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The Evolution of Private Equity

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Institutional investors have increasingly turned to private markets to meet their return requirements. As a result, private equity, being one of the more mature and established components of the private markets universe, has seen phenomenal growth and is now considered less “alternative” and more “core” to an institutional investor’s overall portfolio [1, 2, 3]. Typically, investors allocate to private equity to achieve a higher return than obtained in public or listed equity. Such outperformance is often attributed to a combination of operational improvements, active ownership, increased direct corporate governance, better alignment of interests, longer investment horizons and financial leverage. Beyond the meteoric growth of private equity, the industry has witnessed a variety of structural changes since it took off in the early 1980s.

Strategic evolution

The first private equity funds were created in the 1950s in the US and UK. However, there were few such formal structures and they were mostly marketed to individual investors rather than to institutional investors. Regulatory changes were key to the growth of the industry. For example, the ‘prudent man’ rule in the US prohibited pension funds from allocating to high risk assets such as private equity funds, and was relaxed in 1979. Another milestone in the 1980s was the easier access for non-expert investors either through fund-of-funds, a gatekeeper or a consultant. Institutional investors were suddenly able to effectively outsource the management of fund investments to specialized firms and eliminate the need for in-house expertise. All of these favorable regulatory events together with the evolution of the limited partnership resulted in a spectacular growth of the private equity industry.

Private Equity Trends

1980's

Rise of the modern-day leveraged buyout (LBO), attracting new competitors such as Bain Capital, The Blackstone Group, The Carlyle Group, Warburg Pincus and Hellman & Friedman. Additionally, the venture capital industry grew 10 fold. Early age of LP-led secondaries and syndicated co-investments

1990's

Rise of the big 4 players, consisting of KKR, Blackstone, Carlyle and Apollo. LBO bust and collapse of Drexel Burnham Lambert, transitioning into the venture capital boom and the dotcom bubble.

2000's

In the wake of the dotcom crisis, the mega-buyout emerged in addition to the public offerings of KKR and Blackstone. An institutional secondary market was established, offering investors an early exit from existing positions

2010's

In the wake of the GFC, niche players and strategies gained traction with investors. Additionally, trends in data science slowly crept into private equity offering an opportunity to bring clarity to a previously opaque industry. Significant growth of co-investments, GP-led secondaries and thematic offerings such as ESG.

In this article we study the returns and outperformance of private equity over the last four decades. Through various periods of financial duress we analyze how private equity behaved in market downturns and discuss various stylized facts and return drivers. In addition, we provide insight into long term correlations between private equity and a set of observable variables. We wrap-up by discussing trends we see when entering the next decade.

Source: BlackRock. Fenn, Liang, Prowse 1995. Gompers, Lerner 1999. Brown et. al 2020.

Comparison to other assets

Figure 1 shows the value, on 31 December 2019, of USD 100 invested in five different financial instruments on 1 January 1980, assuming reinvestment of all proceeds. Private equity clearly shows the highest returns with an ending value of USD 27,024, equating to an annual time-weighted return of 15.0% - an outperformance of 5.5% and 4.3% over the MSCI World and S&P 500 indices, respectively.

Fig 1: Time-weighted returns across 5 asset classes

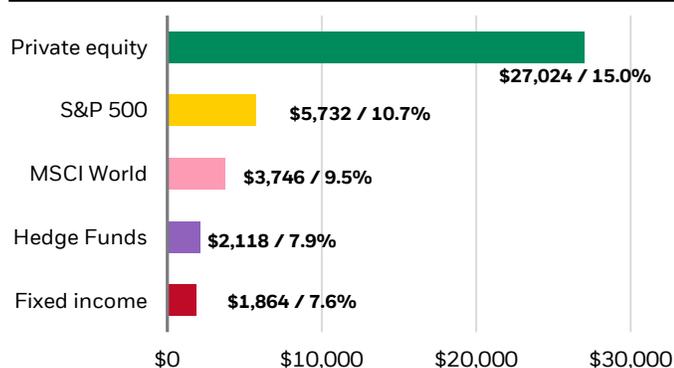


Fig 1: Value of USD 100 invested into five financial instruments on 1 January 1980. Private equity: Burgiss; Fixed income: Barclays US Aggregated Bond index; Hedge funds: HFRI FOF index; both MSCI World and S&P500 represent total return indices. Private Equity data sourced from Burgiss covers vintages 1980-2019, 5,643 funds, and USD 3,992 billion in market capitalization. Private equity strategies include all equity strategies. All dollar figures are USD. Indexes are unmanaged and one cannot invest directly in an index. **Past performance does not guarantee future returns.**

However, as opposed to public equity investments where the investor is immediately fully invested, private equity managers call committed capital from their investors over time as they find investment opportunities and distribute principal and gains as investments are exited. For this reason, the timing and size of cash flows is more important than in traditional asset classes. Private equity practitioners do not typically report time-weighted returns as in Figure 1 but analyze and report performance in a money-weighted performance metric, the internal rate of return (IRR). The money-weighted mechanic of the IRR better reflects the timing and size of the underlying cash flows. In addition, TVPI and other multiples are used to reflect cash-on-cash returns.

Historical performance

Fig 2: Pooled, absolute and relative performance

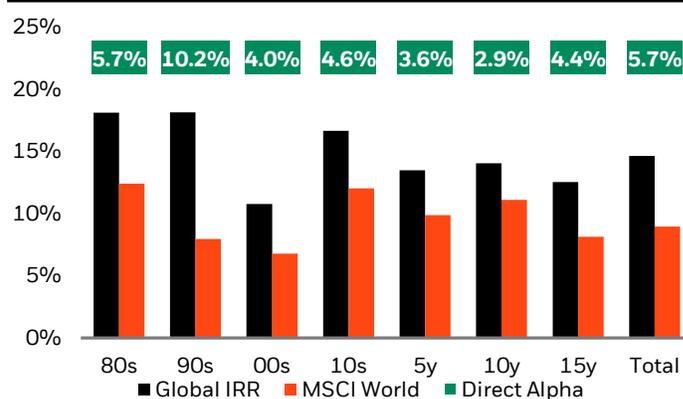


Table 1: Detailed performance of private equity

	1980s	1990s	2000s	2010s	5-year	10-yr	15-yr	Total
Global IRR	18.1%	18.1%	10.8%	16.6%	13.5%	14.0%	12.5%	14.6%
Direct Alpha	5.7%	10.2%	4.0%	4.6%	3.6%	2.9%	4.4%	5.7%
Global TVPI	2.62x	1.78x	1.64x	1.51x	1.38x	1.58x	1.53x	1.60x
KS PME	1.34x	1.41x	1.17x	1.13x	1.09x	1.10x	1.16x	1.20x

Fig 2/Table 1: Global private equity fund pooled, absolute and relative performance against the MSCI World index for 40 vintage years and 4 pooled aggregates – all in USD as of 31 December 2019. Private Equity data sourced from Burgiss covers vintages 1980-2019, 5,643 funds, and USD 3,992 billion in market capitalization. Private equity strategies include all equity strategies. Indexes are unmanaged and one cannot invest directly in an index. **Past performance does not guarantee future returns.**

Figure 2 demonstrates strong performance for each of the four decades in isolation for various aggregates on both an absolute (IRR) and relative (direct alpha) basis. In aggregate and since inception, the direct alpha over these 40 vintage years (1980-2019) is 5.7%. This pooled outperformance is also substantial, when looking at different time windows and ranges from 3.6% for 5 year to 4.4% for 15 years. The 10 year pooled outperformance is the lowest, resulting from the longest public equity rally in history fueled by monetary policies. The equivalent outperformance on an absolute basis for TVPI ranges from 9% for 5 year to 16% for 15 years. On a look-through basis, the direct alpha or pooled outperformance over the MSCI World index is positive in 37 of 40 vintages. For instance, vintage years '05, '06 and '07 are generally considered difficult private equity vintages with record capital raised and, partially because of that, disappointing performance (high single digit IRRs). However, these vintages still show a clear outperformance over listed equity of about 1.5%. 2

Stylized facts

The empirical results shown thus far represent the historical outperformance of a large universe of private equity funds as of 31 December 2019, however, the variation or volatility of the **outperformance over time** is not displayed. Figure 3 displays the direct alpha over time across the same universe. The universe shown grows over time when new funds are raised and invested. The endpoint of Figure 2 and Figure 3 are the same, i.e. a pooled outperformance of 5.7%.

As shown in Figure 3 the outperformance over the MSCI World index is consistently positive, yet volatile and is especially high during times that public equity markets declined, i.e. during the global financial crisis (2008-2009) and the European debt crisis (2011) where outperformance peaked at 8.9% and 8.1%, respectively. Figure 4 is directly related and compares the peak-to-trough decline of valuations during 4 crisis periods to the decline in public equity markets. As it can be seen, the **decline seen in private equity is consistently and significantly smaller** than seen in public equity markets. Recently, valuations took a major hit, with the total universe across private capital **decreasing by 8%** in the aggregate, compared to the **MSCI World at 21% during Q1 of 2020**. While a part of this dampening is explained by smoothed valuations, it also hints to the outperformance of private equity and is consistent with academic studies that show that private equity-backed companies cut investments less than their peers during the crisis and experienced higher

Fig 3: time-evolution of direct alpha and dispersion over time

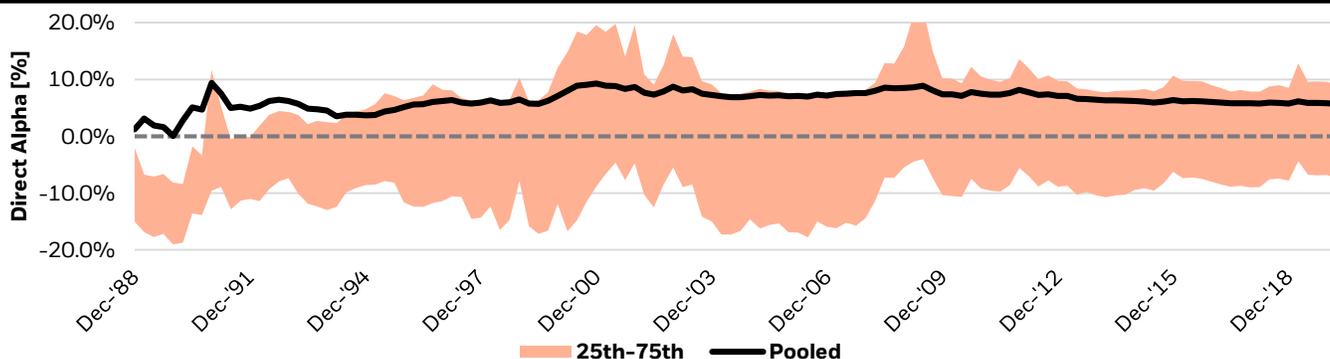


Fig 3: Private Equity data sourced from Burgiss covers vintages 1980-2019, 5,643 funds, and USD 3,992 billion in market capitalization. Private equity strategies include all equity strategies. **Past performance does not guarantee future returns.**

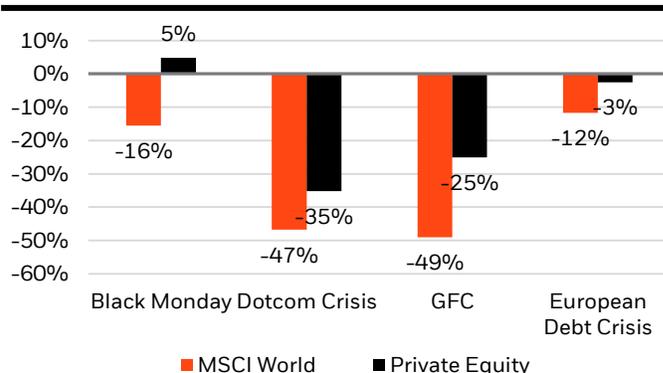
Fig 4: Private Equity data sourced from Burgiss covers vintages 1980-2019, 5,643 funds, and USD 3,992 billion in market capitalization. Private equity strategies include all equity strategies. Black Monday defined as 9/30/1987-12/31/1987, Dotcom Crisis defined as 3/31/2000-9/30/2002, GFC defined as 9/30/2007-3/31/2009, and European Debt Crisis defined as 6/30/2011 - 12/31/2011. **Past performance does not guarantee future returns.**

asset growth and market share [4]

Analysis on the deal-level shows that deals during periods of financial duress are on average 3 times more profitable compared to long-term average returns [source: BlackRock internal data].

Figure 3 also shows that over recent years the outperformance has stabilized mostly due to the lasting public equity rally fueled by monetary policies.

Fig 4: peak-to-trough returns across time periods



These aggregate returns can be interpreted as a passive investment in a private equity index, having exposure to all private equity funds. Clearly, such passive strategy is not feasible and investors must select managers and size the commitment to their funds. The choice of manager and commitment size is the biggest and most important investment decision to achieve incremental returns and manage risk. Figure 3 also shows that the **dispersion of returns** is higher than seen in other asset classes, making manager selection ever more important, especially knowing that persistence of performance by managers has declined considerably [3].

Figure 5 illustrates the **importance of manager selection** in private equity. The bar on the left-hand side corresponds to previous figures and represents a fictitious investor allocated pro-rata to all funds in the market. The bar in the middle represents an investor with the ability to select 75% of the managers in the upper median and the remaining 25% in lower median performing funds. Clearly, the outperformance increases to 8% and the risk or uncertainty of outcomes between the 25th and 75th percentiles reduces considerably.

Fig 5: Outperformance across various investors

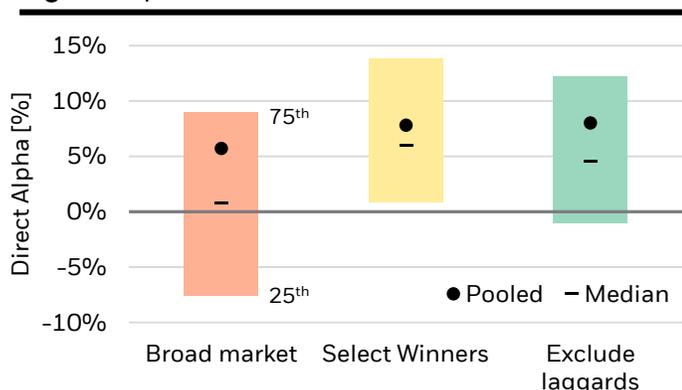


Fig 5: data sourced from Burgiss covers vintages 1980-2019, 5,643 funds, and USD 3,992 billion in market capitalization. Private equity strategies include all equity strategies. All dollar figures are USD. Indexes are unmanaged and one cannot invest directly in an index.

Past performance does not guarantee future returns.

Yet, top performing funds are often oversubscribed and hard to access. An equivalent way to add value would be to exclude 4th quartile funds and invest pro-rata in the remaining funds, this is shown in the bar on the right-hand side. Also here the incremental value-add through selection is material and pooled outperformance equals 8% and a notably smaller spread between the 25th and 75th percentiles can be observed. Interestingly, the downside at the 25th percentile is limited in both scenarios to flat public equity outperformance.

Often investors are concerned with the amount of capital that has been allocated to the private equity industry. While the growth of the industry is impressive, more and more companies are moving from being publicly owned to privately owned. Over the past two decades, the number of listed companies in the US has halved, while the number of privately held companies has continuously increased. Furthermore, companies that are too small or unsuitable for public ownership, as well as

businesses in the early and growth stages, can only be accessed through private equity. On a relative basis the amount of investible capital (dry powder) has remained fairly constant. [1,2]

Figure 6 shows the pooled outperformance over the MSCI world index for 33 vintages since 1988 – young vintages were excluded as these are still in their J curve and so were vintages with less than USD 5 billion in market capitalization. First, every vintage year demonstrated outperformance over public equities. Second, outperformance seems **inversely correlated** with total capital raising on a vintage by vintage basis. [10]. This emphasizes that market timing is difficult if not impossible and calls for a consistent allocation across vintage years.

Fig 6: Inverse relationship between fundraising and outperformance

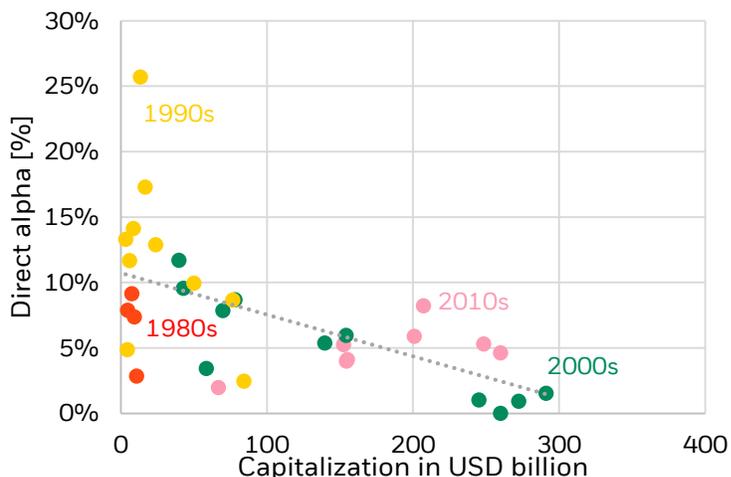


Fig 6: data sourced from Burgiss covers vintages 1986-2017, 4,756 funds, and USD 3,153 billion in market capitalization. Private equity strategies include all equity strategies. All dollar figures are USD. Indexes are unmanaged and one cannot invest directly in an index.

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Many scholars have studied **correlations between macro-economics variables** and private equity returns. Whether public or private, equity investments are exposed to the same factors and hence private equity returns show a high correlation with public returns. Depending on time period, region and level, correlations ranging between 60% and 90% have been reported. [4,8].

Correlations between interest rates and private equity returns is found to be minimal which is explained by diversified debt structures and maturities across economies and regions [11].

Outlook into the 2020s

In the next decade, we see the private equity industry evolving further along with the following trends:

The recent approval of including **private equity in 401(k) plans** by the US Department of Labor provides a number of future implications on the industry as a whole. Private equity solution providers will play a large role, adding an additional layer of fiduciary responsibility to the existing 401(k) sponsor. The secondary market will have an active role given the desire to front load portfolios with seasoned investments, in addition to the need to re-allocate portfolios on a semi-regular basis. Given the total 401(k) market represents approximately \$6T of assets, with half of that in target date funds, the total market opportunity is roughly \$450b assuming a 15% allocation to private equity. [12]

Emerging technologies and data science techniques have swept across public equities given the vast amount of data publicly available. The private equity industry has largely been left in the dust given its opaque nature, however, recent improvements in natural language processing and other techniques have opened the door to a world of analytical capabilities. Utilizing a variety of alternative data sets enables investors to provide differentiated insights into companies with traditionally limited data available.

GPs from across the globe have begun fundraising a variety of **sustainable** focused strategies. A focus on **UN SDG-related themes** can provide both financial returns and positive outcomes to society and environment. Attractive themes in the impact investing space include healthcare, financial inclusion, climate, resources, and education.

Additionally, investors increasingly see their private and public equity allocation as one **integrated equity investment**. This will pose important constraints and drive advancements in transparency, reporting and analytics for the private equity industry.

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Consistent outperformance

Private equity has consistently outperformed public markets over the past 40 years¹

Democratization of access

Recent regulatory approvals in the United States have paved the way for the inclusion of private equity into investors 401(k) accounts

Impact of technology

Advancements in artificial intelligence and data science have reached the private equity industry and offer sophisticated players a unique advantage over competitors

ESG/Impact Investing

“Driver of financial returns is the driver of sustainable outcomes”

Integrated equities

Shift in investor attitudes will drive advancements such as transparency, reporting and analytics

1. Global private equity fund pooled, absolute and relative performance against the MSCI World index for 40 vintage years – all in USD as of 31 December 2019. Private Equity data sourced from Burgiss covers vintages 1980-2019, 5,643 funds, and USD 3,992 billion in market capitalization. Private equity strategies include all equity strategies. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future returns.

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