companies, which face more stringent disclosure requirements than their counterparts in other developed markets. **The UK Companies Act requires that firms file both annual financial statements and a register of shareholders at a national registrar, called Companies House.**
- **Sample**
  - Our sample includes private limited and unlisted public limited companies (PLCs) with non-zero revenue.
  - We concentrate on established firms, with material revenues. To do so, we require each company must have revenue exceeding £1m in at least one of the sample years.
  - Our sample includes all types of private equity (PE) and venture capital (VC) fund as well as non-PE institutions such as banks, insurance companies and mutual funds. The sample consists of both minority and controlling institutional ownership.
  - Our baseline sample features 1,852 private companies with institutional ownership of varying types over the years 2009 to 2019. **Each of these is matched to a control company in the same industry with similar characteristics in terms of size, age and profitability.**
- **Definition of key variables**
  - Total investment = Tangible + Intangible investment
  - Tangible investment: Change in PPE + Depreciation of the year (i.e. an alternative of CAPEX).
  - Intangible investment: Change in intangible assets + amortization + R&D expenses + 30%* adjusted SG&A (Adjusted SG&A = SG&A expenses – amortization – R&D expenses). The measure follows Peters and Taylor (2017).
  - Institutional ownership ($InstOwn_{it}$): A dummy variable set to 1 if a company i has institutional ownership in year t, and 0 otherwise.
  - Investment opportunities ($InvOpp_{It}$): Median sales growth rate in the industry section of the UK SIC system of company i in year t.

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Investment level

- Specification: $Investment_{it} = \alpha + \beta InstOwn_{it} + \phi InvOpp_{it} + X_{it} + \eta_{it} + \varepsilon_{it}$ (X_{it} donates control variables and η_{it} donates industry-year fixed effects).
- Finding: **Institutional ownership is associated with higher investment by private companies, compared with control companies which do not have institutional shareholders. The effect is entirely concentrated on investment in intangible assets.**

Figure 1a: Total investment by year

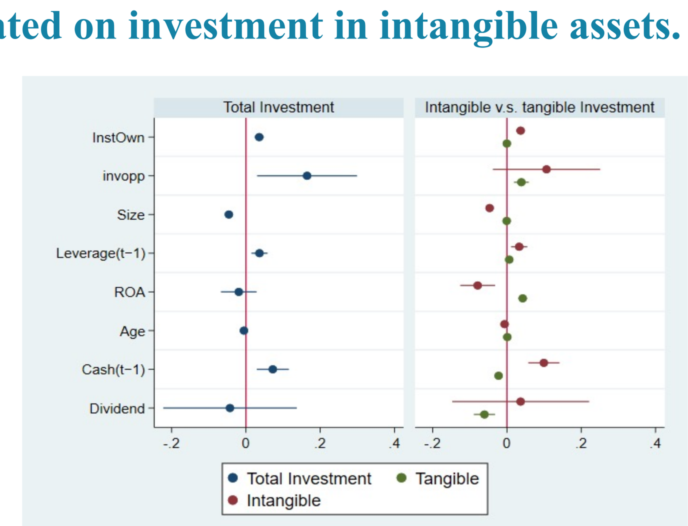


Figure 1b: Regression coefficients

Responsiveness to investment opportunities

- Specification: $Investment_{it} = \alpha + \beta InstOwn_{it} + \delta InstOwn_{it} \times InvOpp_{it} + \phi InvOpp_{it} + X_{it} + \mu_i + \eta_t + \varepsilon_{it}$
- Finding: **Institutional ownership enables firms to respond better to investment opportunities. The impact is also concentrated on intangible investment.**

Institutional ownership and external finance in private firms

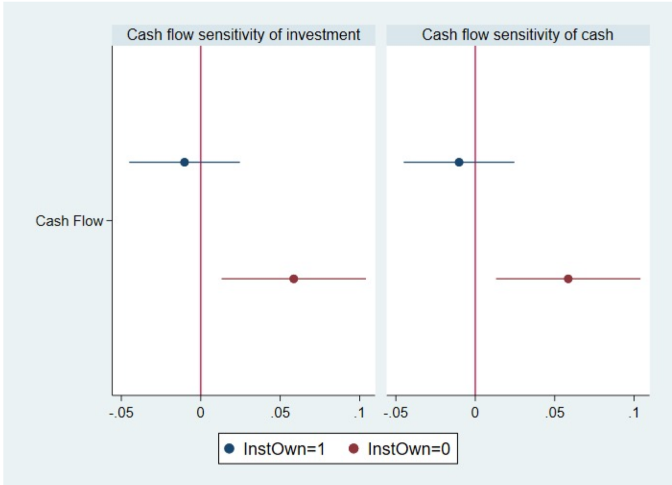
- Specification: $ExtFinance_{it} = \alpha + \beta InstOwn_{it} + \phi InvOpp_{it} + X_{it} + \eta_{it} + \varepsilon_{it}$
- Finding**: Institutional ownership is associated with higher levels of external funding in private firms, both in the form of equity and debt.**

Panel A: external equity	*ExtEquity*	*LargeExtEquity*	*ΔExtEquity*
	(1)	(2)	(3)
InstOwn	**0.027***** **(5.51)**	**0.037***** **(8.08)**	**0.023***** **(5.07)**

Panel B: debt	*IncrDebt*	*LargeIncrDebt*	*ΔDebt*
	(1)	(2)	(3)
InstOwn	**0.028***** **(4.64)**	**0.041***** **(5.62)**	**0.033***** **(4.91)**

Institutional ownership and financing constraints

- Specification:
  - $Investment_{it} = \alpha + \beta CashFlow_{it} + \phi InvOpp_{it} + X_{it} + \eta_{it} + \varepsilon_{it}$ (Cash flow sensitivity of investment)
  - $Cash_{it} = \alpha + \beta CashFlow_{it} + \phi InvOpp_{it} + \varphi Total\ investment + \tau \Delta WorkingCap + \omega \Delta ShortDebt + X_{it} + \eta_{it} + \varepsilon_{it}$ (Cash flow sensitivity of cash)
- Finding: **We find that firms without institutional ownership are financially constrained while firms with institutional shareholders are not, as indicated by the cash flow sensitivity of investment and cash flow sensitivity of cash.**



Results by different types of institutional ownership

To explore the impact of different types of institutional ownership, we divide the sample into four groups, namely companies with PE control, non-PE institutional control, a PE minority stake and a non-PE minority stake. A controlling stake is a holding of at least 20% of the ordinary shares that is also the largest holding.

All types of institutional ownership except non-PE control are associated with both an increased propensity to raise external equity and higher investment by the investee companies. **The increases in external equity and investment are greater when institutional investors have minority as opposed to controlling stakes. But the picture is different for debt. The positive impact of institutions on borrowing is confined to companies under PE control.** When institutions have minority stakes, equity is the more important channel for the provision of external funding to the investee company. Companies under PE control also differ in that they exhibit greater responsiveness of investment to industry growth opportunities than control firms.

Dependent variable:	Total investment	Intangible investment	Tangible investment	Total investment	Intangible investment	Tangible investment	*ExtEquity*	*IncrDebt*	Total investment	Total investment
Explanatory variable:	*InstOwn*	*InstOwn*	*InstOwn*	*InstOwn × InvOpp*	*InstOwn × InvOpp*	*InstOwn × InvOpp*	*InstOwn*	*InstOwn*	*ExtEquity*	*IncrDebt*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
PE control	0.026***	0.027***	-0.000	0.418***	0.453***	-0.025	0.016**	0.039***	0.161***	0.208***
	(2.86)	(3.14)	(-0.08)	(2.93)	(3.29)	(-0.82)	(2.16)	(3.86)	(6.69)	(8.16)
Non-PE inst. control	0.007	0.003	0.003	-0.303	-0.415	0.067	0.016	0.023	0.212***	0.207***
	(0.34)	(0.15)	(0.61)	(-0.69)	(-0.96)	(0.60)	(1.04)	(1.25)	(3.71)	(4.63)
PE minority stake	0.059***	0.060***	-0.001	0.149	0.209	-0.058	0.043***	-0.004	0.222***	0.144***
	(4.81)	(5.02)	(-0.22)	(0.67)	(0.95)	(-1.19)	(4.51)	(-0.35)	(7.87)	(4.33)
Non-PE inst. minority	0.045***	0.043***	0.006	0.428*	0.402*	0.053	0.033**	-0.012	0.201***	0.200***
	(3.14)	(3.10)	(1.39)	(1.75)	(1.71)	(0.79)	(2.47)	(-1.00)	(5.81)	(5.33)

Evidence from transition firms

Our baseline results might arise because there is an unobserved variable that explains both higher investment and whether a firm has institutional ownership. Our results might also arise because of reverse causality: higher investment by a firm might itself attract institutional investors.

Although our evidence on institutional investment and external finance cast doubt on this assumption, we test whether the transition to institutional ownership tends to precede increases in firm investment and external funding. The transition group is compared with non-transitioning control firms which have zero institutional ownership during the sample period. We match the two groups of firm by industry and by the average values of *total investment*, *ExtEquity* and *IncrDebt* calculated over the two years before transition (years *t – 2* and *t – 1*). **The figures below show the means of the differences between transition and control firms for *total investment*, *ExtEquity* and *IncrDebt*, before and after the year of transition.**

Takeaway and contributions

- **Takeaway: We find that institutional shareholders in established private companies promote intangible investment by alleviating funding constraints. The effects are largest for companies with minority institutional stakes, suggesting that alleviation of constraints is a primary motive for ownership in private companies without taking control.**
- **Contributions:**
  - **We contribute to the literature on the role of institutional investors in private companies. Ewens and Farre-Mensa (2020) and Kown, Lowry and Qian (2020) argue that late-stage VC- backed startups are sufficiently able to raise external equity that they choose to remain longer as private firms, rather than listing on the stock market. Our evidence extends theirs, showing explicitly that institutional ownership promotes investment and reduces constraints on external equity in established firms in general.**
  - **Previous studies on the effects on investment of PE control, or of having a listing, examine either capital expenditure on its own, or innovation. We find that the impact of institutional ownership is concentrated entirely on intangible investment. The impact of institutions could be understated if investment is measured solely by capital expenditure.**
  - **We also broaden substantially the evidence on institutional activity in private markets. Existing research is limited primarily to LBOs and VC investment in startups. Our sample consists of established companies rather than startups, and it is comprehensive with respect to the size of institutional holdings and the types of institutional investor.**