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CO-INVESTMENTS: INTELLIGENT PORTFOLIO CONSTRUCTION OVER MARKET CYCLES

By Oliver Schumann and David Smith *June 2019*

INTRODUCTION

Private equity investment decisions can be challenging in the current market due to high valuations caused by an abundance of capital, high levels of leverage and concerns about a potential economic downturn.

Despite this, the alpha generated by well-performing private equity firms remains an attractive prospect for investors considering medium- to long-term investments. However, greater returns are often allied with increased risk. Investors should therefore pay close attention to risk mitigation when constructing a private equity portfolio.

This article explores how an actively managed mid-market co-investment fund[1] properly diversified by region, sector, vintage and lead investor can generate outperformance while mitigating risk when compared to conventional private equity funds (or funds-of-funds). At Capital Dynamics, we refer to this balanced investment approach as *intelligent portfolio construction*.

"INVESTING IN AN ACTIVELY MANAGED AND WELL-DIVERSIFIED MID-MARKET CO-INVESTMENT FUND CAN GENERATE OUTPERFORMANCE WHILE MITIGATING RISK COMPARED TO CONVENTIONAL PRIVATE EQUITY FUNDS."

[1]Co-investments are defined as investments in the equity of individual companies made alongside third-party private equity firms ("lead investors"), generally involving a controlling consortium.

CO-INVESTMENT FUNDS AND THEIR DIVERSIFICATION

Co-investment funds have developed and professionalized over the last 10-15 years as the early *ad hoc* approach to making individual co-investments often led to unsatisfactory returns.

The market for co-investment funds comprises three principal approaches to portfolio construction and diversification:

1) Globally diversified portfolio investing in large cap. transactions;
2) Globally diversified portfolio investing exclusively in mid-market companies; and
3) Concentrated regional portfolio.

As illustrated in the column highlighted in **figure 1** below, a global mid-market portfolio that is actively managed and well-diversified should provide the best returns with optimum diversification. At Capital Dynamics, we believe this is particularly true for investments with an enterprise value of less than EUR 500 million.

"A GLOBAL MID-MARKET CO-INVESTMENT PORTFOLIO THAT IS ACTIVELY MANAGED AND WELL-DIVERSIFIED SHOULD PROVIDE ATTRACTIVE GROWTH POTENTIAL."

FIGURE 1: ILLUSTRATIVE CO-INVESTMENT FUND DIVERSIFICATION MODELS

	Globally diversified portfolio investing in large deals	Global diversified portfolio investing in mid-market deals	Concentrated regional portfolio
No. of investments in portfolio	More than 50	20 - 30	Less than 20
Investment size (typical)	Large (enterprise values > EUR 1 billion)	Mid-market (enterprise values of EUR 50 million to EUR 1 billion)	Small- to-medium-sized (enterprise values of EUR 50 million to EUR 250 million)
Investment approach	Passive	Active	Active
Diversification	High	Optimum	Low
Risk-return profile	Expected return similar to index	Balanced risk-return	High concentration of risk

Source: Capital Dynamics.

CRITERIA FOR SELECTING ATTRACTIVE CO-INVESTMENTS

As with other investment strategies, co-investment fund managers must possess the skillset to identify attractive investments and achieve strong performance.

It is really only a dedicated primaries platform, with a broad and deep network of top-performing private equity managers focused on smaller companies (i.e. less than EUR 500 million), that possesses the capabilities to adopt *intelligent portfolio construction*. Ideally, the co-investment fund manager should have a global network of several hundred lead investors spread across the key geographies, sectors and investment strategies. Independent academic research has endorsed the importance of deal flow derived from a broad network[2].

In addition to having a broad network of lead sponsors from whom to source opportunities, the co-investment manager needs to be able to assess the characteristics of the target companies, including:

- Quality and experience of the target company's management team;
- The target company's market position and barriers to entry for potential competitors;
- Growth opportunities (*e.g.*, regional, new product introductions and acquisitions);
- Target company valuation, capital structure and cash flow; and
- Responsible investment criteria (including ESG[3] matters).

Finally, the credentials of the lead investor and their relevance to the contemplated investment must be assessed – a much easier task if the asset management firm has been invested in the lead investor's fund for some time and knows the firm and its principals well.

Not surprisingly, the best co-investment opportunities are accessed by co-investment funds which have the relevant experience to perform due diligence, and negotiate attractive entry prices and capital structures, alongside a lead investor.

[2]Adverse Selection and the Performance of Private Equity Co-Investments, Braun/Jenkinson/Schemmerl, October 2018.
[3]Acronym for environmental, social and governance aspects of investment.

CO-INVESTMENT OUTPERFORMANCE

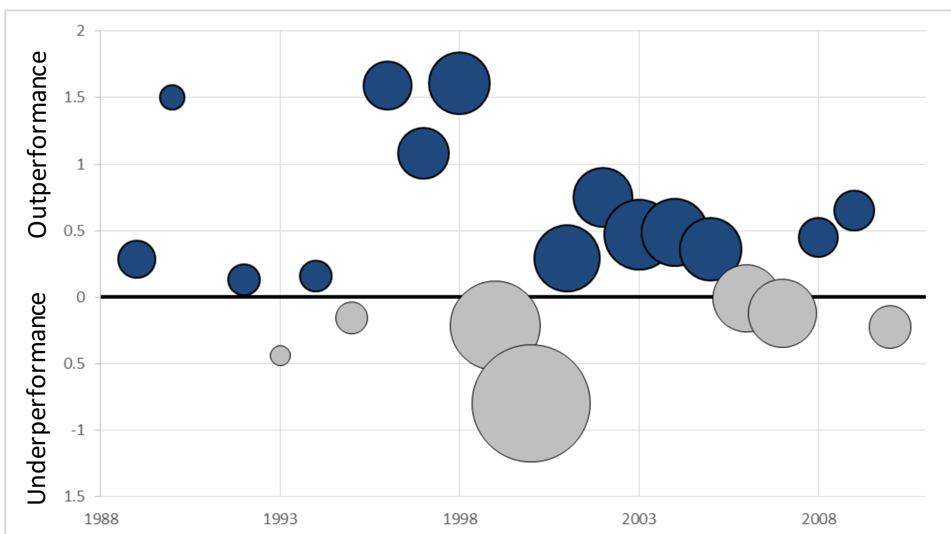
While some private equity investors have held the view that co-investment suffered from adverse selection (*i.e.*, selection bias), recent comprehensive academic research has shown this to be a myth. In their study, Braun, Schemmerl and Jenkinson analysed over 1,000 co-investments from among over 13,000 private equity transactions between 1981 and 2011[4].

Their results showed that "the like-for-like comparison between co-investments and other deals [not offered for co-investment] found no evidence of selection bias, either positive or negative." They also concluded that portfolios of co-investments could achieve better returns due to their lower costs[5]: "…We show that relatively small portfolios of 10 buy-out [co-investment] deals on average outperform [conventional] fund returns, net of fees and costs."

Figure 2 below illustrates the performance of co-investments *versus* investments not offered for co-investment (*i.e.*, conventional private equity fund performance). The blue bubbles show outperformance of co-investments while the grey bubbles show their underperformance. The bubble size indicates the amount of capital invested in specific years. What is striking is that the outperformance of co-investment funds (relative to conventional PE funds) appears more frequently, and on occasion, can be substantial. Conversely, relative underperformance occurs less frequently, principally around the time of the dot-com crash and global financial crisis when a lot of capital was chasing deals (so-called pro-cyclicality), much of which was deployed outside Capital Dynamics' key focus area – the mid-market.

"CO-INVESTMENTS GENERALLY OUTPERFORM INVESTMENTS NOT OFFERED FOR CO-INVESTMENT BY PRIVATE EQUITY MANAGERS."

FIGURE 2: PERFORMANCE OF CO-INVESTMENTS *VERSUS* INVESTMENTS NOT OFFERED FOR CO-INVESTMENT[6]



Source: Adverse Selection and the Performance of Private Equity Co-Investments. Braun/Jenkinson/Schemmerl, October 2018.
Note: Bubble size indicates the amount of capital invested in specific years.

[4] Adverse Selection and the Performance of Private Equity Co-Investments, Braun/Jenkinson/Schemmerl, October 2018.
[5] The annual management fees and carried interests of a private equity co-investment fund are generally set at a level which is approximately half that applicable to a typical private equity fund active in the mid-market.
[6] Net performance shown in terms of Public Market Equivalent (PME).

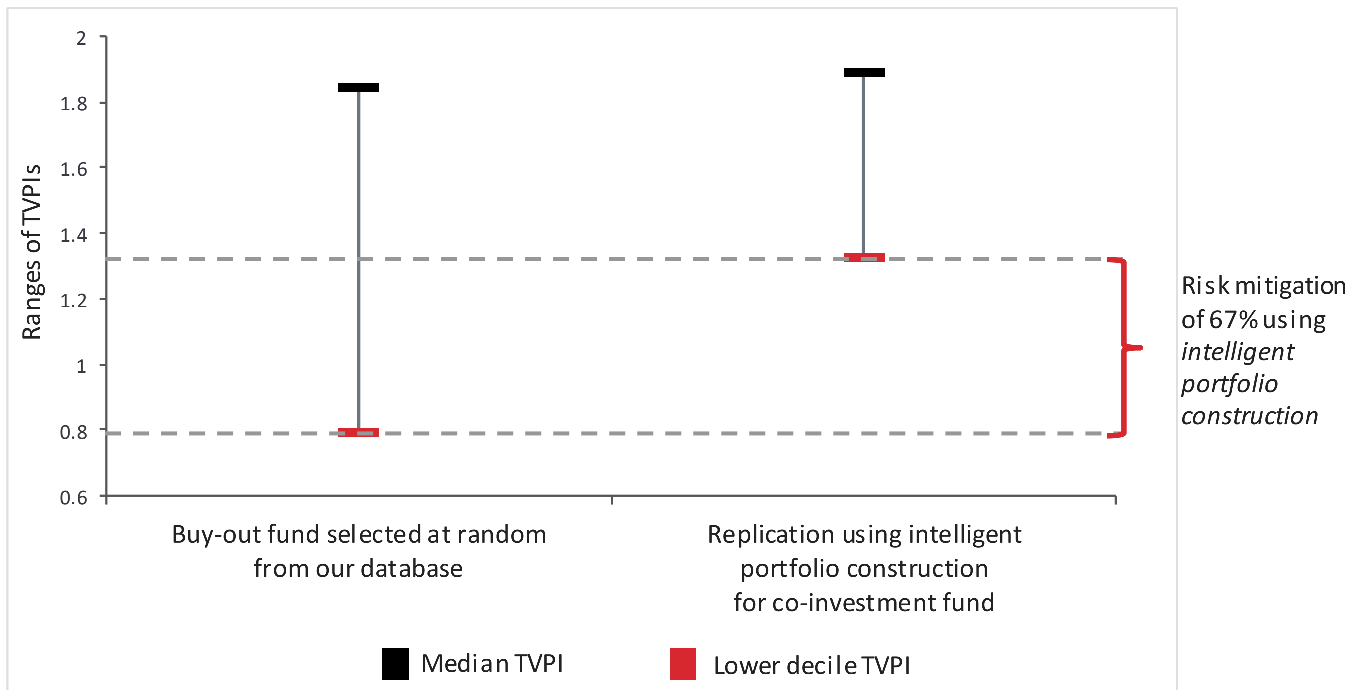
CO-INVESTMENT RISK MITIGATION

Capital Dynamics' approach to the mitigation of risk seeks to ensure that co-investment fund portfolios are constructed based on the four principal diversification pillars of geography, sector, vintage year and lead investor. To explore the impact of *intelligent portfolio construction* on risk, Capital Dynamics carried out simulations of proprietary data on 268 actual private equity funds with vintage years between 1995 and 2010 and their 4,739 underlying portfolio companies[7].

"A CO-INVESTMENT FUND IMPLEMENTING INTELLIGENT PORTFOLIO CONSTRUCTION SIGNIFICANTLY MITIGATES RISK *VERSUS* THAT OF A BUY-OUT FUND."

The results showed that a co-investment fund implementing *intelligent portfolio construction* (*i.e.*, properly diversified and actively managed) has far greater downside protection than that of a randomly selected buy-out fund constructed by a single manager. This is illustrated in **figure 3** below using the spread between the median and lower-decile ratio of Total Value to Paid-in Capital ("TVPI") as a measure of risk. The aforementioned co-investment fund significantly mitigates risk *versus* that of a buy-out fund selected at random from our database – by 67% when comparing each of their lower-decile TVPI figures. These results are further supported by evidence from a sample based on Preqin data[8].

FIGURE 3: RISK MITIGATION THROUGH INTELLIGENT PORTFOLIO CONSTRUCTION[8]



Source: Capital Dynamics, January 2017 and 2019.

[7]Capital Dynamics. Andrew Beaton, Andrew Bernstein and Philippe Jost, *"Commingled co-investment funds: an attractive way to gain exposure to private equity"*, Capital Dynamics, January 2017. The analysis was refreshed in January 2019, leading to a similar conclusion. Further information is available upon request.
[8]Capital Dynamics' calculation and analysis based on Preqin data using a sample of 64 multi-manager co-investment funds as of June 30, 2018.

IMPACT OF MARKET CYCLES ON CO-INVESTMENT SELECTION

A balanced and attractive portfolio is one where a co-investor deliberately over- or under-weights individual regions, sectors, transaction sizes and/or transaction structures depending on the stage of the market cycle. **Figure 4** below provides examples of investment trends that have led to very successful private equity transactions. As a co-investor with privileged access to the corresponding lead investors, one can benefit from the value creation potential of these transactions.

Emerging from the global financial crisis (2009-10), there were good opportunities for medium-sized companies in the portfolios of private equity firms to expand their market positions in various regions (particularly in Asia), either organically or through add-on acquisitions. Access to agile capital provided by private equity firms was crucial in this period. Since the entry prices at the time of the purchase of the companies were often moderate and increased significantly over the course of the cycle, some very successful transactions were consummated.

Later in the economic cycle (2014-16), the co-investor was offered the opportunity to invest in transactions with high-value creation potential, especially in the software and services sector, as the growth momentum remained high in those sectors and entry prices were still very attractive compared to current valuations.

More recently (2016 onwards), thoughtful co-investors have looked for transactions that provide a higher degree of downside protection to safeguard against the uptick in market volatility. In addition, investments with specialist sponsors – typically completed outside auctions at attractive entry valuations – increased in popularity.

These reflect some of the trends that co-investment managers were following throughout the market cycle. At Capital Dynamics, we look for these opportunity types using our proprietary network.

"TO ACHIEVE A BALANCED AND ATTRACTIVE PORTFOLIO, CO-INVESTORS SHOULD EITHER OVER- OR UNDER-WEIGHT ASPECTS OF THEIR PORTFOLIO DEPENDING ON THE STAGE OF THE MARKET CYCLE."

FIGURE 4: EXAMPLES OF ATTRACTIVE CO-INVESTMENTS AT VARIOUS STAGES OF THE MARKET CYCLE

Emergence from the Global Financial Crisis (2009-10)	Growth opportunities at reasonable entry multiples (2014-16)	Downside protection and smaller, active transactions (2016 onwards)
Mid-sized industrial businesses with international expansion potential, particularly in Asia	Software and services businesses with strong growth potential and cash flows, mainly in North America	Transactions with stronger downside protection. Smaller, active co-investments with specialist sponsors

Source: Capital Dynamics.

CONCLUSION

Academic research confirms that investing in a global, well-diversified and actively managed co-investment fund can be an attractive way of generating outperformance (and mitigating risk) *versus* a lead investor's fund, particularly in the mid-market. Outperformance is attributable to the lower overall costs of a co-investment fund for an investor compared to those of a conventional private equity fund. Risk mitigation is derived from the diversification achieved through *intelligent portfolio construction,* enabled by Capital Dynamics' proprietary mid-market network.

A capable co-investment team can add value by capturing trends that take account of market cycles (*e.g.*, with higher value creation potential and/or more downside protection) and should either deliberately over- or under-weight individual regions, sectors, transaction sizes and/or transaction structures depending on the stage of the market cycle. This approach is particularly important late in the cycle.

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[9]As of March 31, 2019.

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