Is success in private equity repeatable? – A study on the persistence of alpha

Executive summary

The idea of repeatability is one of core elements of investing in private equity. But recent research has shown that persistence of absolute private equity returns is much less pronounced than previously thought. In their new study Golding Capital Partners together with Oliver Gottschalg from the HEC School of Management show that while persistence at IRR level is indeed evasive, there is strong evidence for persistence at alpha level – certain fund managers are able to outperform the market in terms of alpha creation repeatedly. And past alpha is not only a predictor of future alpha, it is also a predictor of future absolute returns.

In the lastest round of their joint research on Alpha, Golding Capital Partners together with the HEC have tackled the following questions:

- Are the results on long term alpha, alpha through the cycle and alpha during the crisis stable based on the extended data set?
- Is successful performance for private equity fund managers repeatable?

Expanded data set – approx. 5,600 realised transactions

The starting point of the study was the calculation of private equity's excess return compared with the stock market, by reference to the alpha generated by the private equity transactions. For a variety of reasons, the returns from listed shares and from private equity cannot be compared directly. Following the proven methodology of its three predecessors, this study enables a comparison between the two asset classes by means of various adjustments. This is done by synthesising a comparable investment in shares for every private equity transaction, which reflects (1) the timing effect, i.e. the timing of the cash inflows and outflows, (2) the sector effect, i.e. the performance of the sector in which the company operates and (3) the leverage effect, i.e. the gearing of the private equity investment compared with the publicly listed company. At the same time the return of the private equity transaction is adjusted to reflect realistic reinvestment opportunities using the modified IRR function (M-IRR). The portion of the adjusted private equity return that cannot be obtained from a comparable investment on the stock market is the alpha for private equity.

Based on the alpha methodology, the two methods used to test for persistence are (1) correlation of the tested variable in the prior period with the same variable in the following period and (2) portfolio return contribution of picking only fund managers that have performed in a certain quartile (in our case the top quartile) and then calculating the impact of this selection versus investing in the whole market.

The analysis of the persistence of private equity in this study considerably extends the scope of previous studies on the subject. The main differences to other studies on the subject are: (1) We are not only testing for absolute return measures like IRR or TVPI (net multiple) but also for the relative outperformance (alpha) and for risk (loss ratio, return dispersion) and holding periods (duration), (2) The use of data on transaction level for the first time, (3) A dataset with a significant amount of

recent data points (i.e. post-00) and (4) An expansion of the performance measures employed, including not only IRR and TVPI but also alpha and a couple of additional return and risk measures.

The basis for the study is drawn from around 5,600 relevant realised transactions in the Golding Capital Partners database, which covers the period 1977-2014. Compared with the previous research carried out in 2013, this represents an increase in the data set of around 7%. The study cannot claim to map the entire market, as it mainly tracks established fund managers and in particular eliminates transactions that were unrealised. The data set is however significantly larger than for comparable earlier studies. This makes it possible not only to calculate average values for alpha, but also to consider individual market phases and segments separately.

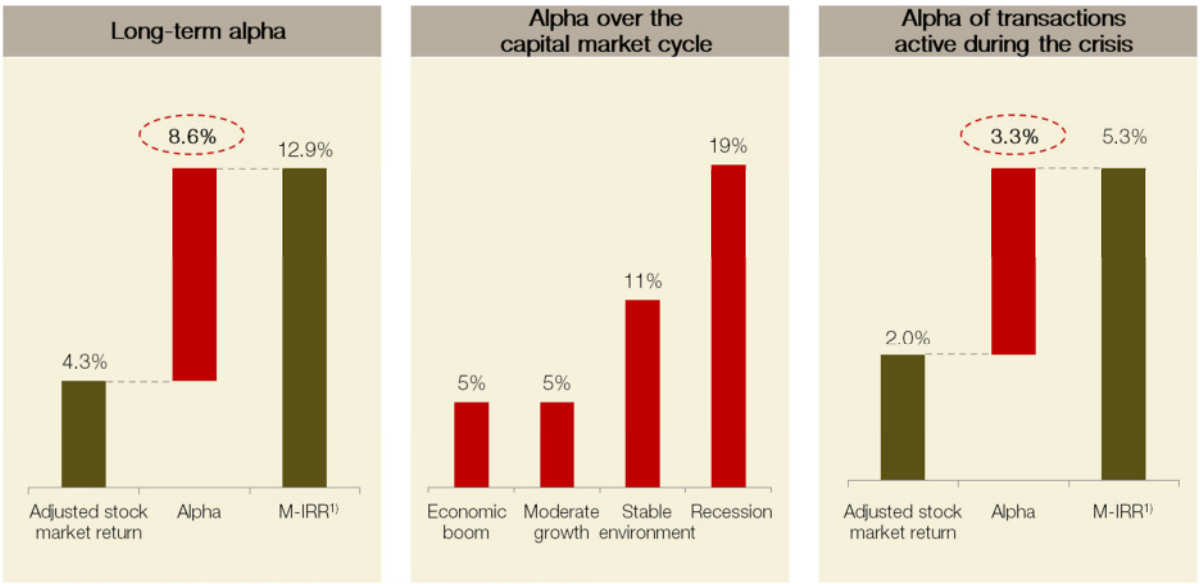
Positive alpha for private equity confirmed over longer period

The updated analysis of the alpha of private equity delivers the following empirical results: For the overall period 1977-2014 – after making all the necessary adjustments for leverage, timing and sector mix – the private equity transactions generated an average positive alpha of 8.6% over the comparable return from the stock market.

The analysis of discrete alpha calculations for different market phases draws a distinction between boom times, relatively stable market phases and periods of retrenchment on share markets. At difficult times with a poor stock market performance the alpha for private equity is particularly high, at an average of 19% over the comparable return from public markets. In phases of rapid economic growth, with stock markets appreciating by over 15% p.a., alpha comes to 5%, however. In an environment of moderate growth private equity generates an alpha of 5%. In a stable environment with a slightly positive or slightly negative stock market return the alpha is 11%.

The return calculation shows that transactions active at the peak of the financial crisis generated an alpha of 3.3% compared with the adjusted stock market return. The absolute return for these very difficult transactions was below the long-term average but still positive, with an M-IRR of 5.3%, whereas the adjusted share return was in negative territory. Available data therefore does not support the hypothesis that private equity-owned companies are more susceptible to crises.

The data set therefore again demonstrates two crucial characteristics of private equity for institutional investors that are highly relevant for its inclusion in a portfolio: firstly a positive overall alpha for the entire cycle and secondly this alpha's anticyclical variance and stability during a crisis environment like 2008.



1) Modified IRR: The discount rate for reinvestment is a stock market index and not the internal rate of return (as with the standard IRR)

The repeatability of success in private equity

Investors in private equity base their investment decisions in most cases on a fund manager's past performance. This implies that there is some relation between a manager's past success and its ability to deliver a similar performance in the future.

This idea is in stark contrast to the generally acknowledged fact that fund managers in public equity investing are subject to mean reversion over time – empirical research has repeatedly shown that past performance in the stock markets is no predictor of future performance. This has led to a move away from active strategies to strategies focused on tracking the market index.

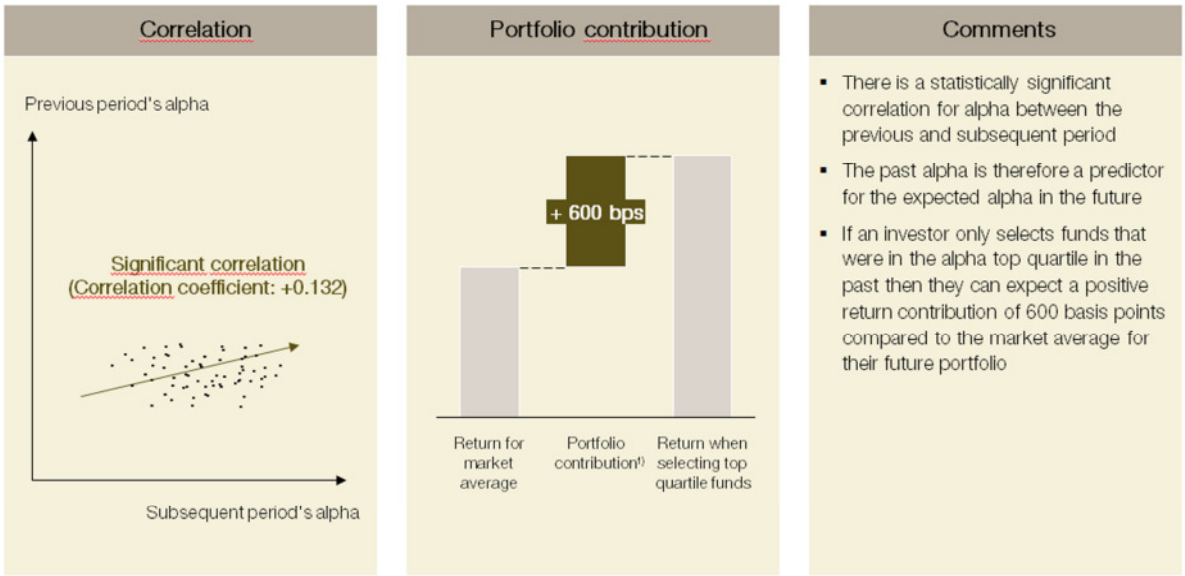
By contrast, academic studies have long argued that past performance in private equity is a predictor of future performance. But recent research (including this study) has shown that there is limited statistical support for this claim in its most simplistic form.

There is no statistically significant persistence of absolute returns in private equity – looking at the past returns of a fund manager gives no indication of the manager's ability to produce above (or below) average returns in the future.

So is the analysis of historical track records a waste of time? It is not. While absolute return measures like IRR or multiple have no predictive power for future performance, measures of relative outperformance such as alpha have that predictive power.

The study is able to show that alpha is a statistically significant predictor of future alpha – a positive correlation exists between past and future alpha and funds that have created above-average alpha in the past have a higher probability of creating above-average alpha in the future than other funds. Moreover, alpha is not only a predictor of future alpha but also of future absolute performance – Investors can significantly increase their expected portfolio return going forward if they only invest in fund managers that have been in the top quartile in terms of alpha in the past. Based on the dataset used, the performance increase from only investing in alpha top quartile managers can lift the average portfolio return by 600bps.

In addition to alpha persistence the study is also able to show that significant persistence exists for risk and holding periods. Average holding periods, return dispersion and loss ratios all show positive correlation over time – fund managers that have been good on these measures in the past tend to be good on them in the future. This shows that good fund managers are not only able to repeat past successes, they are also able to control risk better than their peers on a consistent basis, producing lower loss ratios and being less dependent on individual outliers to drive their overall returns.



Significance for investors

For investors the study shows that while persistence exists, identifying the good managers is harder than previously thought – just looking at the headline IRR is not enough to tell the good from the bad. But with a deep understanding of the asset class and with detailed due diligence that not only focuses on absolute return measures but also on relative return measures and on the analysis of the underlying risk, investors are able to materially increase their chances of improving the performance of their private equity portfolio and of outperforming the market average.

Conclusion

In summary the question asked at the outset can therefore be answered as follows:

- Update on the alpha calculations
  - The established private equity fund managers on which this study is based generate a positive alpha of 8.6% over the comparable stock market return with their transactions.
  - Private equity was able to show a very stable performance throughout the crisis, with investments active during the collapse of Lehman Brothers generating a positive alpha of 3.3%
  - The alpha of private equity is anticyclical i.e. it is particularly high at times of economic difficulty and declining capital markets. Private equity funds are capable of supporting their companies to the greatest effect when they are most in need of assistance.

- New results on the persistence of private equity
  - There is no persistence for absolute performance measures like IRR and TVPI (net multiple)
  - There is persistence on alpha level – fund managers that have produced above-average alpha in the past have a higher likelihood of producing above-average alpha in the future
  - Persistence can also be shown for several other measures including measures for risk (loss ratio, return dispersion) and for holding periods (duration)

The overall results give a strong indication that there is indeed persistence in the performance of private equity funds. This provides the crucial link between existing track records and the expectations for future funds – but both fund managers and investors need to look beyond IRR and MoMs to identify this link and to use it to support their investment decisions.