Morgan Stanley

INVESTMENT MANAGEMENT

Market Timing in Private Investments

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Executive Summary

It is a well-known phenomenon that private market returns vary across vintage years. Moreover, as we show in our "Post-Crisis Private Markets Investing" paper, this variability is closely tied to market cycles. Historically, the performance of vintages that immediately follow the onset of market crises has been particularly strong. This is true on both an absolute basis, when compared to private market returns in other vintage years; and on a relative basis, when compared to public market performance in the same vintage years.

In this paper, we analyze whether GPs have been able to time the market and increase investments in favorable years. We conclude that GPs have not historically taken advantage of market timing and thus investors should increase their commitments in order to obtain the desired exposure to investments at favorable valuations.

AUTHOR

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See p. 12 for important disclaimers.

In the past, private valuations have recovered slowly during crises. If this pattern continues to hold in the future, investors[1] should have ample opportunity to attempt to achieve higher returns through market timing. But the question is how. Should investors rely on General Partners[2] to make smart timing decisions on their behalf (by calling and investing more capital when valuations are low and exiting when valuations peak)? Or, should investors take it upon themselves to increase their overall commitments to private funds during crisis periods?

To answer this question, we analyzed a broad set of historical data to determine whether GPs are skilled at timing their entry and exit points.

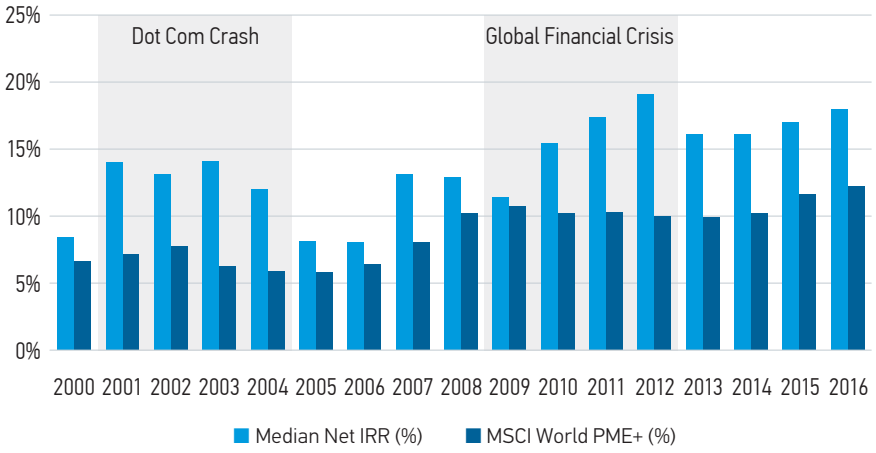
Entry market timing was analyzed by looking at the proportion of called capital to total committed, but undrawn, capital ("dry powder"), with a higher level of called capital during favorable years and lower level during unfavorable years indicating successful entry market timing. Exit market timing was analyzed by looking at the proportion of distributed capital to Net Asset Value ("NAV"). A higher level of distributed capital during years when valuations were high relative to years when valuations were low indicates successful exit market timing. We conducted our analysis on the entire population of buyout funds as well as a subset of top-performing managers.

Our conclusions are as follows:

- GPs **do not** time market entry effectively as called capital has decreased by 33% on average in post-crisis years vs. pre-crisis years.[3]

DISPLAY 1

Private Equity vintages that immediately follow the onset of market crises have delivered attractive returns on an absolute and relative basis



Source: Preqin as of August 2020

- GPs **do** time market exits effectively as distributions have historically increased by approximately 49% in periods when asset prices are relatively high.

Based upon these findings, to maximize returns, we believe that investors should consider increasing their private market commitments in post-crisis periods and allow GPs to naturally reduce their exposure through distributions in market peaks.[4]

Private Asset Manager Market Timing

ENTRY MARKET TIMING

Successful entry market timing, in our view, can be assessed by examining whether GPs invest a higher proportion of committed capital during "favorable years" when valuations decrease meaningfully following a market downturn or a smaller proportion during "unfavorable years" when valuations increase during the late cycle. We have found that funds that do so have generated returns that are 26% higher,[5] on average, than their peers.[6]

When we look across the broad universe of buyout funds we find that GPs overall are not skilled at entry market timing. First, we observe that GPs call less capital in favorable years. Moreover, when they do call capital in these periods, they use more of it to support existing investments instead of making new investments at favorable valuations. Furthermore, when we examine capital call patterns of fund vintages from 1996-2018, we find that vintages active during the Dot Com Crash and the Global Financial Crisis ("GFC") called a smaller amount of capital than other vintages in the same year in their investment period.

[1] The term Investors is used interchangeably with Limited Partners (LPs), Asset Owners, and Asset Allocators throughout this paper.

[2] The term General Partner (GPs) is used interchangeably with Asset Managers, Managers, and Private Asset Managers throughout this paper.

[3] Source: Preqin as of October 2020. Numbers exclude impact of dry powder age; methodology described on page 11.

[4] We caution investors that past performance is no guarantee of future results and private market investment strategies carry significant risk.

[5] Source: Preqin as of August 2020; calculated as a proportion of peer returns.

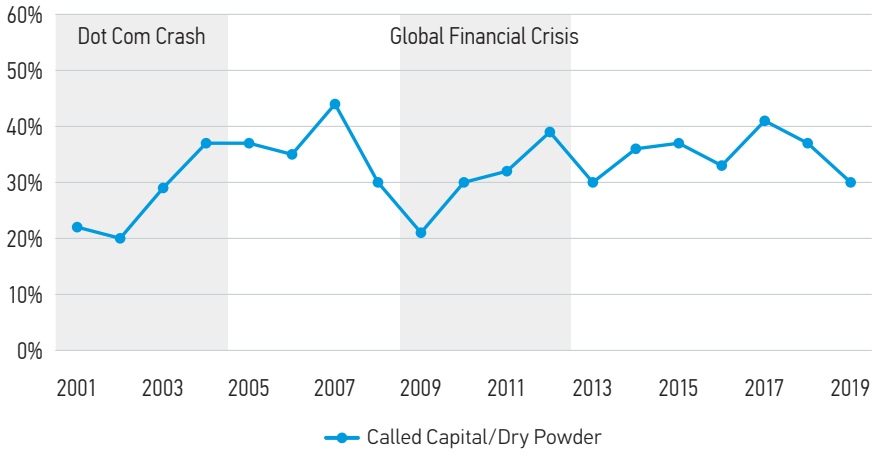
[6] Buyout funds included in analysis were part of vintages 2002-2011 as these called capital either late cycle or during the downturn. These were ranked within each vintage group with a higher ranking given to funds calling more capital during the crisis and less capital during late cycle. First quartile funds were compared versus peer funds. Source: Preqin as of August 2020.

The proportion of managers' committed capital was analyzed through the called capital/dry powder ratio[7] over time. *Display 2* shows that the ratio is at its lowest during or after financial crises and highest during market booms. From peak to trough,[8] the ratio decreased by 53%, with GPs deploying on average 19% less during crises. This indicates that GPs are not putting a higher, or even average, amount of capital to work during favorable periods and thus are not able to time market entry effectively. The impact this has on LPs is simple—they do not necessarily gain their desired level of exposure to new investments in favorable vintages.

The called capital/dry powder ratio shown in *Display 2* is an aggregate of the called capital/dry powder ratios of all funds calling capital at a certain point in time.[9] Over the investment period of an individual fund the called capital/dry powder ratio steadily increases due to the denominator effect—each successive capital call represents a greater proportion of an ever-shrinking level of dry powder. In *Display 3*, we display the median called capital/dry powder ratio in each year of the investment period *(Display 3)* for 1996-2018 fund vintages. We observe that the ratio increases from zero to approximately 0.47 for funds in the final year of their investment period.[10]

DISPLAY 2

GPs call the least amount of capital during favorable years and the highest amount of capital during unfavorable years



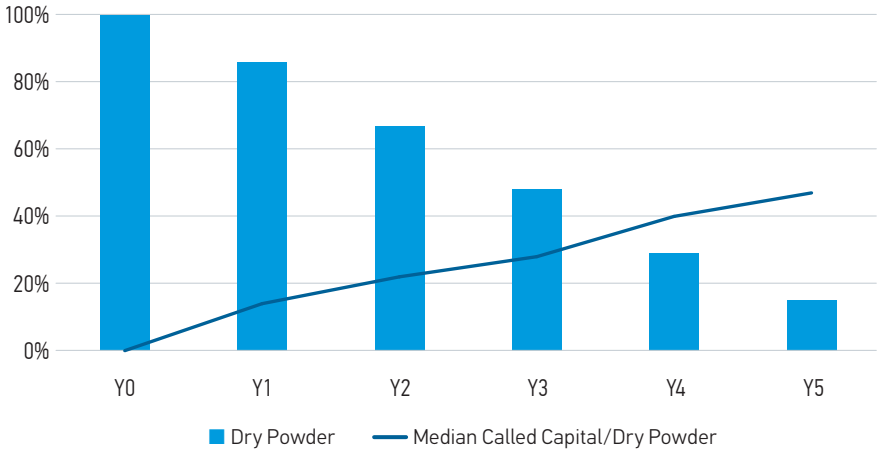
Source: Preqin as of June 2020

EXAMPLE: Assume there are two scenarios of dry powder. Within each scenario, dry powder age ranges from 0 to 5 years as per *Display 3*. In the first scenario, dry powder is split equally across the 6 ages of dry powder (≈16.7%), resulting in an average age of 2.5 years. In the second scenario, years 0 through 4 each represent 10% of total dry powder (i.e. a total of 50%) and year 5 is the remaining 50%; in this case, the average age increases to 3.5 years.

As per *Display 3*, we assume the following called capital/dry powder ratios for years 0 through 5: 0, 0.14, 0.22, 0.28, 0.4, and 0.47, respectively, for both scenarios. Calculating the weighted average dry powder ratio in scenario 1, we obtain a value of 0.25; for scenario 2, this increases to 0.34. If we look at these two ratios without understanding the underlying components, we would be led to believe that managers in scenario 2 are better at calling capital than those in scenario 1. In reality, this is not the case as both scenarios use the same called capital/dry powder ratios; the only difference is due to the average age of dry powder.

DISPLAY 3

The Called Capital/Dry Powder ratio increases as dry powder ages



Source: Preqin as of June 2020

[7] Called Capital represents total amount of called capital by all buyout funds during a year; Dry Powder at each point in time represents the aggregate level of dry powder of all buyout funds as of December 31st of the prior year and all fundraising up until June 30th of the current year.

[8] Calculated between 2007 and 2009 as no other pre-crisis peak data was available.

[9] To be more precise, it is the weighted average (based on dry powder proportions) of these ratios.

[10] Source: Preqin as of October 2020. Median called capital % was approximated for each vintage at each year in the investment period. A median value was then obtained for each investment year based on these values. This was then used to calculate the median called capital to dry powder ratio as dry powder was approximated by subtracting the called capital % at each year. The Year 0 ratio is equal to 0 as funds being raised for the following year's vintage will not be called in the current year as a vintage is assigned based on the year of the first investment (i.e. the following year). Last year of investment period refers to years 5 and onwards.

Although *Display 3* helps to conceptualize how managers call capital on average and how the called capital/dry powder ratio increases as dry powder ages, these values are not constant and change yearly based on market conditions. The called capital/dry powder ratio will be higher if managers call a higher amount of capital in a given year and vice versa. The ratio will also be higher, however, if older funds comprise a greater percentage of the total population of funds in a given calendar year (due to the denominator effect described previously). In *Display 4* we illustrate the impact of the age profile of dry powder on the ratio in pre-and post-crisis years. To summarize, both the rate at which managers are calling capital for investment purposes and the "age profile" of dry powder will impact the magnitude of the ratio in a given year.

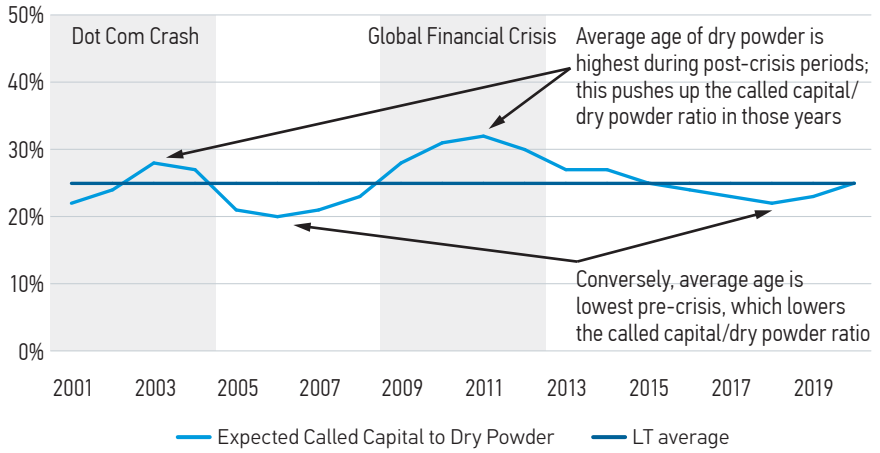
To make an accurate assessment of the collective market timing skill of managers in a given year we have to isolate and eliminate the impact of the age profile of dry powder on the called capital/dry powder ratio. The methodology that we used to do so is described in the Appendix. In *Display 5*, we adjust the graph shown in *Display 2* to eliminate the effect of dry powder age and observe that there is an even more pronounced drop in investment activity by managers in crisis periods.

Investors are impacted not only by the magnitude of called capital which has been discussed up until this point, but also by its composition. As investors seek to increase their exposure to private markets during favorable years, they would presumably benefit more if managers used the capital that they call to make new investments at favorable valuations. Unfortunately, our analysis suggests that managers do the opposite. They invest a smaller proportion of called capital in new deals during favorable years. We observed this by analyzing the breakdown of industry-wide called capital levels, which can be thought of as a combination of capital for transactions that constitute a material change of ownership ("new deal capital"), and capital to support the existing ownership structure ("support capital"). The latter could include equity raises for growth purposes, debt capital for refinancing, or capital required for defensive purposes (i.e., additional support to help firms continue their operations and service their debt).

Using the private equity buyout market as an example, we can estimate the proportion of cash flow that represents support capital in the following manner:

DISPLAY 4

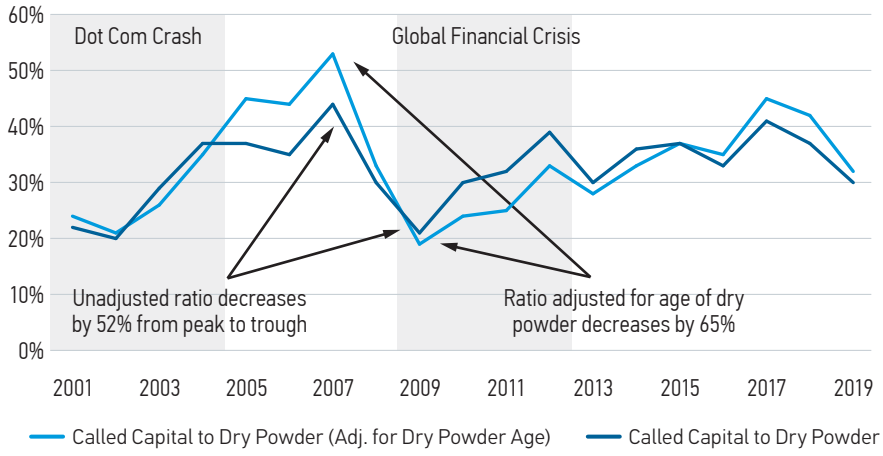
The age profile of dry powder typically increases the called capital to dry powder ratio post-crisis and decreases it pre-crisis



Source: Preqin as of June 2020

DISPLAY 5

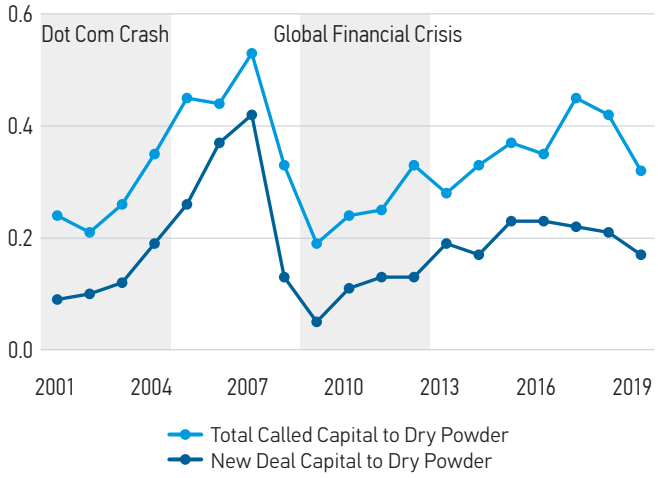
When neutralizing the effects of average dry powder age, the called capital to dry powder ratio decreases even more post-crisis relative to pre-crisis. The larger relative drop in this ratio further emphasizes that managers do not time market entry particularly well.



Source: Preqin as of June 2020

DISPLAY 6A

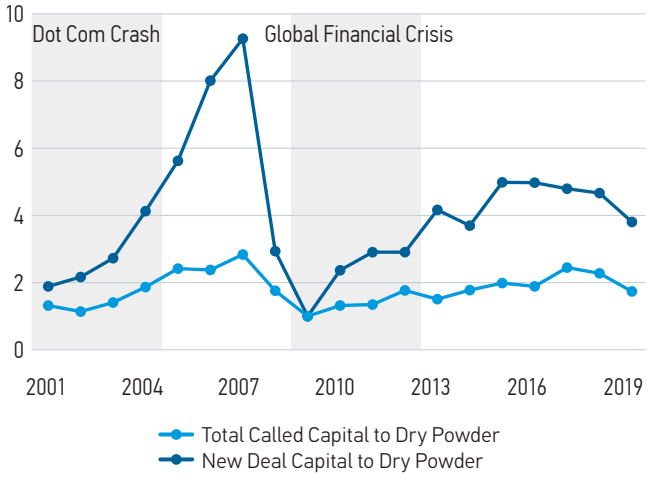
New Deal Capital decreases even more post-crisis than Total Called Capital as proportion of Support Capital increases



Source: Preqin as of June 2020

DISPLAY 6B

Larger relative decrease in New Deal Capital versus Total Called Capital is more noticeable when normalizing values to 1 as of 2009.



Source: Preqin as of June 2020

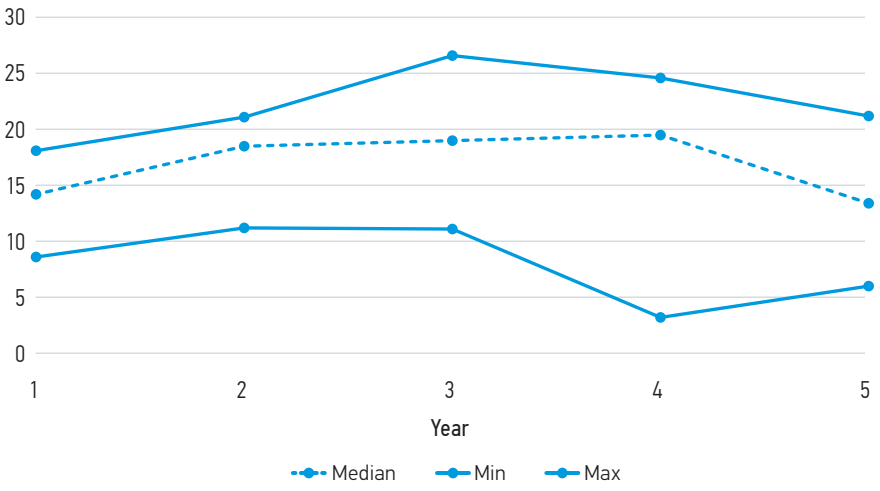
Total buyout fund called capital – Total equity deal value attributable to buyout funds = Support capital[11]

Notably, during market downturns, the proportion of support capital to total called capital tends to increase, and thus the proportion of new deal capital decreases *(Displays 6A, 6B)*. When taking this into account, GPs call on average 51% less new deal capital post-crisis versus pre-crisis—a much more significant difference than when analyzing only total called capital, as was done in the previous pages. This is likely due to two reasons: (1) new deal volumes falling (e.g., volume decreased by 84% between 2007-09),[12] (2) existing portfolio companies needing more capital to weather the storm. The lower proportion of total capital called for new deals further suggests that, historically, GPs have been unable to identify and invest in a substantial number of new investment opportunities during favorable years. However, we acknowledge that GPs may have expanded their use of existing portfolio companies to deploy capital for offensive rather than defensive purposes, which would also be captured in the support capital called.

To provide more color on the investment behavior of GPs during crisis periods we believe it is useful to zoom-in and examine how capital is deployed during the investment periods of funds across vintage years. To do this, we examine

DISPLAY 7

Range of median yearly called capital percentage for vintages 1996-2018



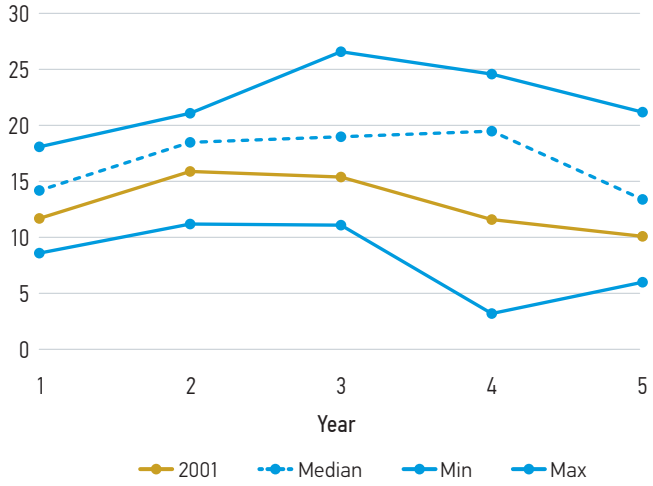
Source: Preqin as of June 2020

[11] Support Capital is approximated by subtracting equity deal value undertaken by buyout funds from total called capital. Equity deal value undertaken by buyout funds is approximated at 65% of total buyout equity deal value, with the remainder being made up of corporate investors, Private Equity firms participating in deals outside of their buyout funds, other financial institutions, and various types of non-buyout Private Equity funds). Total equity deal value is approximated by multiplying industry-wide average equity contribution by total deal value. Source: Preqin as of June 2020; Source for Equity Contribution: S&P LCD Comps LBO Review 4Q19.

[12] Source: Preqin as of October 2020; excludes Information Technology sector.

DISPLAY 8A

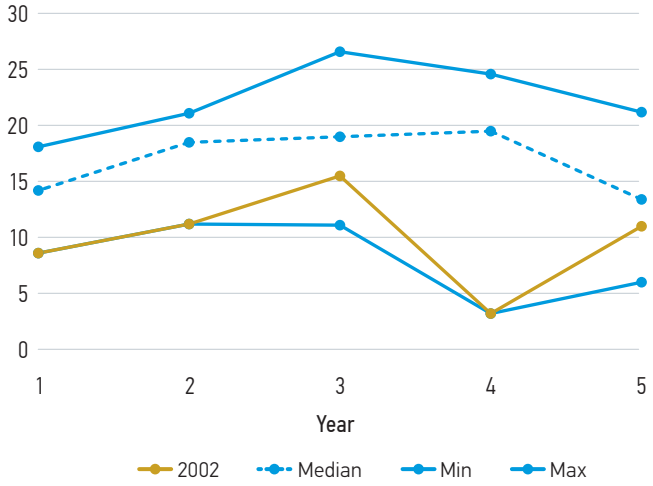
All vintages calling capital in 2001 (Year 1 = 2001 vintage, Year 2 = 2000 vintage, etc.) called less capital than the median vintage (1996-2018) in the equivalent year of their investment period



Source: Preqin as of June 2020

DISPLAY 8B

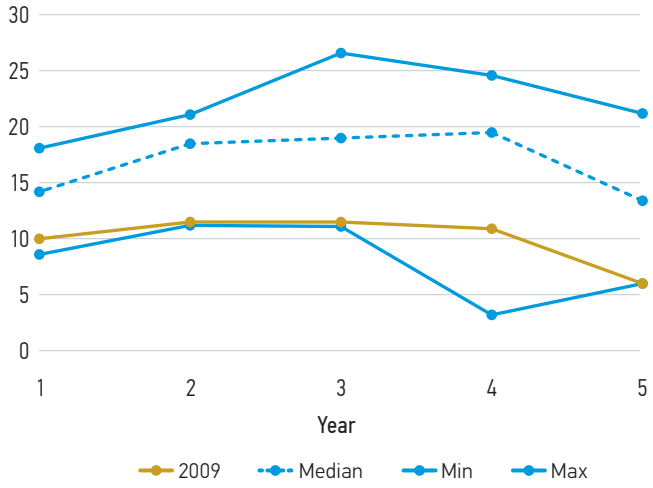
All vintages calling capital in 2002 (Year 1 = 2002 vintage, Year 2 = 2001 vintage, etc.) were close to or at the minimum level across vintages 1996-2018 in the equivalent year of their investment period



Source: Preqin as of June 2020

DISPLAY 8C

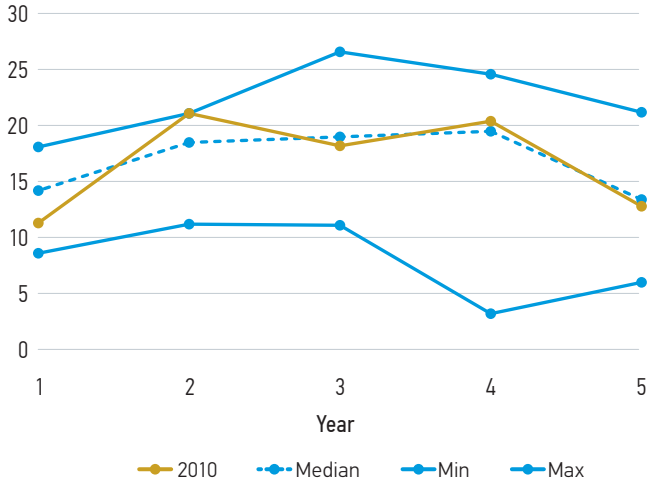
All vintages calling capital in 2009 (Year 1 = 2009 vintage, Year 2 = 2008 vintage, etc.) were close to or at the minimum level across vintages 1996-2018 in the equivalent year of their investment period



Source: Preqin as of June 2020

DISPLAY 8D

Most vintages calling capital in 2010 (Year 1 = 2010 vintage, Year 2 = 2009 vintage, etc.) were close to the median level across vintages 1996-2018 in the equivalent year of their investment period. The exception was vintage 2009 which had called close to the minimum level in the previous year (Year 1 in *Display 8C*)



Source: Preqin as of June 2020

investment patterns during the Dot Com Crash and GFC relative to long-run averages. For purposes of this analysis we assume a five-year investment period.

To compare fund vintages over time, we look at the median percent of total capital called in each year of a vintage's five-year investment period (i.e., % of capital called in Year 1 of the investment period, Year 2, Year 3, etc.). *Display 7* presents this data for 1996-2018 vintages.

Given these ranges, we then analyzed how vintages that were active during the Dot Com Crash (2001-2002) and the GFC (2009-2010) called and deployed capital in each of those years. In *Displays 8A-D*, we show that all vintages called a smaller (or at best median) percentage of capital in 2001, 2002, 2009 and 2010 relative to long-term averages for each year of their investment period. To demonstrate market timing ability, managers would have had to call more than the long-term median level.

The only exception was in 2010, as shown in *Display 8D*, when the vintage group in Year 2 of its investment period (i.e., vintage 2009 funds) called an above average amount of capital. However, if we refer to *Display 8C* which shows capital call activity in 2009, vintage 2009 funds (in Year 1 of their investment period) called capital at a rate that was close to the minimum.

These findings show that during the Dot Com Crash and the GFC, GPs overall did not demonstrate an ability to take advantage of market dislocation by deploying an above-average percentage of capital during times of crisis.

To further test the robustness of our findings, top quartile managers[13] and funds[14] were analyzed separately. We defined a set of top-performing managers prior to the post-crisis period and then compared the called capital patterns of their post-crisis funds to other funds in the same series and also to their post-crisis peers. We then identified top-performing funds within the post-crisis period to see if their performance was partly explained by entry timing.

Similar to the entire manager population, top-performing managers decreased their exposure to favorable years and increased exposure during unfavorable years,[15] thus demonstrating they are not able to time market entry. Relative to peers, they called slightly more capital during both unfavorable and favorable years.[16] The latter is positive; however, the proportion was only marginally higher. In addition, this is compared to the general manager population which called extremely low proportions of capital during those times.

For top-quartile funds, we analyzed how much capital was called post-crisis and pre-crisis and compared versus peers in the same vintages. In this case, the results were inconclusive as top-quartile funds showed some market timing ability in certain vintages, but not others, and called, on average, less capital versus peers. This leads us to believe that during post-crisis periods, top-quartile funds experience strong performance not because of their ability to call capital at the right time, but because of their asset level work across sourcing and value creation. As a result, manager selection can target top-quartile activity in these areas but will not necessarily generate entry timing alpha for the LP.

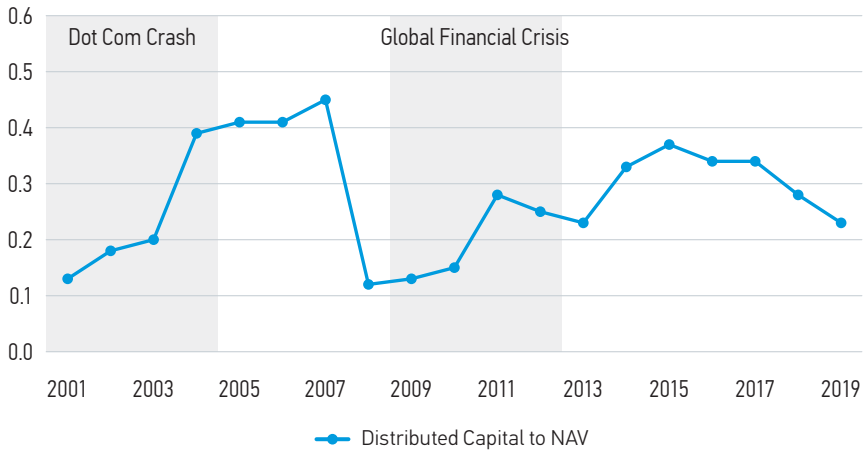
EXIT OPPORTUNITIES

If GPs do not necessarily time deployment optimally with respect to market conditions, what about exits? We analyze exit timing by examining GPs' propensity to distribute capital during favorable years, with an increased proportion of distributed capital to Net Asset Value ("NAV") demonstrating GPs' willingness and ability to sell when valuations are high.

Display 9 shows the distribution activity of buyouts in the last 20 years, with the

DISPLAY 9

GPs distribute most capital during favorable years and least during unfavorable years



Source: Preqin as of June 2020

[13] Top performing managers were selected ex-ante and represent top 25% of active managers based on their proportion of Q1 funds to the total number of funds they had raised as of 2005; additionally, they must had raised at least three funds as of 2005.

[14] Source: Preqin as of September 2020; top quartile rankings based on performance.

[15] This was analysed by ranking each year's called capital proportion during the late cycle and post-crisis periods versus all called capital values at the same year in the investment period. During the late cycle, funds of top performing managers ranked on average in the 26th percentile, indicating they called more than average; during the post-crisis, this decreased to the 64th percentile, indicating they called less than average.

[16] The same ranking process was undertaken as for the comparison versus their own fund series. In this case, top performing managers ranked on average in the 40th percentile during the late cycle; they ranked in the 43rd percentile post-crisis.

gray areas highlighting vintages in which there was a cycle trough. The data shows that, in contrast to timing the market when deploying capital, asset managers have demonstrated an ability to time the market when exiting investments as they distribute significantly less capital during and following downturns and increase distributions by approximately 49% during favorable economic conditions. Replacing end-of-year NAV by average NAV during the year[17] to more closely match distributions to NAV leads to similar findings, with a 48% increase during favorable years.

Drivers of GP Behavior

There are a number of potential reasons for the patterns discussed previously; these can be split into pre-crisis and post-crisis factors.

PRE-CRISIS FACTORS

At the peak of the market, several factors act concurrently to create a sub-optimal environment for managers to be able to call higher proportions of capital once a downturn begins. As *Display 10* illustrates, managers raise greater amounts of new capital in the years following the beginning of the late-cycle.[18,19] Therefore, when the cycle turns, there is an abundance of dry powder that must be deployed in down markets. Investors also play a role in this dynamic. As *Display 11* shows, Limited Partners increase their commitments late in the cycle, enabling GPs to meet, and often exceed, their fundraising targets.

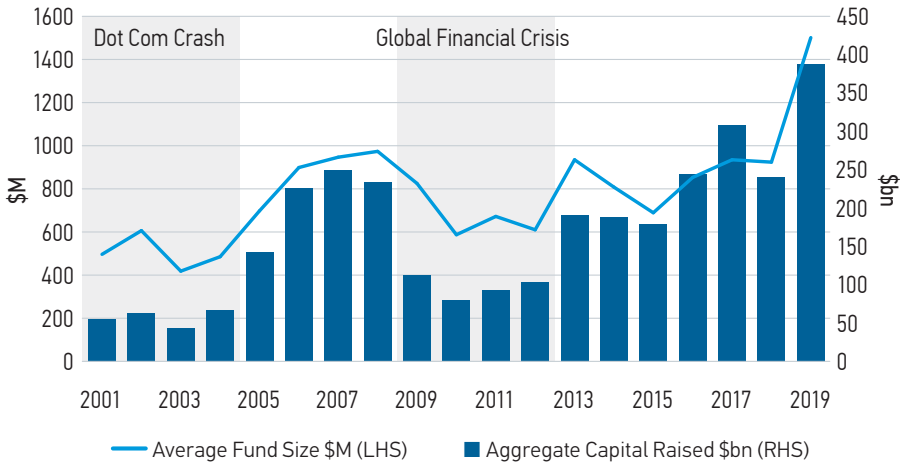
In addition, in strong fundraising environments the interests of GPs and LPs may diverge. LPs expect GPs to seek out the best opportunities and selectively deploy capital. GPs, however, may have an incentive to deploy capital at a faster rate so that they can raise follow-on funds when the fundraising market is hot. Furthermore, we have observed that in some sectors managers charge lower fees on undrawn commitments relative to invested capital which encourages GPs to put capital to work faster.

Unlike decision-making regarding capital deployment, distribution decisions benefit from a greater alignment of interest between asset managers and investors because performance fees are often the dominant near-term source of revenue and compensation for GPs.

Lastly, we should not discount the possibility that private investment teams lack the resources and skill needed to anticipate when markets are most likely to turn and adjust their risk-management and capital deployment activities accordingly. In general, private market

DISPLAY 10

GPs raise most capital and close largest funds late cycle



Source Preqin as of August 2020

DISPLAY 11

Funds close above their target size late cycle, but are unable to do so post-crisis

Source Preqin as of November 2020

[17] Calculated as average between end of previous year NAV and end of current year NAV.

[18] Late cycle is defined as the period in which rate of GDP growth begins to decline.

[19] Top quartile managers also exhibited this behavior.

investment teams are staffed to focus on asset-level investment sourcing, execution and management and not market timing. Since the lifespan of funds is often ten years or more, managers may be less interested in focusing on short-term market dynamics. This could lead to increased commitments at the wrong time even without the abovementioned misalignment of interests.

GP ability to spot the late cycle was also analyzed by looking at the relationship between the number of deals per amount of capital called *(Display 12)*. Late cycle, GPs on average invest with high conviction, i.e., they make bigger bets on fewer companies. They also use higher levels of leverage. During crisis periods, however, managers do the opposite and make smaller investments in a greater number of companies. If managers were adept at market timing, we would expect to see higher concentration in their portfolios when valuations are low during crisis periods and greater diversification late cycle when valuations are at their highest.

DISPLAY 12

Number of deals per $ billion of called capital (ex-support) is at its lowest late cycle, signaling GP confidence in unfavorable years

Source Preqin as of August 2020

POST-CRISIS FACTORS

Once a downturn begins, there are additional factors that lead to reduced capital being called. Unlike pre-crisis factors, these arise not only due to GP and LP conduct, but also due to characteristics which are typical of depressed markets. One such characteristic is a decrease in deal volume which has been observed both during the Dot Com Crash (-39%) and the GFC (-84%).[20] In times of distress, there tends to be a larger dispersion in the pricing expectations between buyers and sellers, resulting in negotiations breaking down. Historically, this has been worsened by a shortage of transaction financing which leaves buyers unable to raise the required funds to participate in deals. Additionally, GPs' may lack the time and resources to devote a meaningful amount of time to new deal activity in challenging environments. Greater time may need to be devoted to supporting current investments which could be struggling due to the downturn. This leaves less time available to conduct rigorous due diligence on new opportunities. During previous downturns, LPs have also struggled to raise the necessary funds for capital calls. In some cases larger LPs have pressured GPs to slow capital deployment to lower their risk of defaulting on their commitments.

COVID-19 Market Conditions

COVID-19 has resulted in an unprecedented shock to the global economy and the uncertainty that has persisted has undoubtedly put a dent in managers' ability to call capital during 2020. Although up-to-date capital called data is not yet available due to a lag in reporting of data by managers, we can infer this by the year-to-date aggregate buyout deal value. This value has decreased by -24% YTD versus recent years.[21] This is a substantial reduction, particularly because there are several factors which have counteracted this, such as:

- The exogenous nature of the shock on the economy makes it feasible that we experience a shorter and sharper economic downturn with a fully functioning financial system throughout.
- The policy response across major economies has been unprecedented, both in terms of size and timing. This has added substantial liquidity to financial markets. As a result, financing for private transactions could be more readily available than one would ordinarily expect in the period after such a significant economic shock.
- Due to the rapid rebound in public asset prices, private investors are not suffering from the "denominator effect"[22] and are not pressuring asset managers to refrain from calling capital, as was the case among large investors in 2009.

[20] Source: Preqin. Dot Com Crash decrease in deal volume between 2000-01; GFC between 2007-09; excludes Information Technology Sector.

[21] Source: Preqin, September 2020. Buyout deal value excludes Information Technology sector.

[22] The denominator effect occurs when an investor's private markets allocation proportion grows following a large decline in the value of public markets. The resulting overweight position forces the investors to refrain from further commitments or sell stakes.

While capital calls will likely decrease at a smaller rate, they are directionally consistent with previous market corrections and we have confidence that we will see a decrease in deployment relative to average levels once data becomes available. Therefore, we still expect asset managers to fall short of providing a positive market timing experience for investors.

LP Market Timing

As asset managers have not demonstrated an ability to time the market when investing, we have analyzed the benefit of increasing exposure to private equity during crisis years and decreasing it late cycle and once the crisis is over. This is compared to maintaining an equal allocation throughout. This analysis of a hypothetical scenario assumed a $100m annual commitment level for the equal allocation state. Dynamic allocation increases this exposure to $150m in favorable years and decreases to $50m in unfavorable ones *(Display 13)*. As private markets have tended to see stronger performance immediately following the start of market downturns, the increased allocation to these vintages improves the investor's average performance. Over the twenty-year period between 1998 and 2017, investors would have gained over 33% more by implementing a dynamic allocation strategy *(Display 14)*.

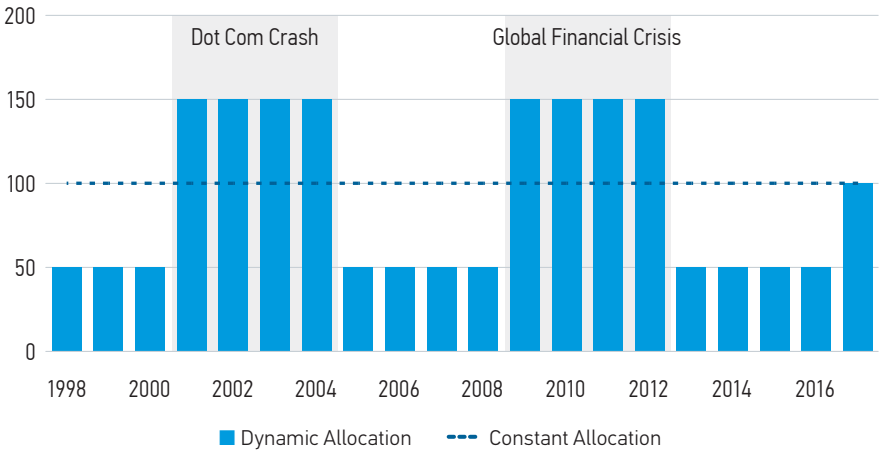
Conclusion

Market corrections have historically been followed by periods of lower asset values in private markets, resulting in significant benefits to increasing distributions late cycle and increasing capital calls in post-crisis periods. GPs have successfully demonstrated the former, but not the latter, which has resulted in sub-optimal market timing for private markets portfolios. Other signals such as increased leverage, decreased diversification, and larger fund sizes during the late cycle are further evidence of imperfect market timing through exuberance that later results in lower exposure when investors arguably want more. The distinctive features of the COVID-19 correction could be favourable for capital call levels compared to previous corrections, but these features are not expected to drive an increased allocation in the absence of investor intervention.

We encourage asset allocators to consider influencing their level of participation by increasing commitment sizes during periods of improved opportunity. In reality, many investors are unwilling or unable to do this, so it could be considered a competitive advantage for asset allocators with balanced portfolios and flexible strategies.

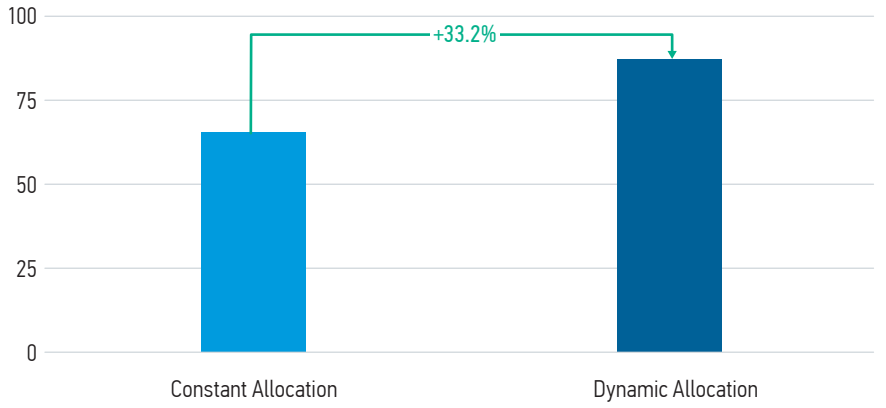
DISPLAY 13

Example of dynamic allocation to PE Buyouts



DISPLAY 14

Example of theoretical growth of investment using a dynamic allocation strategy versus a constant allocation between 1998-2017.



Assumes growth of $1 of investment as of 1998, using a compounded weighted average return of Q1 Private Equity Buyout Funds. Fund returns source: Preqin as of July 2020.

Appendix

We isolated the impact of the change in average dry powder age by calculating the expected called capital/dry powder ratio at each point in time using the static median called capital/dry powder ratios in *Display 3* and the dynamic proportions of dry powder which can be found in *Display 15* (i.e. calculated a weighted average for each year). The resulting values, which are presented in *Display 4*, show how the called capital/dry powder ratio is impacted by the change in the average age of dry powder: the higher the value in *Display 4*, the higher the upward pressure on the called capital/dry powder ratio in *Display 2*. We neutralized this effect by dividing the called capital/dry powder ratios in *Display 2* by the corresponding ratio between expected called capital/dry powder ratio and the long term average in *Display 4*.

DISPLAY 15

Breakdown of dry powder age can change dramatically over time as a result of market conditions and manager behavior

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6+
Dec-01	3.9%	24.1%	45.4%	15.1%	6.3%	2.6%	2.5%
Dec-02	7.3%	23.1%	20.6%	31.9%	10.6%	3.9%	2.6%
Dec-03	2.6%	26.2%	18.7%	14.2%	24.4%	8.3%	5.7%
Dec-04	5.2%	28.2%	20.8%	11.6%	9.3%	15.5%	9.4%
Dec-05	10.0%	48.1%	15.3%	8.4%	5.1%	3.8%	9.3%
Dec-06	3.3%	55.6%	23.3%	5.9%	2.9%	2.4%	6.7%
Dec-07	1.9%	43.7%	33.8%	10.9%	2.6%	1.2%	6.0%
Dec-08	1.7%	31.2%	34.3%	19.8%	6.5%	1.6%	4.8%
Dec-09	1.8%	9.7%	32.7%	29.0%	15.2%	4.4%	7.3%
Dec-10	8.6%	7.7%	10.1%	30.3%	23.2%	11.7%	8.4%
Dec-11	1.4%	25.9%	9.5%	7.8%	22.7%	17.0%	15.9%
Dec-12	2.4%	22.7%	25.0%	8.0%	5.5%	15.0%	21.4%
Dec-13	6.5%	24.8%	21.4%	17.4%	5.0%	3.4%	21.5%
Dec-14	1.5%	32.6%	19.5%	14.4%	10.1%	3.1%	18.8%
Dec-15	9.6%	24.4%	23.9%	14.2%	8.0%	5.3%	14.5%
Dec-16	4.7%	33.0%	22.0%	16.1%	20.1%	2.8%	1.3%
Dec-17	12.0%	24.8%	28.0%	14.5%	6.9%	3.9%	9.9%
Dec-18	9.4%	35.5%	20.6%	15.7%	6.2%	2.9%	9.7%
Dec-19	1.7%	36.3%	32.6%	11.3%	6.7%	1.9%	9.5%
Jun-20	0.0%	26.4%	32.4%	25.0%	8.0%	3.7%	4.5%

Source: Preqin as of October 2020

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