



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

SEPTEMBER 2020
Private Equity Outlook

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Executive summary

Observations driving Verus outlook

Executive summary

Outlook

PE has pulled back to a significant degree this year. Through 1H2020, deal volume and value stood at roughly a quarter of 2019 tallies, representing a strong deceleration after back-to-back record-breaking years. The median PE deal size slumped even as the average notched a new high, indicating that larger deals were still closing even in an environment fraught with uncertainty. Contrary to previous years our outlook at the large end of the market moves to neutral as the credit markets remain open for larger deals coupled with their ability to provide flexible capital in this environment.

Exits by buyout fund managers have fallen due to the degree of uncertainty spanning global economies and markets. Sponsor-to-sponsor sales have even reversed their growth in proportion of exit volume, indicating a general retrenchment as fund managers look to avoid incurring any discounts to expected valuations in sales processes. Instead, portfolio managers seem set to extend holding times in hopes of a calmer environment to come. Based on previous crises, we expect a decline in both capital calls and distributions from buyout funds, with the decline in distributions more severe, likely leading to negative net cash flows for the coming quarters.

Venture-backed exits have plummeted. Significant selloffs and rapid rises in equity markets have created one of the more volatile and uneasy environments on record, discouraging prospective IPOs. Acquirers meanwhile have shied away from any M&A that, due to the degree of risk, could be perceived as potentially pricier than anticipated. Even as public markets have recovered much of their March 2020 decline, the overall exit environment looks muted for liquidity going forward, although it is possible that as down rounds and mark-downs in valuations occur, some VC portfolio companies could become more attractive targets for prospective buyers.

The COVID-19 pandemic caused many portfolio companies to experience unforeseen demand shocks as new direct lending opportunities temporarily dried up and a wave of distressed and special situations funds came to market hoping to capitalize on market turmoil. Distressed debt funds tend to invest in existing debt facilities: either in “distressed-for-control,” hoping to buy the debt of a company and convert it into equity, or in more liquid securities trading at steep discounts to par, such as high yield bonds and leveraged loans. Special situations funds, on the other hand, tend to originate loans to companies that are considered too bespoke and/or risky for other lenders. In the current crisis, special situations funds are targeting investments where a company requires bridge or rescue financing to stay afloat through the pandemic. Despite an oversupply of dry powder and swift recovery in asset prices, the magnitude of the pandemic’s economic shocks will continue to create distressed investment opportunities well into next year.

The secondary market is very different than it was during the last economic downturn. While illiquidity remains a concern and will be an issue for some LPs, we think the risk of the denominator effect is somewhat mitigated because many LPs are currently under allocated to private markets. We also do not foresee panic-selling on the secondaries market, as was the case in the GFC. For those LPs who do need liquidity, the secondaries market is deeper and more developed than it’s ever been—even if transactions may take longer in a challenging environment. Investors will seek to take advantage of repricing opportunities in the secondary market, though with an excess of buyers and fierce competition for the best-quality assets, prices may not fall as far as buyers would wish.

Summary of findings

Outlook

Unattractive	Neutral	Attractive

Strategy	Geography		Commentary
Buyout	U.S.	Small/ Mid Mkt	The median holding period for small and middle market companies continued to tick up in Q2 due to various factors. We expect that trend to continue as uncertainty around valuation and earnings outlooks lead sellers to wait out the storm.
		Large	Consolidation within private equity has led to large asset managers with multiple platforms that can capitalize on a range of opportunities in a variety of economic environments.
	Europe	Small/ Mid Mkt	Managers will be focused on increasing platform resilience, agility, and stability during the crisis, while playing offense through add-on acquisitions to heighten geographic, product, customer, and supplier diversification.
		Large	Although divestiture activity has seen a subdued first half of 2020, we anticipate public and private carveouts will considerably pick up in the second half as many companies will be forced to raise cash and deleverage.
Private Credit	Direct Lending		We are concerned about the liability side of Direct Lending with funds employing fund-level leverage subject to revaluation events, which could negatively impact funds and lead to forced selling and adverse performance.
	Distressed/ Special Situations		With default rates anticipated to increase above 9%, we anticipate another round of spread widening and forced selling within direct lending, broadly syndicated loans and high yield.
	Opportunistic		Multi-asset funds can capitalize on the non-corporate opportunity during periods of sustained distress through liquid structured credits and pools of asset-secured instruments (commercial RE mortgages, NPLs, whole loan portfolios, etc.).
Secondaries	Secondaries		Although we have seen pricing levels come down over the 2H 2020; sellers have not had the cash needs as in previous periods and are not looking to sell at any price. Suggesting variations in market conditions may impact an anticipated surge in secondary transactions.
Venture Capital	Early Stage		Valuations and pricing will see downward pressure as investors focus on stronger fundamentals; companies may turn to debt financing as an alternative to traditional equity rounds, as they attempt to avoid down rounds, dilution, and unfavorable terms.
	Late Stage		The number of companies valued at over \$1 billion remains high —as does their age— driving a need for liquidity. IPOs will make up a smaller percentage of 2020 exits given the COVID impacts.

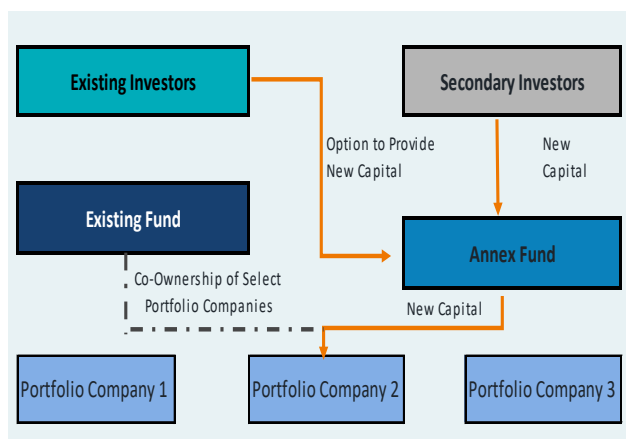
Topical focus

Topical focus

GP-LED SECONDARIES

- During the last few years, General Partner-led (GP-led) secondary transactions have evolved and are no longer just associated with General Partners trying to dispose of lingering assets that have become hard to sell.
- GP-led secondaries are used to create for both private equity fund sponsors and their limited partners, liquidity solutions with more attractive valuations than regular dispositions of funds' assets.
- It is expected such GP-led secondary transactions are set to increase as the coronavirus pandemic pushes more buyout groups to find ways to hold on to good assets and provide much-needed liquidity to limited partners.
- Other than a direct sale of a fund's remaining assets to a secondary investor, there are three types of GP-led secondary transactions: Annex Funds, Fund Re-Openings and Secondary Continuation Funds.

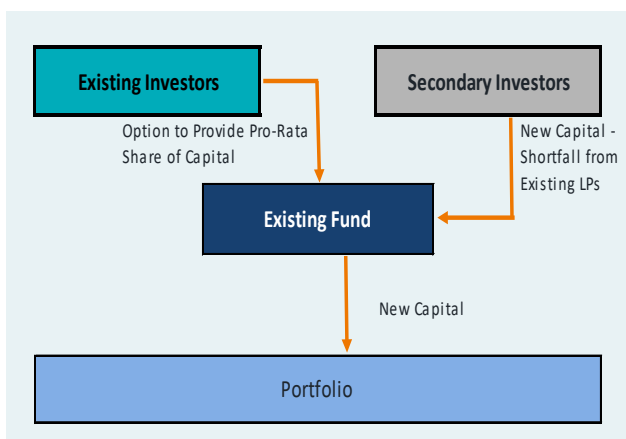
ANNEX FUNDS



GP-managed vehicle to raise new capital in existing portfolio companies

↓ Dilution for existing LPs or subordinated to new capital

FUND RE-OPENINGS

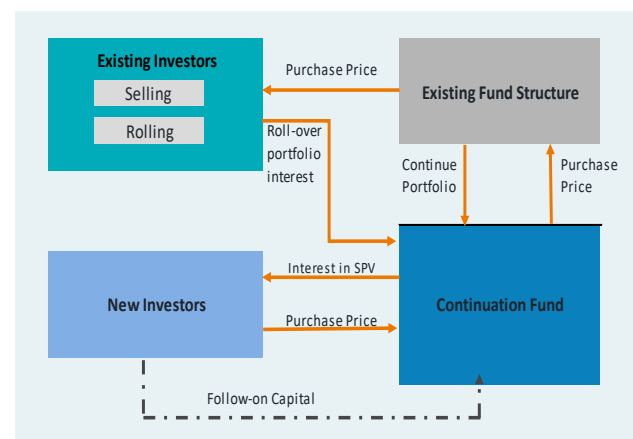


Existing fund structure re-opened to raise new unfunded capital in support of the existing portfolio

↓ Dilution of existing LPs

↓ Existing LPs may be unable to provide incremental capital in the current environment

SECONDARY CONTINUATION FUNDS



Auction process to identify portfolio market price; LPs must make positive election to remain invested

↑ Provides full liquidity to the existing LPs

↓ Majority of carried interest triggered must be re-invested

Topical focus

Key issues to consider for existing fund investors

CONFLICTS OF INTEREST

- **Valuation of the assets:** The General Partner is frequently on both sides of the transaction in GP-led fund secondary transactions.
 - General Partner owes fiduciary duties to the investors in its existing fund which involves maximizing the value of the remaining assets.
 - Resetting the economics in the new vehicle and the receipt of a carried interest will be tied to the value of the assets, creating an incentive for the General Partner to agree to a lower price.
 - The General Partner or its affiliate may also participate as a buyer, which creates an incentive for the General Partner to lower the price.A third-party valuation and/or a fairness opinion should be obtained to give comfort to the existing investors.
- **Regulatory scrutiny:** The SEC is focused on GP-led secondary transactions regarding how conflicts of interest and disclosure to limited partners are handled by the General Partners. They are also focused on valuation of the assets subject to the transaction, allocation of transaction fees, expenses and broker fees and whether such transactions are conducted in accordance with the underlying agreements.
- **Economics:** The General Partner may seek to obtain revised economic rights, such as carry, management fee and clawback mechanics to provide an incentive to the investment professionals to continue to manage the assets.

The Evolving Secondary Market

The secondary market is essentially a source of innovation in terms of allowing sponsors and investors to more effectively manage liquidity in what is otherwise an illiquid asset class. Current secondary transactions often involve GP-led: fund restructurings, re-caps, single asset deals, “stapled” transactions, preferred equity transactions, and restructurings of groups of funds or combining groups of assets in a more cohesive way in order to boost returns. Often such deals blur the lines between the secondaries market and primary fundraising. These aspects bring a new level of complexity that requires specialized attention to navigate.

The Institutional Limited Partners Association, an industry body, published guidelines in late 2018 regarding GP-led secondaries. Although these guidelines do not have the effect of law, they nevertheless seek to establish industry best practice, and LPs may find them useful as a form of roadmap to follow when presented with a GP-led secondary transaction.

(<https://ilpa.org/wp-content/uploads/2019/04/ILPA-Guidance-on-GP-Led-Secondary-Fund-Restructurings-Apr-2019-FINAL.pdf>)

Buyouts

U.S. Buyout

Global economic uncertainty has muted buyout activity across the board

Trends

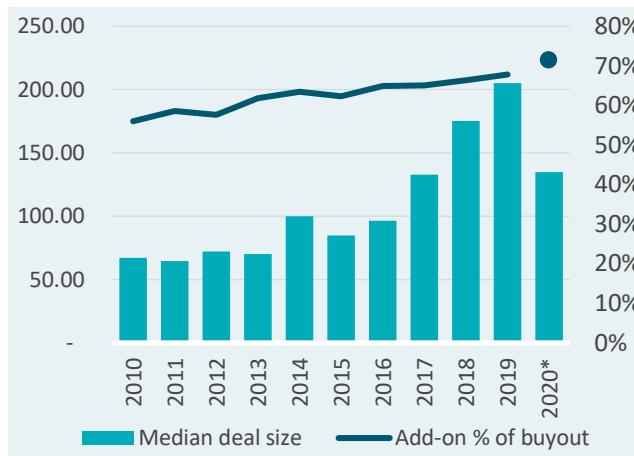
- Given COVID-19-related uncertainty deal activity, exits and overall fundraising has been muted, but remain above the low points of the global financial crisis.
- As sponsor-to-sponsor transactions have declined due to wide bid-ask spreads preventing buyers and sellers from agreeing on price; managers are looking towards non-sponsored companies and add-ons for capital deployment opportunities. Such deals have caused the median U.S. PE buyout size to decrease for the first time in five years.
- There has been a stark decline in the number of funds that have raised capital; however the fundraising landscape has been bifurcated as the large established managers (\$5B+) drove fundraising value totals while smaller managers have struggled.
- Investor appetite seems to have turned to the largest U.S.-based PE firms who have been more active during the crisis and can invest in different channels, including minority, majority, distressed for control, carve-out deals and private investments in public equity (“PIPE”).

DEAL VALUE AND VOLUME



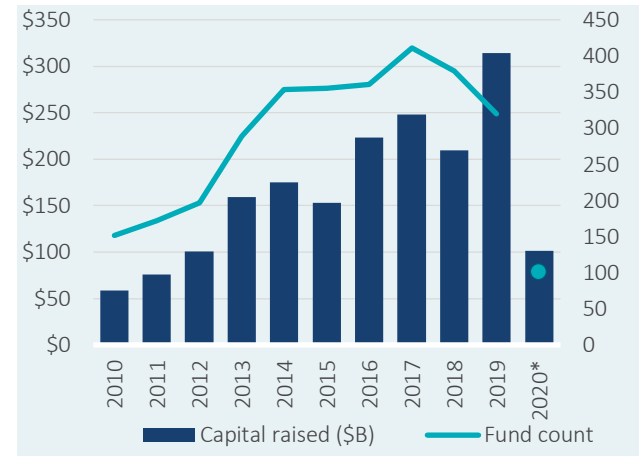
Source: PitchBook as of 6/30/2020

MEDIAN PE DEAL SIZE VS. % OF ADD-ONS



Source: PitchBook as of 6/30/2020

FUNDRAISING



Source: PitchBook as of 6/30/2020

U.S. Buyout

Buyout purchase price multiples reach new high

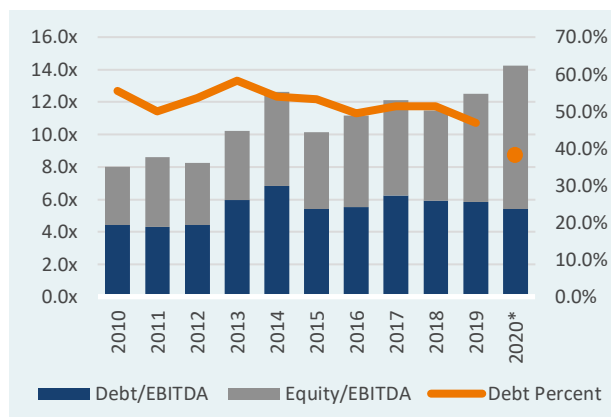
2020 Environment

- Despite an unfavorable exit environment, the most resilient and valuable companies are still being sold. In fact, entry multiples have increased from 12.5x in 2019 to 14.3x in 2020, which could be explained by a larger portion of activity being attributed to those companies.
- Heavy debt loads used in LBO strategies have riddled many companies with debt, resulting in bankruptcies of PE-backed companies, mainly in retail.
- The year has experienced the actualization of potential concerns associated with lenient debt lending, as the number of companies with ratings of B3 negative and lower has more than doubled in 2020. Of the 412 companies with <B3 credit ratings, two-thirds were PE-backed.
- Buyout managers will look towards PIPEs, add-ons, divestitures, distressed opportunities, and growth equity to deploy remaining dry powder.

Outlook

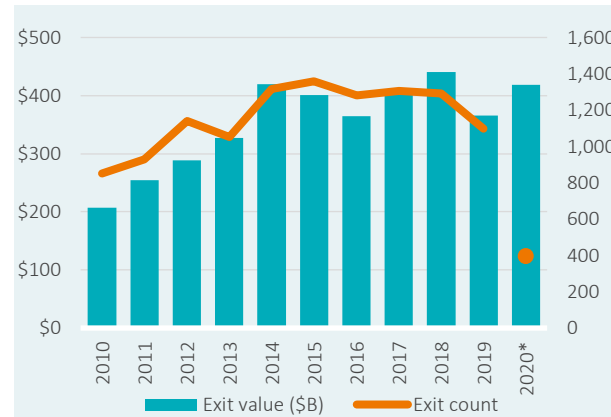
- As the pandemic continues, GPs will continue holding on to companies, which will cause hold periods to balloon, distributions to be delayed, and fund life extensions to be requested.
- LPs must consider the effects of a prolonged pandemic on new commitments.
- Tighter credit markets will force adjusted transaction capital structures, creating private debt and special situations opportunities.

MEDIAN U.S. PE BUYOUT MULTIPLES



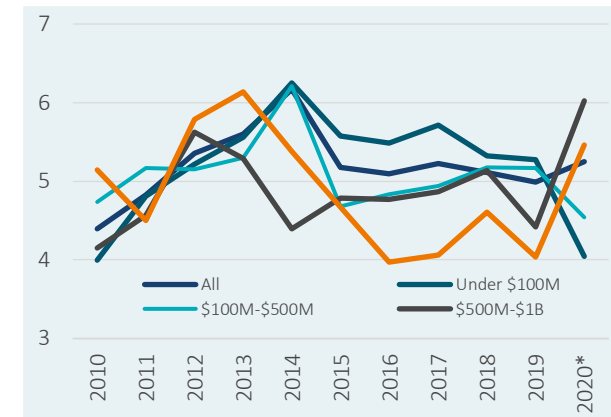
Source: PitchBook as of 6/30/2020

U.S. PE EXIT ACTIVITY



Source: PitchBook as of 6/30/2020

MEDIAN YEARS TO EXIT BY SIZE AND EXIT YEAR



Source: PitchBook as of 6/30/2020

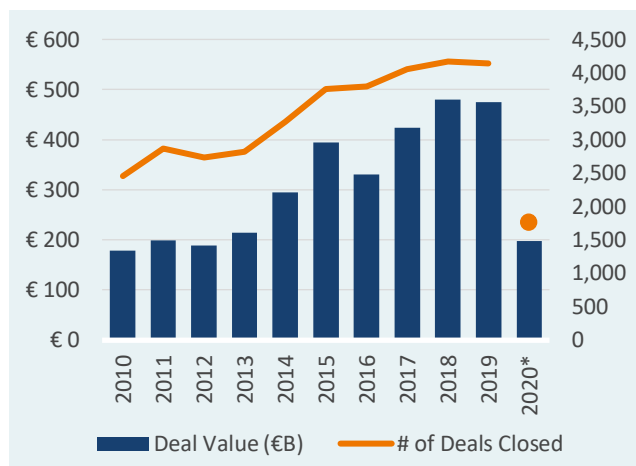
European buyout

Large transactions under pressure; M&A remains strong

Trends

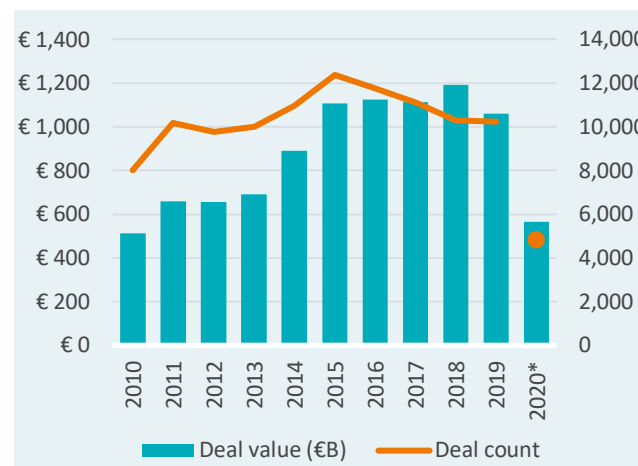
- European PE deal activity has slowed considerably in both deal count and value as the COVID-19 crisis continues to unfold. A range of factors have converged to reduce deal activity; leveraged lending activity fell precipitously as lenders concentrated on existing loans; sellers tabled exit plans amid the volatility; and most GPs either paused or outright cancelled transactions as portfolio triage took precedent.
- Unlike in the U.S., the trend of a larger transaction environment coming into the pandemic has reversed, as European PE deal size fell considerably due to larger entities tabling exit plans and refusing to sell at a discounts while global uncertainty remains.
- M&A deal values have been resilient, given major European economies were in lockdown for a majority of 2020, resulting in sectors either working in a limited capacity or being closed completely; however the strong numbers could be result of pre-pandemic deals signed that are now closing.
- PE firms are focusing on increasing platform resilience, agility and stability while playing offense through add-on acquisitions to heighten geographic, product, customer and supplier diversification.

DEAL FLOW



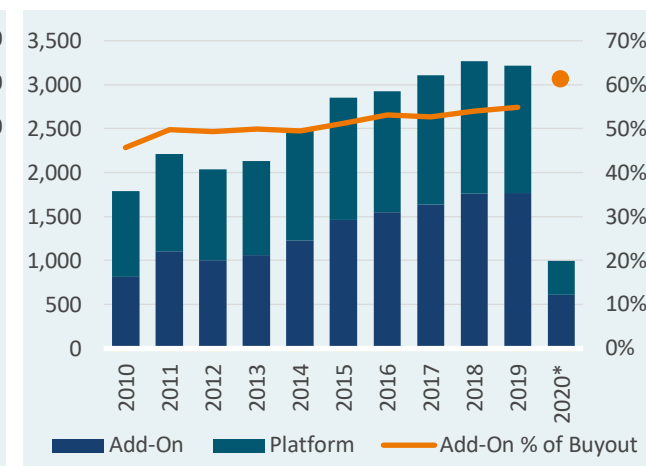
Source: PitchBook as of 6/30/2020

M&A ACTIVITY



Source: PitchBook as of 6/30/2020

PE ADD-ONS(#) VS. ALL EUROPEAN BUYOUTS



Source: PitchBook as of 6/30/2020

European buyout

Deal volume and exit values hit low points

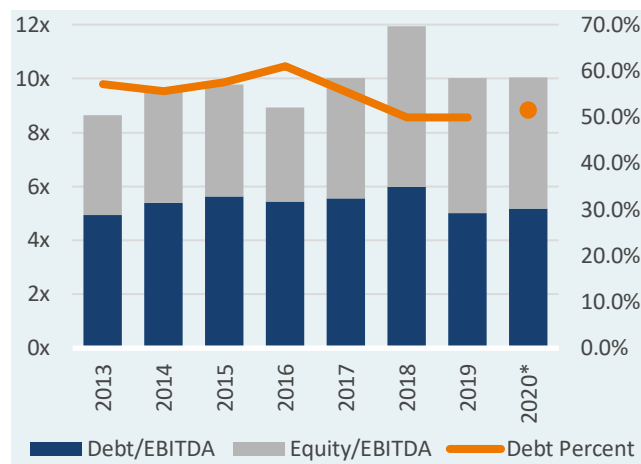
2020 Environment

- Concerns around Europe's economic outlook caused a drop in purchase multiples in 2019 down to 10.0x from a decade high of 11.9x in 2018. Throughout the first half of 2020, multiples have held firm at 10.0x, largely buoyed by strong European equity prices influenced by persistent fiscal and monetary policy.
- Aside from a few large exits in the first half of the year, the market has seen a considerable drop in exit value; while the lower end of the market has disproportionately affected with exit volume falling 90%. The IPO market, although measure, has been active as the public markets have embraced the central bank and government policy responses.
- Fundraising has been subdued over the first six months; however, like the U.S., brand-name European managers are expected to grow their share as limited partners lean into existing relationships to take advantage of the dislocation.

Outlook

- As the economic crisis intensifies, many companies will be forced to raise cash and deleverage; carveouts allow entities to obtain liquidity while focusing on outperforming units. These divestitures provide will provide opportunity for additional deal flow in the coming quarters.

MEDIAN PURCHASE MULTIPLES



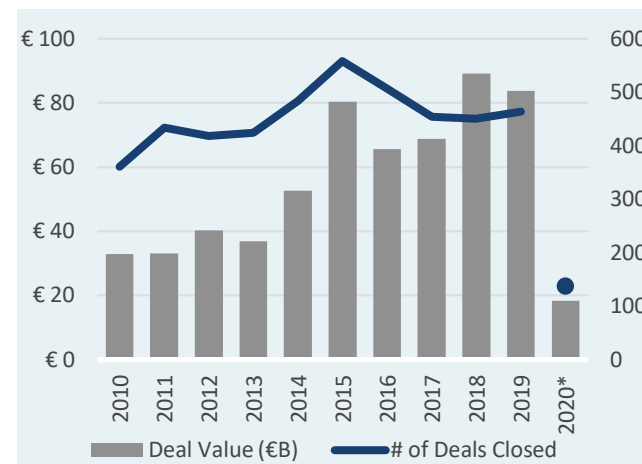
Source: PitchBook as of 6/30/2020

BUYOUT EXIT ACTIVITY



Source: PitchBook as of 6/30/2020

CARVEOUT DEAL ACTIVITY



Source: PitchBook as of 6/30/2020

Private credit

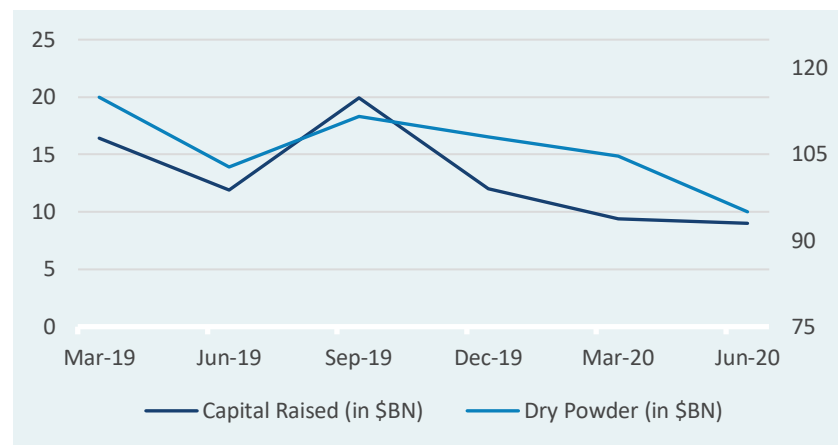
U.S. private credit

Direct Lending

Trends

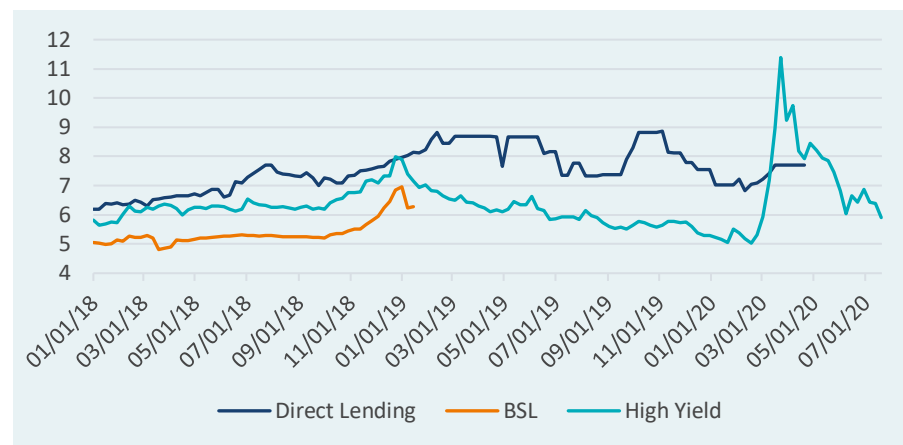
- The new issue markets for Lower Middle Market (“LMM”) and Middle Market (“MM”) Direct Lending have not reopened since the volatility of March and April. While we anticipate spreads for Direct Lending will be wider, they may not fully offset lower LIBOR rates in the intermediate term. There is increased premium over the High Yield, but lenders and investors are not being compensated for illiquidity relative to the broadly syndicated market.
- We are concerned about the liability side of Direct Lending with funds employing fund-level leverage subject to revaluation events, which could negatively impact funds and lead to forced selling and adverse performance.
- Fund raising and dry powder in direct lending show challenges facing the strategy. The pace of successful fund raising in Direct Lending has slowed. While the number of fund in the market from 1Q19 to 2Q20 increased from 206 to 228, the amount of capital raised decreased from \$16.4BN in 1Q20 to \$9.0BN in 2Q20. Dry powder has decreased from \$115BN to \$95BN over the same period.

DIRECT LENDING - CAPITAL RAISED & DRY POWDER



Source: The Lead Left

YIELD COMPARISON - DIRECT LENDING VS. HY & BSL



Source: Covenant Review

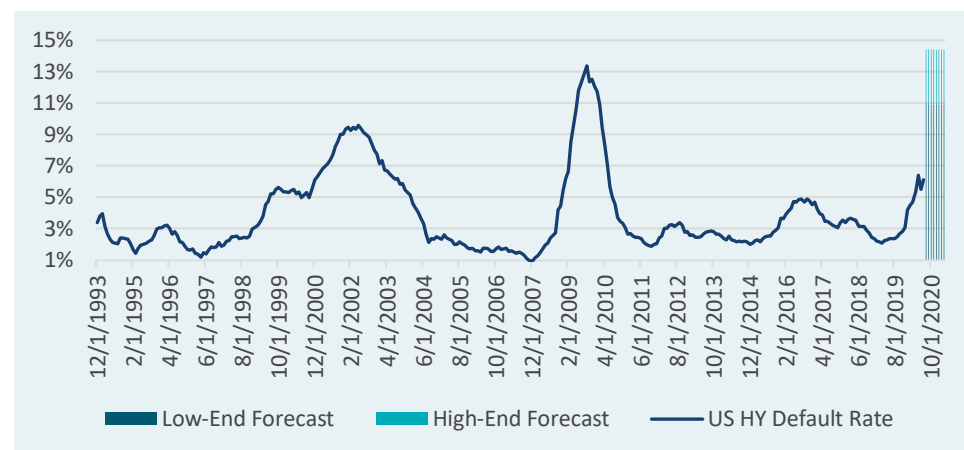
U.S. private credit

Distressed / Special situations

Trends

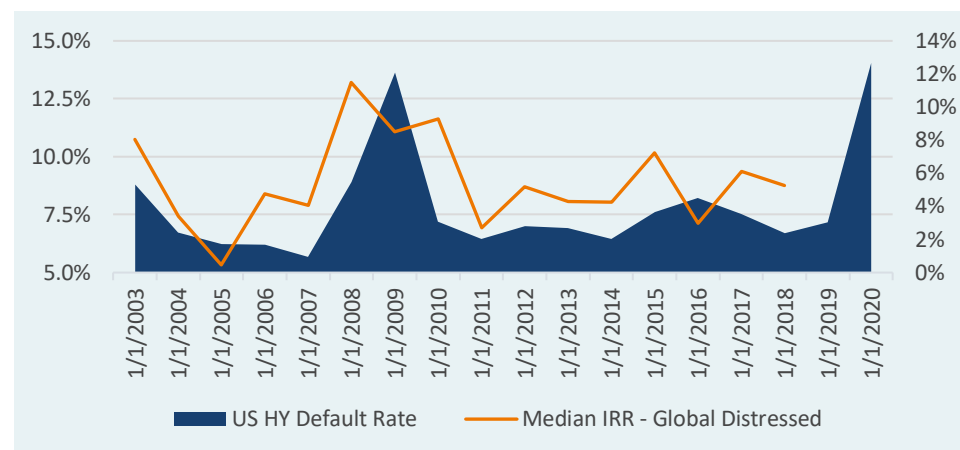
- With default rates anticipated to increase above 9%, we anticipate another round of spread widening and forced selling within direct lending, broadly syndicated loans and high yield. The selling could come from direct lending funds, CLOs, high yield funds and insurance companies.
- Recession risks will mount if average high-yield expected default frequency metric extends its climb.
- Spread widening has historically been followed by a significant opportunity for total return.
- Appetite for distressed and special situations funds increases amid growing concerns over credit profiles and widening spreads
- Tighter credit markets will force adjusted transaction capital structures, creating private debt and special situations opportunities

U.S. SPECULATIVE GRADE DEFAULTS – HISTORICAL AND FORECAST



Source: Moody's Annual default study, Feb 2020; Moody's Default Trends, Global, August 26, 2020

DISTRESSED RETURN BY VINTAGE VS. DEFAULT RATE



Source: Moody's Annual default study, Feb 2020; Moody's Default Trends, Global, August 26, 2020
Thomson Reuters CJA indices, Global Distressed, as of 3/31/20

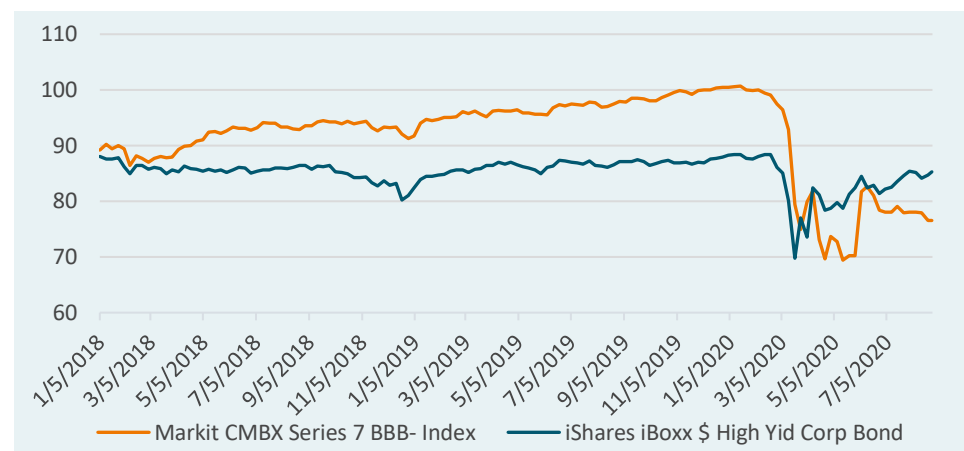
U.S. private credit

Opportunistic Credit

Trends

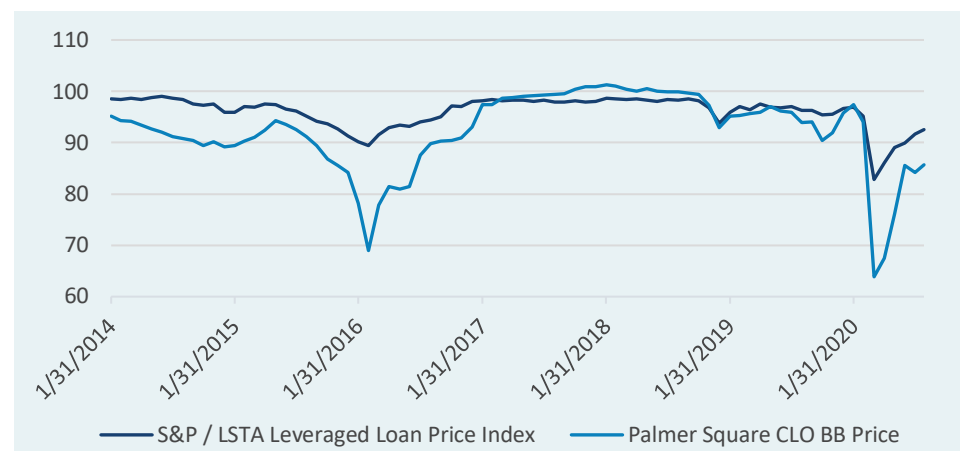
- While the March selloff in structured and securitized credit was exacerbated by a liquidity squeeze, the recovery has been less pronounced than it has been in corporate debt. CMBS, for example, the BBB- index traded off 31% from its pre-crisis highs and still remains down 25%. High yield corporates, which traded down by a comparable 27%, are now only down about 10.5%.
- Our positive outlook on Opportunistic Credit is partly driven by a view that managers can capture price appreciation during market dislocations with gains (and risks) commensurate with the liquidity of the underlying collateral. The CLO BB debt market traded from a pre-crisis high of 101.25 down to a low of 63.75 (37-1/2 points) and has since recovered 22 points. The more liquid leveraged loan market traded off 16 points. While the % recovered from the bottom is similar at 60% of losses, the 10-point recovery trails the 22-point recovery in BB-rated CLO debt. We anticipate Opportunistic funds will see similar opportunities in the coming 24 months.
- Within non-correlated strategies, Verus anticipates improved opportunities as capital that entered the non-correlated strategies (legal assets, regulatory capital, royalties, life settlements, etc.) are redeployed in corporate and structured credit markets.

CMBS PRICES VS. HIGH YIELD PRICES



Source: Bloomberg

BB CLO PRICES VS. LEVERAGED LOAN PRICES



Source: Bloomberg

Secondaries

Global secondaries

Market dislocation pauses secondary activity

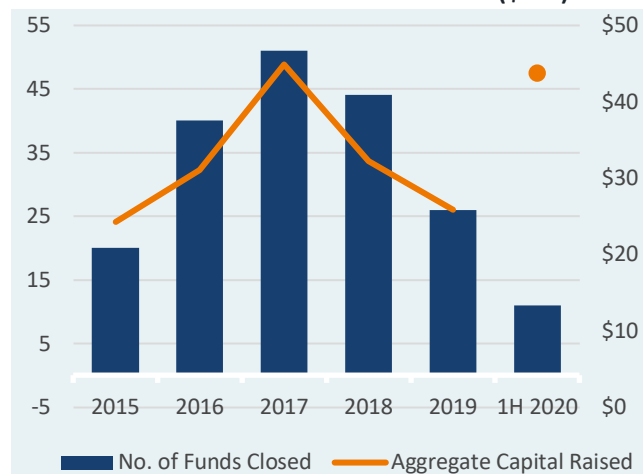
Trends

- A lack of distressed sellers and a wide bid-ask spread between opportunistic buyers and sellers in the first half resulted in a dearth of activity
- The average high bid across all strategies was 80% of NAV as buyers decreased their appetite for risk, favoring newer vintage funds, well-known managers and resilient defensive assets
- Contrary to the GFC, distressed sellers never materialized because of sizable stimulus and the fact that public markets rebounded so quickly

2020 Environment

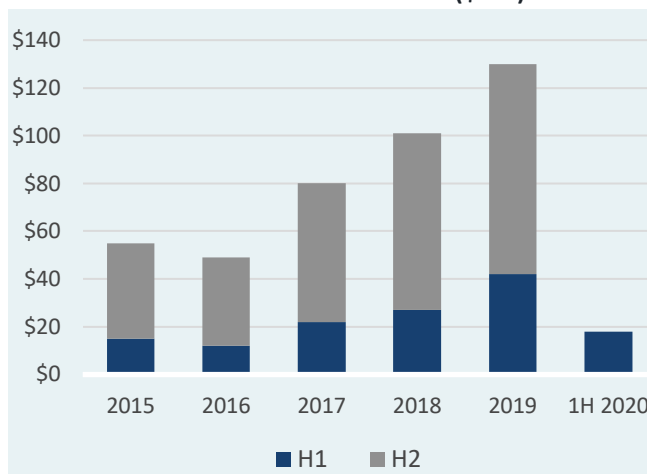
- The three largest secondary funds closed in 2020 secured \$36B in aggregate capital; demand was boosted by the expected impact of COVID-19
- First half volume represented a 57% decline from the first half volume of 2019; most deals were postponed or failed due to: wide bid-ask spreads, inability to value portfolios with an uncertainty of expected write-downs, or limited market-wide bidding activity
- Demand for recent funds has increased driven largely by unfunded capital multiples, which are viewed to have greater access to capital to deploy either defensively in follow-on investments or offensively in add-on acquisition targets.

GLOBAL SECONDARIES FUNDRAISING (\$BN)



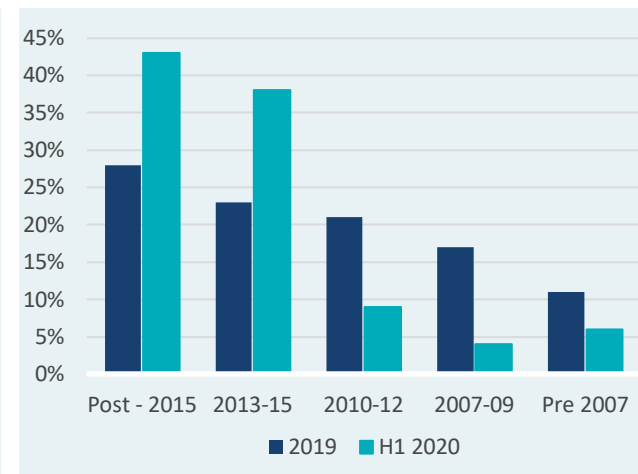
Source: Preqin as of 6/30/2020

HISTORICAL SECONDARY VOLUME (\$BN)



Source: Greenhill as of 6/30/2020

TRANSACTION VOLUME BY VINTAGE YEAR



Source: Greenhill as of 6/30/2020

Global secondaries

Demand remains for both buyers and sellers

Outlook

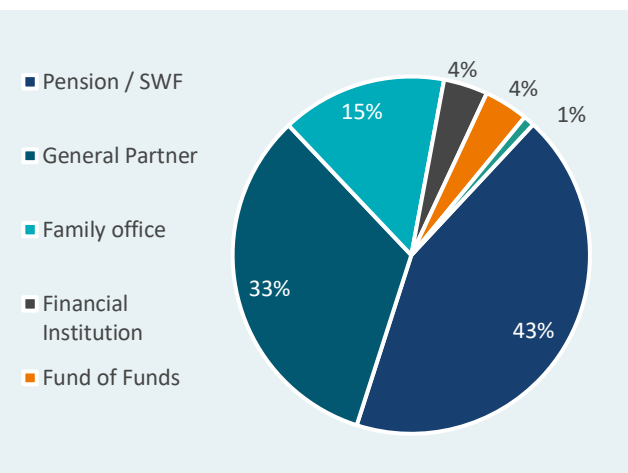
- The current environment has driven the capital overhang in the secondary market to recent highs causing a shift in market equilibrium to a seller favorable environment as buyers have unsatisfied demand and deployment objectives heading into the last half of the year
- Looking near-term some LPs may need to liquidate assets to help cover growing operating expenses and decreased revenue; furthermore GPs facing portfolio issues with respect to liquidity or exit timing will account for more transactions as they: build value, defend value or accelerate liquidity
- Secondaries funds will continue to deliver; having outperformed private capital funds in every vintage year since 2007 in terms of median IRR. The gap has widened to double digits across 2015-2017 vintages, though this can partly be explained by the shorter hold periods on secondaries funds. Bargains have been hard to find as increased competition make it difficult to purchase assets at a discount. If IRR multiples begin to normalize toward previous longer-term trends, the wide dispersion between the top- and bottom-quartile performers may also begin to narrow.

HISTORICAL CAPITAL OVERHANG



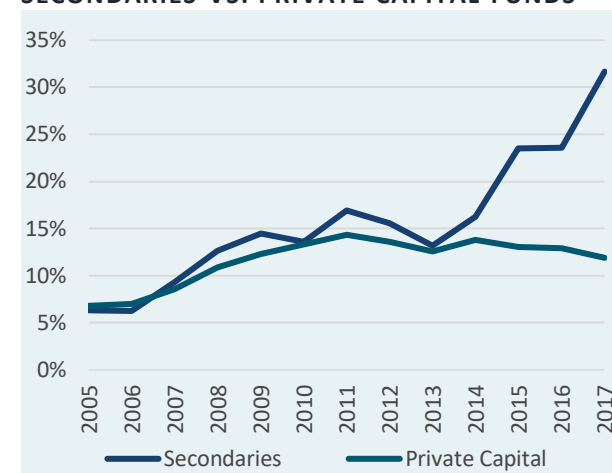
Source: Greenhill as of 6/30/2020

VOLUME BY SELLER TYPE



Source: Greenhill as of 6/30/2020

MEDIAN NET IRRS BY VINTAGE YEAR: SECONDARIES VS. PRIVATE CAPITAL FUNDS



Source: Preqin

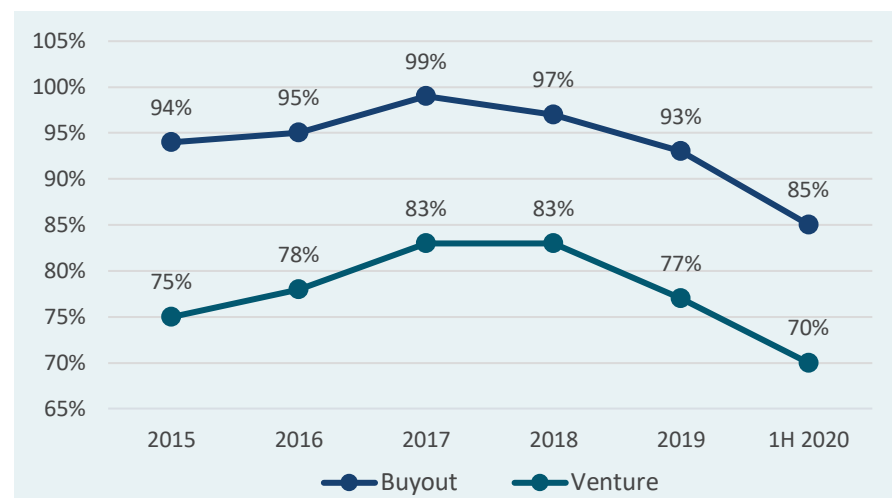
Global secondaries

Pricing

Historical pricing

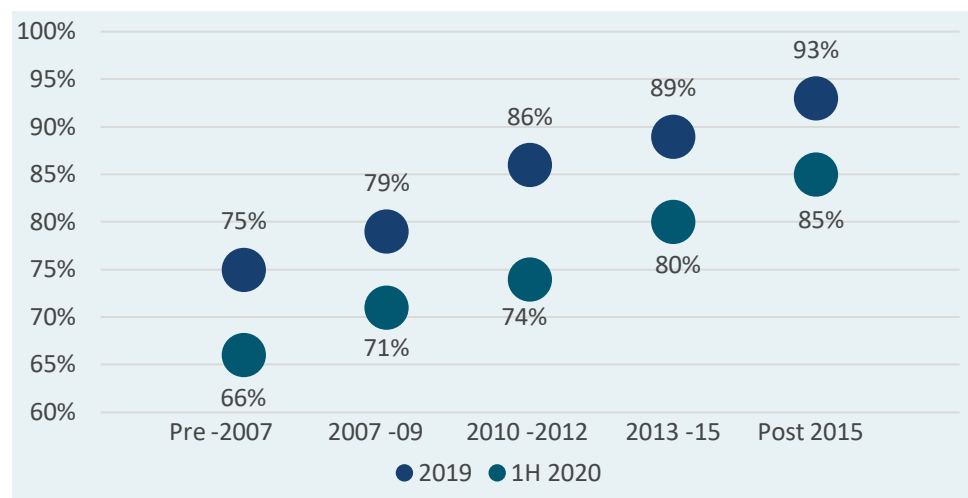
- According to Greenhill Cogent the average high bid across all strategies in 1H2020 was 80% of net asset value (NAV). Buyers decreased their appetite for risk, favoring newer vintage funds, well-known managers, and resilient, defensive assets. With most transactions in 1H pricing off a 3Q 2019 record date, buyers were highly cautious of imminent write-downs at the end of Q1.
 - Buyout pricing was highly manager and fund dependent. Funds with exposure to highly impacted sectors (travel, entertainment and retail) saw 20-30% declines, while those in late stage technologies, enterprise software and healthcare exposure were more insulated.
 - Venture pricing decreased due to high cash burn and extended holds due to the challenged M&A/ IPO environment.
- Buyers want to price off updated NAVs that reflect write-downs, hoping Q1 2020 and Q2 2020 NAVs more closely reflect today's economic environment to allow them to offer optically attractive headline prices
- Continued focus on portfolio companies' financial and operating performance as the economy "re-opens" during Q3 – Q4 2020, as buyers have lingering questions on whether valuations accurately reflect current market conditions

HISTORICAL SECONDARY PRICING (% OF NAV)



Source: Greenhill Cogent

PRICING BY VINTAGE YEAR (% OF NAV)



Source: Greenhill Cogent

Venture capital

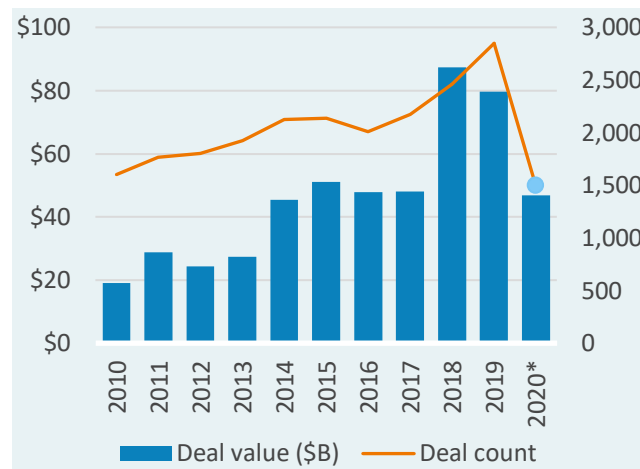
Venture capital

Global VC investments remain resilient among market slowdown

Trends

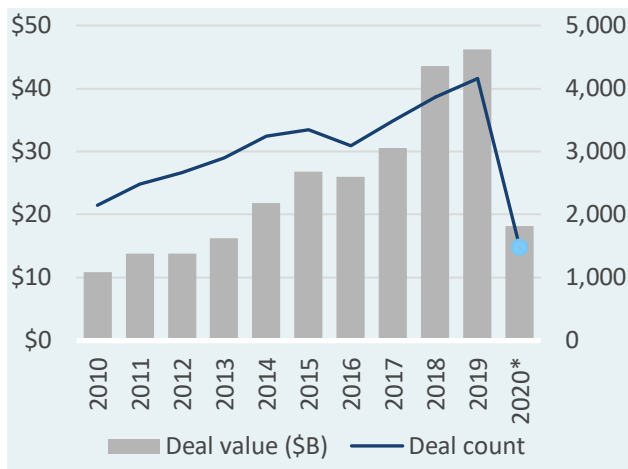
- Late-stage being the most exposed to market volatility has remained unexpectedly steady as certain sectors have realized newfound growth and are looking to capitalize on capital availability; conversely many sectors have seen a disruption to growth and some companies are needing to raise unplanned rounds to weather the market downturn.
- While some early-stage VC firms have been taking advantage of the chaos caused by the pandemic, other investors are cautious about writing checks for new investments as valuations have not dropped as much as investors would like. Investors' fear of overpaying during this period of uncertainty has undoubtedly contributed to deal activity's slower pace.
- In Europe strong deal value generated across financing stages and regions highlighted the resilience and independence of the VC ecosystem where software, food delivery and mobility sectors have continued to earn attention in Europe.

U.S. LATE STAGE VC DEAL ACTIVITY



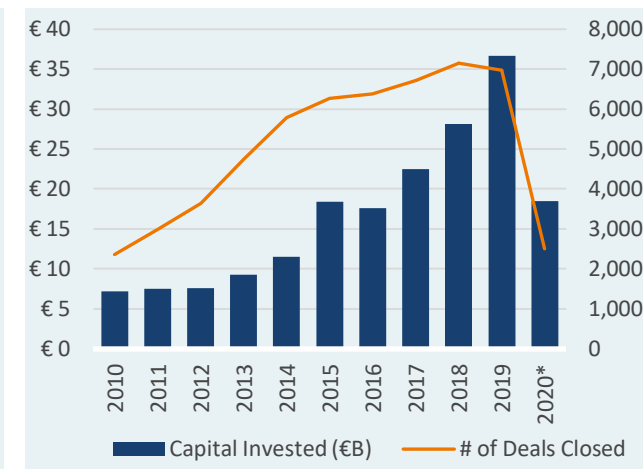
Source: PitchBook as of 6/30/2020

U.S. EARLY-STAGE VC DEAL ACTIVITY



Source: PitchBook as of 6/30/2020

EUROPEAN DEAL ACTIVITY



Source: PitchBook as of 6/30/2020

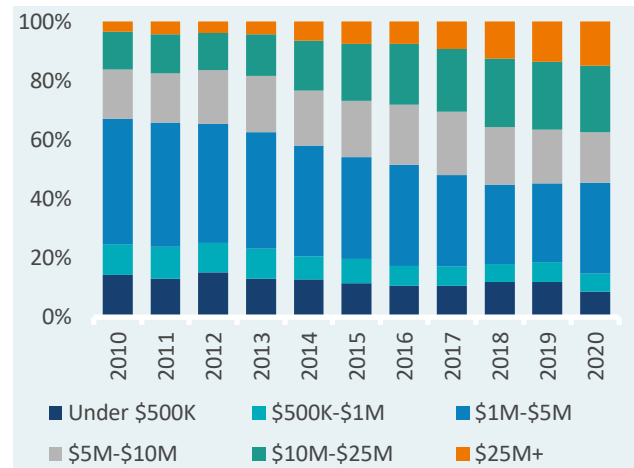
Venture capital

Mega-deals remain lion's share of the pie

2020 Environment

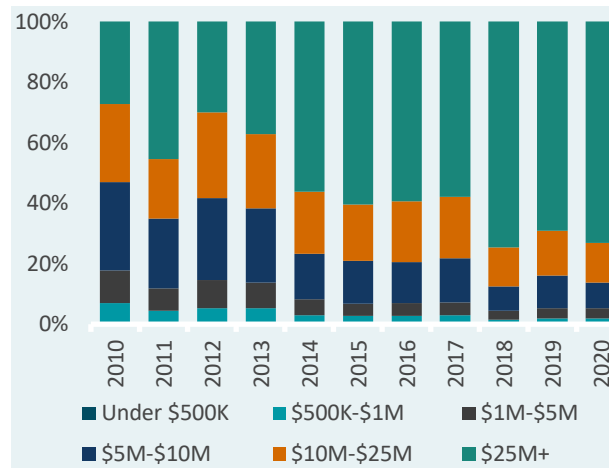
- Across all stages, large deals continue to make up the greatest share of respective deal value
- Early stage: Even though the pace of deals has slowed, larger early-stage deals have continued to close; VC deals exceeding \$10 million and \$25 million have continued to grow to record levels (37.5%) in the first half of 2020
- Late stage: During the first six months of 2020, more late-stage VC deals were financed than were early-stage investments, a strong statement by investors looking to protect their largest investments. Deals greater than \$25 million represent 73% of deal in value, drifting up from 70% in 2019 but a significant rise from 27% in 2010
- Median VC deal sizes across all stages in Europe have paced higher in the first half of 2020 relative to 2019, pointing towards a healthy ecosystem with broad financing options for startups at different phases of their lifecycle; a cause for optimism as European nations lift lockdowns and re-open borders for business and travel, which could further promote growth

U.S. EARLY STAGE VC BY DEAL SIZE (\$)



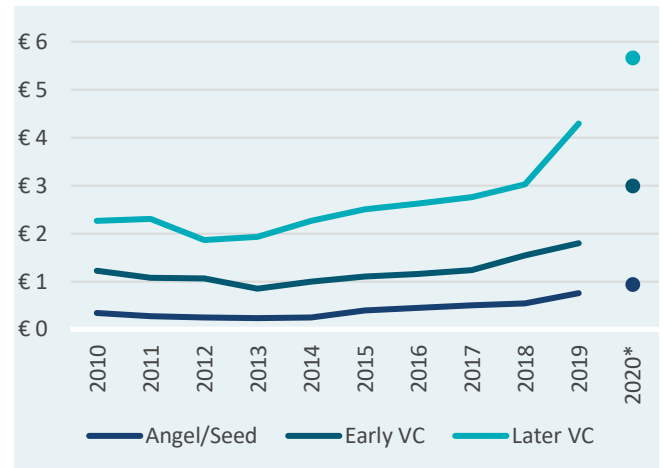
Source: PitchBook as of 6/30/2020

U.S. LATE STAGE VC BY DEAL SIZE (\$)



Source: PitchBook as of 6/30/2020

EUROPEAN VC DEAL SIZE (€M) BY STAGE



Source: PitchBook as of 6/30/2020

Venture capital

Exits continue to struggle during the pandemic

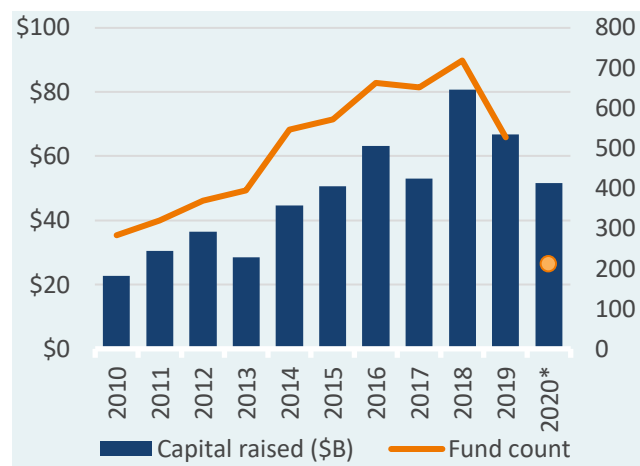
2020 Environment

- Despite a projected tightening of global investment on the horizon, established VCs and specialist funds, particularly those in healthcare and technology, continue to grow as first-time funds struggle to gain traction
- The first two quarters of 2020 maintained the slower pace of VC exits that began with the onset of COVID-19; exit count is tracking to be the lowest since 2011, and value is pacing to drop back toward the levels seen pre-2017

Outlook

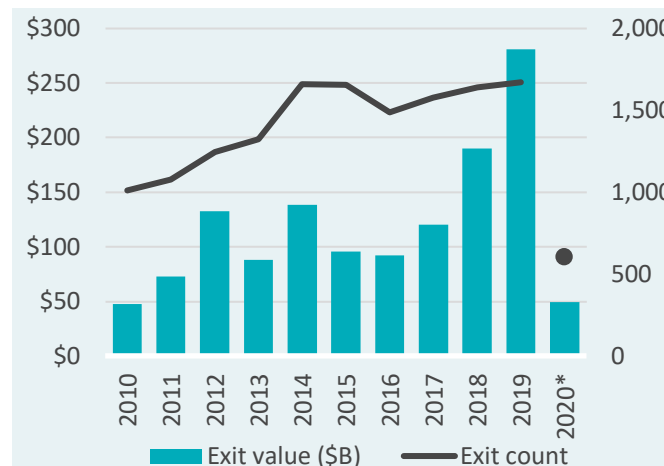
- IPOs saw some positive momentum toward the end of Q2 with companies outside of the technology & biotech industry completing or filing for public listings. While possibly due to the rebound in public equity prices and government stimulus rather than a full recovery, it still breeds some optimism for IPOs, especially for large companies in the queue that still plan to list
- The strength of VC in both exits and fundraising over the past few years has built up a large stockpile of dry powder and net cash flows to LPs, developing a material amount of goodwill in the industry, which should allow many GPs to weather a short-term blip in liquidity. However if negative cash flows continue into negative territory LPs may tap the brakes

GLOBAL VC FUNDRAISING(\$)



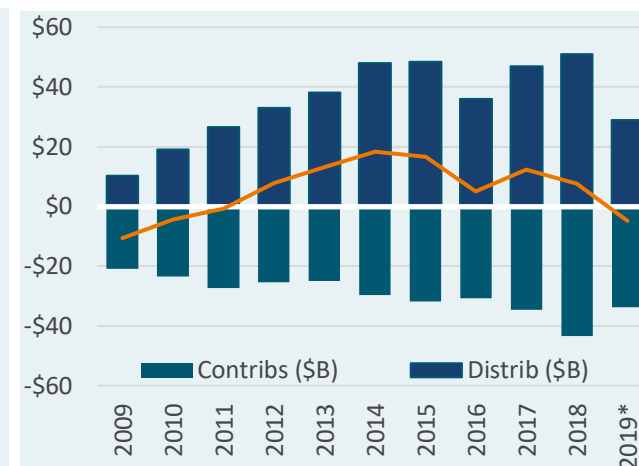
Source: PitchBook as of 6/30/2020

GLOBAL VC EXIT VALUE(\$)



Source: PitchBook as of 6/30/2020

VC CASHFLOWS(\$)



Source: PitchBook as of 9/30/2019

Appendix

Verus private equity philosophy

- Private equity is a long-term asset class:
 - Funds deploy capital into new investments over a three- to five-year period
 - After investment, portfolio companies are held for a period of four to seven years on average prior to exit
 - This typical investment course drives discrete fund lives to often last beyond 10 years, during which significant changes can occur
- To address this phenomenon, investors generally “average in” to the market by building portfolios of discrete private equity funds over multiple vintage years
- For these reasons, significant tactical shifts are not easily implemented in private markets portfolios
- Our top-down review of the asset class incorporates current trends, which if sustained, can potentially impact returns over the long term

We believe that careful manager selection is the primary driver of returns

That said, macro and top-down conditions have the potential to impact portfolio returns over the long term

Detailed returns by geography

Pooled Returns by Geography	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5
Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7

Public Index

Russell 3000	31.0	14.6	11.2	13.4	6.4		
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6		
MSCI EM Latin America	17.5	10.7	4.2	(0.6)	8.0		
MSCI FM Africa	10.8	6.8	(1.5)	5.3	--		
70% MSCI Arabian/ 30% MSCI Israel	10.1	7.6	2.7	4.4	--		

Outperformance vs. Public Index

U.S. All Private Equity *	(13.6)	1.0	1.7	1.6	3.5		
Europe All Private Equity *	(6.6)	9.4	9.3	6.7	10.0		
Asia All Private Equity *	(7.3)	2.2	4.5	6.7	7.8		
LatAM All Private Equity *	(9.6)	(4.6)	(2.7)	2.7	(4.8)		
Africa All Private Equity *	(5.9)	(1.0)	4.2	(0.5)	-		
Middle East All Private Equity *	6.1	4.5	7.0	6.6	-		

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters CJA as of December 31, 2019

Pooled returns by implementation approach

Pooled Returns by Implementation Approach	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
U.S. Pooled Returns							
U.S. All Private Equity Direct*	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7
U.S. Fund of Funds	13.3	12.6	9.6	12.3	8.1	472	158.8
U.S. Secondary Funds	11.6	12.8	9.6	12.4	11.5	199	184.3
Europe Pooled Returns							
Europe All Private Equity Direct*	17.2	19.2	14.4	11.9	13.6	723	707.5
Europe Fund of Funds	10.3	13.6	9.1	8.8	8.5	69	29.9
Europe Secondary Funds	7.7	13.1	9.6	12.3	13.6	35	18.0
Asia Pooled Returns							
Asia All Private Equity	12.1	13.0	11.4	12.8	11.4	640	336.7
Asia Fund of Funds	6.3	10.8	9.5	11.2	9.6	58	19.8
Global Pooled Returns							
Global All Private Equity Direct**	12.1	10.5	8.6	10.6	9.9	200	255.1
Global Fund of Funds **	14.2	14.3	10.9	11.0	9.3	87	31.8
Global Secondary Funds **	11.3	15.6	14.9	13.8	-	17	34.3
All Region Pooled Returns							
All Regions Private Equity Direct*	16.1	15.3	12.4	13.7	10.4	5,356	3,738.6
All Regions Fund of Funds	12.4	12.8	9.8	11.6	8.3	695	241.5
All Regions Secondary Funds	11.3	13.2	10.3	12.6	11.9	261	238.6
Public Index							
Russell 3000	31.0	14.6	11.2	13.4	6.4		
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6		
MSCI ACWI	26.6	12.4	8.4	8.8	4.5		

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

** Global Funds invest across the globe, without any targeted regions for investment.

Source: Thomson Reuters C/A as of December 31, 2019

Pooled returns outperformance

Outperformance vs. Public Index	1 Year	3 Year	5 Year	10 Year	20 Year
U.S. Outperformance					
U.S. All Private Equity Direct*	(13.6)	1.0	1.7	1.6	3.5
U.S. Fund of Funds	(17.7)	(2.0)	(1.6)	(1.1)	1.7
U.S. Secondary Funds	(19.4)	(1.9)	(1.6)	(1.0)	5.1
Europe Outperformance					
Europe All Private Equity Direct*	(6.6)	9.4	9.3	6.7	10.0
Europe Fund of Funds	(13.5)	3.8	4.0	3.6	4.9
Europe Secondary Funds	(16.1)	3.3	4.5	7.1	10.0
Asia Outperformance					
Asia All Private Equity *	(7.3)	2.2	4.5	6.7	7.8
Asia Fund of Funds	(13.1)	0.0	2.6	5.1	6.0
Global Outperformance					
Global All Private Equity Direct**	(14.6)	(1.9)	0.2	1.8	5.4
Global Fund of Funds **	(12.4)	1.9	2.5	2.2	4.8
Global Secondary Funds **	(15.3)	3.2	6.5	5.0	-
All Region Outperformance					
All Regions Private Equity Direct*	(10.5)	2.9	4.0	4.9	5.9
All Regions Fund of Funds	(14.2)	0.4	1.4	2.8	3.8
All Regions Secondary Funds	(15.3)	0.8	1.9	3.8	7.4

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

** Global Funds invest across the globe, without any targeted regions for investment.

Source: Thomson Reuters C/A as of December 31, 2019

U.S. returns

U.S. Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
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Private Equity Pooled Returns

U.S. Venture Capital	19.3	16.2	12.1	14.6	6.6	1,942	427.0
U.S. Growth Equity	22.5	20.3	16.0	16.5	12.3	284	274.7
U.S. Buyouts	17.4	15.9	13.8	15.8	11.2	902	1,275.6
U.S. Debt-Related	9.0	9.2	8.3	11.1	9.7	446	401.4
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7

Public Index

S&P 500	31.5	15.3	11.7	13.6	6.1		
Russell 3000	31.0	14.6	11.2	13.4	6.4		
Barclay's Aggregate	8.7	4.0	3.0	3.7	5.0		

Outperformance

All PE Outperformance*	(13.6)	1.0	1.7	1.6	3.5		
Debt-Related Outperformance	0.3	5.2	5.3	7.4	4.7		

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters C/A as of December 31, 2019

Europe returns

Europe Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
Europe Venture	24.5	25.1	17.1	14.0	8.8	161	32.2
Europe Growth Equity	10.7	21.3	15.6	11.8	11.8	46	14.5
Europe Buyouts	18.5	19.9	14.9	12.1	14.4	450	585.4
Europe Debt-Related	7.1	11.6	9.4	8.1	8.6	66	75.5
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5
Public Index							
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
Barclays Pan European Aggregate	7.2	2.5	2.3	4.4	4.6		
Outperformance							
All PE Outperformance*	(6.6)	9.4	9.3	6.7	10.0		
Debt-Related Outperformance	(0.2)	9.1	7.1	3.7	4.0		

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters C/A as of December 31, 2019

Asia, Latin America, Africa, Middle East returns

Asia, Latin America, Africa, Middle East	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7
Public Index							
MSCI Emerging Markets	18.4	11.6	5.6	3.7	6.7		
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6		
MSCI EM Latin America	17.5	10.7	4.2	(0.6)	8.0		
MSCI FM Africa	10.8	6.8	(1.5)	5.3	--		
70% MSCI Arabian/ 30% MSCI Israel	10.1	7.6	2.7	4.4	--		
Outperformance							
Asia All Private Equity *	(7.3)	2.2	4.5	6.7	7.8		
LatAM All Private Equity *	(9.6)	(4.6)	(2.7)	2.7	(4.8)		
Africa All Private Equity *	(5.9)	(1.0)	4.2	(0.5)	-		
Middle East All Private Equity *	6.1	4.5	7.0	6.6	-		

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters C/A as of December 31, 2019

Sub-asset class returns

U.S. Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
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Private Equity Pooled Returns

U.S. Venture Capital	19.3	16.2	12.1	14.6	6.6	1,942	427.0
U.S. Growth Equity	22.5	20.3	16.0	16.5	12.3	284	274.7
U.S. Buyouts	17.4	15.9	13.8	15.8	11.2	902	1,275.6
U.S. Debt-Related	9.0	9.2	8.3	11.1	9.7	446	401.4
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7

Asia, Latin America, Africa, Middle East	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
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Private Equity Pooled Returns

Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7

Europe Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
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Private Equity Pooled Returns

Europe Venture	24.5	25.1	17.1	14.0	8.8	161	32.2
Europe Growth Equity	10.7	21.3	15.6	11.8	11.8	46	14.5
Europe Buyouts	18.5	19.9	14.9	12.1	14.4	450	585.4
Europe Debt-Related	7.1	11.6	9.4	8.1	8.6	66	75.5
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters CJA as of December 31, 2019

Sub-asset class returns – fund of funds

Fund of Funds by Geography	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
U.S. Fund of Funds	13.3	12.6	9.6	12.3	8.1	472	158.8
Europe Fund of Funds	10.3	13.6	9.1	8.8	8.5	69	29.9
Asia Fund of Funds	6.3	10.8	9.5	11.2	9.6	58	19.8
Global Fund of Funds **	14.2	14.3	10.9	11.0	9.3	87	31.8
All Fund of Funds	12.4	12.8	9.8	11.6	8.3	695	241.5
Public Index							
Russell 3000	31.0	14.6	11.2	13.4	6.4		
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6		
MSCI ACWI	26.6	12.4	8.4	8.8	4.5		
Outperformance							
U.S. Fund of Funds	(17.7)	(2.0)	(1.6)	(1.1)	1.7		
Europe Fund of Funds	(9.1)	2.8	2.2	2.7	4.9		
Asia Fund of Funds	(20.3)	(1.6)	1.1	2.4	5.1		
Global Fund of Funds **	14.2	14.3	10.9	11.0	9.3		

** Global Funds invest across the globe, without any targeted regions for investment.
Source: Thomson Reuters C/A as of December 31, 2019

Sub-asset class returns – fund of funds

Fund of Funds by Sub Asset Class ⁽¹⁾	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
U.S. Buyout Fund of Funds	9.9	11.6	9.5	11.8	9.7	188	66.4
U.S. Venture Capital Fund of Funds	16.2	14.1	9.9	13.3	7.2	168	51.4
U.S. Venture Capital & Buyout Fund of Funds	12.0	11.3	9.1	11.3	6.6	116	41.0
U.S. Fund of Funds	13.3	12.6	9.6	12.3	8.1	472	158.8
Europe Buyout Fund of Funds	9.4	13.4	9.1	8.7	8.5	59	27.0
Europe VC & Buyout Fund of Funds	14.2	14.3	9.3	9.8	7.7	8	2.7
Europe Fund of Funds	10.3	13.6	9.1	8.8	8.5	69	29.9
Asia Buyout Fund of Funds	4.1	10.0	9.0	11.5	10.5	39	12.8
Asia VC & Buyout Fund of Funds	14.0	14.7	12.2	9.4	-	18	6.9
Asia Fund of Funds	6.3	10.8	9.5	11.2	9.6	58	19.8
Global Buyout Fund of Funds **	9.1	11.6	8.6	10.0	8.9	60	23.3
Global Venture Capital Fund of Funds **	23.9	22.0	19.5	17.6	11.7	13	4.8
Global VC & Buyout Fund of Funds **	14.1	13.5	10.2	10.5	-	14	3.7
Global Fund of Funds **	14.2	14.3	10.9	11.0	9.3	87	31.8

Fund of Funds by Sub Asset Class ⁽¹⁾	1 Year	3 Year	5 Year	10 Year	20 Year
Public Index					
Russell 3000	31.0	14.6	11.2	13.4	6.4
MSCI Europe	23.8	9.8	5.1	5.2	3.6
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6
MSCI ACWI	26.6	12.4	8.4	8.8	4.5
Outperformance vs. Public Index					
U.S. Buyout Fund of Funds	(21.1)	(3.0)	(1.7)	(1.6)	3.3
U.S. Venture Capital Fund of Funds	(14.8)	(0.5)	(1.3)	(0.1)	0.8
U.S. Venture Capital & Buyout Fund of Funds	(19.0)	(3.3)	(2.1)	(2.1)	0.2
U.S. Fund of Funds	(17.7)	(2.0)	(1.6)	(1.1)	1.7
Europe Buyout Fund of Funds	(14.4)	3.6	4.0	3.5	4.9
Europe VC & Buyout Fund of Funds	(9.6)	4.5	4.2	4.6	4.1
Europe Fund of Funds	(13.5)	3.8	4.0	3.6	4.9
Asia Buyout Fund of Funds	(15.3)	(0.8)	2.1	5.4	6.9
Asia VC & Buyout Fund of Funds	(5.4)	3.9	5.3	3.3	-
Asia Fund of Funds	(13.1)	0.0	2.6	5.1	6.0
Global Buyout Fund of Funds **	(17.5)	(0.9)	0.2	1.2	4.4
Global Venture Capital Fund of Funds **	(2.7)	9.6	11.1	8.8	-
Global VC & Buyout Fund of Funds **	(12.5)	1.1	1.8	1.7	-
Global Fund of Funds **	(12.4)	1.9	2.5	2.2	4.8

** Global Funds invest across the globe, without any targeted regions for investment.

(1) All Fund of Funds may occasionally co-invest in private companies and/ or invest in secondary transactions.

Europe and Asia Venture Capital Fund of Funds have less than 3 funds and therefore included in the All Europe and Asia FoF pooled returns.

Source: Thomson Reuters C/A as of December 31, 2019

Sub-asset class returns - secondaries

Secondary Funds	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
U.S. Secondary Funds	11.6	12.8	9.6	12.4	11.5	199	184.3
Europe Secondary Funds	7.7	13.1	9.6	12.3	13.6	35	18.0
Global Secondary Funds **	11.3	15.6	14.9	13.8	-	17	34.3
All Secondary Funds ⁽¹⁾	11.3	13.2	10.3	12.6	11.9	261	238.6
Public Index							
Russell 3000	31.0	14.6	11.2	13.4	6.4		
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
MSCI ACWI	26.6	12.4	8.4	8.8	4.5		
Outperformance							
U.S. Secondary Funds	(19.4)	(1.9)	(1.6)	(1.0)	5.1		
Europe Secondary Funds	(16.1)	3.3	4.5	7.1	10.0		
Global Secondary Funds **	(15.3)	3.2	6.5	5.0	-		

** Global Funds invest across the globe, without any targeted regions for investment.

(2) Regions that have less than 3 funds are only included in the All Secondary Funds pooled returns.

Source: Thomson Reuters C/A as of December 31, 2019

Geography and approach

Pooled Returns by Geography	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5
Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7

Public Index

Russell 3000	31.0	14.6	11.2	13.4	6.4
MSCI Europe	23.8	9.8	5.1	5.2	3.6
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6
MSCI EM Latin America	17.5	10.7	4.2	(0.6)	8.0
MSCI FM Africa	10.8	6.8	(1.5)	5.3	--
70% MSCI Arabian/ 30% MSCI Israel	10.1	7.6	2.7	4.4	--

Outperformance vs. Public Index

U.S. All Private Equity *	(13.6)	1.0	1.7	1.6	3.5
Europe All Private Equity *	(6.6)	9.4	9.3	6.7	10.0
Asia All Private Equity *	(7.3)	2.2	4.5	6.7	7.8
LatAM All Private Equity *	(9.6)	(4.6)	(2.7)	2.7	(4.8)
Africa All Private Equity *	(5.9)	(1.0)	4.2	(0.5)	-
Middle East All Private Equity *	6.1	4.5	7.0	6.6	-

Pooled Returns by Implementation Approach	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
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U.S. Pooled Returns

U.S. All Private Equity Direct*	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7
U.S. Fund of Funds	13.3	12.6	9.6	12.3	8.1	472	158.8
U.S. Secondary Funds	11.6	12.8	9.6	12.4	11.5	199	184.3

Europe Pooled Returns

Europe All Private Equity Direct*	17.2	19.2	14.4	11.9	13.6	723	707.5
Europe Fund of Funds	10.3	13.6	9.1	8.8	8.5	69	29.9
Europe Secondary Funds	7.7	13.1	9.6	12.3	13.6	35	18.0

Asia Pooled Returns

Asia All Private Equity	12.1	13.0	11.4	12.8	11.4	640	336.7
Asia Fund of Funds	6.3	10.8	9.5	11.2	9.6	58	19.8

Global Pooled Returns

Global All Private Equity Direct**	12.1	10.5	8.6	10.6	9.9	200	255.1
Global Fund of Funds **	14.2	14.3	10.9	11.0	9.3	87	31.8
Global Secondary Funds **	11.3	15.6	14.9	13.8	-	17	34.3

All Region Pooled Returns

All Regions Private Equity Direct*	16.1	15.3	12.4	13.7	10.4	5,356	3,738.6
All Regions Fund of Funds	12.4	12.8	9.8	11.6	8.3	695	241.5
All Regions Secondary Funds	11.3	13.2	10.3	12.6	11.9	261	238.6

Public Index

Russell 3000	31.0	14.6	11.2	13.4	6.4
MSCI Europe	23.8	9.8	5.1	5.2	3.6
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6
MSCI ACWI	26.6	12.4	8.4	8.8	4.5

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters CJA as of December 31, 2019

Geography and approach (continued)

Pooled Returns by Implementation Approach	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Global Pooled Returns							
Global All Private Equity Direct**	12.1	10.5	8.6	10.6	9.9	200	255.1
Global Fund of Funds **	14.2	14.3	10.9	11.0	9.3	87	31.8
Global Secondary Funds **	11.3	15.6	14.9	13.8	-	17	34.3
All Region Pooled Returns							
All Regions Private Equity Direct*	16.1	15.3	12.4	13.7	10.4	5,356	3,738.6
All Regions Fund of Funds	12.4	12.8	9.8	11.6	8.3	695	241.5
All Regions Secondary Funds	11.3	13.2	10.3	12.6	11.9	261	238.6
Public Index							
Russell 3000	31.0	14.6	11.2	13.4	6.4		
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6		
MSCI ACWI	26.6	12.4	8.4	8.8	4.5		

Outperformance vs. Public Index	1 Year	3 Year	5 Year	10 Year	20 Year
U.S. Outperformance					
U.S. All Private Equity Direct*	(13.6)	1.0	1.7	1.6	3.5
U.S. Fund of Funds	(17.7)	(2.0)	(1.6)	(1.1)	1.7
U.S. Secondary Funds	(19.4)	(1.9)	(1.6)	(1.0)	5.1
Europe Outperformance					
Europe All Private Equity Direct*	(6.6)	9.4	9.3	6.7	10.0
Europe Fund of Funds	(13.5)	3.8	4.0	3.6	4.9
Europe Secondary Funds	(16.1)	3.3	4.5	7.1	10.0
Asia Outperformance					
Asia All Private Equity *	(7.3)	2.2	4.5	6.7	7.8
Asia Fund of Funds	(13.1)	0.0	2.6	5.1	6.0
Global Outperformance					
Global All Private Equity Direct**	(14.6)	(1.9)	0.2	1.8	5.4
Global Fund of Funds **	(12.4)	1.9	2.5	2.2	4.8
Global Secondary Funds **	(15.3)	3.2	6.5	5.0	-
All Region Outperformance					
All Regions Private Equity Direct*	(10.5)	2.9	4.0	4.9	5.9
All Regions Fund of Funds	(14.2)	0.4	1.4	2.8	3.8
All Regions Secondary Funds	(15.3)	0.8	1.9	3.8	7.4

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

** Global Funds invest across the globe, without any targeted regions for investment.

Source: Thomson Reuters C/A as of December 31, 2019

Geographies with outperformance

U.S. Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
U.S. Venture Capital	19.3	16.2	12.1	14.6	6.6	1,942	427.0
U.S. Growth Equity	22.5	20.3	16.0	16.5	12.3	284	274.7
U.S. Buyouts	17.4	15.9	13.8	15.8	11.2	902	1,275.6
U.S. Debt-Related	9.0	9.2	8.3	11.1	9.7	446	401.4
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7
Public Index							
S&P 500	31.5	15.3	11.7	13.6	6.1		
Russell 3000	31.0	14.6	11.2	13.4	6.4		
Barclay's Aggregate	8.7	4.0	3.0	3.7	5.0		
Outperformance							
All PE Outperformance*	(13.6)	1.0	1.7	1.6	3.5		
Debt-Related Outperformance	0.3	5.2	5.3	7.4	4.7		

Europe Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
Europe Venture	24.5	25.1	17.1	14.0	8.8	161	32.2
Europe Growth Equity	10.7	21.3	15.6	11.8	11.8	46	14.5
Europe Buyouts	18.5	19.9	14.9	12.1	14.4	450	585.4
Europe Debt-Related	7.1	11.6	9.4	8.1	8.6	66	75.5
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5
Public Index							
MSCI Europe	23.8	9.8	5.1	5.2	3.6		
Barclays Pan European Aggregate	7.2	2.5	2.3	4.4	4.6		
Outperformance							
All PE Outperformance*	(6.6)	9.4	9.3	6.7	10.0		
Debt-Related Outperformance	(0.2)	9.1	7.1	3.7	4.0		

Asia, Latin America, Africa, Middle East	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7
Public Index							
MSCI Emerging Markets	18.4	11.6	5.6	3.7	6.7		
MSCI AC Asia Pacific	19.4	10.8	6.9	6.1	3.6		
MSCI EM Latin America	17.5	10.7	4.2	(0.6)	8.0		
MSCI FM Africa	10.8	6.8	(1.5)	5.3	--		
70% MSCI Arabian/ 30% MSCI Israel	10.1	7.6	2.7	4.4	--		
Outperformance							
Asia All Private Equity *	(7.3)	2.2	4.5	6.7	7.8		
LatAM All Private Equity *	(9.6)	(4.6)	(2.7)	2.7	(4.8)		
Africa All Private Equity *	(5.9)	(1.0)	4.2	(0.5)	-		
Middle East All Private Equity *	6.1	4.5	7.0	6.6	-		

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters C/A as of December 31, 2019

Geographies with sub-asset classes excluding outperformance

Pooled Returns by Geography	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5
Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7

Europe Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
Europe Venture	24.5	25.1	17.1	14.0	8.8	161	32.2
Europe Growth Equity	10.7	21.3	15.6	11.8	11.8	46	14.5
Europe Buyouts	18.5	19.9	14.9	12.1	14.4	450	585.4
Europe Debt-Related	7.1	11.6	9.4	8.1	8.6	66	75.5
Europe All Private Equity *	17.2	19.2	14.4	11.9	13.6	723	707.5

U.S. Pooled Returns	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
U.S. Venture Capital	19.3	16.2	12.1	14.6	6.6	1,942	427.0
U.S. Growth Equity	22.5	20.3	16.0	16.5	12.3	284	274.7
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U.S. Debt-Related	9.0	9.2	8.3	11.1	9.7	446	401.4
U.S. All Private Equity *	17.4	15.6	12.9	15.0	9.9	3,574	2,378.7

Asia, Latin America, Africa, Middle East	1 Year	3 Year	5 Year	10 Year	20 Year	Fund Count	Total Capitalization (\$B)
Private Equity Pooled Returns							
Asia All Private Equity *	12.1	13.0	11.4	12.8	11.4	640	336.7
LatAM All Private Equity *	7.9	6.1	1.5	2.1	3.2	68	29.3
Africa All Private Equity *	4.9	5.8	2.7	4.8	6.5	47	12.5
Middle East All Private Equity *	16.2	12.1	9.7	11.0	5.1	60	9.7

* All Private Equity excludes Natural Resource, Infrastructure, Real Estate, Fund of Funds and Secondary Funds.

Source: Thomson Reuters C/A as of December 31, 2019

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