Private Equity Insights

THIRTY-FOURTH EDITION | Q3 2024

CURRENT QUARTER PERFORMANCE SUMMARY

The State Street® Private Equity Index (SSPEI) recorded a robust 2.92% return in Q3 2024, marking the highest quarterly return since the Federal Reserve's rate hikes in Q1 2022. Buyout and Private Debt funds led with gains of 3.09% and 3.06%, respectively, improving from 1.47% and 2.18% in Q2. Venture Capital fund showed significant improvement, rebounding from negative territory of -0.07% in Q2 to achieve a 2.2% return in Q3 (see Exhibit 1).

Exhibit 1. Private Equity Performance by Strategy

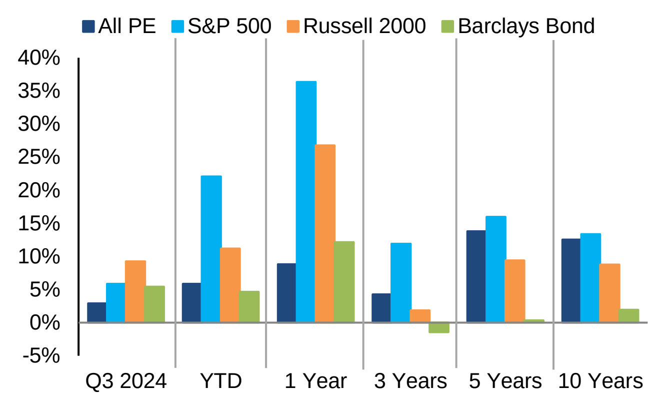
	All PE	Buyout	VC	Private Debt
2024 Q3	2.92%	3.09%	2.20%	3.06%
2024 Q2	1.26%	1.47%	-0.07%	2.18%
2024 Q1	1.46%	1.20%	2.07%	2.17%
YTD	5.85%	5.96%	4.14%	8.18%

Source: State Street Global Markets, as of Q3 2024.

Despite the performance improvements in Q3 2024, private equity still underperformed the public equity market and the US bond market. SSPEI lagged behind large-cap stocks across all horizons, with SSPEI underperforming the S&P 500, which posted a quarterly return of 5.9% and an impressive one-year return of 36.4% as of Q3 2024. SSPEI also lagged behind small-cap stocks over short-term horizons (quarterly to 1-year), proxied by Russell 2000, which had an 9.3% quarterly return, up from the -3.3% in Q2 2024. The US bond market (proxied by Bloomberg Barclays US Aggregated Bond Index) had a 5.5% quarterly return, also exceeding SSPEI in the Q3 2024 quarter (see Exhibit 2).

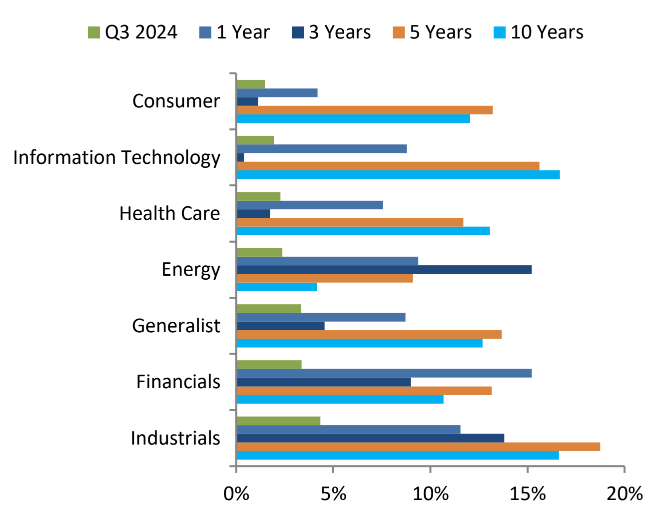
In Q3 2024, we saw a rebound of performance across sectors. Funds focusing on Industrials and Financial sectors were the top performers, delivering robust quarterly returns of 4.34% and 3.36% respectively. Despite being the strongest performer in the 10-year horizon, Information Technology funds reported a modest quarterly return of 1.94%. While this marked an improvement from Q2 2024, it still ranked as the second to last across all sectors. Healthcare sector rebounded with a positive quarterly return of 2.28%. Although Consumer sector was ranked at the bottom of the list, its quarterly return of 1.47% was surpassed its performance in Q2 2024 (see Exhibit 3).

Exhibit 2. Investment Horizon Returns



Source: State Street Global Markets, DataStream, Bloomberg Barclays US Aggregate Bond Index (total returns as of Q3 2024).

Exhibit 3. Performance of Sector Focused Funds



Source: State Street Global Markets, as of Q3 2024.

Continued on page 7.

VENTURE CAPITAL IN EMERGING MARKETS: GROWTH AND CHALLENGES

Insights from Harvard University and the Private Capital Research Institute

PCRI
The Private Capital Research Institute

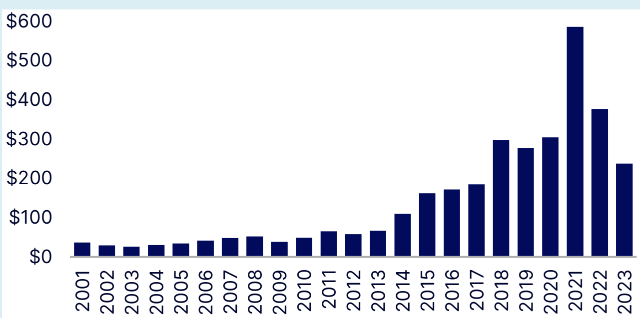
By Josh Lerner

Introduction – Long-term growth in EM VC

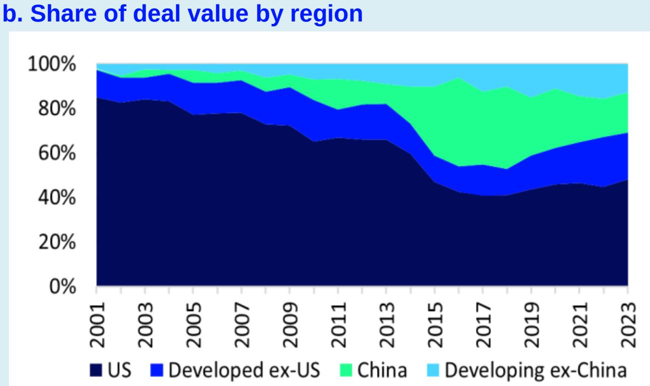
Venture capital (VC) investment in emerging markets (EMs) has surged in the twenty-first century. In 2001, U.S.-based companies represented 85% of global VC investment, with most of the remainder going to other developed countries. However, by 2018, EM-focused companies had surged to 47% of global VC investment, while the U.S. share declined to 41% (Figure 1b). Notably, U.S. investment levels overall increased during this period, but VC activity in EMs grew at an even quicker rate.

Figure 1: Global VC deal value, 2001 – 2023 [1]

a. Total deal value ($B)



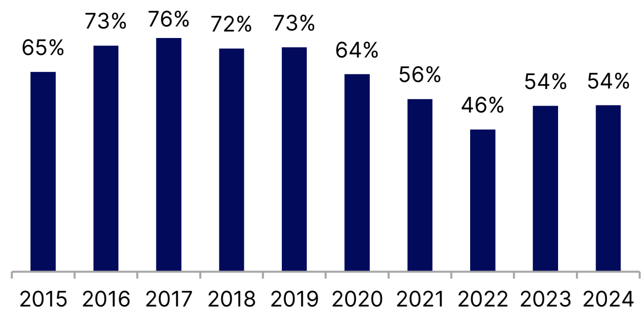
b. Share of deal value by region



Despite remarkable growth in the 2010s, the post-pandemic VC market has been sluggish in EMs.

Figure 1**b** indicates that developing countries have declined as a share of global VC deal value since 2018, in large part due to declining Chinese deal activity. Similarly, while fundraising has slowed across the industry, the decline has been most pronounced among developing countries. After peaking at 76% in 2017, the share of VC capital going to funds based outside North America declined to 54% in 2024 (**Figure 2**). This reflects a variety of macroeconomic and market factors, including global inflation and geopolitical conflicts.

Figure 2: Funds based outside of North America as a share of global VC capital raised, 2015 – 2024 [2]



Media commentary has captured the uncertainty around VC (and finance generally) in emerging markets, noting both the decline in investment and its crucial role in funding sustainable development.[3] In the face of this uncertainty, it can be useful to consider factors that have influenced both the previous growth and current challenges of VC in EMs. In particular, this essay examines four historical trends apparent from industry data and academic research: the mixed returns of EM funds; importance of the rule of law; potential opportunities among innovative, underserved sectors; and the growing influence of Chinese VC on EMs.

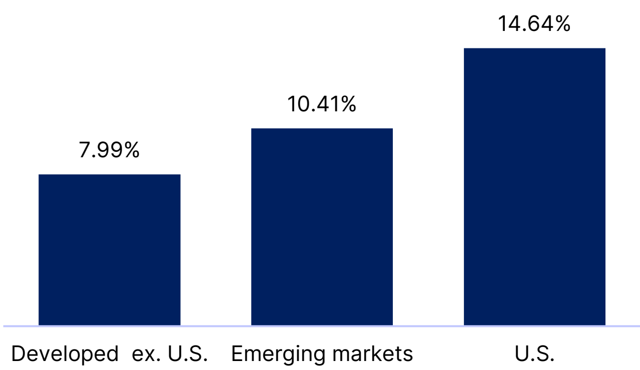
[1] Based on the methodology of Lerner et al. (2023), deal values come from completed deals categorized as "Early-Stage VC" or "Later-Stage VC" on PitchBook. All values are expressed in 2011 U.S. dollars, calculated using the implicit price deflator for Gross Domestic Product provided by the U.S. Bureau of Economic Analysis. Sources: Josh Lerner, Junxi Liu, Jacob Moscona, and David Y. Yang, "Appropriate Entrepreneurship? The Rise of Chinese and the Developing World," National Bureau of Economic Research Working Paper No. 32193, 2024; data from PitchBook (accessed on February 5, 2024); U.S. Bureau of Economic Analysis, "Table 1.1.9. Implicit Price Deflators for Gross Domestic Product" (accessed Tuesday, February 5, 2024).

2 "Q4 2024 PitchBook Global Venture First Look," PitchBook, January 6, 2025, https://pitchbook.com/news/reports/q4-2024-pitchbook-nvca-venture-monitor-first-look.
3 Lawrence Aragon and Iris Dorbian, "Emerging venture market sees sharp investment decline," Venture Capital Journal, January 8, 2025, https://www.venturecapitaljournal.com/emerging-venture-markets-see-sharp-investment-decline/; Indermit Gill, "For developing economies, the finance landscape has become a wasteland," World Bank Blogs, December 11, 2024, https://blogs.worldbank.org/en/voices/for-developing-economies-the-finance-landscape-has-become-a-wasteland.

Mixed returns of EM funds

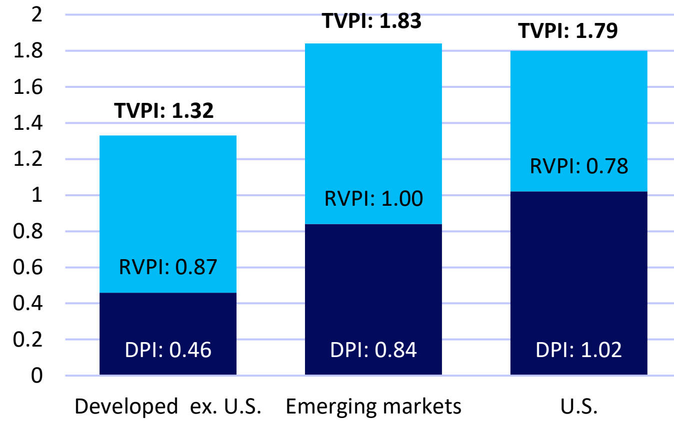
Compared to VC funds focused on the U.S., EM funds have generally exhibited relatively poor absolute returns. **Figure 3** uses State Street data to illustrate that on average, EM VC funds have underperformed U.S. funds as measured by internal rate of return (IRR). This return metric captures the time value of money, reflecting the fact that returns received today are more valuable than the same amount received in the future. Although EM funds have attained a lower IRR than U.S. funds, they have outperformed VC funds that target non-U.S. developed markets.

Figure 3: Since-inception IRR for VC funds by region, as of Q3 2024[4]



A more nuanced picture emerges when examining total value to paid-in (TVPI), which represents how many dollars of value a fund has generated for every dollar invested. This return can be decomposed into two constituent metrics: distributions to paid-in (DPI), or the portion of TVPI that GPs have actually distributed to LPs; and residual value to paid-in (RVPI), or the portion of TVPI attributable to the value of outstanding investments. **Figure 4** highlights that while EM funds have exhibited a slightly higher TVPI than U.S. funds on average, U.S. funds have distributed more value, with DPI comprising a larger share of TVPI. Both U.S. and EM funds have generally outperformed non-U.S. developed market funds on these measures.

Figure 4: Since-inception TVPI for VC funds by region, as of Q3 2024[5]



Despite underperforming U.S. VC funds when it comes to absolute returns, EM funds demonstrate more positive performance relative to public markets. The Kaplan-Schoar (KS) public market equivalent (PME) compares the returns of a VC fund against those that would have been generated from investing the same amounts, at the same times, in a public index instead. A KS-PME greater than one implies outperformance of the VC fund against the public index.

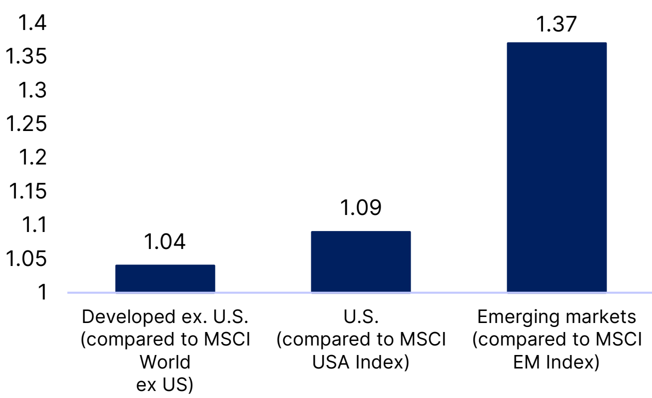
As shown in **Figure 5**, EM VC funds have generally outperformed their comparable public market index to a greater extent than U.S. and developed ex. U.S. funds have. This partly reflects the poor performance of the MSCI Emerging Markets index, which attained an annualized return of only 1.46% from 2020 to 2024 compared to 11% for the MSCI World index.[6] EM VC funds also achieved higher average returns than the MSCI World index with a PME of 1.09.

4 Developed ex. U.S. includes funds focused on the regions of Developed Europe, United Kingdom, Japan, Canada, Australia, and Global. Emerging markets includes funds focused on the regions of Africa, Emerging Europe, China, India, Asia, Middle East, Latin America, and Brazil. Source: State Street Global Markets, as of Q3 2024.

5 Developed ex. U.S. includes funds focused on the regions of Developed Europe, United Kingdom, Japan, Canada, Australia, and Global. Emerging markets includes funds focused on the regions of Africa, Emerging Europe, China, India, Asia, Middle East, Latin America, and Brazil. Source: State Street Global Markets, as of Q3 2024.

6 Annualized returns calculated from the MSCI Emerging Markets Net index and MSCI World Net index, accessed from Refinitiv on February 5, 2025.

Figure 5: KS-PMEs for VC funds by region as of Q3 2024 [7]



Taken together, these State Street data indicate that the performance of EM VC funds has been mixed. Despite outperforming funds based in non-U.S. developed countries, EM funds have achieved lower absolute returns than U.S. funds on average. However, EM funds have exhibited superior returns to public markets in these nations. Thus, these VC funds may serve as a way for investors to gain exposure to emerging economies outside of public markets. Next, we consider a few factors that may play a role in driving these EM returns.

Importance of rule of law

Differing legal environments can help explain differences in absolute returns between developing and developed countries – and even among developing countries. A large academic literature finds a correlation between financial development and aspects of a country's rule of law, such as legal enforcement and minority shareholder protections.[8] This is true for VC as well – at least historically, common law and superior legal enforcement are associated with higher valuations and returns.[9] General partners (GPs) who manage VC funds often exert influence through majority ownership and/or board representation to compensate for weaker legal systems among investments, but this approach is only a partial remedy.[10]

The rule of law plays a crucial role in fostering public markets, which, in turn, can boost a country's VC activity by providing reliable exit opportunities. Second-tier markets complement VC investing by allowing small market-cap entrepreneurial firms to publicly raise capital with lower listing requirements than primary exchanges.[11] However, while lower requirements make listing easier for younger firms, they also increase the risk that an entrepreneur may take advantage of public investors.

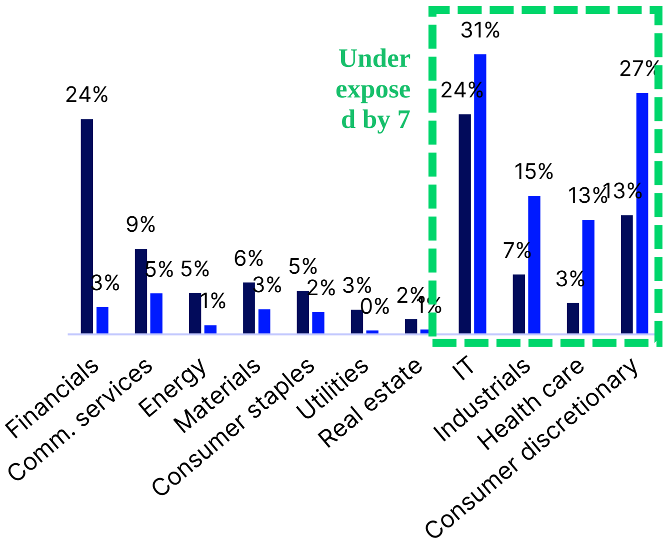
Bernstein, Dev, and Lerner (2020) finds that more robust legal institutions can mitigate this risk of investor expropriation. This study suggests that investors are more likely to provide capital to second-tier exchanges when the law better protects minority shareholder rights. In particular, exchanges in countries with stronger shareholder protections are more likely to remain active, have a higher volume of initial public offerings (IPOs) over time, and raise greater IPO proceeds.[12] These results underscore the importance of the rule of law in fostering an environment conducive to VC investment—and financial investment more broadly—in emerging markets.

Potential opportunities among innovative, underserved sectors

Beyond legal protections, investment opportunities in high-growth startups have likely played a role in increasing VC activity among EMs. While public markets can complement VC investment, private markets have generally focused on a different sector mix than public markets. **Figure 6** highlights that the sector composition of exited VC-backed EM companies has differed from that of EM public companies. In particular, the consumer discretionary, health care, industrials, and information technology (IT) sectors have been more prominent among VC-backed companies. This suggests that VC has capitalized on investment opportunities among rapidly growing sectors with limited access to public equity.

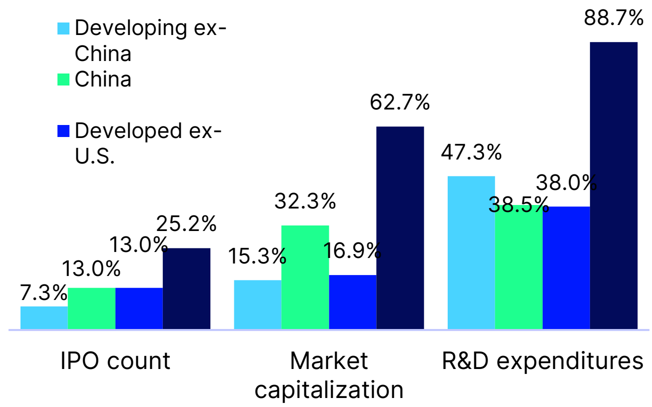
7 Developed ex. U.S. includes funds focused on the regions of Developed Europe, United Kingdom, Japan, Canada, Australia, and Global. Emerging markets includes funds focused on the regions of Africa, Emerging Europe, China, India, Asia, Middle East, Latin America, and Brazil. Source: State Street Global Markets, as of Q3 2024.
8 For a review of literature on this topic, please see: Thorsten Beck and Ross Levine, "Legal Institutions and Financial Development," in Handbook of New Institutional Economics, ed. Claude Ménard and Mary M. Shirley (Berlin: Springer, 2008), https://doi.org/10.1007/978-3-540-69305-5_12.
9 Josh Lerner and Antoinette Schoar, "Does Legal Enforcement Affect Financial Transactions?: The Contractual Channel in Private Equity," Quarterly Journal of Economics 120, 1 (February 2005): 223-246.
10 Ibid.
11 Shai Bernstein, Abhishek Dev, and Josh Lerner, "The Creation and Evolution of Entrepreneurial Public Markets," Journal of Financial Economics 136, 2 (May 2020): 307-329.
12 Ibid.

Figure 6: Sector weights of MSCI Emerging Market Index vs. share of VC-backed EM exit value (2015 – 2024) [13]



Likewise, EM firms originally backed by venture capitalists are highly innovative even when publicly listed, as shown in **Figure 7**. Although VC-backed companies made up only 7% of firms that went public in developing countries (excluding China) between 2003 and 2022, they represented 15% of total market capitalization and nearly 50% of R&D spending.[14] Likewise, VC-backed firms' innovations are highly influential, representing 31% of citation-weighted U.S. patents awarded between 2013 and 2022 to firms based in developing nations.[15] This further underscores the potential for VCs to target innovative, high-growth EM companies and achieve outsized returns.

Figure 7: VC-backed firms as a share of publicly traded firms that went public between 2003 and 2022 [16]



Growing influence of Chinese VC on EM

As VCs have backed high-growth firms in underserved sectors across EMs, a key question remains: how do startups and VCs identify these compelling opportunities? A recent study suggests that Chinese entrepreneurship has played a crucial role in this regard.[17] Its findings indicate that China's rise as a global hub of innovation has boosted VC in EMs more generally by demonstrating which sectors are most "appropriate" for entrepreneurship in developing countries.

Investors often rely on "pattern recognition," backing startups that parallel earlier, successful businesses. However, VC has historically been concentrated in the U.S., financing technologies poorly suited – or "inappropriate" – for developing economies and potentially limiting VC activity in EMs. Starting in 2013, China's emergence provided an alternative model, diffusing innovation that may be more "appropriate" for EMs. For example, online education startups historically struggled in the U.S. – likely due to high-quality, accessible public education – but proved popular in China and later India.

Lerner et al. (2024) indicates that growth in EM entrepreneurship from 2000 to 2019 was driven by country-sector pairs most "similar" to China along a variety of social

13 For the sector weights of the MSCI Emerging Markets Index, we referenced its index factsheet. For sector composition of VC-backed EM exits, we pulled data on VC-backed EM exit values from Pitchbook, accessed February 5, 2025. We restricted these data to only encompass countries included in the MSCI EM Index. These data reflect completed VC-backed exits that occurred between 2015 and 2024, and each company is assigned to its primary industry only. To ensure comparability, we mapped PitchBook industries to align with the Global Industry Classification Standard (GICS) standard used by the MSCI EM index. Source: "MSCI Emerging Markets Index (USD) Index Factsheet," MSCI Inc., referenced February 5, 2024, https://www.msci.com/documents/10199/c0db0a48-01f2-4ba9-ad01-226fd5678111.

14 Josh Lerner, Junxi Liu, Jacob Moscona, and David Y. Yang, "Appropriate Entrepreneurship? The Rise of Chinese and the Developing World," National Bureau of Economic Research Working Paper No. 32193, 2024.

15 Academic research commonly uses the frequency of a patent's citations by other patents as a proxy for its quality. See, for instance, Bronwyn H. Hall, Adam Jaffe, and Manuel Trajtenberg, "Market Value and Patent Citations," The RAND Journal of Economics 36, 1 (2005): 16–38, http://www.jstor.org/stable/1593752.

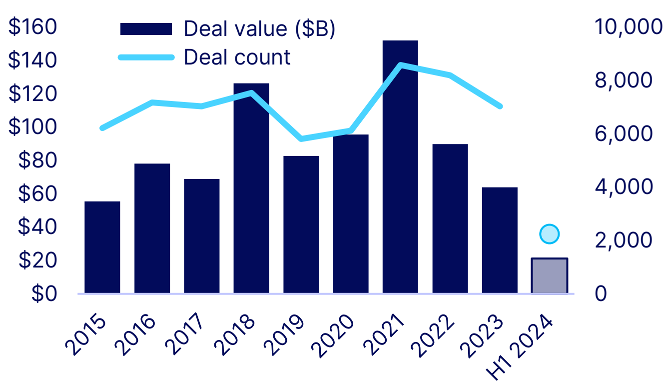
16 Josh Lerner, Junxi Liu, Jacob Moscona, and David Y. Yang, "Appropriate Entrepreneurship? The Rise of Chinese and the Developing World," National Bureau of Economic Research Working Paper No. 32193, 2024.

17 Ibid.

and economic indicators (in other words, higher "suitability").[18] Aggregating estimates across all country-sector pairs, the study finds that the surge in Chinese VC starting in 2013 increased EM VC activity outside of China by 42%.[19] Greater VC investment largely came from local investors in each developing country rather than from outside (or Chinese) investors. Moreover, while VC deal activity in China-led sectors surged for developing countries, developed countries experienced no such increase. This suggests that the innovative sectors targeted by China were "appropriate" for developing – but not developed – countries.

Despite this boost in investment activity, concerns linger around whether "mirroring" China's entrepreneurship is a sustainable strategy for VC in EMs. Following significant growth in the 2010s, Chinese VC activity has declined and remained muted since 2021 (**Figure 8**). This reflects a variety of factors, including regulatory uncertainty and increasing geopolitical tension between the U.S. and China.

Figure 8: Greater China VC deal activity, 2015 – H1 2024[20]



Notably, foreign participation in Chinese VC has steadily decreased. Only 12% of total Chinese VC deal values had non-Chinese investors involved in 2023, versus the 2018 peak of over half.[21] Excitement surrounding AI firm DeepSeek could signal a revival of Chinese innovation, but VCs in other EMs may no longer be able to rely on "following the lead" of Chinese VC.

Regardless of China's declining VC activity, cross-pollination between countries has continued and is likely to persist. Recently founded startups have continued to adapt models and ideas popularized in other regions. For example, Saudi Arabia-based Buildnow, which raised a $9.4 million seed round in March 2024, adapts the buy-now-pay-later model popular in India, offering credit terms for construction and manufacturing firms to buy raw materials.[22] HairOriginals, an Indian startup that raised a $5 million Series A round in February 2025, produces hair extensions and wigs from hair sourced in India, tapping into a business model dominated largely by Chinese firms.[23] Philippines-based CloudEats adapts the "cloud kitchen" model popularized in the U.S., China, and India to a Southeast Asian context.[24] In some cases, VCs have even funded US-based firms in sub-industries pioneered by EMs, such as AI-powered edtech.[25] Even without one major hub for "appropriate" entrepreneurship, it seems likely that VC activity in EMs will continue to draw inspiration from – and, in turn, inspire – innovation across borders.

Conclusion

Opportunities persist for VC in EMs, despite short-term struggles. Looking beyond the recent slowdown in activity, many factors that have driven the growth in EM VC remain relevant. EM funds have achieved respectable returns relative to public markets and high-growth sectors are likely underrepresented among EM firms in public markets. In the face of macroeconomic challenges, highly innovative EM companies will likely continue to attract investment. Even as Chinese VC remains muted, startups and VCs around the world have continued to adopt and adapt successful ideas from other countries to fit their local contexts.

18 Specifically, this paper uses social and economic indicators from the World Bank's World Development Indicators (WDI) database to measure "suitability" of Chinese entrepreneurship. The authors compile country-level indicators, link each to one or more sectors on PitchBook, and construct a measure of similarity to China for all country-sector pairs. On average, the study finds that China is 0.565 standard deviations more similar to developing countries than the U.S.
19 Lerner, Liu, Moscona, and Y. Yang, "Appropriate Entrepreneurship?"
20 Ibid.
21 "Greater China Private Capital Breakdown," Pitchbook, September 16, 2024, https://pitchbook.com/news/reports/2024-greater-china-private-capital-breakdown.
22"Saudi proptech startup Buildnow bags $9.4M in seed funding," Your Story Gulf Edition, March 7, 2024, https://yourstory.com/ys-gulf/saudi-arabia-proptech-startup-buildnow-bags-94m-in-seed-funding.
23 Vivek Vishwakarma, "Shark Tank India-featured Hair Originals raises $5 million in funding," Indian Startup News, February 5, 2025, https://indianstartupnews.com/funding/shark-tank-india-featured-hair-originals-raises-usd-5-million-in-funding-8692487
24 Kate Park, "Cloud kitchen startup CloudEats raises more capital to ramp up Southeast Asian expansion," TechCrunch, September 22, 2024, https://techcrunch.com/2022/09/22/cloud-kitchen-startup-cloudeats-raises-more-capital-to-fuel-its-southeast-asia-expansion/.
25 Devin Coldewey, "Amira Learning raises $11M to put its AI-powered literacy tutor in post-COVID classrooms," April 13, 2021, https://techcrunch.com/2021/04/14/amira-learning-raises-11m-to-put-its-ai-powered-literacy-tutor-in-post-covid-classrooms/.

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The Private Capital Research Institute is a not-for-profit 501(c)(3) corporation formed to further the understanding of private capital and its global economic impact through a commitment to the ongoing development of a comprehensive database of private capital fund and transaction-level activity supplied by industry participants. The PCRI, which grew out of a multi-year research initiative with the World Economic Forum, also sponsors policy forums.

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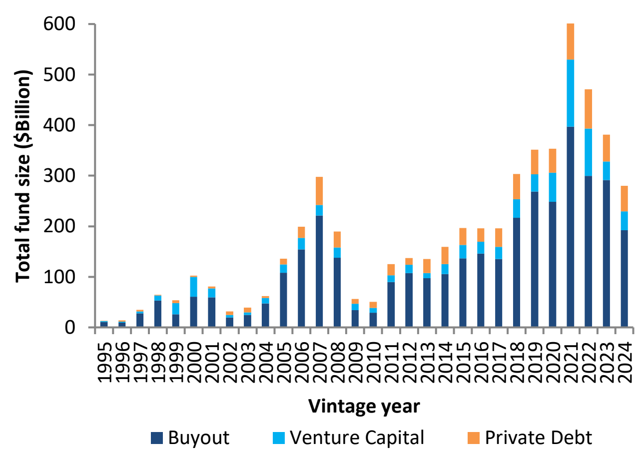
Fundraising

Total capital raised in the first three quarters of 2024 reached $280 billion. Based on this trend, a linear projection estimates that total fundraising for 2024 will amount to $374 billion, slightly below the $381 billion recorded in 2023. The largest drop came from Buyout funds which was only at $192.1 billion. Buyout funds lost its fundraising momentum and only raised $34 billion in Q3 2024, significantly less than the 79 billion strong quarterly average we saw in the first half of 2024. Both Venture Capital and Private Debt fundraising activities were strong in Q3 2024, with Venture Capital funds raised $37.6 billion and Private Debt fund gathered $50.5 billion over the first three quarters. The amount Venture Capital raised is already higher than the amount raised in the whole year of 2023 and that of Private Debt corresponds to 95% of the total raised in 2023 (see Exhibit 4A). Regionally, Rest of World funds' activities remained strong, raising 34.3 billion, 94% of the total raised in 2023. US and Europe focused funds raised $190.7 and$ 55.3 billion respectively—amounting to 72% and 71% of the total raised in 2023 (see Exhibit 4B).

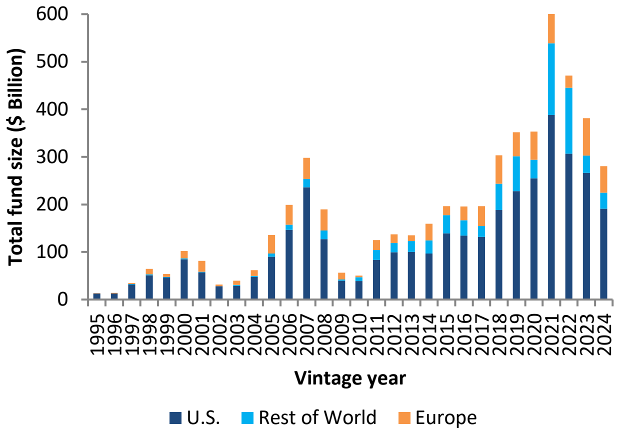
Exhibit 4. Total Fund Size (USD Billion)

A. By Strategy



Source: State Street Global Markets, as of Q3 2024.

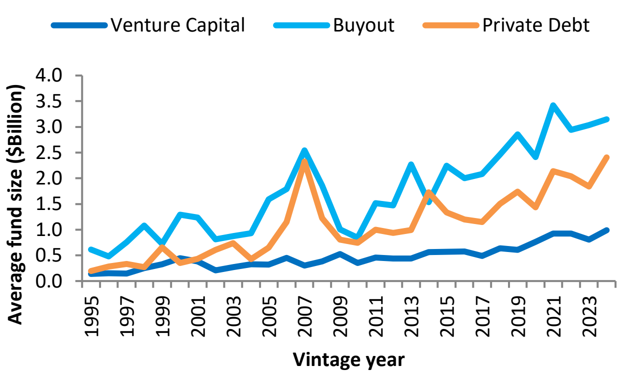
B. By Region



Source: State Street Global Markets, as of Q3 2024.

The average fund size in 2024 decreased by 10% in Q3 2024 versus that of Q2. Nevertheless, with $2.34 billion, it was still higher than the $2.2 billion we saw in 2023. The average fund size was higher than their equivalents in 2023 across all strategies. The average fund size for Buyout funds and Venture Capital funds were at $3.15 and $0.99 billion, 4% and 23% higher than that of 2023 respectively. The increase in average fund size for Private Debt funds was the most pronounced. With $2.41 billion, it was 31% higher than that of 2023 (see Exhibit 5). This indicates the strong fundraising activities we showed for the Private Debt strategy was driven by relatively large Private Debt funds.

Exhibit 5. Average Fund Size (USD Billion)



Source: State Street Global Markets, as of Q3 2024.

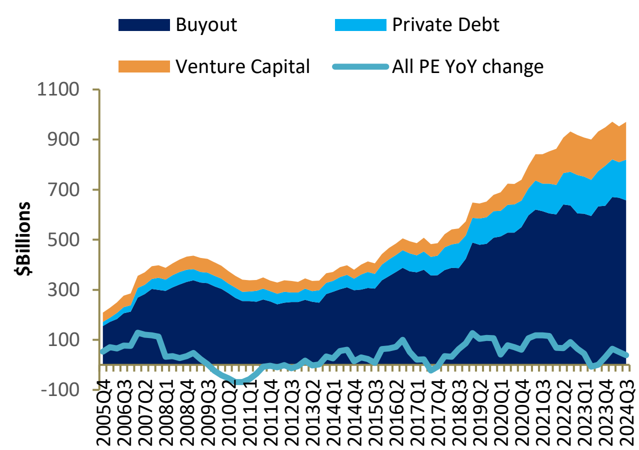
Dry Powder

Dry powder, or unfunded commitment, represents the amount of capital that has not been called, thus remaining available for future investment opportunities. In Q3 2024, the total dry powder of SSPEI constituent funds reached $971 billion, the same as its all-time high in Q1 2024. Specifically, the dry powder level for Buyout funds reported $658 billion which was lower than that of Q1 and Q2 2024 but higher than the quarterly average in 2023. Dry powder for Venture Capital funds increased to $150 billion from $142 billion in Q2 2024 but it was still lower than that of Q3 2023, Private Debt funds saw the most significant increase in dry powder, it reached $162 billion in Q3, the highest we have seen in Private Debt funds' history (see Exhibit 6A).

The quarterly dry powder normalized by the monthly average contribution of the past 12 months measures how long the current dry powder inventory can last at the recent average capital call rate without new fundraising activities. In Q3 2024, the dry powder inventory for all PE was 30.3 months. Buyout and Private Debt funds remained stable at around 29.8 and 29.2 months respectively. The increase in Venture Capital fund's dry powder inventory was the most significant. It was at 33.9 months, a 1.6 months increase comparing to Q2 2024 (see Exhibit 6B).

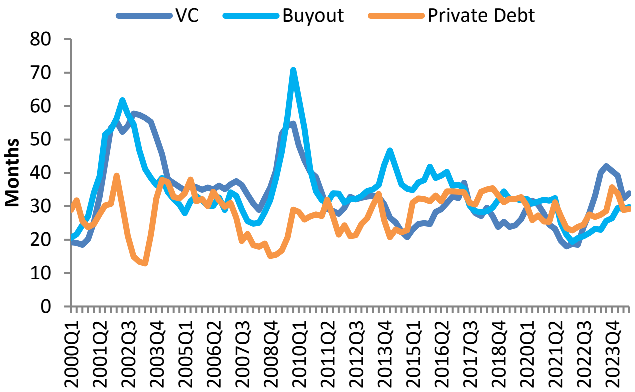
Exhibit 6. Dry Powder

A. Monthly Dry Powder



Source: State Street Global Markets, as of Q3 2024.

B. Quarterly Dry Powder Normalized by Average Contribution



Source: State Street Global Markets, as of Q3 2024.

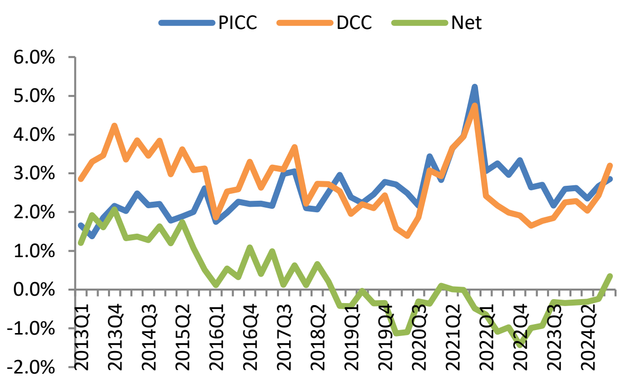
Cash Flow Activity

In Q4 2024, the quarterly distribution to committed capital (DCC) ratio increased to 3.2%, and the quarterly paid-in over committed capital (PICC) ratio increased to 2.9%. This contributed to an improvement in net cash flow, which shifted from negative to a positive 0.34% (see Exhibit 7A).

Exhibit 7B provides a detailed examination of the net cash flow across different PE strategies. Buyout and Private Debt funds reported positive net cash flows of 0.3% and 1.33%, respectively. The net cash flow for Venture Capital funds remained negative at -0.54%.

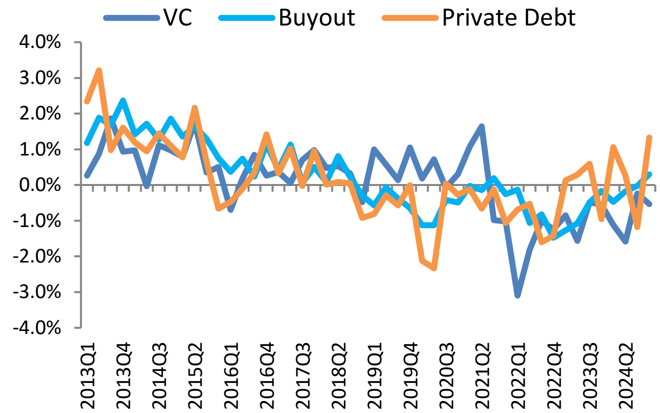
Exhibit 7. Quarterly Cash Flow Ratios Normalized by Commitment

A. Contribution and Distribution for All PE



Source: State Street Global Markets, as of Q3 2024.

B. Net Cash Flow to Committed Capital By Strategy



Source: State Street Global Markets, as of Q3 2024.

Valuations

The Dollar Value Added (DVA) is the sum of NAV changes and net cash flows. It measures the realized and unrealized gains and losses in dollar amounts.

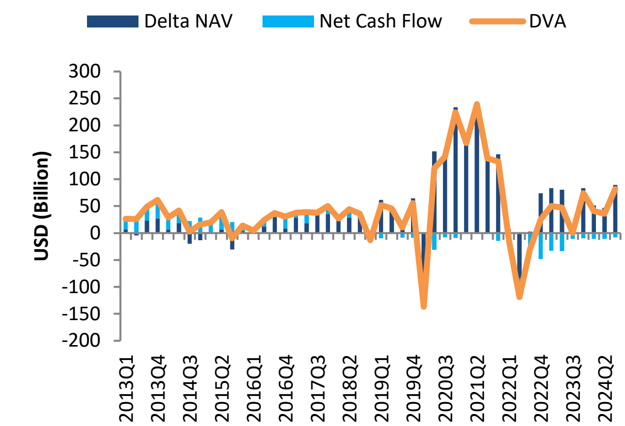
$$DVA = EndingNAV - BeginningNAV + Distribution - Contribution$$

The quarterly DVA as of Q3 2024 for all PE increased significantly, moving from $35.9 billion in Q2 to $81.4 billion. This increase was driven by quarterly increase of NAV and a less negative net cash flow (see Exhibit 8A).

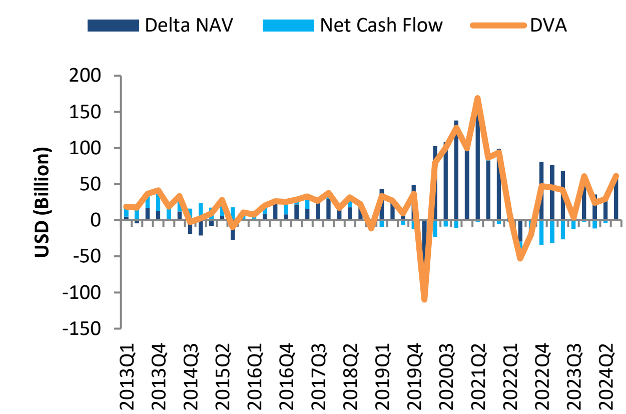
DVA for Buyout funds increased the most in Q3 2024. We saw a rise from $29.2 billion to $61 billion. The increase was mostly driven by NAV growth for Buyout funds and a slight increase in net cash flow. DVA for Venture Capital funds increased to $11 billion from -$0.44 billion in Q2 2024. Both net cash flow and NAV growth contributed to such increase, but most growth can be attributed to the increase in net cash flow. For Private Debt funds, despite it having the largest NAV increase since Q2 2020, DVA for Private Debt funds remained leveled at $8.9 billion due to drop in net cash flow. Private Debt funds' net cash flow decreased to -$7.3 billion in Q3 2024 from $1.7 billion in Q2, consistent with the strong fundraising activities and high levels of dry powder trend we saw in Q3 2024 (see Exhibit 8A, 8B, 8C, 8D, and 8E).

Exhibit 8. Dollar Value Added

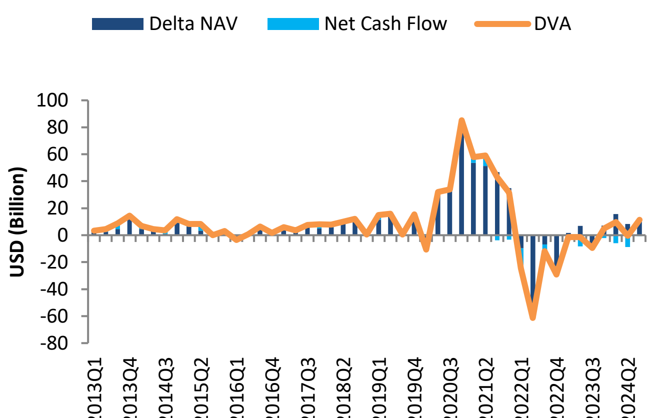
A. All PE



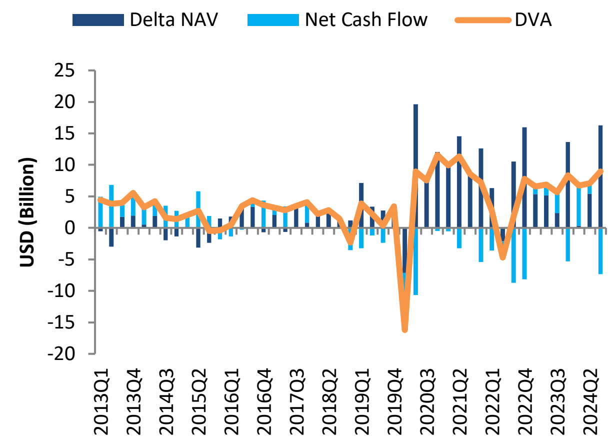
B. Buyout



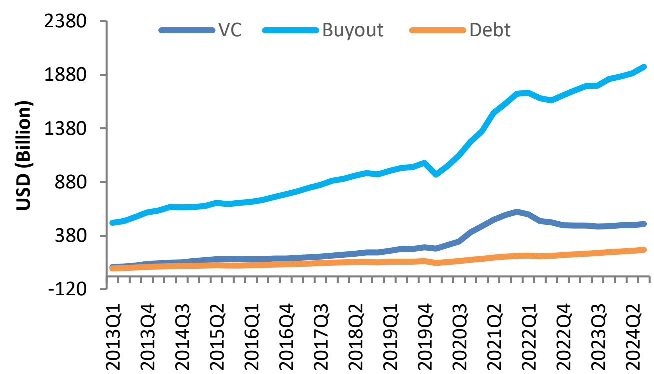
C. Venture Capital



D. Private Debt



E. NAV by VC, Buyout and Private Debt



Source: State Street Global Markets, as of Q3 2024.

Holdings Exposure

In SSPEI, sector focus is categorized at the fund level. While this classification offers insights into the overall fund strategy, classifications at the holding company level would provide finer granularity, allowing us to identify the exposures more precisely.

Exhibit 9A displays the NAV weights of GICS sector classifications of the portfolio companies in SSPEI constituent funds, based on State Street proprietary private holdings data, across strategies as of Q3 2024[26]. Information Technology sector had the highest share of holdings across all strategies. For Buyout funds, overall there was 30% NAV in Information Technology sector, followed by Health Care, Industrials and

[26] As of Feb 2025, the coverage of Q3 holdings data was 58% of the overall NAV in SSPEI.

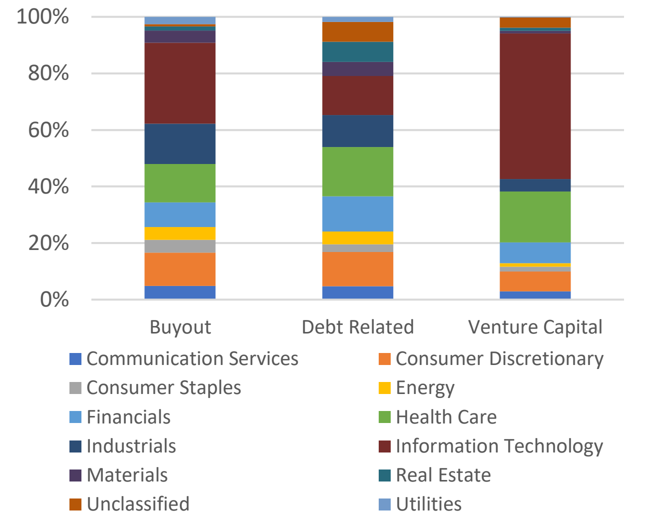
Consumer Discretionary with NAV weights of 14%, 13%, and 11% respectively. The NAV of Venture Capital had 49% concentrated in Information Technology which was slightly lower than that of Q2, followed by 19% of Health Care and around 9% of Financials sectors. Private Debt still stayed as the most diversified among strategies, with Information Technology and Financials as the top two sectors having largest NAV weights of 17% and 16% respectively, followed by Health Care sector of 15% weight.

For funds classified as Generalist in SSPEI, Information Technology consists of 21% of the NAV, followed by Health Care, Industrials and Consumer Discretionary, accounting for 17%, 15% and 13% respectively. These four sectors collectively represented 66% of the NAV within generalist funds (see Exhibit 9B).

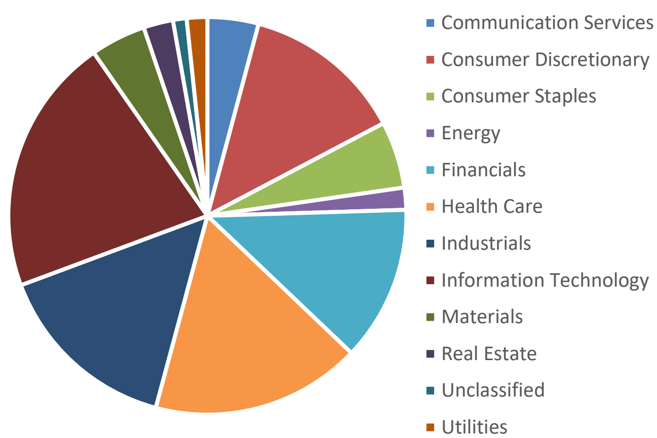
Exhibit 9C illustrates the percentage of holding companies whether their remaining NAV to remaining cost ratio increased, decreased, or remained stable from Q2 2024 to Q3 2024 across various sectors, excluding fully exited deals. The changes in the NAV-to-cost ratio serves as a key indicator of valuation changes, isolating the investment cost adjustments. In Q3 2024, most sectors saw more than 50% of investments increased in valuation. In contrast, Consumer Discretionary and Energy sectors were the only two where a larger proportion of investments experienced a decline in the valuation ratio rather than an increase.

Exhibit 9. Holdings Sector Exposure Measured by NAV

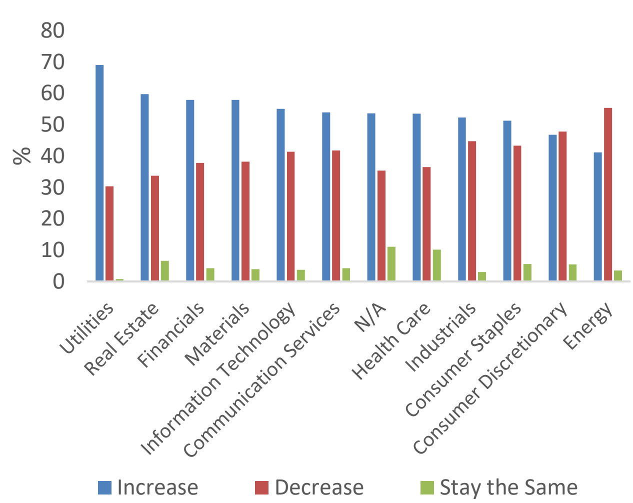
A. Sector Exposure by Strategies



B. Sector NAV weights for Generalist PE Funds



C. NAV/Remaining Cost Ratio from Q2 to Q3 2024



Source: State Street Global Markets, as of Q3 2024.

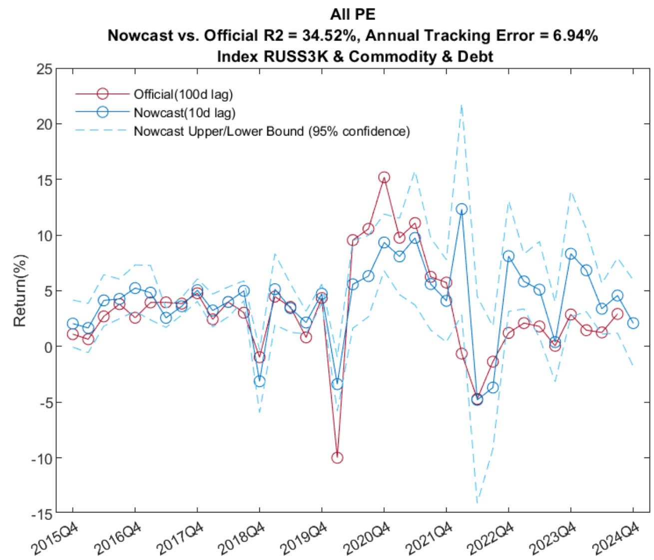
Nowcasting

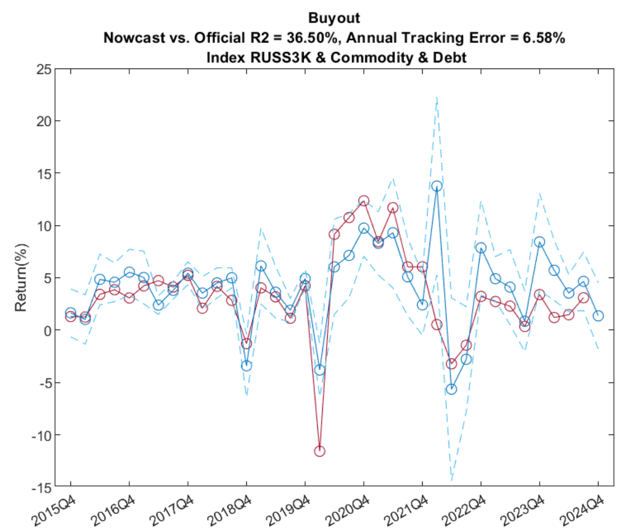
Inspired by the concept of nowcasting, SSPEI research team developed a model, aspiring to estimate the concurrent performance of private equity market, of which the reporting is otherwise delayed at least by one quarter. We hereby only share the model predictions for Q4 2024 without going into theoretical background. For model details, please refer to State Street Private Equity Insights Q3 2021 publication.[27] Nowcasting results are out-of-sample predictions based on the regression coefficients from the past 5 year rolling window and the observed public market returns and private market cash flows.

Reflecting on Q3 2024, the actual returns for All PE, Buyout, Venture Capital, and Private Debt were 2.92%, 3.09%, 2.20% and 3.06% respectively. These figures compared to the nowcasting model's predictions of 4.57%, 4.65%, 3.53% and 3.49%. Exhibit 10 indicates that the nowcasting model's predictions for all strategies were within their 95% confidence intervals. The model accurately projected the upward trend in quarterly performance for All PE, Buyout, and Private Debt, but it failed to capture the upward trend in VC funds.

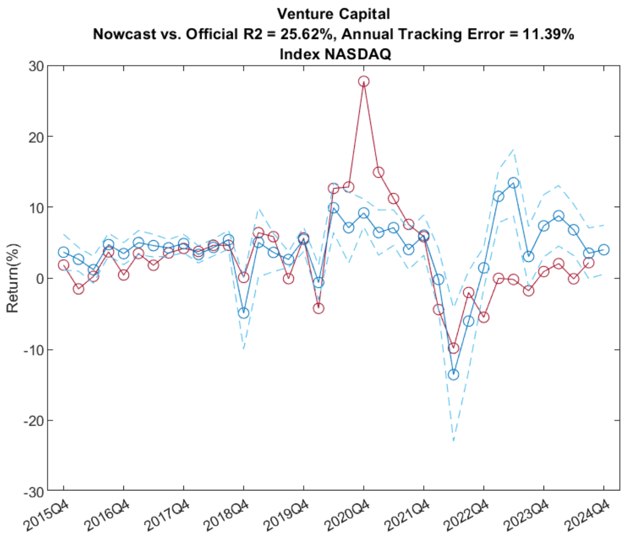
Looking ahead to Q4 2024, the nowcasting model anticipates a slowdown in the gains for All PE, Buyout and Private Debt, predicting quarterly returns of 2.10%, 1.36% and 2.50% respectively. This forecast is linked to weaker debt and equity market performance in Q4 2024, with the Bloomberg US Aggregated Index returning -3.20%, Bloomberg US Corporate High Yield Index marginally rising 0.18%, and the Russell 3000 Index returning 2.63% which is slower than 6.23% in Q3 2024. In contrast, the model expects an increase in Venture Capital return to 4.03%. This forecast correlates with strong return in the technology-heavy NASDAQ Composite Index, which recorded higher quarterly return from 2.76% in Q3 to 6.35% in Q4.

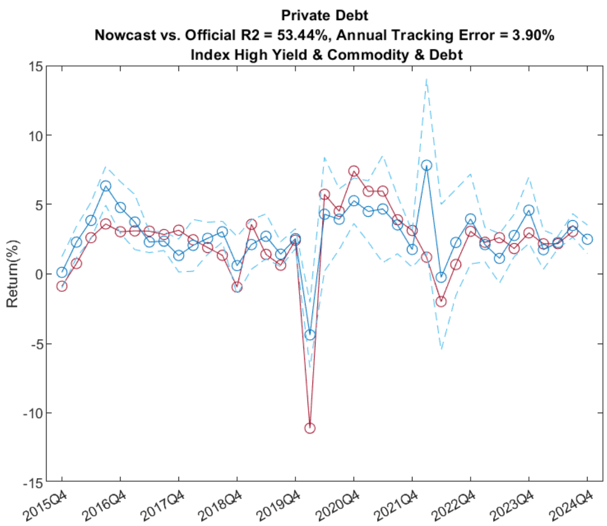
Exhibit 10. Actual vs. Out-of-sample Nowcast IRRs





[27] State Street Private Equity Insights Q3 2021
https://globalmarkets.statestreet.com/portal/peindex/ publications





Source: State Street Global Markets, as of Q3 2024.

DISCUSSION – FUND AND ASSET LEVEL FX EXPOSURES

Fund level FX exposure arises when a LP commits to a PE fund denominated in a foreign currency. The fund's cash flows and NAVs are directly impacted by exchange rate fluctuations as they get converted back into the LP's base currency. As of Q3 2024, 85% of SSPEI's total fund size is denominated in USD, 14% in EUR, and the remaining 1% in GBP, AUD, CAD, and other currencies. However, the fund denominated currency does not always capture the asset level FX exposure stemming from a PE fund's underlying holdings.

As shown in Exhibit 11A, U.S.-focused funds are almost exclusively denominated in USD (99.1% by fund size, same below); however, only 79% of Europe-focused funds are denominated in EUR, and despite their global allocations, 93% of Rest-of-World (ROW)-focused funds are denominated in USD. Exhibit 11B further highlights the disconnect between a fund's denominated currency and the FX exposure of its underlying assets – most funds, regardless of their denominated currency, hold a portion of foreign assets.

A deeper analysis at the portfolio company level further clarifies the FX exposure. Exhibit 12 illustrates the FX exposure of underlying assets held by regionally focused funds. U.S. focused funds hold ~16% of their NAV in non-U.S. assets, while Europe-focused funds have only 40% of their NAV in EUR-incorporated assets. ROW-focused funds exhibit the most diversified FX exposure across both emerging and developed markets. Notably, there has been a post-pandemic decline in China's share, accompanied by a complementary increase in the U.S.'s share with ROW funds, as discussed in the previous section.

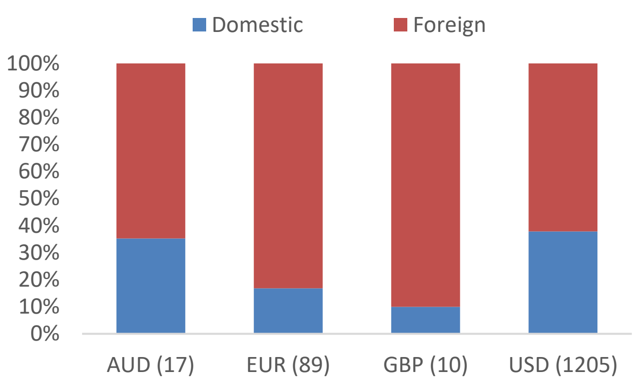
Analyzing FX exposure at the portfolio company level provides a more accurate and granular understanding of currency risk than simply relying on a fund's denominated currency or its regional-focus. This approach enables investors to uncover hidden FX exposures, better assess diversification benefits and make more informed hedging and allocation decisions. As global market dynamics evolve, leveraging detailed asset-level data becomes increasingly essential for optimizing portfolio performance and managing currency-related risks effectively.

Exhibit 11. Fund local currency exposure

A. Share of fund size by fund regional focus and denominated currency

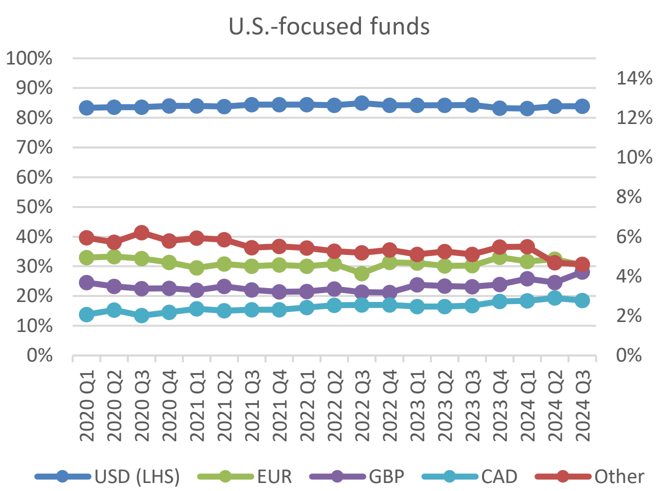
Regional focus	USD	EUR	GBP	Other
U.S.	99.1%	0.9%		
Europe	15.1%	78.6%	5.7%	0.5%
Rest of World	92.9%	4.7%		2.4%

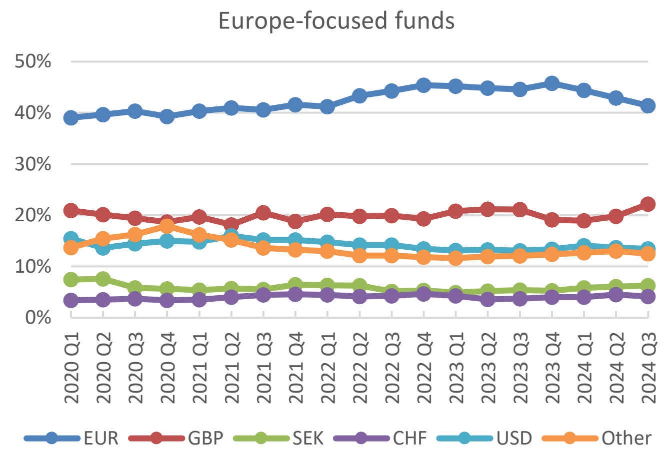
B. share of funds holding domestic assets only vs funds holding a portion of foreign assets

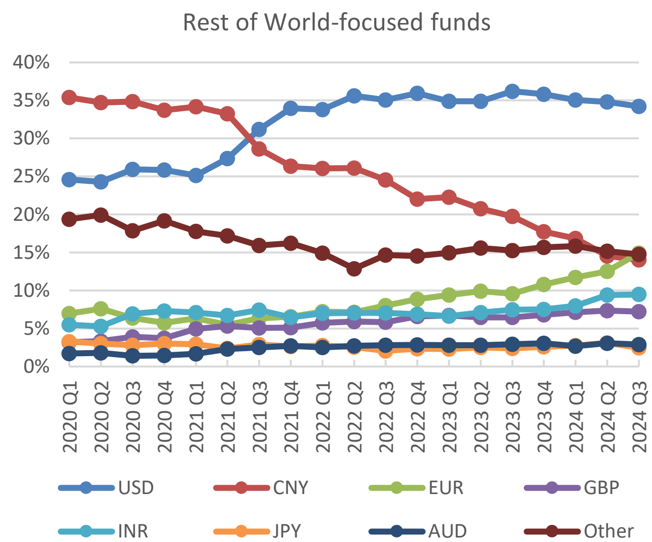


Source: State Street Global Markets, as of Q3 2024.

Exhibit 12. Portfolio company level FX exposures







Source: State Street Global Markets, as of Q3 2024.

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Participants in private capital markets need a reliable source of information for performance and analytics. Given the non-public nature of the private equity industry, collecting comprehensive and unbiased data for investment analysis can be difficult. The State Street Private Equity Index ("SSPEI") helps address the critical need for accurate and representative insight into private equity performance.

Derived from actual cash flow data of our Limited Partner clients who make commitments to private equity funds, SSPEI is based on one of the most detailed and accurate private equity data sets in the industry today. These cash flows received as part of our custodial and administrative service offerings are aggregated to produce quarterly Index results. Because the SSPEI does not depend on voluntary reporting of information, it is less exposed to biases common among other industry indexes. The result is an index that reflects reliable and consistent client data, and a product that provides analytical insight into an otherwise opaque asset class.

- Currently comprises more than 4,000 funds representing more than $5.4 trillion in capital commitments as of Q3 2024
- Global daily cash-flow data back to 1980.
- The Index has generated quarterly results since Q3 2004.
- Published approximately 100 days after quarter-end.

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