

Private Equity Insights

NINETEENTH EDITION | Q1 2020

CURRENT QUARTER PERFORMANCE SUMMARY

The State Street® Private Equity Index (SSPEI) posted a 10 percent decline in the first quarter of 2020, a significant decrease from the positive 4.35 percent return in Q4 2019, and the lowest quarterly return after the GFC. Buyout funds saw the largest contraction in performance among three strategies with a -11.57 percent return, followed by -11.10 percent return from Private Debt funds and -4.23 percent from Venture Capital funds. (See Exhibit 1).

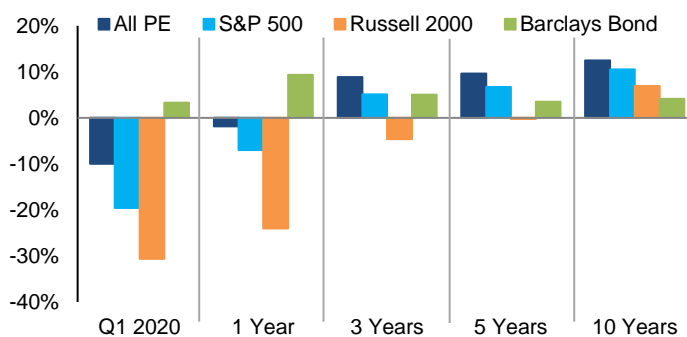
Exhibit 1. Private Equity Performance by Strategy

Column1	All PE	Buyout	VC	Private Debt
2020 Q1	-9.99%	-11.57%	-4.23%	-11.10%
2019 Q4	4.35%	4.24%	5.68%	2.43%
2019	14.22%	13.32%	20.43%	8.28%

Source: State Street®, as of Q1 2020.

As shown in Exhibit 2, SSPEI outperformed the US public equity market (proxied by S&P 500) and small-cap stocks (proxied by Russell 2000) over all horizons. SSPEI underperformed US debt market (proxied by Barclays US Aggregate Bond Index) over short-term (quarterly and 1-year), while it outperformed over mid to longer horizons.

Exhibit 2. Investment Horizon Returns



Source: State Street®, DataStream, Bloomberg Barclays US Aggregate Bond Index (total returns as of Q1 2020).

Continued on page 3.

SUBSCRIPTION LINES: THE GOOD, THE BAD, AND THE COVID

Insights from Harvard University and the Private Capital Research Institute

By Leslie Jeng and Josh Lerner



Subscription lines of credit (SLCs) have become a staple of the private equity (PE) industry. A recent study has shown that at least 47% PE funds¹ use these vehicles, and one estimate suggests that U.S.-based mid-market PE funds have access to \$300 billion in SLCs.² In light of the recent economic upheaval, it is reasonable to wonder what effect SLCs might have on the industry.

First, it is helpful to understand the role SLCs play in PE. In theory, they serve as a bridge loan. Typically, limited partners (LPs) will commit capital to a fund managed by a general partner (GP), but they do not write a check for the full amount. When GPs wish to invest in an asset, they must “call down” the capital from the LPs by sending a request that is generally fulfilled within 10 days. Upon receiving the funds from the LPs, the GP can close the deal.

SLCs streamline this process significantly. As the name suggests, they are lines of credit issued by a bank or a credit fund and secured by the LPs’ capital commitments. Upon finding a deal, GPs can use SLCs to close the transaction. LPs contribute their capital later, perhaps quarterly or even annually. Both parties benefit: the GPs can be more agile in

¹ “Preqin special report: Subscription credit facilities.” *Preqin*. (June 2019): 6.

² Aleali, Scott, and Jeff Maier. “The impact of COVID-19 on subscription lines of credit.” *First Republic: Banking for Innovators*, April 13, 2020. <https://www.firstrepublic.com/innovators/articles-insights/the-impact-of-covid-19-on-subscription-lines-of-credit>.

Continued on page 2.

response to fast-moving deals, and LPs can better forecast their capital infusions to the funds.

Both observers and academics, however, have pointed out some challenges stemming from the use of SLCs. A primary issue, they note, is the impact of deferred capital draw-downs on the timing of fund cash flows. Delaying the arrival of LP capital reduces the amount of time that it is deployed, therefore increasing the Internal Rate of Return (IRR) in a way that may give a misleading view of fund performance.

The two recent academic studies³ took different approaches but arrived at similar conclusions: SLCs do have an impact on net IRR. The extent varies with the characteristics of the vehicle, particularly the length of its term, but predominantly serves to inflate PE fund performance, as shown in *Exhibit 3*. SLCs with relatively short terms (less than six months) increased the average net IRR of a fund by a meagre 0.4 percentage points, but the impact could be as high as 4.3 percentage points for SLCs with longer lives and funds less than five years old. (In the extreme, an investment fund could call down its funds a day before it exited a transaction and end up with a nearly infinite IRR!) Almost half (44.4%) of the funds using SLCs moved up by at least *one decile* in performance.

The findings of these analyses are troubling. Literature shows that LPs base their investment decisions substantially upon the net IRR of a previous fund.⁴ In addition, new funds tend to be raised when the current fund is between three and five years old—exactly when SLCs increase net IRRs most dramatically. It is possible, then, that fund investment decisions may be made with distorted information.

Along with inflating performance to facilitate fundraising, SLCs can also affect the timing of GPs' collection of carried interest. For buyout funds, the payment of carried interest, the

20% share of profits intended to align GP interests with LPs', is contingent upon the fund's ability to achieve a hurdle rate, returning a certain amount (usually 8%) to the LPs. If SLCs speed the fund's arrival at the 8% hurdle, GPs then start receiving carry earlier than they would have otherwise.

Even more worrisome is the possibility that these lines may introduce added risk into the private equity world. As the founder of Oaktree Capital, Howard Marks, notes, if these lines are withdrawn by banks during a financial crisis, then investors are likely to receive a wave of demands for capital during precisely those periods when liquidity is tightest.⁵ These capital drawdowns would be not to fund new investments, but rather to replace bank debt in deals made quarters or years before—many of which are likely to be underwater.

Nor is Marks alone in his concerns. Particularly in the current uncertain environment, LPs are paying keen attention to their liquidity and anticipated cash flow, and wrestling with determining how much of their unfunded commitment has been deployed but financed through SLCs.⁶ A number of industry observers note that a declining economy might affect portfolio valuations to the point that a fund breaches its SLC's covenants, requiring capital calls from liquidity constrained LPs. Here, lawyers warn, that LPs might scrutinize such calls more intently, possibly leading to litigation.⁷ Lenders do appear to be reducing time frames and increasing the costs of SLCs.⁸

Others, however, anticipate that SLCs will mitigate the effects of COVID-19-related disruption. "Fund level finance is being used by PE managers and investor to address challenges within their portfolios and also in anticipation of opportunities that will arise," noted Stephen Quinn, managing director at 17

³ Albertus, James F. and Matthew Denes, "Private Equity Fund Debt: Capital Flows, Performance, and Agency Costs," (May 26, 2020). Available at SSRN: <https://ssrn.com/abstract=3410076>; Schillinger, Pierre, Reiner Braun, and Jeroen Cornel. "Distortion or cash flow management? Understanding credit facilities in private equity funds (August 7, 2019); revised February 25, 2020. Available at SSRN: <https://ssrn.com/abstract=3434112>.

⁴ Gompers, Paul, Steven N. Kaplan, and Vladimir Mukharlyamov. "What do private equity firms say they do?" *Journal of Financial Economics*, 121 (3), (2016): 449-476.

⁵ Howard Marks, "Lines in the Sand." Oaktree Capital Management. (April 18, 2017). <https://www.oaktreecapital.com/docs/default-source/memos/lines-in-the-sand.pdf>.

⁶ ILPA. "Enhancing transparency around subscription lines of credit." *Recommended Disclosures Regarding Exposure, Capital Calls, and Performance Impacts*. (June 2020). https://ilpa.org/wp-content/uploads/2020/06/ILPA-Guidance-on-Disclosures-Related-to-Subscription-Lines-of-Credit_2020_FINAL.pdf.

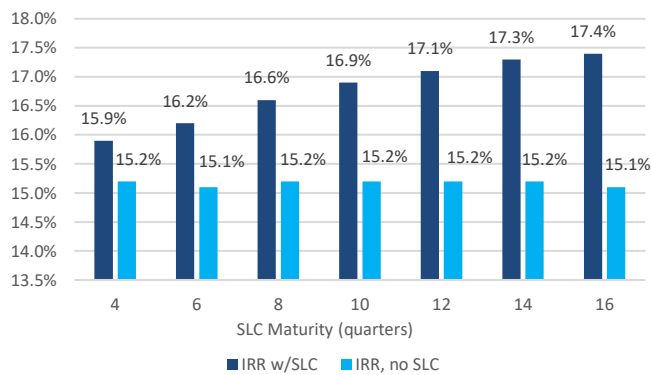
⁷ Sablone, Jonathan, and Noah Schottenstein. "Coronavirus, subscription credit lines and private equity funds—oh my!" DLA Piper. (May 11, 2020), and Aleali and Maier, *op. cit.*

⁸ Andrews, Robert et al. "COVID-19 and the fund finance market." *Ashurst*. (April 30, 2020). <https://www.ashurst.com/en/news-and-insights/legal-updates/covid-19-and-the-fund-finance-market-4292020-35334-pm/>.

Capital in a webinar on April 23, 2020.⁹ Others agreed, noting that SLCs allowed GPs to fund distressed portfolio companies and reduce pressured on a GP to exit struggling portfolio companies.¹⁰

As the Institutional Limited Partners Association has pointed out, the disclosure of the use and rationale for these lines, and their impact on reported performance, is important.¹¹ In the long run, such conversations are likely to lead to a more successful private equity industry.

Exhibit 3. Modeled impact of a fund's average IRR with and without SLCs¹²



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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.

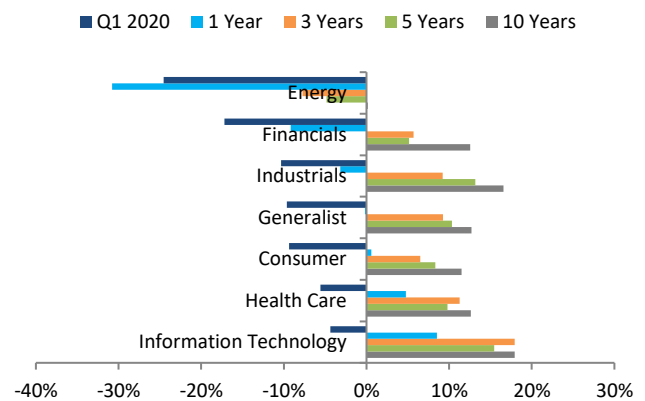
⁹ Quinn, Stephen, cited in Pearce, Cliff, and James Rock-Perring. "New research highlights to role of fund finance by GPs will combat impact of COVID-19." *Intertrust Group Press Release*. (May 6, 2020). <https://www.intertrustgroup.com/news-and-insights/press-releases/2020/new-research-highlights-role-of-fund-finance-by-gps-will-combat-impact-of-covid19>.

¹⁰ Pearce, and Rock-Perring, *op. cit.*

CURRENT QUARTER PERFORMANCE SUMMARY – CONTINUED FROM PAGE 1

Among sectors, financial service focused funds underperformed severely ending with a quarterly return of -17.20%, free-falling from 4.38% for the previous quarter. Energy funds dropped deeper into negative territory for the fourth straight quarter with -24.56% in Q1. Health Care funds and Information Technology funds had relatively smaller decline at -5.56% and -4.39% respectively (Exhibit 4).

Exhibit 4. Returns of Sector Focused Private Equity Funds



Source: State Street®, as of Q1 2020.

Fund Raising

Private equity performance stumbled in Q1 in the midst of a global pandemic and consequent impact on the real economy. Overall fund raising slowed considerably with only \$68 billion raised, putting constraints on GPs' capacity to access capital.

However, as we have seen in the listed markets, the impact of the pandemic was not uniform. Buyout and Private Debt fund raising slowed in the first quarter to only 16% and 10% of their previous year's total capital raised, while Venture Capital saw almost 60% of the capital raised in the full year of 2019 in the first quarter despite the market turmoil (see Exhibit 5(A)). With strong fund raising, the average fund size for Venture Capital

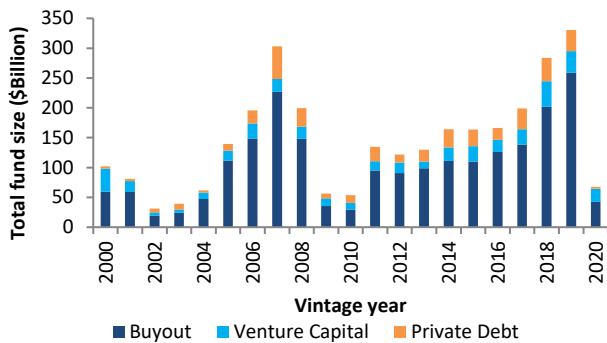
¹¹ ILPA, *op. cit.*

¹² Data compiled for the estimates in Albertus and Denes, *op. cit.* The data are modeled assuming a \$100 million fund that invests in 11 portfolio companies with equally sized investments at the start of the fund's life. The SLC is assumed to be \$25 million, with a varied length between 1 and 4 years.

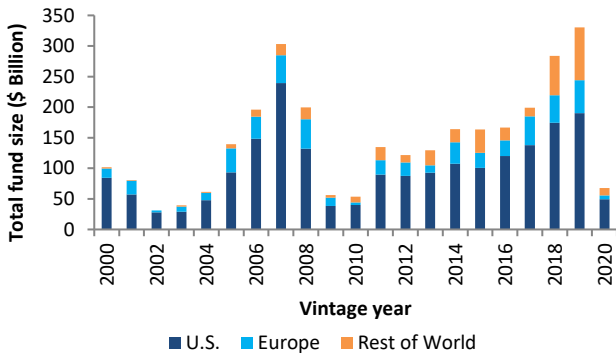
funds posted highest record of \$1.56 billion. However, the average fund size tumbled for Private Debt from \$1.7 billion to \$0.7 billion in Q1. Buyout average fund size was \$2.65 billion, marginally lower than \$2.76 billion in 2019 (see Exhibit 6).

Among regions, fund raising in US focused is steady at \$49 billion, which is 25% of last year's total. Europe and Rest of World funds collected \$6 billion and \$12 billion respectively, counting for 11.8% and 14% of the totals from last year (see Exhibit 5(B)).

Exhibit 5. Total Fund Size (USD Billion)
(A) By Strategy

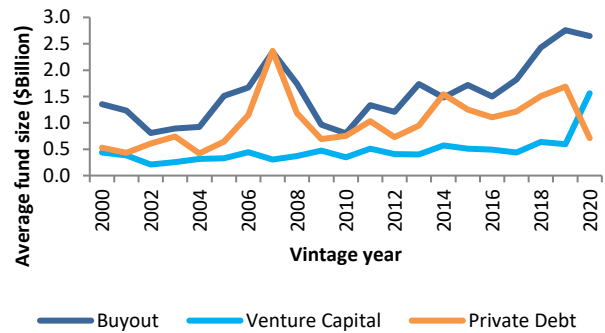


(B) By Region



Source: State Street®, as of Q1 2020.

Exhibit 6. Average Fund Size (USD Billion)



Source: State Street®, as of Q1 2020.

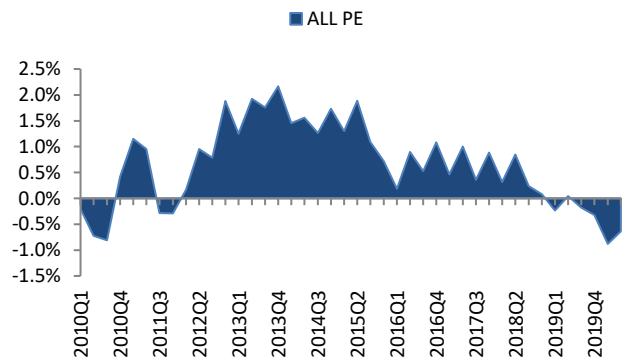
Cash Flow Activity

Cash flow activity decreased dramatically, reaching its lowest level in a decade at the end of Q1. The net cash flow of overall private equity in Q2 was still in the negative territory, but was beginning to show a sign of trending upward as shown in Exhibit 7(A).

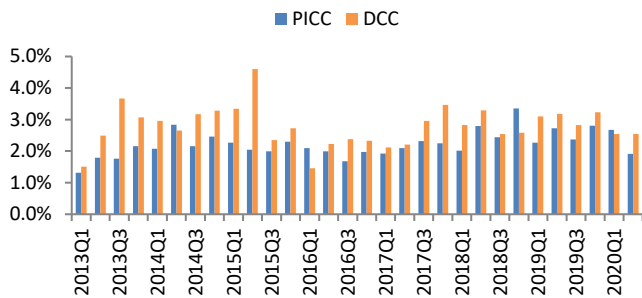
The quarterly distribution rate (DCC) for Venture Capital funds recorded at 2.5% in Q2, which is higher than the quarterly Paid-in Capital over Committed Capital (PICC), resulting in a positive net cash flow around 0.6%. However, Buyout and Private Debt fund managers appear to be more cautious with relative low distribution rate in the first half of 2020 (see Exhibit 7(B) – 7(D)).

Exhibit 7. Quarterly Cash Flow Ratios Normalized by Commitment

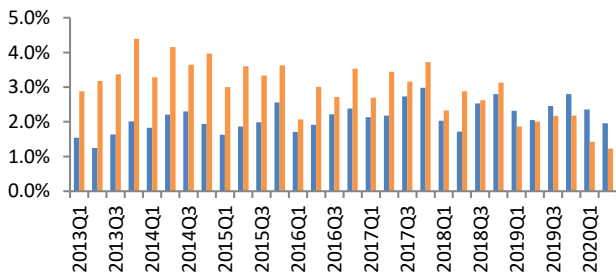
(A) Net Cash Flow of All PE (2010Q1 – 2020Q2)



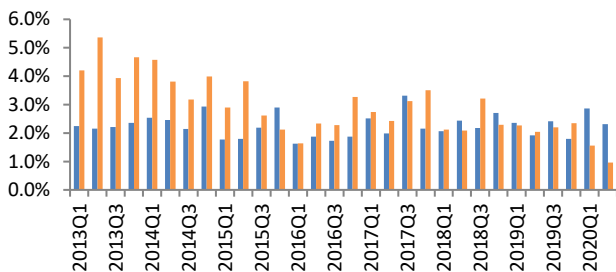
(B) Venture Capital (2013Q1 – 2020Q2)



(C) Buyout (2013Q1 – 2020Q2)



(D) Private Debt (2013Q1 – 2020Q2)



Source: State Street®, as of Q1 2020.

Valuations

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

$$DVA = \text{Ending NAV} - \text{Beginning NAV} + \text{Distribution} - \text{Contribution}$$

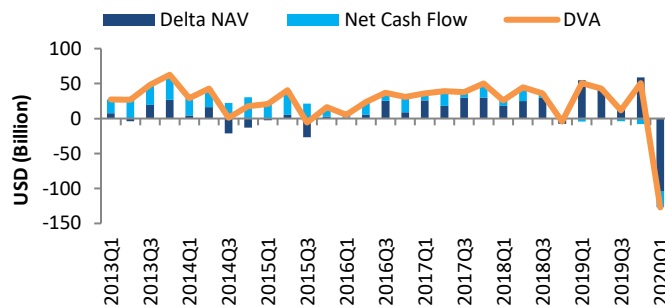
DVA of overall PE slumped to a all-time low of \$ -127 billion in Q1 2020. It came from both the negative NAV change of \$ -104 billion and negative net cash flow of \$ -23 billion (see Exhibit 8(A)).

As shown in Exhibit 8(B), the delta NAV of all three strategies fell into negative territory. Buyout funds accounted for the largest decrease in NAV of \$ -83 billion in Q1, down from a

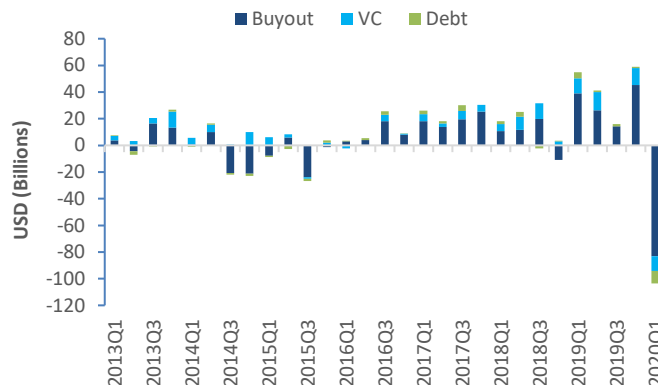
positive \$45 billion delta NAV in Q4 2019. Delta NAV of Venture Capital and Private Debt funds recorded \$ -11 billion and \$ -10 billion in Q1 respectively, dragging delta NAV of overall PE even lower.

Exhibit 8. Net Asset Value and Dollar Value Added (2013 Q1 – 2020Q1)

(A) All PE



(B) Delta NAV of Each Strategy



Source: State Street®, as of Q1 2020.

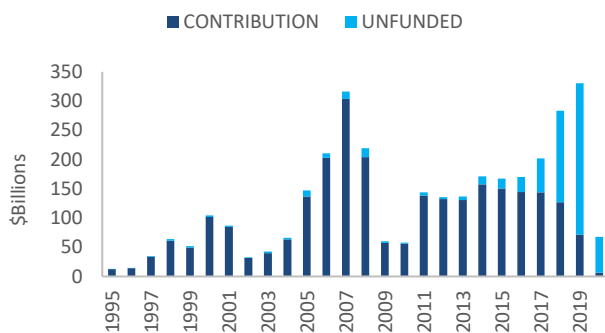
DISCUSSION – PRIVATE EQUITY DRY POWDER

Dry powder is the committed capital that have not been called by fund manager. It is the amount that can be used in future investment opportunities. Dry powder may not evenly distribute in all investment areas (e.g. region, strategies). A high dry powder means too much capital going into this area but not enough investment opportunities relative to the capital. This area may have seen high returns in the past but difficult to maintain the returns as more capitals are competing each other. And dry powder offers a liquidity management challenge to the private equity investors as cash reserves need to be put somewhere such as a bank or money market that earns a reasonable return.

In Exhibit 11, fund raising activity shows strong cyclicality. Since most of the committed capital in earlier vintage year has been called already, funds in recent vintage years contribute to the most of the current unfunded dry powder. From the historical time series point of view (Exhibit 12), there are three periods of time when dry powder was quickly built up. The first one was during 1999-2001 before the internet bubble burst. The second one was during 2005-2008 before the Great Financial Crisis. Before the COVID, we were experiencing the third one since 2012. Many new funds were created quickly in these times. During the internet bubble hundreds of billions of dollars were raised for private equity funds. By the end of 2001, the funds in PEI has accumulated \$170 billion dry powder. Almost a trillion dollars were raised from 2005 to 2008. Dry powder reached the peak in march 2009 at \$450 billion. By the time COVID happened, additional 1.6 trillion dollars already have been committed to private equity since 2012, with a dry powder of \$650 billion accumulated by the end of 2020 Q1.

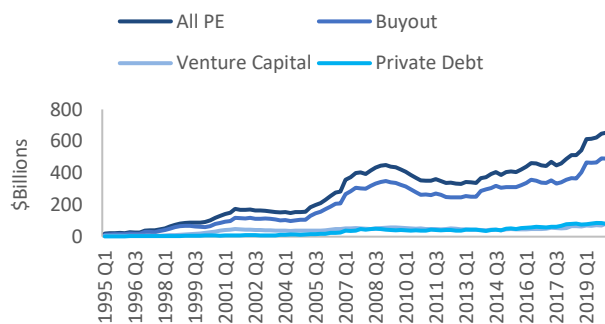
Source: State Street®, DataStream, as of Q1 2020.

Exhibit 11. Dry Powder by Vintage Year (1995-2020 Q1)



Source: State Street®, DataStream, as of Q1 2020.

Exhibit 12. Quarterly Dry Powder (1995 Q1-2020 Q1)



Source: State Street®, DataStream, as of Q1 2020.

Considering that SSPEI only represents an estimated 50% of total private equity market, the total amount of dry powder could be as high as \$1.3 Trillion as of 2020 Q1. It would be helpful to put the level of dry powder into a relative scale against other benchmarks such as the valuations of public equity or valuations of private equity, and capital call speed of private equity. As shown in Exhibit 13, the market capitalization of MSCI All Country World Index grew from \$8.5 trillion to \$50 trillion (6 times) from 1995 to 2019, the market value of SSPEI grew from \$27 billion to \$1.2 trillion (46 times), and the dry powder grew from 19 billion to 650 billion (34 times). Obviously private equity is a much faster growing market compared to the more mature public equity market; however, the ratio between dry powder and the market values have become relatively stable - dry powder stays around 1%-1.5% of the market cap of MSCI ACWI and around 40%-50% of private equity valuation after 2011.

To look at dry powder within the context of the capital call speed, we have created a measure called 'dry powder inventory' to account for the speed of dry powder consumption. Dry powder inventory is defined as the current dry powder divided by average monthly contribution of the past year. An inventory of 6 months indicates the current dry powder can support 6 months of investment activity at the one year average speed without raising new funds. Since 1995, there were two large spikes in dry powder inventory happened at the end of the internet bubble in 2002 and at the end of the GFC in 2009, as a result of muted investment activities during and immediately after the crisis. However, Exhibit 14 shows that, despite the significant growth in volume, dry powder inventory has been stable during normal non-crisis periods. In aggregate, General Partners maintain a dynamic equilibrium inventory level around 30-40 months by raising new capital and deploying committed capital.

In summary, today's dry powder level is within its historical normal ranges when compared against public and private equity valuations, and GP's capital call speed. Considering that private equity is a fast growing asset class, the current seemingly high level of dry powder is not unreasonable.

Exhibit 13. Dry Powder vs. Public Equity and Private Equity Valuations (1995 Q1-2020 Q1)

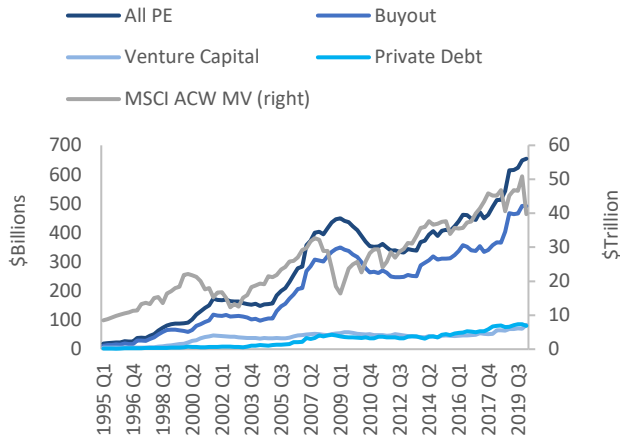
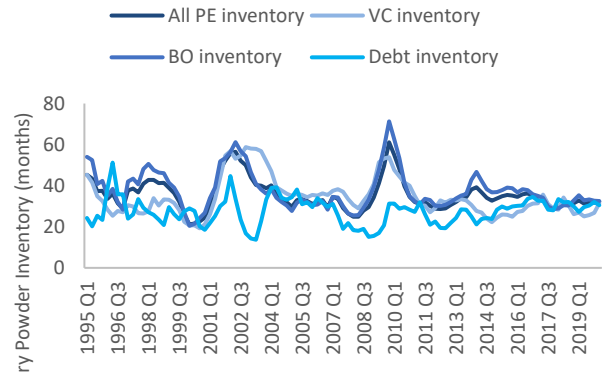
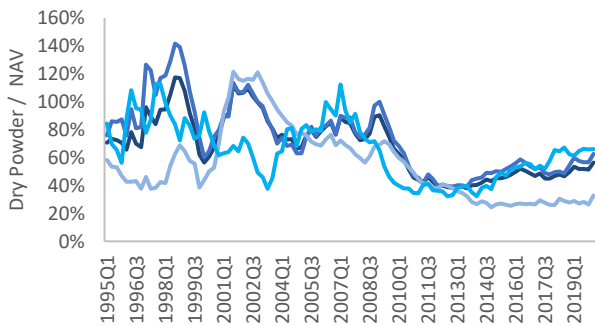
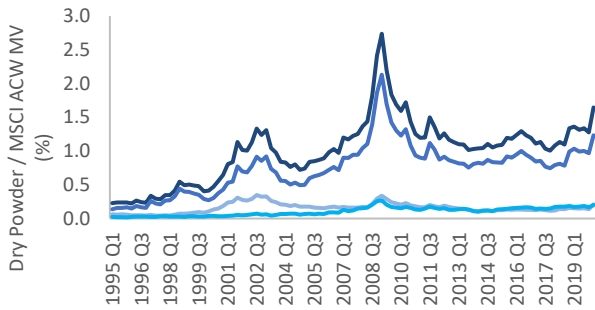


Exhibit 14. Dry Powder vs. Capital Call Speed (1995 Q1 2020 Q1)



Source: State Street®, DataStream, as of Q1 2020.



Source: State Street®, DataStream, as of Q1 2020.

ABOUT THE GX PRIVATE EQUITY INDEX

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 GX Private Equity Index (“GXPEI”) 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, GXPEI 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 GXPEI does not depend on voluntary reporting of information, it is less exposed to biases common among other industry indexes. The end 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 3,000 funds representing around \$3 trillion in capital commitments as of Q1 2020.
- 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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