

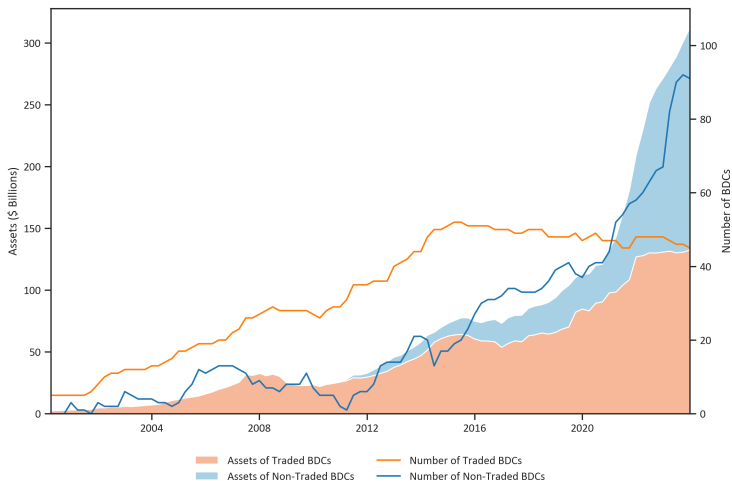
Discussion:
"Bank Capital and the Growth of Private Credit"
by Chernenko, Ialenti, Scharfstein

Juliane Begenau

Stanford GSB & NBER & CEPR

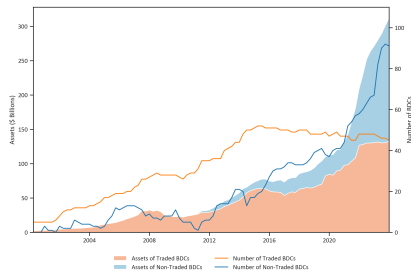
NBER Fall CF 2024

What explains the growth of private credit?



- ▶ Business development companies (BDCs) created in 1980 via Amendment of the 1940 Investment Company Act
- ▶ Goal was to enhance credit provision to small & medium size firms

What explains the growth of private credit?



- ▶ One view: high bank capital req pushed lending to shadow banks
 - ▶ This paper: But BDCs are better capitalized than banks
 - ▶ Puzzle: why are banks not lending if they have a funding advantage?
Answer: $\text{Opex} + \text{reg cost to direct lending} > \text{lending to BDCs}$
 - ▶ Question: BDC lending threatening financial stability?
 - ▶ Answer: unlikely given better capitalization, but may cut back credit

Insights

1. BDCs are important credit providers to "middle-market" firms

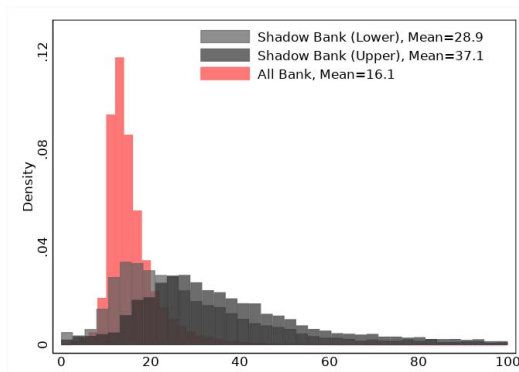
1. BDCs are important credit providers to "middle-market" firms
 - ▶ BDCs possess skill/relationships in middle-market lending
 - ▶ Often affiliated with PE funds funding portfolio company
 - ▶ Consistent with county-level analysis Davydiuk-Marchuk-Rosen-2024

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 - ▶ Also case for mortgage originators Jiang-Matvos-Piskorski-Seru-2024
 - ▶ Shadow banks' Tier-1 ratios exceed banks' Tier-1 even under conservative calculations (lower bound)



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3. Banks lend to BDC instead directly to portfolio firms

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 - ▶ Jiang-2023 & Jiang et al-2024 in mortgage originators

Discussion: What explains growth of non-bank credit?

Paper rationalizes banks' investment into BDCs rather than MMF, but could do more to explain the growth in non-bank lending to firms

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Theme in literature: banks have become less competitive

- (1) Regulation
- (2) Technology changes in lending and firm operations
- (3) (1) and (2) should also lead to less capital into banks

(1) Regulation

- ▶ E.g., Davydiuk-Marchuk-Rosen-2024; Erel-Inozemtsev-2024
- ▶ Industry reports view
Direct lending has grown to become the largest private debt strategy by AUM in North America since 2008, following the tightening of bank lending regulation. Source: Prequin 2024

(1) Regulation

- ▶ Suppose Banks and BDCs do direct lending to MMF

Value of direct lending $NPV^{DL} = \frac{CF(MMF)}{WACC - G}$

- ▶ If banks enjoy a competitive advantage through deposit insurance
 $\Rightarrow WACC^{Bank} < WACC^{BDC}$

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- ▶ Tightening of bank regulation **reduces** banks' competitive advantage
 $\Downarrow$ $EV(\text{Bank})$ through a decline in banks' WACC advantage
- ▶ **GE effect: investors reallocate capital away from banks towards BDCs**

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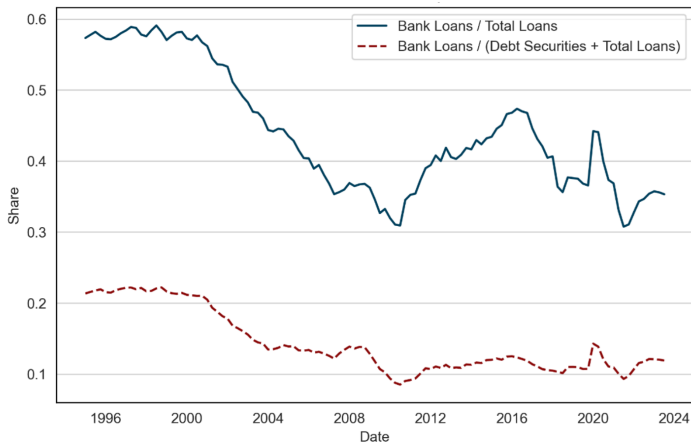
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- ▶ **BDS leverage level irrelevant for this points**

(2) Technology: bank share declined since 2000s



- ▶ Bank loans as shares of nonfinancial corporate liabilities
- ▶ Figure from Hanson et al (2024) using data from Flow of Funds

(2) BDC superior lending technology?

- ▶ Non-bank intermediation technology better
E.g., Buchak et al 2018; Fuster-Plosser-Schnabl-Vickery-2019;
Chernenko-Erel-Prilmeier-2022; Lerner-Seru-Short-2023
- ▶ BDCs better at finding & executing good lending opportunities?

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- ▶ BDCs better at finding & executing good lending opportunities?
 - ▶ For borrowers: banks less attractive: slow & uncertain & less flexible
Davydiuk-Erel-Jiang-Marchuk-2024: firms willing to pay BDC premium
- ▶ $NPV^{DL,BDC} = \frac{CF(BDC)}{R^{BDC} - g^{BDC}} > NPV^{DL,Bank} = \frac{CF(Bank)}{R^{Bank} - g^{Bank}}$
because $CF(BDC) > CF(Bank)$ or $g^{BDC} > g^{Bank}$
- ▶ Example lower search costs as attached to PE funds

(2) BDC target firms grew also as share of economy

- ▶ BDC created in 1980 to "facilitate credit to small-and-medium firms"
 - ▶ Suggests banks never lent to types of firms BDCs specialized in
 - ▶ Quantitatively only started to matter mid-to-late 2000s

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 - ▶ Suggests banks never lent to types of firms BDCs specialized in
 - ▶ Quantitatively only started to matter mid-to-late 2000s
- ▶ BDC specialize in high-tech, R&D-focused, intangible capital rich firms whose share grew between 1980s-2010
(E.g., Begenau-Palazzo-2021; Falato et al 2022)
- ▶ These firms tend to be riskier, often with lower or negative EBITDA (Chernenko-Erel-Prilmeier-2022)

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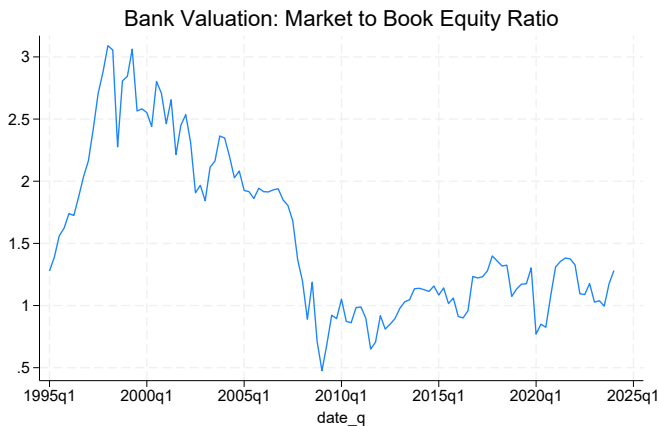
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To what extent have BDCs replaced banks in lending to MMFs vs specialized in firms that grew as a share of the economy

How much of BDCs' growth would have happened w/o change in reg?

(3) (1) + (2) $\Rightarrow$ Banks less competitive

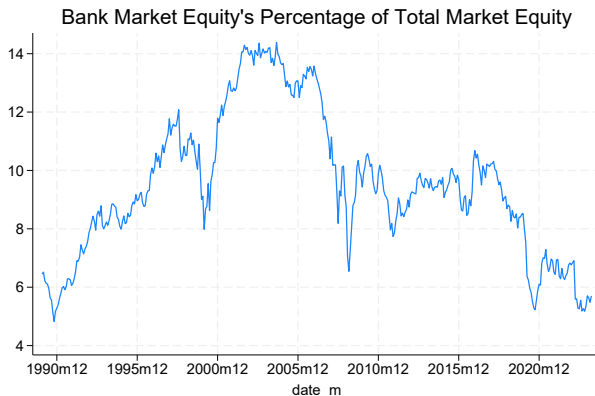
- ▶ Since 2008, aggregate US bank valuations (M/B) average 1.05



Data from CRSP and FR-Y-9C filings

(3) (1) + (2) $\Rightarrow$ Banks less competitive

- Less public equity allocated to banks



- Banks are less attractive: investor capital to shadow banks

(3) Capital reallocation to direct lending strategies

- ▶ Alternative AUM became mainstream mid 2000s
- ▶ Direct lending share grew from 15% in 2008 to 44% in 2023
 - ▶ BDCs often used to fund leveraged buyouts
 - ▶ BDCs contributing to recent growth typically sponsored by PE fund

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- ▶ Why has so much capital gone into private credit?

Standard mean-variance portfolio choice:

Investor views of the CAPM α in private credit have improved

(3) Capital reallocation to direct lending strategies

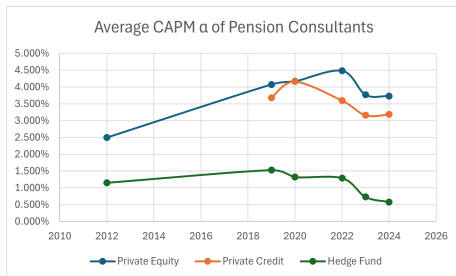
- ▶ Increase in perceived α causes investor reallocate capital to PE
- ▶ Pension consultants report α in CMAs (Begenau-Liang-Siriwardane-2024)



- ▶ Perceived $\alpha \uparrow$ explains 1/3 of aggregate rise in pensions' PE share

(3) Capital reallocation to direct lending strategies

- ▶ Horizon Actuarial 2022 Survey of roughly 20 pension consultants CMAs (capital market assumption)



- ▶ Private credit α roughly in line with private equity α
- ▶ Expect similar affect on investors capital allocation to private credit
- ▶ Perceived α differs from realized: Erel-Flanagan-Weisbach-2024 estimate $\alpha = 0$
- ▶ How much is perceived α responsible for rise in private credit?

Conclusion

Very interesting paper on the changing nature of banking

What drives the growth of private credit?

- ▶ Lots of complementary forces at play
(change in regulation, technology, investor capital allocation)
- ▶ Regulation can cause reallocation of investor capital in GE
- ▶ Lower BDC leverage not informative about regulation as cause
- ▶ Counterfactual growth of BDC w/o post-GFC reforms
- ▶ Potentially additional effects through perceived change in α
- ▶ Potential narrative:
 - ▶ Middle-market loan demand increased with PE growth
 - ▶ Banks faced a choice: direct lender or lender to lender
 - ▶ Banks choose indirect lending due to cap. regulation & search costs
 - ▶ Bank corporate loan share falls: worse lending tech & tighter reg.
 - ▶ Investor allocate relatively more capital to shadow banks