

London Business School (LBS)
Private Capital Symposium
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Private Debt

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For later...



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www.tilburguniversity.edu/research/institutes-and-research-groups/tilburg-institute-private-debt



An 8-minute introduction...

- I Private Markets: Size and Expected Growth**
- II Research Finding I: Performance in terms of IRR, Multiples & PME**
- III Research Finding II: Performance in terms of Alpha**
- IV Research Finding III: Why Firms Borrow Directly from Nonbanks**
- V Research Finding IV: ESG of Private Market Funds**
- VI Research Finding V: The Bank Lending Channel and Private Market Growth**

Private Markets: Size and Expected Growth

Opinion **On Wall Street**

Private versus public markets is the battle to watch

Billions have gone into less liquid securities but the risks of private markets are untested

ROBIN WIGGLESWORTH [+ Add to myFT](#)




Financial Times

February 8, 2019

FT Alphaville Capital markets [✓ Added](#)

Is the \$12tn private market the 'next shoe to drop'?

O Lord make me mark properly, but not yet

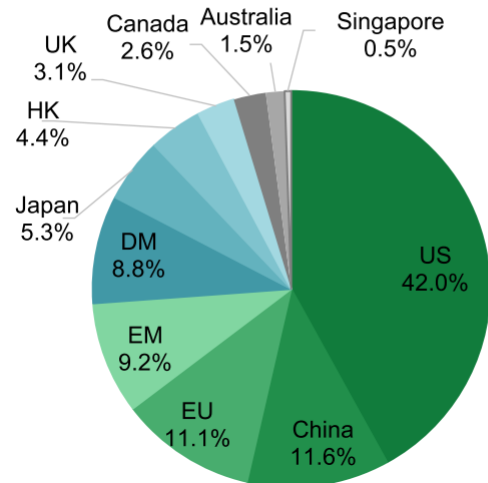


Robin Wigglesworth APRIL 14 2023 34

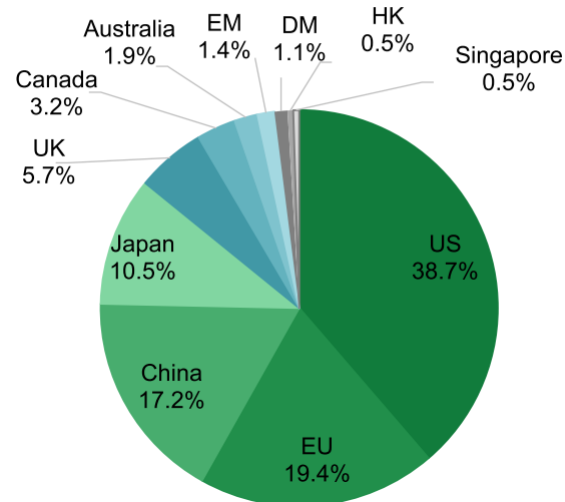
April 14, 2023

Private Markets: Size and Expected Growth

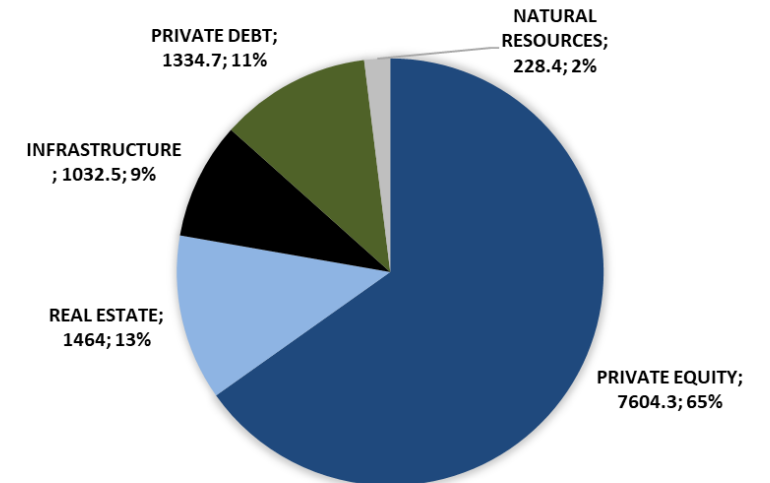
**Global Equity Market Cap
2021 - \$124.4 Trillion**



**Global Bond Market Outstanding
2021 - \$126.9 Trillion**



**Global Private Markets Assets under
Management Breakdown - \$11.6 Trillion**



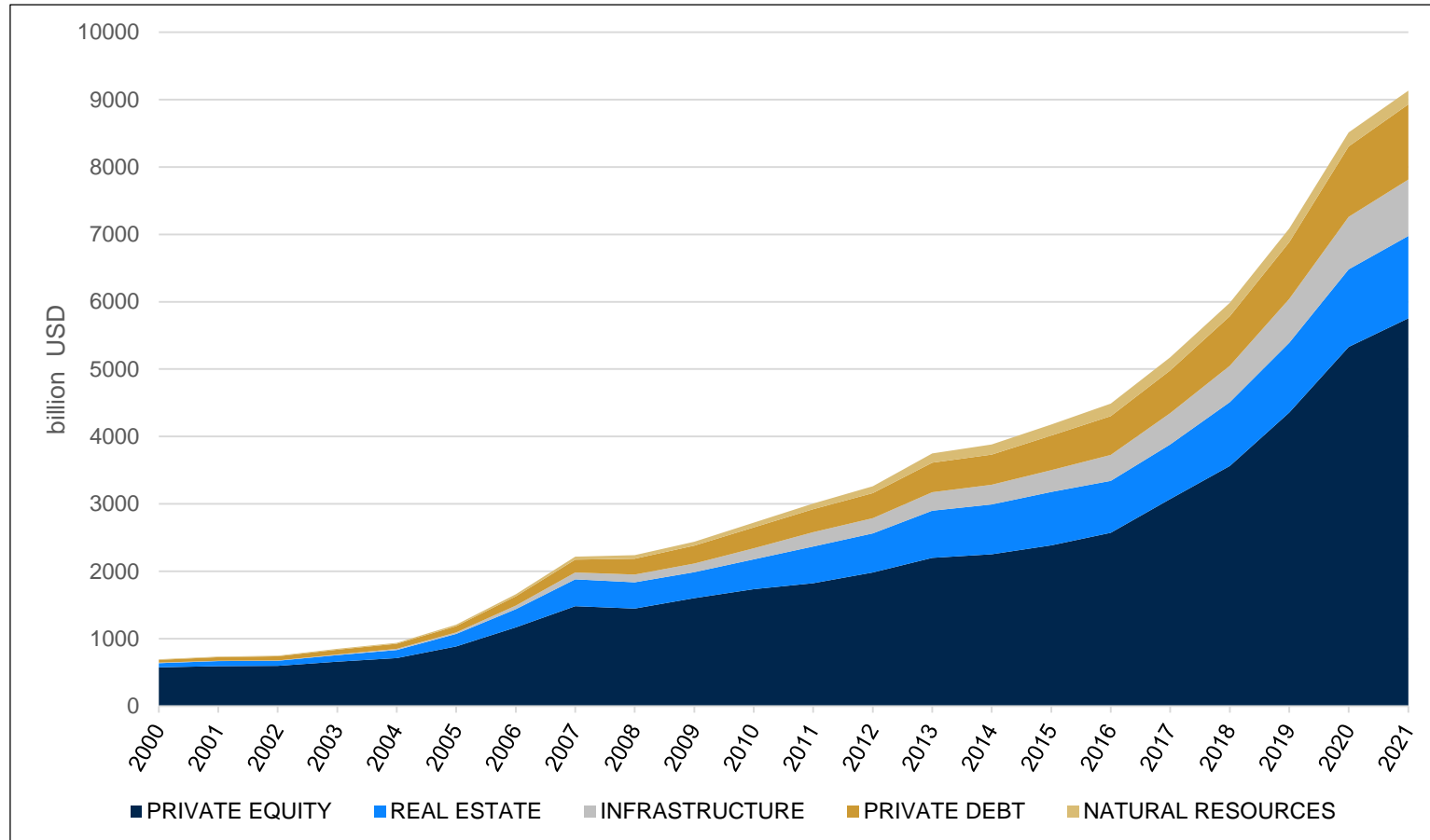
Source: SIFMA 2022 Capital Markets Fact Book, Preqin Pro Assets under Management breakdown, data retrieved as of March 6, 2023.

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1

Private Markets: Size and Expected Growth

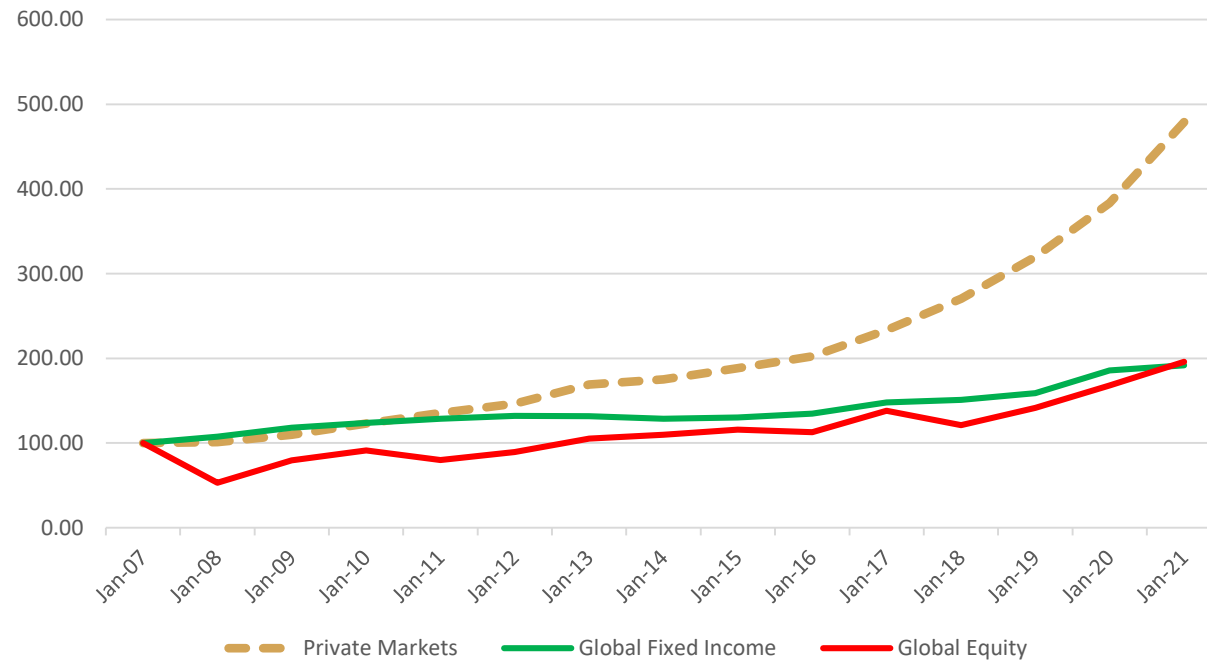


Growth of Private Capital Assets under Management, billion US\$, 2000 - 2021

This figure illustrates the growth of private capital asset classes. Assets under management (AUM) are in billion US dollars. To avoid double counting of available capital and unrealized value, fund of funds and secondaries are excluded. Natural Resources includes Natural Resources and Timberland fund types only to avoid double counting. Source: Preqin Pro as retrieved in October 2021. AUM per per year end. 2021 AUM as of March.

Private Markets: Size and Expected Growth

Private Market Growth vs. Fixed Income Outstanding & Equity
Market Capitalization (2007 = 100)



4.8 X Private Markets

10 Yr CAGR: 12.6%

1.92 X Global Fixed Income Markets

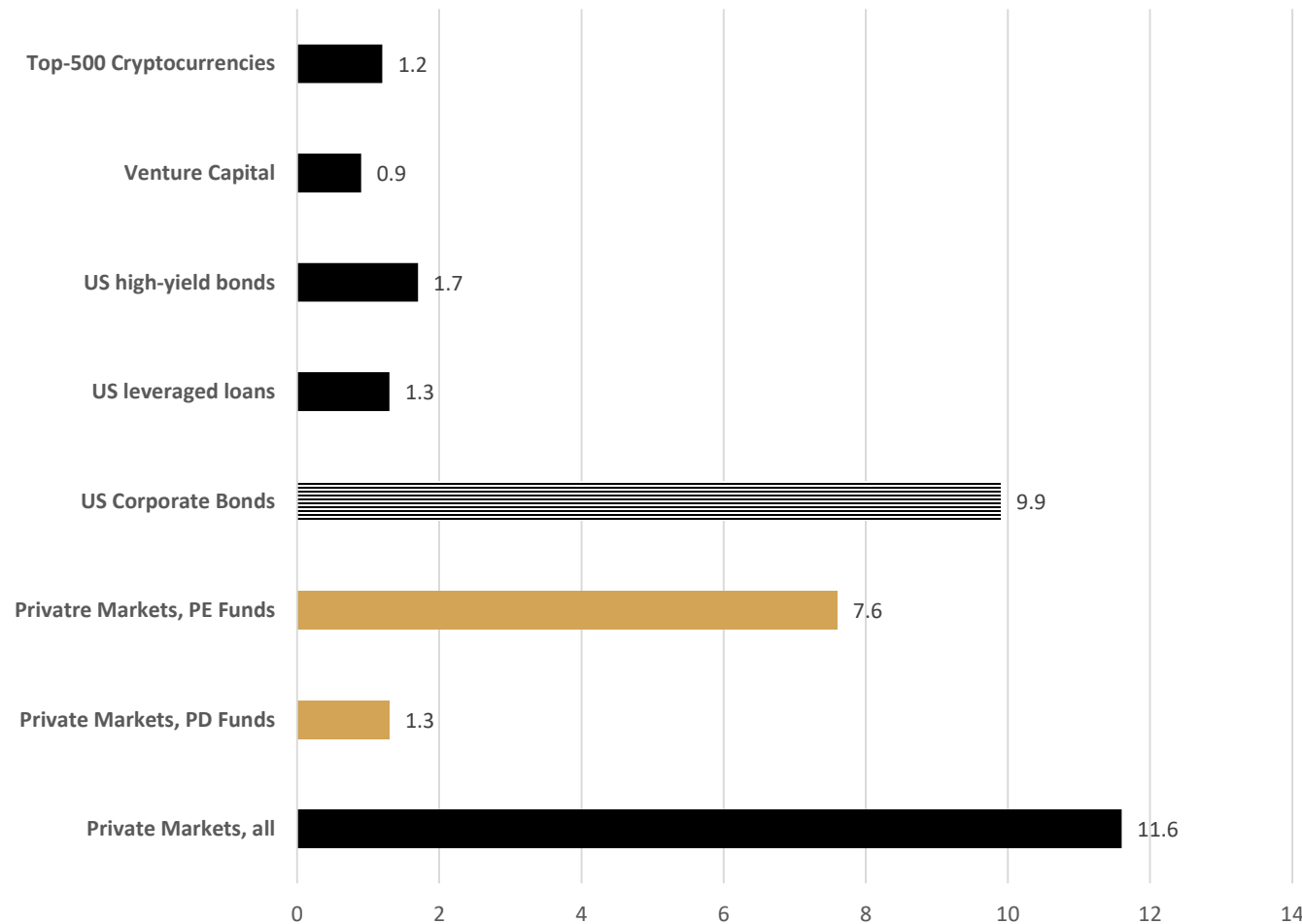
10 Yr CAGR: 8.2 %

1.96 X Global Equity Markets

10 Yr CAGR: 3.8 %

Source: SIFMA 2022 Capital Markets Fact Book, Global Equity Market Capitalization Value, Global Fixed Income Markets Outstanding Value
Preqin Pro Assets under Management breakdown as per June 2022, data retrieved as of March 6, 2023.
Index 100 = 2007

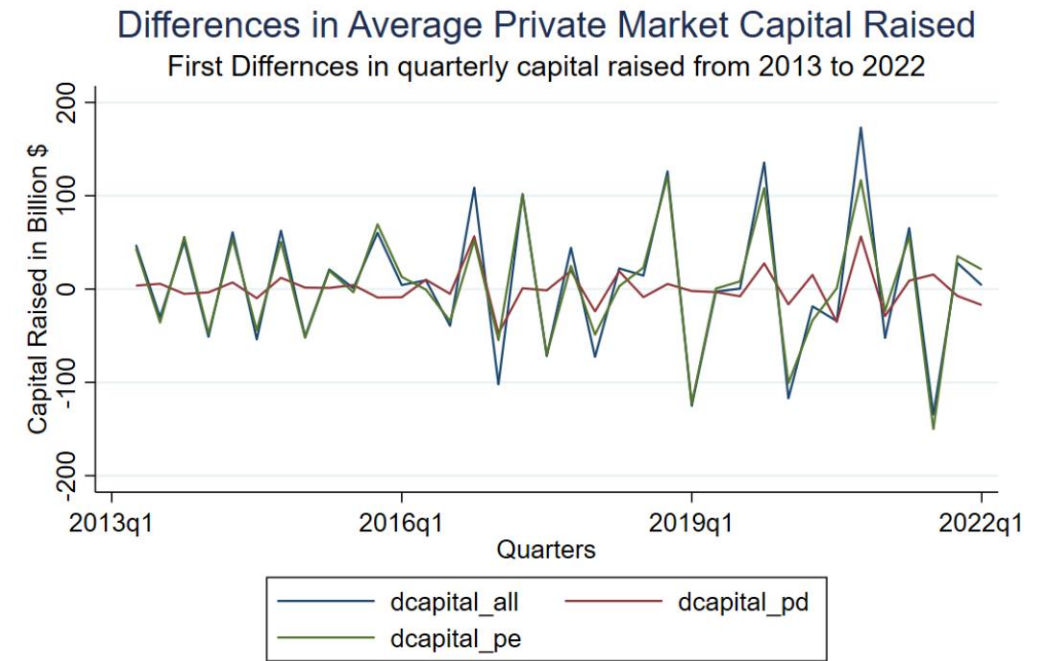
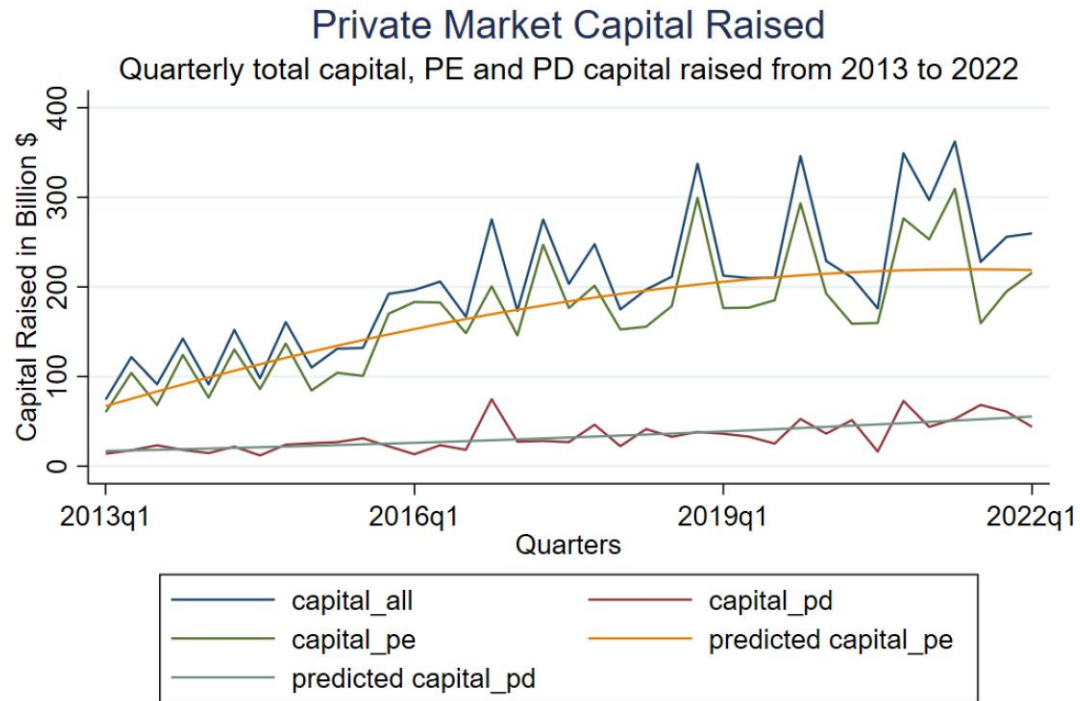
Private Markets: Size and Expected Growth



On the Importance of Private Markets & Private Debt (PD), trillion US\$

This Figure seizes the importance of PD funds relative to other asset classes including US corporate bonds, US high-yield bonds, US leveraged loans, venture capital and the Top-500 cryptocurrencies. The data for private market assets and for venture capital are from Preqin Pro, retrieved on March 6, 2023 and per end of June 2022. Those for US corporate bonds from SIFMA (2022). The data for the US leveraged loans market including high-yield bonds and leveraged loans are from S&P Global as per June 30, 2021. Cryptocurrency data are from statista.com and retrieved on March 6, 2023, from <https://www.statista.com/statistics/730876/cryptocurrency-maket-value/>.

Private Markets: Size and Expected Growth



Quarterly Capital Commitments: ~ 250 billion USD

Private Markets: Size and Expected Growth

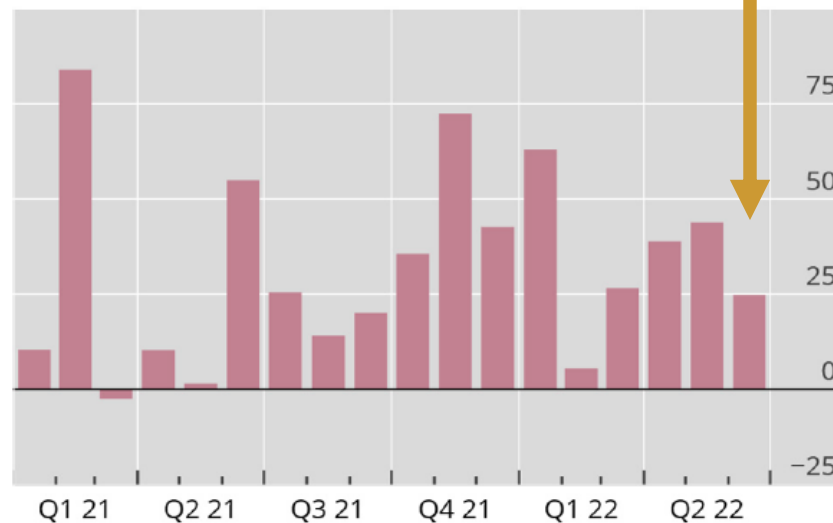
Bank Syndicated Lending vs. Private Market Quarterly Volumes
~ USD 75 Milliarden vs. ~250 Milliarden USD

Syndicated loans to NFCs differ between AEs and EMDEs

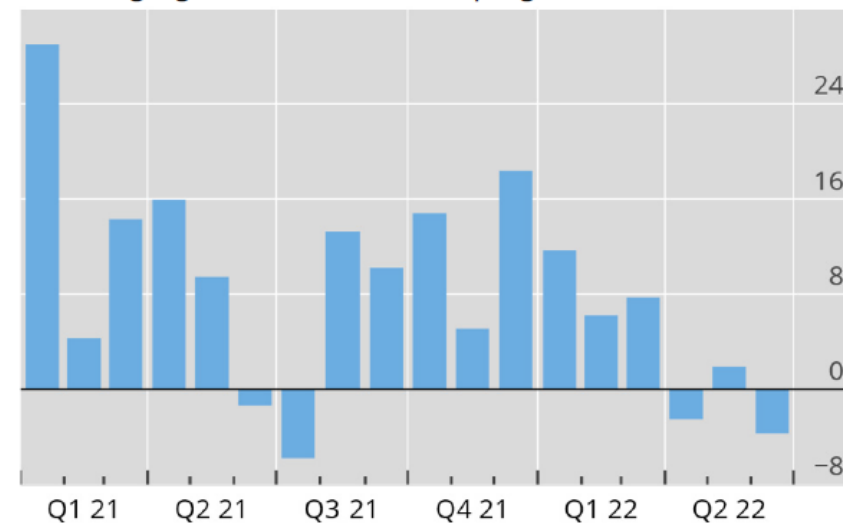
Monthly net issuance of term loans, by residence of borrower; in billions of US dollars

Graph 6

1. Advanced economies (AEs)

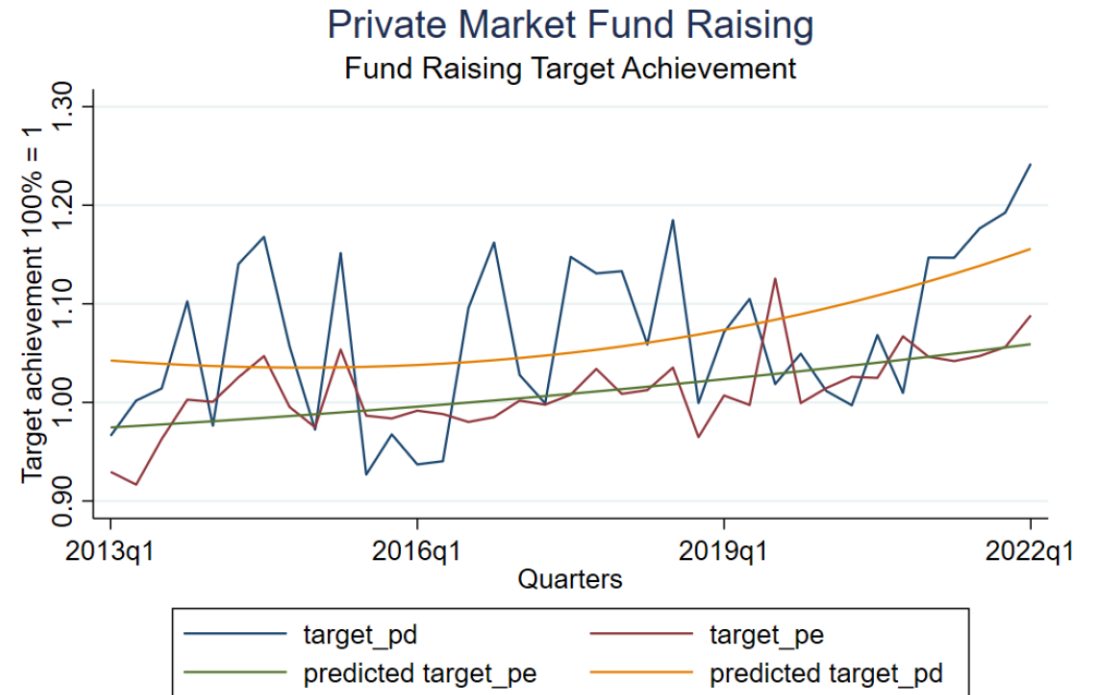
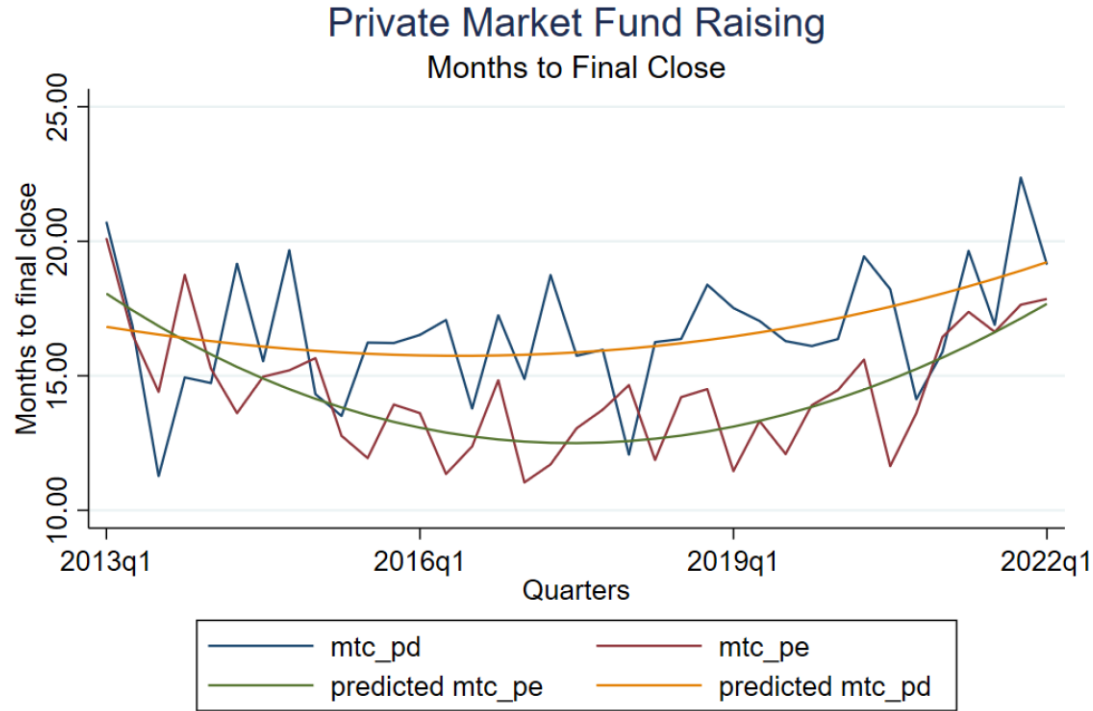


2. Emerging market and developing economies (EMDEs)



Sources: Dealogic; BIS calculations.

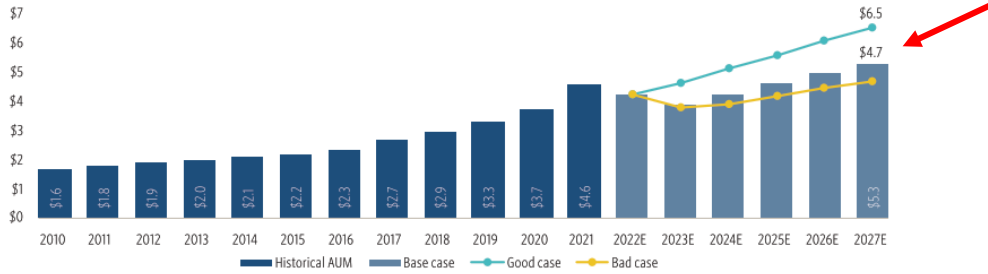
Private Markets: Size and Expected Growth



Quelle: Remaco Research, März 2023

Private Markets: Size and Expected Growth

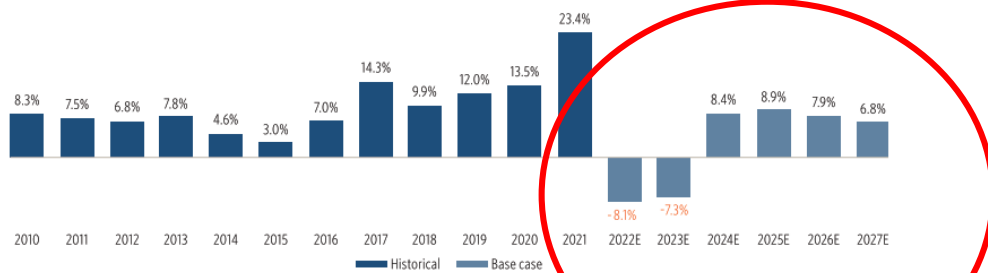
PE AUM (\$T) forecast*



Source: PitchBook | Geography: Global
*Historical AUM and forecasts generated on January 5, 2023

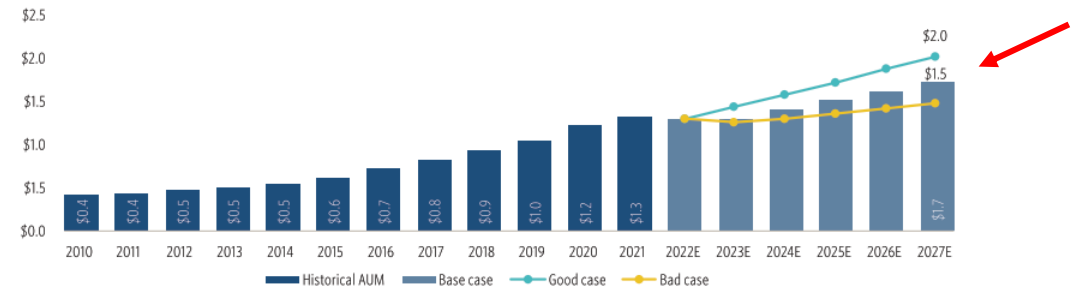
Overall, we expect the rapid growth seen at the end of the last decade to come down to a more sustainable pace. The year-over-year change in total AUM for PE funds ramped up to a peak of 23.4% in 2021. We expect the maturation of the industry and headwinds from a less-accommodating central bank environment to bring down growth in AUM to a level seen in the early 2010s.

Year-over-year percent change in PE AUM with base-case forecast*



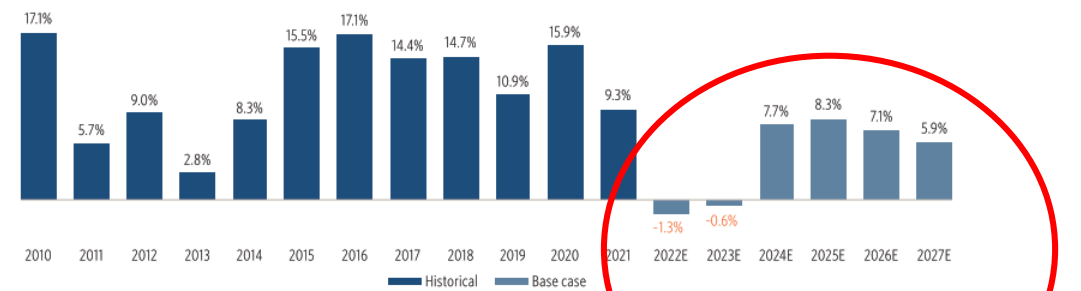
Source: PitchBook | Geography: Global
*Historical AUM and forecasts generated on January 5, 2023

Private debt AUM (\$T) forecast*



Source: PitchBook | Geography: Global
*Historical AUM and forecasts generated on January 5, 2023

Year-over-year percent change in private debt AUM with base-case forecast*



Source: PitchBook | Geography: Global
*Historical AUM and forecasts generated on January 5, 2023

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Research Finding I: Performance in terms of IRR, Multiples & PME

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<https://doi.org/10.1080/00101385.2022.2092384>

Research

OPEN ACCESS

Private Debt Fund Returns, Persistence, and Market Conditions

Pascal Boni and Sophie Manigart

Pascal Boni is professor of practice in finance and private debt at Tilburg University, Tilburg School of Economics and Management, assistant professor of finance at Tilburg University, TIAS School for Business and Society, Tilburg, the Netherlands, and the managing director of Tilburg Institute for Private Debt (TIPD). Sophie Manigart is full professor of corporate finance and faculty dean at Vlerick Business School and full professor at Ghent University, Belgium. Send correspondence to Pascal Boni at pascalboni@tilburguniversity.nl.

This paper examines net-of-fees private debt fund performance, performance persistence across funds managed by the same general partner and a general partner's ability to time the market. We document that private debt funds outperform bond and equity market benchmarks in the cross-section, with high performance dispersion across strategies and performance quartiles. Lagged performance significantly affects current fund performance. While ex ante and ex post credit market conditions strongly affect fund performance, general partners can only partially time them.

Keywords: credit market conditions; market timing; performance; performance persistence; private debt; private markets; return; skill

Disclosure: In accordance with Taylor & Francis policy and our ethical obligation as researchers, we report that one of two researchers acts as consultant to institutional investors interested in PD fund investments. His employer may be affected by the research reported in the enclosed paper. We disclose those interests fully to Taylor & Francis. The views expressed in this paper are those of the authors and not necessarily those of the researcher's employer.

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Volume 76, Number 4

Introduction

We investigate private debt (PD) fund performance and determinants thereof. PD funds represent an important segment of the private capital industry, which soared on the boom in unlisted assets and tripled their market capitalization since the COVID-19 pandemic induced market sell-off.¹ PD funds emerged as an asset class in the late 1990s and exceeded \$1.1 trillion assets under management in 2020 (Preqin Pro 2021). As of today, PD funds' assets under management represent some important 12.3% of the aggregate value of private capital funds. They approximately match the size of real-estate funds (\$1.15 trillion) and have outgrown infrastructure (\$0.8 trillion) and natural resources (\$0.2 trillion) funds (Preqin Pro 2021). This growth has been driven by a surge in the demand for non-bank private debt, as banks retrenched from cash-flow-based lending to the middle market after the Global Financial Crisis due to increased bank regulation and the resulting reduction in risk appetite on the part of the banks (see, for example, Langfield and Pagano 2016; van der Veer and Hoebrechts 2016; Bordo and Duca 2018; Cortés et al. 2020). Also, PD fund growth was spurred by an increase in the supply of capital by yield-seeking institutional investors challenged by a low-yield environment in traditional credit markets.

Despite the growing importance of PD funds, which have reached average fund sizes exceeding \$1.3 billion (in 2018 US dollars), our understanding of PD fund returns to limited partners (LPs) is limited

We thank the editors, two anonymous referees, M. Du Bin, PPM, Xos, F.A. de Roo, J.A.G. Driessen, P.G.J. Roserboom, A. Versteil, D.J.D. Cummings as well as seminar participants at Ghent University, for valuable comments on previous versions of the paper. We acknowledge *Banque Paribas* for the use of the Preqin data. This is an Open Access article distributed under the terms of the Creative Commons Attribution NonCommercial NoDerivatives license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

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Table 2. Private Debt Fund Performance (IRR, Multiples, PME)

A. Cross-sectional performance, measured by internal rate of return (IRR), over the sample period 1996–2020

IRR	N	Mean	Median	SD	Percentiles					
					1st	5th	25th	75th	95th	99th
Internal rate of return (IRR)	448	9.19	8.46	14.81	-33.90	-7.12	5.11	12.28	27.71	57.14
Top quartile	112	23.3	16.6	19.2	12.3	12.9	14.0	25.2	48.1	93.2
Second quartile	112	10.1	10.0	1.0	8.5	8.7	9.1	11.0	11.8	12.2
Third quartile	112	7.0	7.2	1.0	5.1	5.3	6.1	8.0	8.4	8.5
Bottom quartile	112	-3.6	0.9	11.9	-55.7	-28.3	-5.8	3.2	4.4	5.0
High-low (quartiles)	27.0	15.7	18.1	68.0	41.3	19.8	22.0	43.8	88.1	

B. Cross-sectional performance, measured by net multiples (multiple)

Multiples	N	Mean	Median	SD	Percentiles					
					1st	5th	25th	75th	95th	99th
Net multiples (X)	436	1.30	1.24	0.35	0.57	0.85	1.10	1.45	1.93	2.58
Top quartile	106	1.76	1.65	0.35	1.46	1.48	1.54	1.88	2.42	3.12
Second quartile	112	1.33	1.31	0.06	1.24	1.24	1.28	1.38	1.44	1.45
Third quartile	106	1.16	1.16	0.04	1.11	1.11	1.13	1.19	1.23	1.23
Bottom quartile	112	0.98	1.03	0.15	0.50	0.59	0.95	1.08	1.10	1.10
High-low (quartiles)	0.79	0.62	0.31	0.96	0.89	0.59	0.80	1.32	2.02	

C. Cross-sectional performance, measured by public market equivalent (PME), using the investment grade benchmark (IG)

PME IG	N	Mean	Median	SD	Percentiles					
					1st	5th	25th	75th	95th	99th
Public market equivalent (PME) –IG	448	1.08	1.05	0.25	0.51	0.73	0.96	1.15	1.50	2.03
Top quartile	112	1.38	1.30	0.26	1.15	1.16	1.20	1.43	2.00	2.38
Second quartile	112	1.10	1.10	0.03	1.05	1.05	1.07	1.12	1.14	1.15
Third quartile	112	1.01	1.01	0.02	0.96	0.97	0.99	1.03	1.04	1.05
Bottom quartile	112	0.82	0.87	0.14	0.31	0.52	0.79	0.92	0.95	0.96
High-low (quartiles)	0.55	0.43	0.24	0.84	0.63	0.41	0.51	1.05	1.42	

D. Cross-sectional performance, measured by public market equivalent (PME), using the high yield benchmark (HY)

PME HY	N	Mean	Median	SD	Percentiles					
					1st	5th	25th	75th	95th	99th
Public market equivalent (PME) –HY	448	1.06	1.04	0.24	0.50	0.72	0.95	1.13	1.45	1.90
Top quartile	112	1.23	1.24	0.26	1.13	1.14	1.18	1.39	1.84	2.33
Second quartile	112	1.08	1.08	0.03	1.04	1.05	1.06	1.11	1.12	1.13
Third quartile	112	1.01	1.01	0.03	0.95	0.96	0.99	1.02	1.04	1.04
Bottom quartile	112	0.81	0.85	0.14	0.31	0.50	0.76	0.91	0.95	0.95
High-low (quartiles)	0.52	0.40	0.23	0.82	0.64	0.45	0.48	0.89	1.38	

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Financial Analysts Journal | A Publication of CFA Institute

Table 2. Private Debt Fund Performance (IRR, Multiples, PME) (continued)

E. Cross-sectional performance, measured by public market equivalent (PME) using the equity market benchmark (S&P 500)

PME S&P 500	N	Mean	Median	SD	Percentiles					
					1st	5th	25th	75th	95th	99th
Public market equivalent (PME) –S&P 500	448	1.06	1.01	0.30	0.51	0.71	0.92	1.14	1.55	2.06
Top quartile	112	1.42	1.34	0.35	1.14	1.15	1.21	1.50	1.95	2.55
Second quartile	112	1.06	1.06	0.04	1.01	1.01	1.03	1.09	1.13	1.14
Third quartile	112	0.96	0.96	0.03	0.92	0.92	0.94	0.98	1.00	1.00
Bottom quartile	112	0.79	0.83	0.13	0.40	0.53	0.74	0.89	0.91	0.91
High-low (quartiles)	0.63	0.51	0.33	0.74	0.62	0.47	0.61	1.04	1.64	

This table reports on the performance of private debt funds in the cross-section and by performance quartile. Panel A reports on the performance of private debt funds, as measured by their internal rate of return (IRR), showing the mean, median, standard deviation, and performance percentiles, together with quartile performance (top to bottom quartile) and the difference between the best and worst performance (high-low). Panel B shows investment multiples. If a fund is not liquidated, the last available net asset value (NAV) is considered to reflect the last market value and used as a last distribution when calculating the performance results. Panel C reports on the public market equivalent (PME), calculated as in Kaplan and Schoar (2005), and using the investment grade (IG) benchmark. The Bloomberg Barclays US Corporate Bond Total Return Index (Ticker: LBTRBTR) is used to calculate the PME against the IG benchmark. Panel D depicts the PME against the high yield benchmark. The Bloomberg Barclays Corporate High Yield Index (Ticker: LPHYBTR) is used to calculate the PME. Panel E shows the PME when using the equity market benchmark, i.e., the Standard & Poor's 500 total return index. Private debt fund data are from Preqin, cut off date December 31, 2020. Benchmark data are from Bloomberg.

Internal Rate of Return (IRR)

9.2% (-3.6% - 23.3%)

Investment-Multiple

1.3X (0.8X – 1.8X)

Public Market Equivalent vs. IG-Bonds

8% (-18% - 38%)

Public Market Equivalent vs. HY-Bonds

4% (-19% - 33%)

Public Market Equivalent vs. S&P 500

6% (-21% - 42%)

Research Finding II: Performance in terms of Alpha

UNCOVERING THE PUBLIC AND PRIVATE COMPONENTS OF PRIVATE DEBT RETURNS

January 15, 2023

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TIAS School for Business and Society

Frans de Roon

Tilburg University, The Netherlands
TIAS School for Business and Society and Tilburg School of
Economics and Management (TISEM)

Abstract

We investigate private debt fund returns, disentangling them into a publicly traded and a private component. Studying their time-series and cross-sectional properties, we find a significant private debt premium of around 1.6% per quarter. We establish that fund returns are negatively skewed and have long exposure to high yield bonds and stocks and short exposures to investment grade bonds, together explaining up to 70% of return variation. Regressing the private debt premium on its factor loads in the cross-section of individual funds, the pure private return component amounts to 2.2%, on average, and is negatively affected by exposures to all traded factors. Return skewness is largely driven by exposures to traded factors and further explained by higher downside-beta than upside-betas. We find a positive tradeoff between negative skew and mean returns and a reward-to-expected shortfall ratio that is more favorable for private debt funds as compared to the traded portfolios by a factor of ten.

JEL classification: G11, G12, G20, G23, G30

Keywords: Private Market, Private debt, Returns, Performance, Skewness, Value at Risk, Expected Shortfall

Böni, Pascal and de Roon, Frans A., Uncovering the Public and Private Components of Private Debt Returns (January 15, 2023). Available at SSRN: <https://ssrn.com/abstract=4319347> or <http://dx.doi.org/10.2139/ssrn.4319347>

Panel A: Single Factor Market Model									
		All Funds		By Strategy					F-test
		Mean	Median	Mezzanine	Distressed	Venture	Special Sit.	Direct Lending	p-values
α	BBIG	1.47%	0.94%	2.02%	0.42%	3.53%	1.39%	1.65%	0.0000
		(3.79)	(3.9)	(3.85)	(0.75)	(3.49)	(1.95)	(3.4)	
$\Sigma\beta_{Dimson}$		0.526	0.433	0.434	0.941	-0.586	0.568	0.447	0.0003
		(2.76)	(3.66)	(1.78)	(3.55)	(1.27)	(1.48)	(1.57)	
R^2		24%	29%	8%	26%	11%	30%	18%	
α	BBHY	1.44%	0.97%	2.07%	0.46%	2.53%	1.26%	1.37%	0.0000
		(5.4)	(6.21)	(4.53)	(1.19)	(2.66)	(2.2)	(3.67)	
$\Sigma\beta_{Dimson}$		0.476	0.354	0.334	0.779	0.089	0.623	0.676	0.0001
		(5.37)	(6.84)	(2.4)	(6.37)	(0.32)	(2.81)	(3.75)	
R^2		55%	63%	13%	56%	5%	43%	39%	
α	SPX	1.57%	1.02%	1.89%	0.90%	1.92%	1.42%	1.73%	0.0000
		(5.27)	(6.27)	(4.67)	(2.00)	(2.16)	(2.12)	(3.47)	
$\Sigma\beta_{Dimson}$		0.286	0.235	0.371	0.387	0.404	0.324	0.175	0.0001
		(3.73)	(5.62)	(3.8)	(3.43)	(1.88)	(1.7)	(1.04)	
R^2		44%	60%	28%	38%	12%	32%	26%	
Panel B: Three Factor Market Model									
		All Funds		By Strategy					F-test
		Mean	Median	Mezzanine	Distressed	Venture	Special Sit.	Direct	p-values
α	3factor	1.60%	1.00%	1.96%	0.71%	3.61%	1.33%	2.07%	0.0000
		(5.65)	(7.12)	(4.16)	(1.76)	(4.66)	(1.95)	(4.16)	
$\Sigma\beta_{Dimson}$	BBIG	-0.502	-0.216	-0.12	-0.578	-2.929	-0.717	-0.613	0.0005
		(2.05)	(1.78)	(0.28)	(1.62)	(3.98)	(1.34)	(1.88)	
$\Sigma\beta_{Dimson}$	BBHY	0.531	0.257	-0.05	0.95	1.187	0.914	1.148	0.0005
		(3.00)	(2.91)	(0.16)	(3.72)	(2.22)	(2.21)	(4.02)	
$\Sigma\beta_{Dimson}$	SPX	0.198	0.2	0.455	0.109	0.601	0.199	-0.255	0.0002
		(2.15)	(4.36)	(3.08)	(0.85)	(2.38)	(0.82)	(1.25)	
R^2		65%	79%	33%	65%	53%	49%	45%	

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Research Finding III: Why Firms Borrow Directly From Non-Banks

Bank Substitution

Chernenko, S., Erel, I., Prilmeier, R., 2022. Why Do Firms Borrow Directly from Nonbanks? *Review of Financial Studies* 35, 4902-4947.

Loumioti, Maria, Direct Lending: The Determinants, Characteristics and Performance of Direct Loans (May 30, 2022). Available at SSRN: <https://ssrn.com/abstract=3450841> or <http://dx.doi.org/10.2139/ssrn.3450841>

Public Market Substitution

Schlinemann, F.P., Stulz, R.M., 2022. Have exchange-listed firms become less important for the economy? *Journal of Financial Economics* 143, 927-958.

Doidge, C., Karolyi, G.A., Stulz, R.M., 2017. The U.S. listing gap. *Journal of Financial Economics* 123, 464-487.

Ewens, M., Farre-Mensa, J., 2022. Private or Public Equity? The Evolving Entrepreneurial Finance Landscape. *Annual Review of Financial Economics* 14, 271-293.

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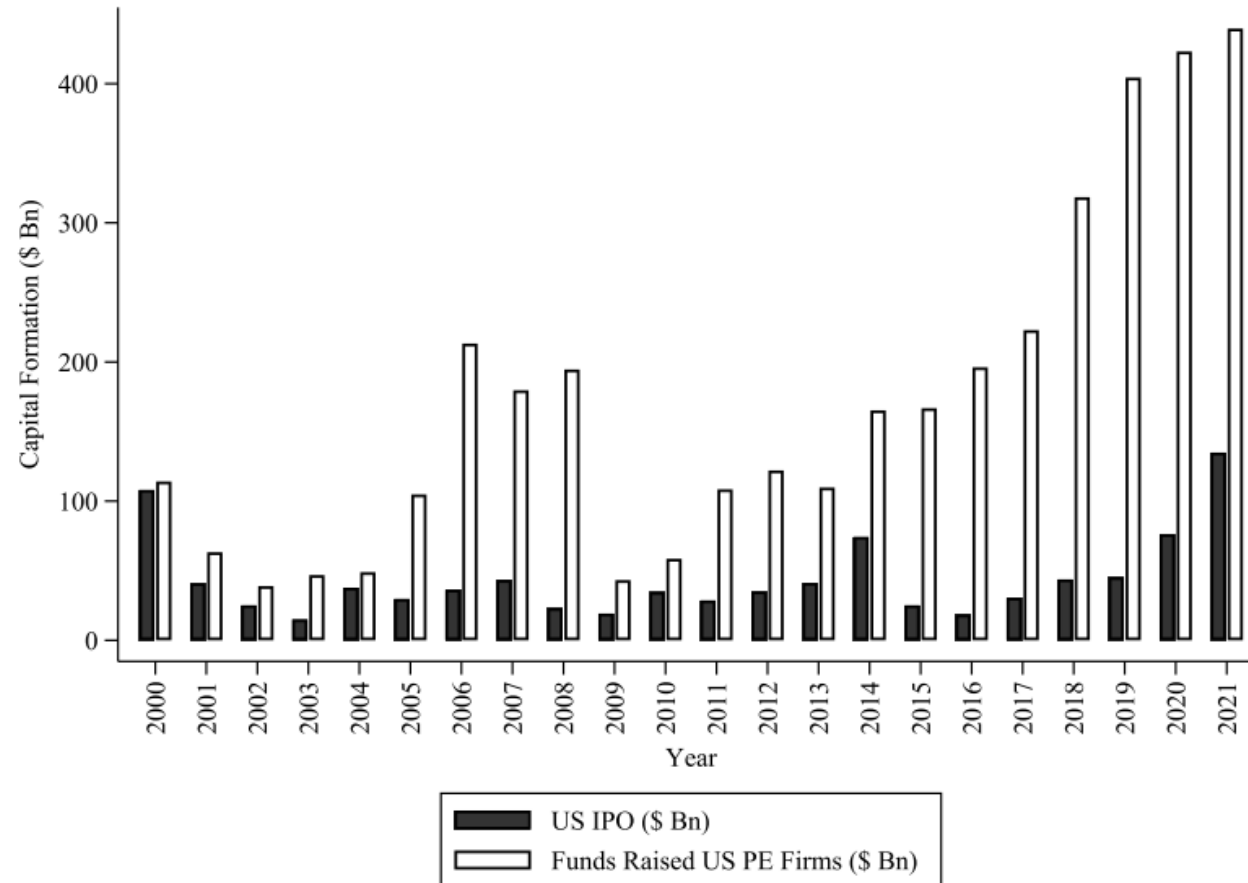
Credit Space Expansion (Capital Solutions)

Chernenko, S., Erel, I., Prilmeier, R., 2022. Why Do Firms Borrow Directly from Nonbanks? *Review of Financial Studies* 35, 4902-4947.

Loumioti, Maria, Direct Lending: The Determinants, Characteristics and Performance of Direct Loans (May 30, 2022). Available at SSRN: <https://ssrn.com/abstract=3450841> or <http://dx.doi.org/10.2139/ssrn.3450841>

Research Finding III: Why Firms Borrow Directly From Non-Banks

Figure 1: US Initial Public Offerings vs. PE Funds Raised.



Abraham, Jefferson Kaduvinal, Olbert, Marcel and Vasvari, Florin P., ESG Disclosures in the Private Equity Industry (November 1, 2022). Available at SSRN: <https://ssrn.com/abstract=4265171> or <http://dx.doi.org/10.2139/ssrn.4265171>

Research Finding III: Determinants, Characteristics and Performance of Direct Loans

- I Corporate loans originated by nonbank institutional investors without banks' intermediation.
- II DL activity increases when commercial **banks face greater regulatory pressure**.
- III DL activity increases during **periods of weak bank loan and securitized debt issuance**.
- IV Particularly active in geographic **regions that experience more bank mergers**.
- V Focus on **informationally opaque borrowers** with limited credit history and few financing alternatives.
- VI Higher interest rate, more flexible covenant structures and are more likely to be secured by borrower's capital stock compared to institutional loans issued by banks.
- VII Similar or somewhat **better post-issuance performance compared to bank-originated institutional loans**.
- VIII Direct lending **expanded the credit space** without giving rise to adverse selection costs.

Loumioti, Maria, Direct Lending: The Determinants, Characteristics and Performance of Direct Loans (May 30, 2022). Available at SSRN: <https://ssrn.com/abstract=3450841> or <http://dx.doi.org/10.2139/ssrn.3450841>

Research Finding III: Why Firms Borrow Directly from Nonbanks

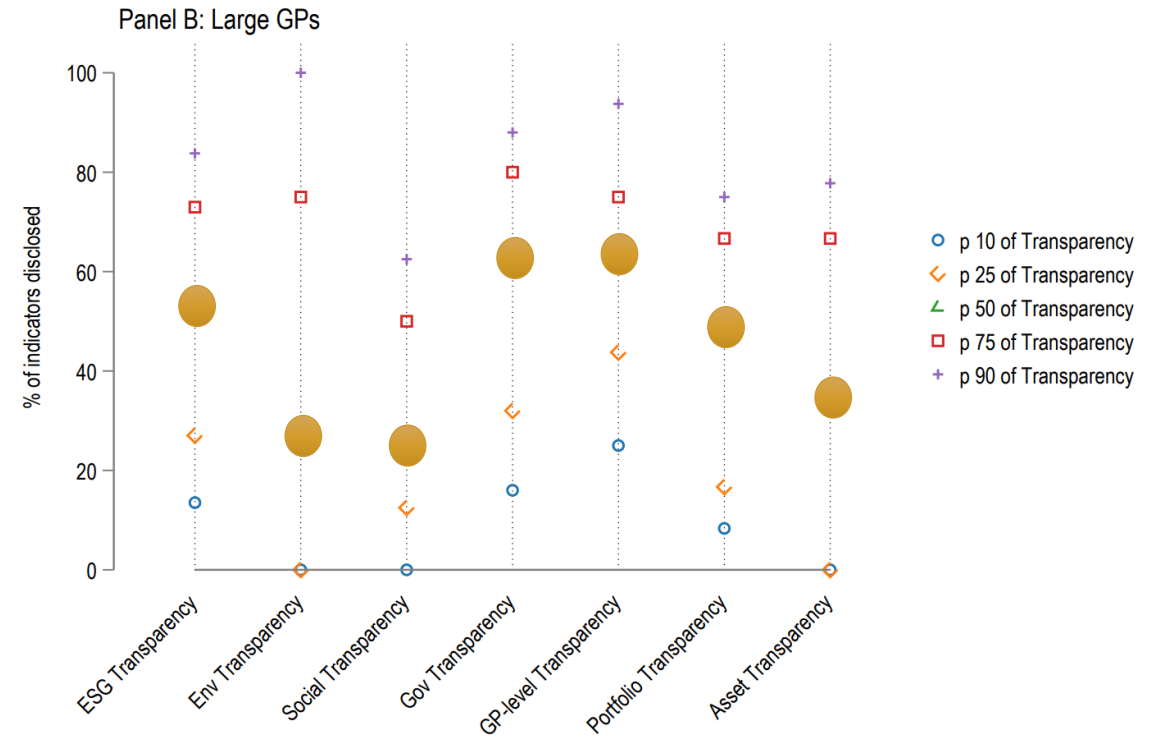
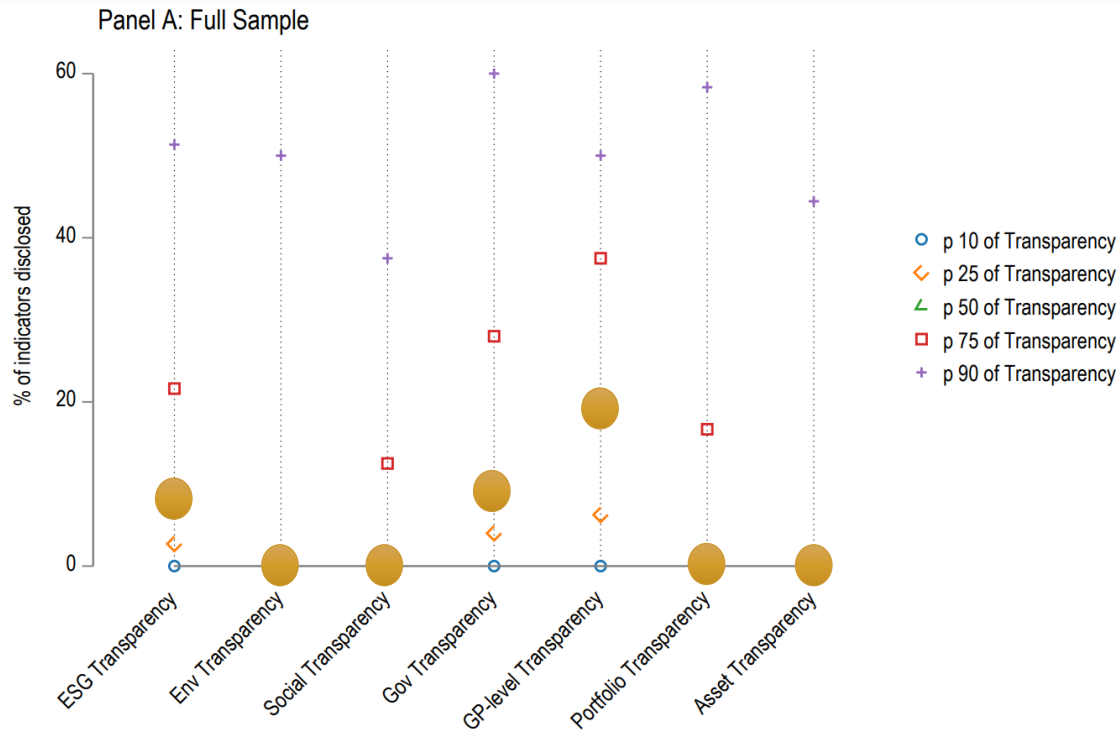
- I Analyzing hand-collected credit agreements for a sample of **middle-market firms** over 2010–2015
- II **One-third of all loans** are directly extended by nonbank financial intermediaries.
- III Two-thirds of such nonbank lending can be attributed to **bank regulations that constrain banks' ability to lend** to unprofitable and highly levered borrowers.
- IV Firms with **negative EBITDA and debt/EBITDA greater than six** are 32% and 15% more likely to borrow from nonbanks.
- V Firms pay significantly **higher interest rates**, especially following the 2013 leveraged loan guidance revisions.
- VI Nonbank borrowers also receive **different nonprice terms** compared to firms borrowing from banks.

Chernenko, S., Erel, I., Prilmeier, R., 2022. Why Do Firms Borrow Directly from Nonbanks? Review of Financial Studies 35, 4902-4947.

An 8-minute introduction...

- I Private Markets: Size and Expected Growth**
- II Research Finding I: Performance in terms of IRR, Multiples & PME**
- III Research Finding II: Performance in terms of Alpha**
- IV Research Finding III: Why Firms Borrow Directly from Nonbanks**
- V Research Finding IV: ESG of Private Market Funds**
- VI Research Finding V: The Bank Lending Channel and Private Market Growth**

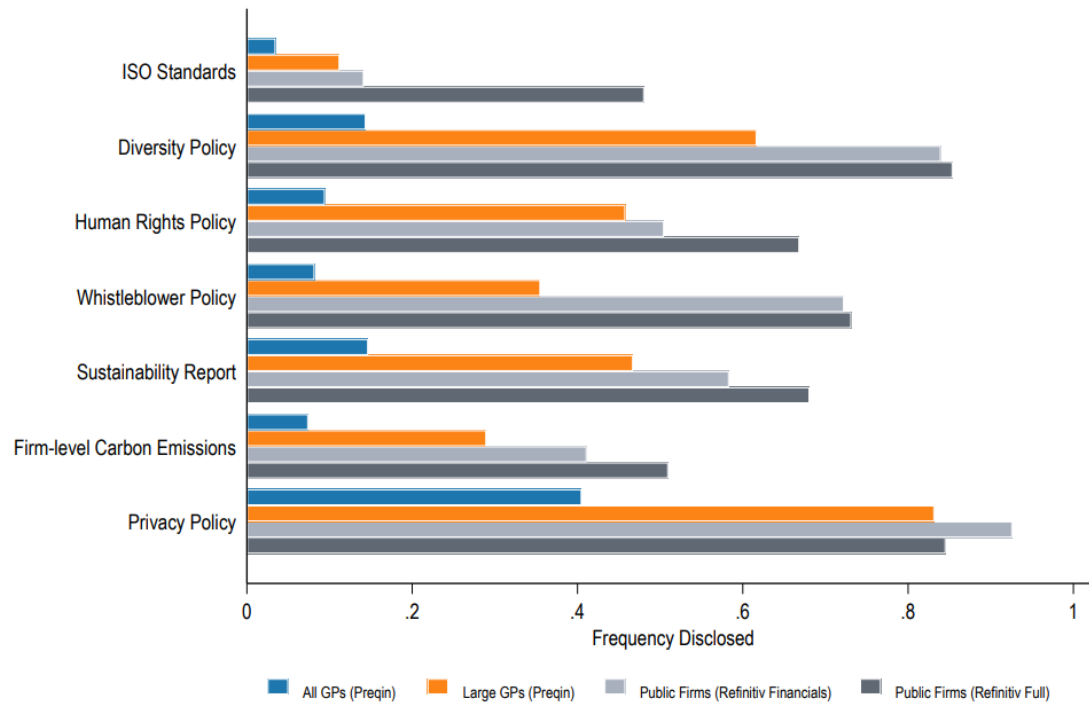
Research Finding VI: ESG of Private Market Funds



Research Finding VI: ESG of Private Market Funds

Figure 2: Comparison ESG Disclosure Public and Private Markets

Figure 2 represents the frequency of disclosure of several ESG indicators for our 4150 sample GPs, for the largest GPs in our sample that together represent 50% of total funds raised (N = 107), for financial firms in the FY2021 Refinitiv universe based on GICS Sector classifications, and for the full FY2021 Refinitiv universe excluding financials. The top bars represent disclosure frequency for our sample GPs, the second bars for large GPs, the third bars for Refinitiv financial firms, and the bottom bars for the full Refinitiv universe excluding financials.



Böni, Pascal and Hendrikse, Jurian and Joos, Philip, ESG Transparency of Private Equity and Debt Firms (November 30, 2022). Available at SSRN: <https://ssrn.com/abstract=4289573> or <http://dx.doi.org/10.2139/ssrn.4289573>

Abraham, Jefferson Kaduvinal, Olbert, Marcel and Vasvari, Florin P., ESG Disclosures in the Private Equity Industry (November 1, 2022). Available at SSRN: <https://ssrn.com/abstract=4265171> or <http://dx.doi.org/10.2139/ssrn.4265171>

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Research Finding VII: The Bank Lending Channel and Private Market Growth

Are Private Markets Driven by Yield Seeking (only)?
US Constant Maturity Treasury Yield



Research Finding VII: The Bank Lending Channel and Private Market Growth

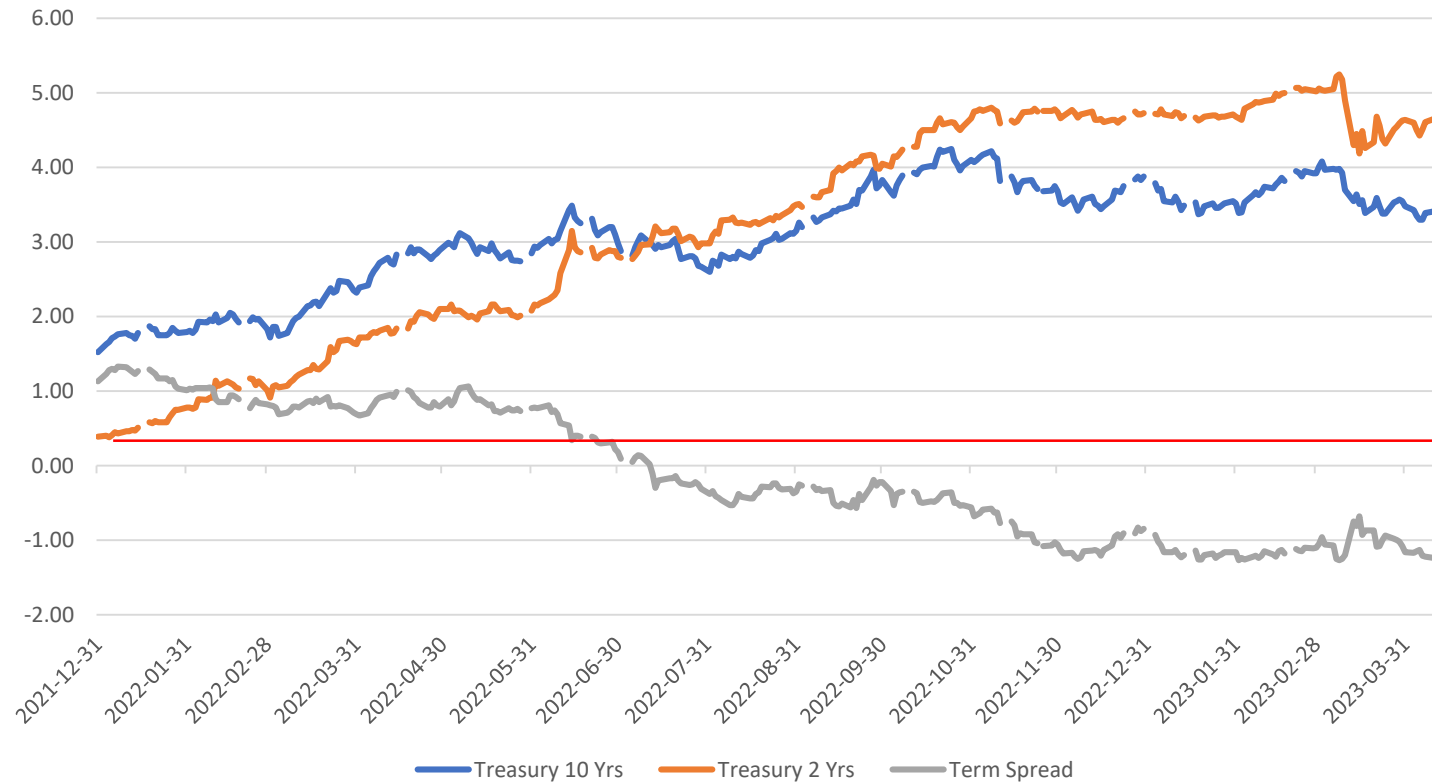
Table 1 Importance of Bank Debt

This table shows the mean proportions for seven types of debt for the 20 largest economies in the world according to the IMF (2021). The data are from Berger et al. (2021), who study capital structure of listed firms in 110 countries over 17 years from 2001 through 2018, covering 300,000 firm-year observations from nearly 60,000 corporations.

Country	Region	2021 GDP \$ trillion	Bank Debt			Bonds			Other Types of Debt			
			Term Loans	Credit Lines	Σ	Senior Bonds	Sub. Bonds	Σ	Leases	Comm. Paper	Other Debt	Σ
United States	Americas	22,68	31%	17%	48%	33%	5%	38%	6%	1%	8%	15%
China	Asia	16,64	82%	7%	89%	7%	0%	7%	2%	0%	2%	4%
Japan	Asia	5,38	75%	6%	81%	9%	0%	9%	8%	0%	2%	10%
Germany	Europe	4,32	62%	9%	71%	14%	1%	15%	7%	0%	7%	14%
United Kingdom	Europe	3,12	43%	26%	69%	16%	1%	17%	10%	0%	4%	14%
India	Asia	3,05	45%	28%	73%	4%	0%	4%	1%	1%	21%	23%
France	Europe	2,94	49%	14%	63%	15%	1%	16%	7%	1%	14%	22%
Italy	Europe	2,11	60%	12%	72%	12%	1%	13%	5%	0%	10%	15%
Canada	Americas	1,88	30%	24%	54%	27%	5%	32%	7%	0%	5%	12%
South Korea	Asia	1,81	35%	35%	70%	19%	0%	19%	1%	1%	9%	11%
Russia	Europe	1,71	58%	11%	69%	16%	1%	17%	4%	0%	10%	14%
Australia	Oceania	1,62	31%	31%	62%	15%	1%	16%	16%	0%	7%	23%
Brazil	Americas	1,49	53%	14%	67%	18%	2%	20%	1%	0%	11%	12%
Spain	Europe	1,46	63%	11%	74%	11%	1%	12%	3%	0%	11%	14%
Mexico	Americas	1,19	44%	8%	52%	35%	1%	36%	4%	0%	8%	12%
Indonesia	Asia	1,16	43%	34%	77%	13%	1%	14%	6%	0%	4%	10%
Netherlands	Europe	1,01	43%	23%	66%	18%	2%	20%	6%	1%	7%	14%
Switzerland	Europe	0,82	43%	12%	55%	28%	1%	29%	5%	1%	9%	15%
Saudi Arabia	Asia	0,80	65%	23%	88%	4%	2%	6%	2%	0%	3%	5%
Turkey	Asia	0,79	80%	4%	84%	3%	0%	3%	5%	0%	7%	12%
20 Largest Economies			52%	17%	69%	16%	1%	17%	5%	0%	8%	14%
Americas			40%	16%	55%	28%	3%	32%	5%	0%	8%	13%
Asia			61%	20%	80%	8%	0%	9%	4%	0%	7%	11%
Europe			56%	14%	69%	15%	1%	16%	6%	0%	9%	15%

Research Finding VII: The Bank Lending Channel and Private Market Growth

Or does a Bank's Willingness to Lend drive Private Markets?
Term Spread ~ a Bank's Net Interest Margin



Research Finding VII (PRELIMINARY): The Bank Lending Channel and Private Market Growth

Outside-in look:

Bank Margin
(Term spread_{10yr-6m})

Performance Chasing
(PM performance)

Yield Seeking
(Level of CMT₂)

Credit standards tightening
(Loan officers standards)

Risk compensation
(Credit spread)

$$y_t = \beta_0 + \beta_1 x_{t-2} + u_t$$

Data providers often use:

- NAV and dry powder estimation
- Takahashi-Alexander modelling
- Fundraising forecasts
- Inside out look...

Research Finding VII (PRELIMINARY): The Bank Lending Channel and Private Market Growth

Outside-in look:

Bank Margin
(Term spread_{10yr-6m})

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Credit standards tightening
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(Level of CMT₂)

Risk compensation
(Credit spread)

$$y_t = \beta_0 + \beta_1 x_{t-2} + u_t$$

Yield Seeking & PD: - 14 billion USD / quarter

«A treasury-yield increase by 1% does not affect capital commitments to PE, but reduces quarterly commitments to PD by 14 billion USD.»

Bank Margin & PD: - 22 billion USD / quarter

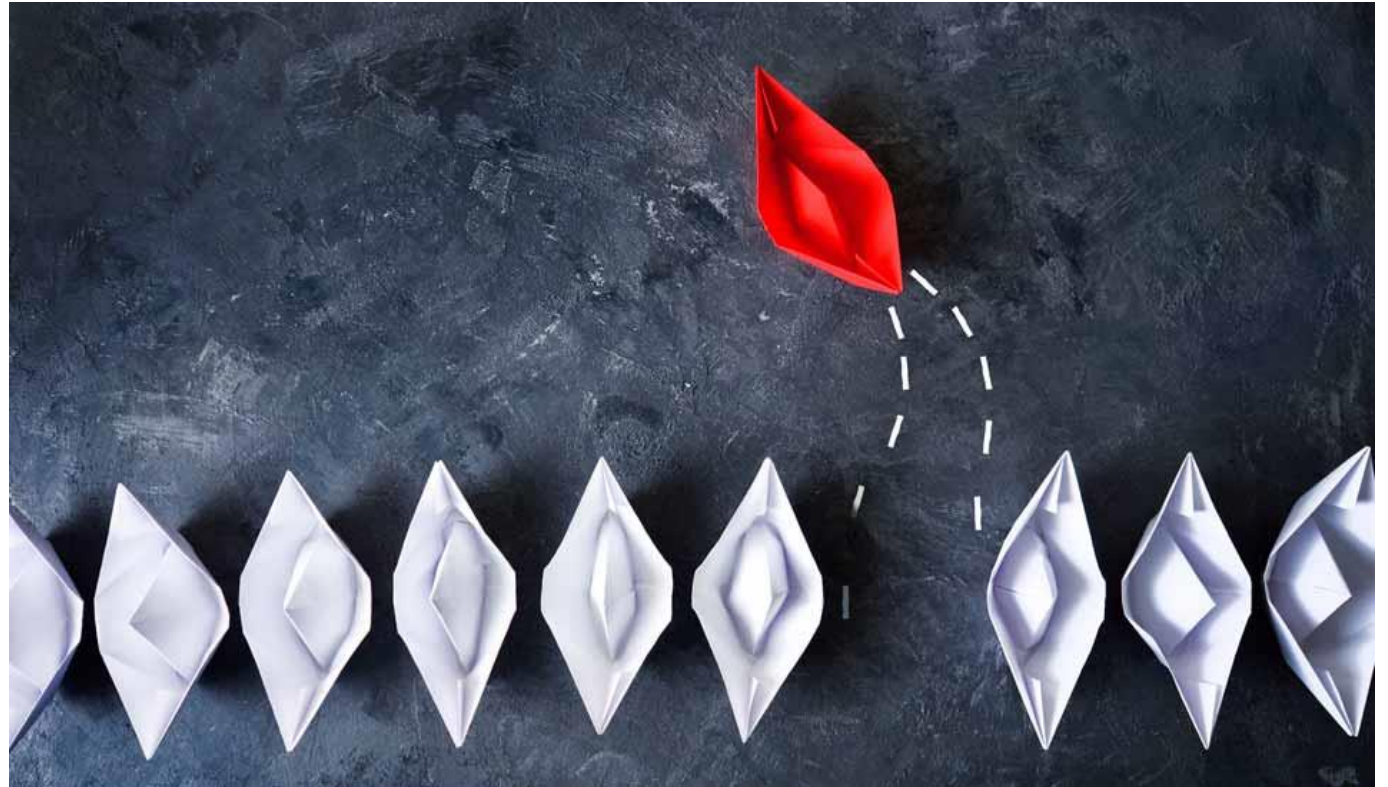
«A 1% increase of a bank's net interest margin reduces quarterly PE capital commitments by 57 billion US dollars and PD capital commitments by 22 billion USD. A bank's net interest margin thus importantly affects the flow of capital to private markets.»

Performance Chasing & PD: + 3.6 billion / quarter

«An increase of performance by 1% increases quarterly capital commitments to PE by an approximate 5 billion USD and to PD by an approximate 3.6 billion USD.»

What makes Private Debt special?

- I Renditesuchende Investoren
(Yield Seeking)
- II Bankenfinanzierung und –Regulierung
(Bank net interest margin)
- III Attraktivität & Bedeutung der “Public Company”
(Public market attractivity)
- IV Performance der Asset-Klasse
(Performance chasing)
- V “Specialness”





<https://www.tilburguniversity.edu/research/institutes-and-research-groups/tilburg-institute-private-debt>,
pascal.boeni@tilburguniversity.edu

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