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Co-Investing for Limited Partners: Another Risk vs. Return Tradeoff

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Overview

- Developments in the LP Investment market
- How is Co-Investing different from the usual way LP invest
- Risk and return characteristics of traditional LP Investing and Co-Investing
  - Forecasting cash flows
  - Projecting residual values and cash flow multiples
- Contrast and compare
- Controversy and fiduciary considerations

Introduction

- For more than a decade, Limited Partners have been giving increasing interest to the possibility of co-investing alongside General Partners on an equal footing

- This opportunity, more often than not, has been given to large organizations

- This is partially due to senior personnel shift from private asset management companies to asset owner organizations, like pension plans, and vice versa

- There are also some fundamental economic reasons for this development

- This type of investment presents opportunities, but also carries identifiable risks, especially when considering the mandate of many public asset owner organizations as long term, lability driven investors

Recent Market Developments

- For the last several years the trend of large LP's turning to co-investing opportunities has only accelerated

- The additional impetus in this direction was the ever-increasing entry valuations in the private equity mid-market, which exemplify the "average" traditional limited partner investment approach

- Parallel to that is the long-term downward trend in bond yields which pressure large asset owners – most of which are liability driven pension plans – to reach for yield

- Co-investing is also viewed as a viable alternative to forming in-house private asset management teams, where these organizations have to attract skillful deal makers from the private sector, while also facing the hurdle of state and municipal government mandates and constraints

How is Co-investing different

- Before contrasting Co-investing with traditional LP investing, let's revisit what traditional LP investing looks like:
  - A fund sponsor – i.e. a private equity management company – forms a limited partnership vehicle, where it acts as the General Partner
  - It raises capital from investors that act as Limited Partners who commit capital to the fund
  - Limited Partners are promised return of invested capital, often a preferred rate of return, that is generated by income of the companies underlying the private equity fund portfolio, and the proceeds of the divestment from those deals over time
  - In return, Limited partners pay to the GP an asset management fee on AUM – e.g. 2% - and, and a percentage of profits – portfolio income, and realized appreciation on divested positions – e.g. 20%, also known as carried interest
  - Limited partnership funds usually have a stated sunset clause of 10-15 years where most of the underling investments have to be liquidated and all invested capital returned to investors

How is Co-investing different

- Co-investing on the other hand has the following characteristics:
  - It is still offered by General Partners to Limited Partners
  - It, however, refers to sidecar investments that require significant liquidity outlay from the LP
  - Unlike calls of capital which LP committed to a fund which may take up to several years, co-investment amounts are not blind investment pools but directed to specific opportunities, and thus have a much shorter "call" period
  - Likewise, due to the need to match opportunities with investors, the number of the co-invested deals in such manner is small at any given time
  - Due to the need for speed and flexibility on each such opportunity, a small number of investors are required – usually the ones with the largest amount of liquid resources
  - The usually perceived benefit of co-investing is that the LP that takes part in it save themselves some or all of the asset management fees and carried interest. Occasionally, they get offered unique and more attractive co-investing deals than what is in the rest of the LP fund.

Co-investing: Risk and Return

- On one hand, everything else the same, co-investing offers a higher payoff to the investor due to the saving of management fees and carried interest, and potentially superior expected payoff

- On the other hand, given the large size of the investment, the timing of the cash flow, and the singular nature of opportunities as they occur through time give rise to three incremental types of risk in comparison to traditional LP-investing:

  - Lower level of deal diversification at any point in time
  - Lower level of “dollar cost averaging” diversification through time
  - Higher liquidity drain at a single point in time – the time of the investment

- Consequently, the limited partner has to analyze co-investing opportunities through the prism of the incremental risks and payoffs; we will focus on the first two components, as we have addressed the third one in our PE liquidity webinar.

Forecasting Private Asset Performance

- Projections of the periodic cash flow of the underlying fund or asset over different horizons
  - Portfolio growth / Asset growth
  - Portfolio volatility / Standalone Asset Volatility
  - Distribution and Contributions Pacing Rates / Liquidation timing

- Projections of cumulative cash flows based on periodic cash flows, over different horizons

- Projections of marketable fund NAV based on cumulative cash flows over different horizons

- Projection of cash flow multiples – RVPI, DPI, and TVPI

Forecasting Performance (cont’d)

- We will perform analysis that will look into three investments

- First: a conventional LP fund investment where diversification of underlying deals and cash flows over time is at a reasonable level

- Second: a co-investment deal which is expected to be liquidated in five years; carries only a marginal incremental amount of idiosyncratic cash flow volatility; LP is not paying carried interest and fees on otherwise comparable cumulative cash flows to the conventional LP investment

- Third: a co-investment deal which is equivalent to the other co-investment deal in every respect except one – in addition to not paying carried interest and fees by the LP, it also offers superior expected payout prospects

Forecasting Performance - Methodology

- The analysis uses as ingredients the following models from *Northfield* and our partner – the private asset cash flow and valuation analytics firm *Aspequity*

- Northfield's risk factor models: we are a provider of risk models for equity, debt, and real assets for more than 35 years

- Aspequity's cash flow pacing models and cumulative cash flow simulation engine which captures 10^{20} different cash flow paths in second

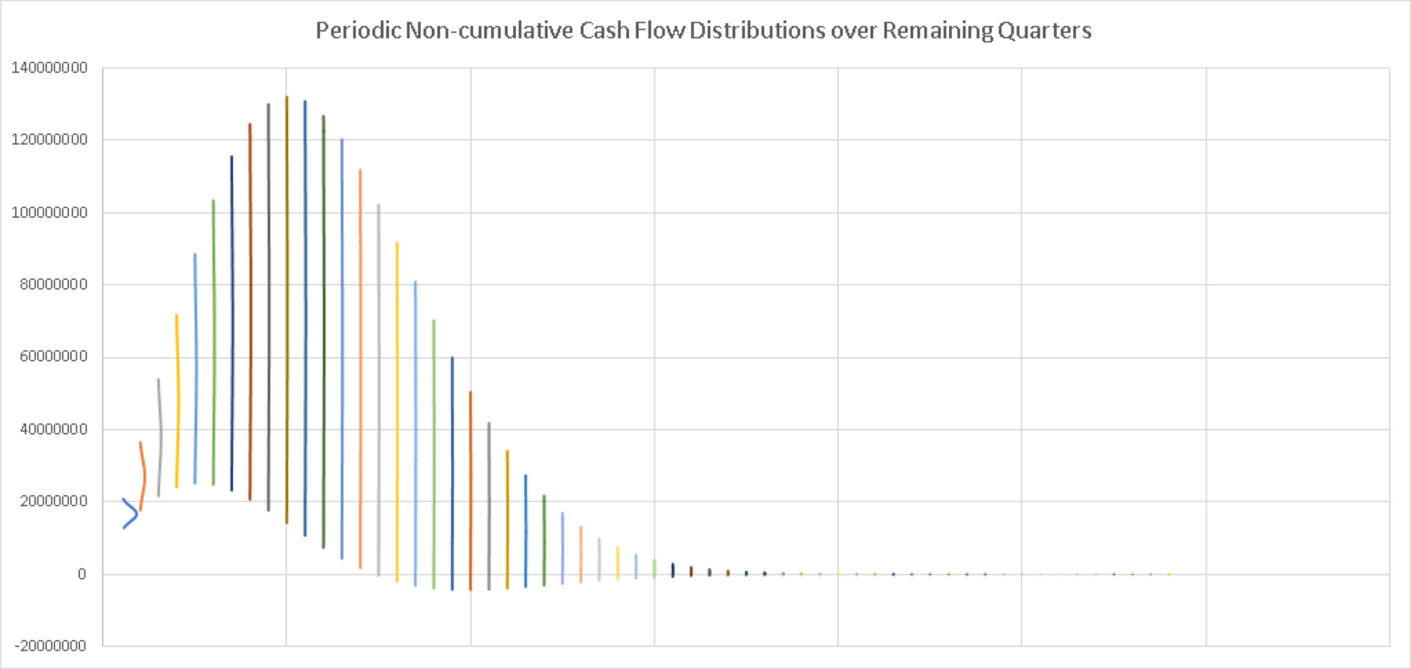
- Aspequity's valuation EXPLO technology, which implements the most advanced private asset valuation approach – the certainty equivalent approach – prescribed by AICPA, CFA Institute, and IPEV.

- In an upcoming paper, we demonstrate that EXPLO algorithm is equivalent to maximizing a concave utility function of wealth similar to Markowitz, Levy, Merton, Kelly, and Wilcox

Periodic Distributions – LP Fund Investment

Portfolio:	BuyoutFund		Model:	BOSTON
As of date:	20200728		Currency:	USD

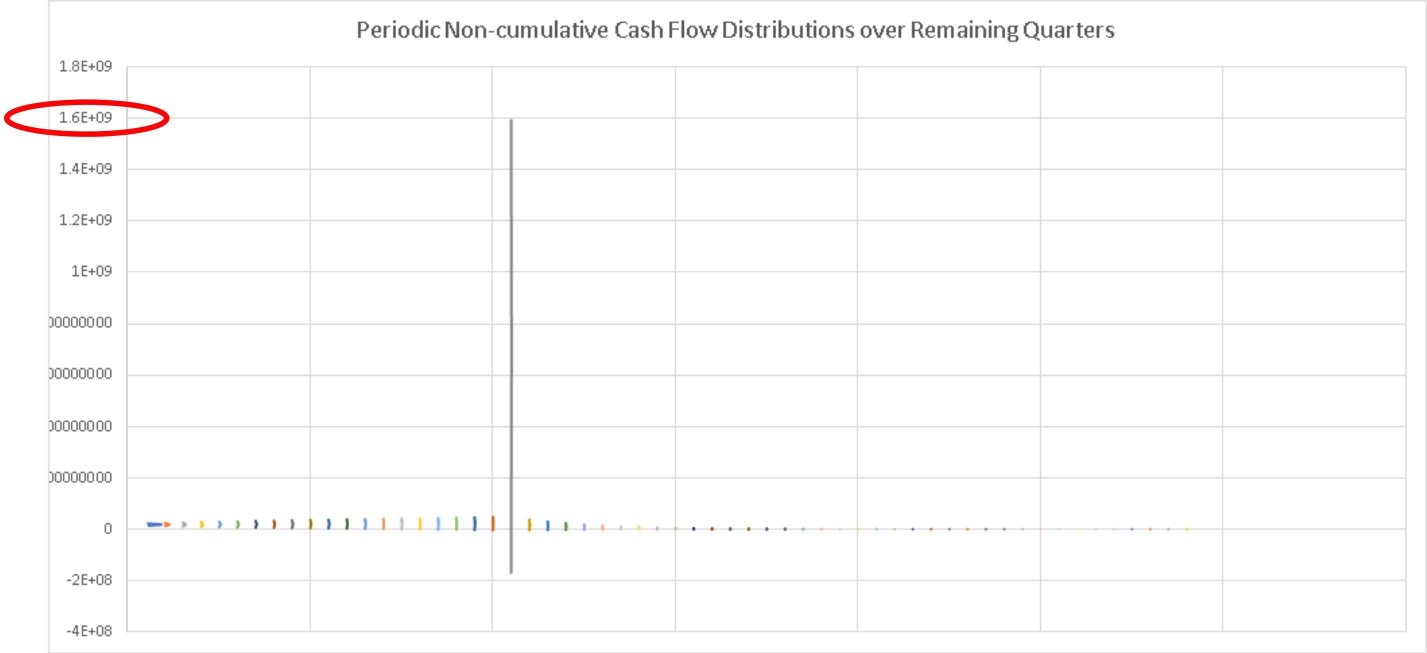
Cash Flow Forecast



Periodic Distributions – Co-Investment 1

Portfolio:	BuyoutFund_CO1	Model:	BOSTON
As of date:	20200729	Currency:	USD

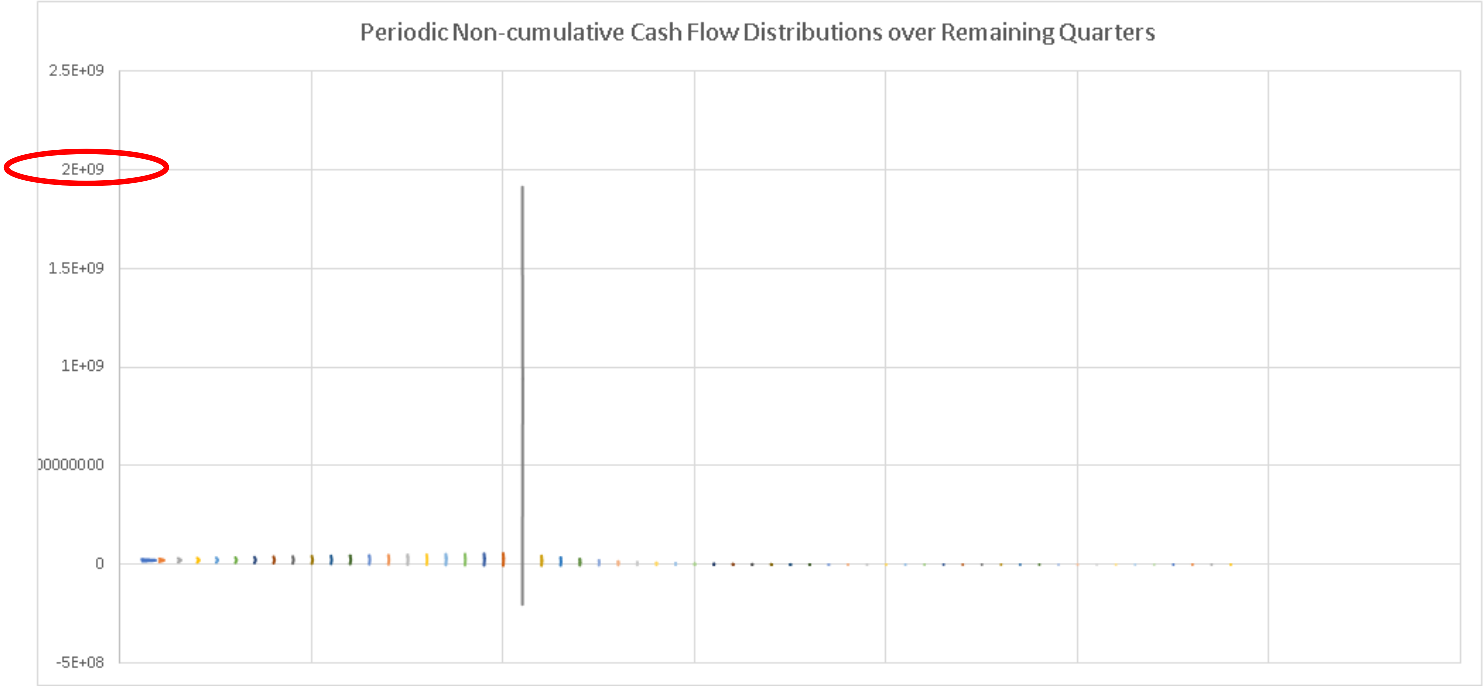
Cash Flow Forecast



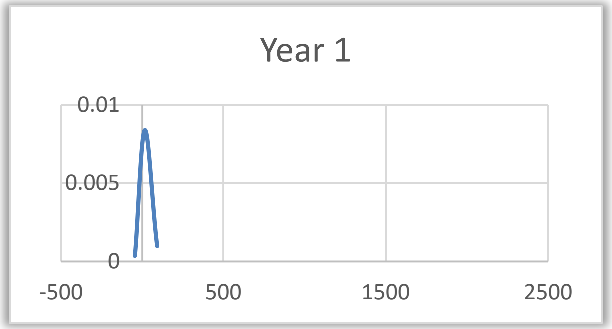
Periodic Distributions – Co-Investment 2

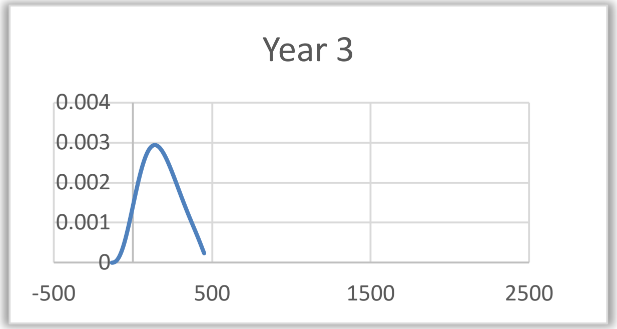
Portfolio:	BuyoutFund_CO2	Model:	BOSTON
As of date:	20200729	Currency:	USD

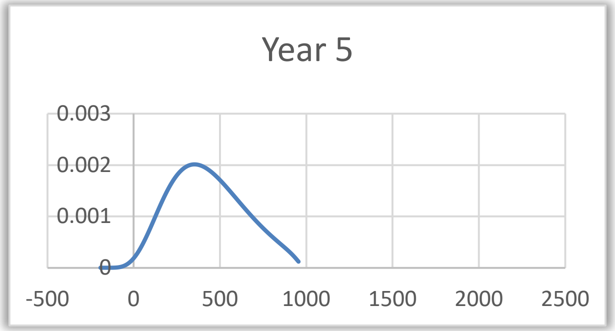
Cash Flow Forecast

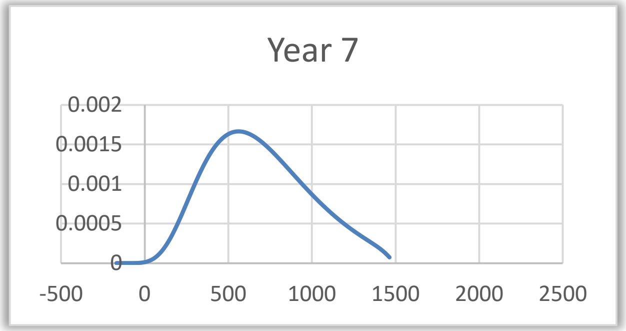

Periodic Non-cumulative Cash Flow Distributions over Remaining Quarters

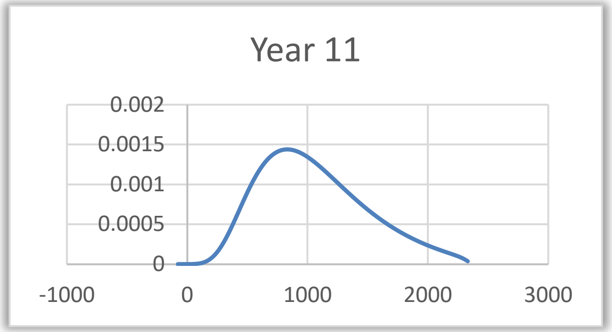
Cumulative Cash Flows – Private Investments


Year 1


Year 3


Year 5

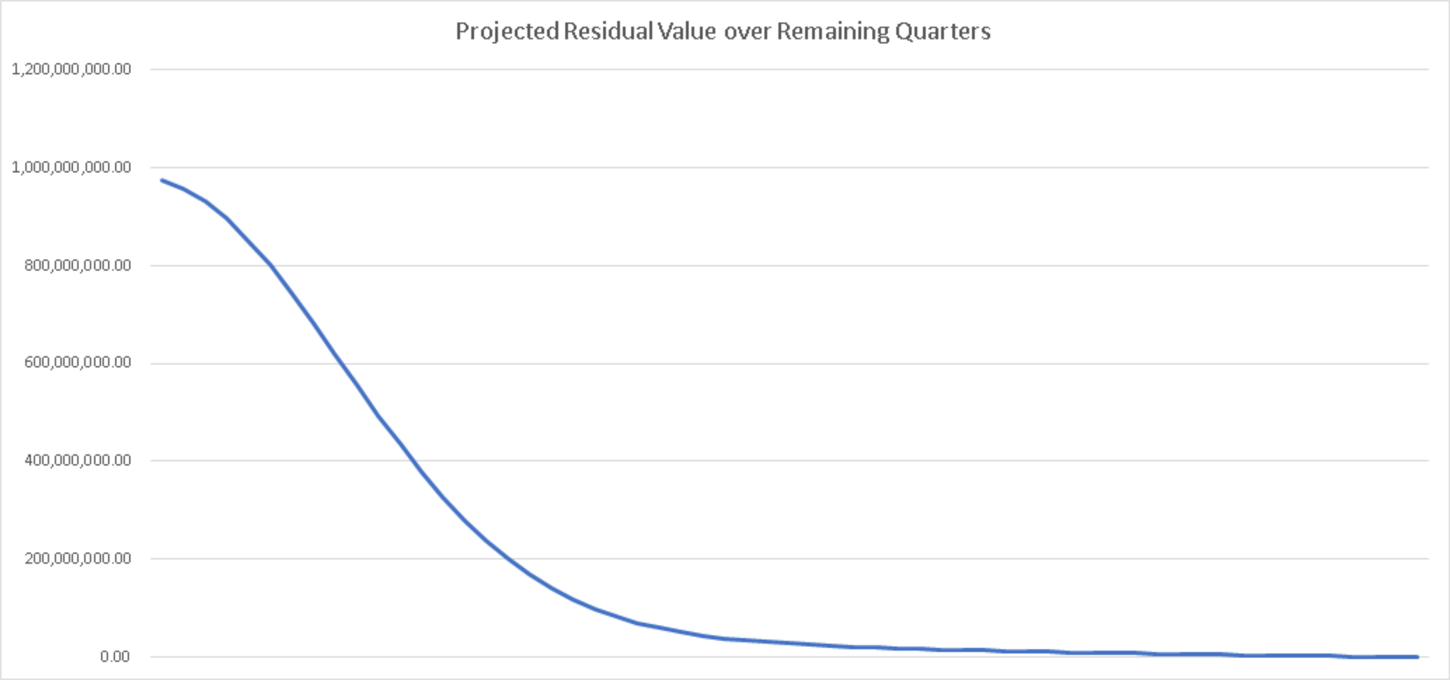

Year 7


Year 11

Forecast Residual Value – LP Fund

Portfolio:	BuyoutFund	Model:	EXPLO
As of date:	20200728	Currency:	USD

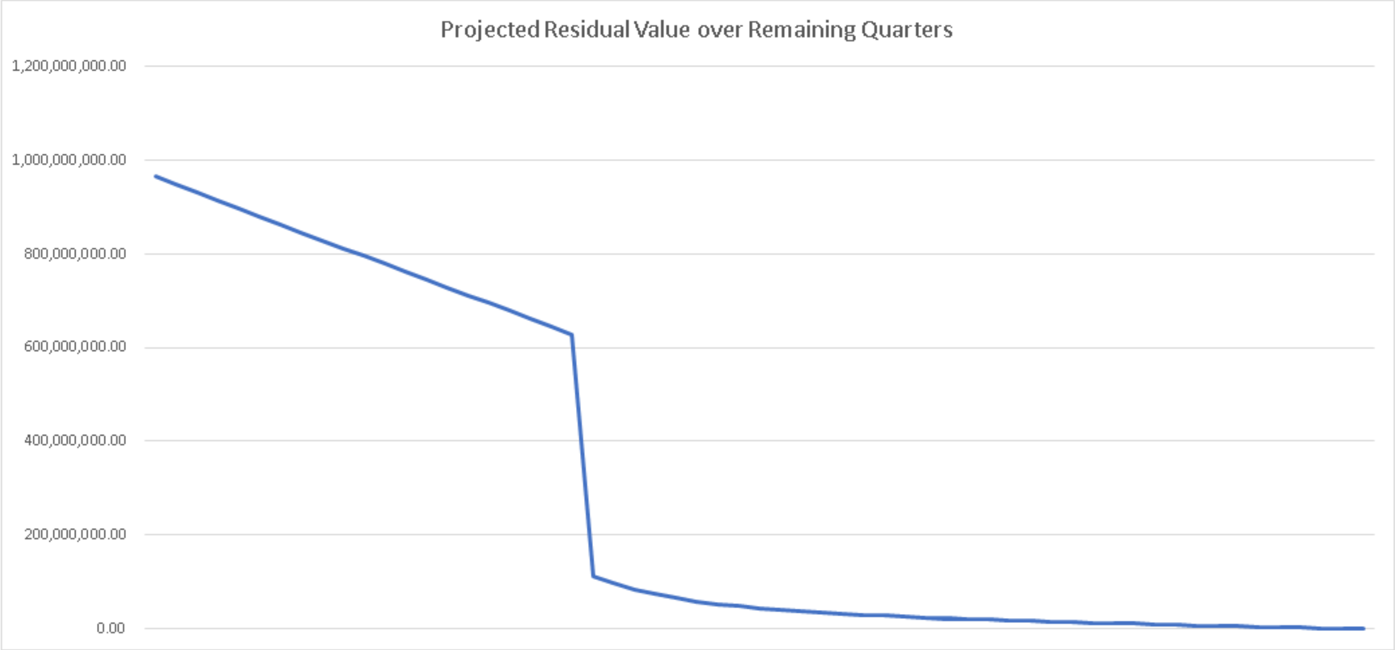
Residual Values Forecast



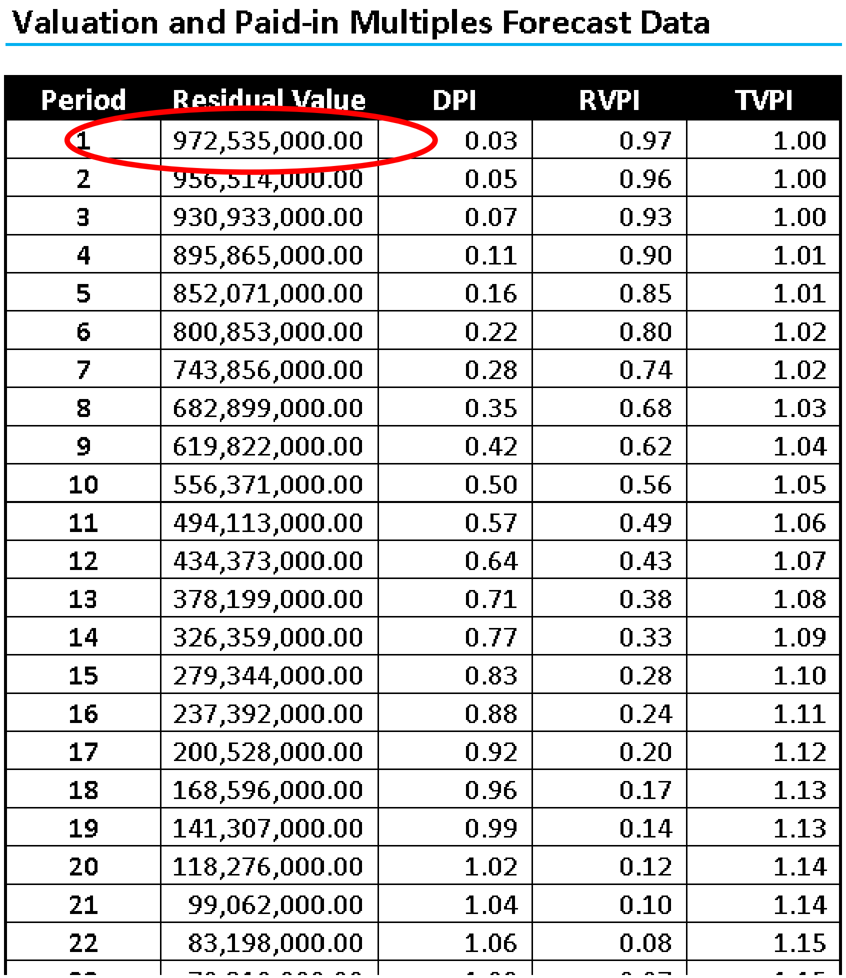
Forecast Residual Value – Co-investment

Portfolio:	BuyoutFund_CO1	Model:	EXPLO
As of date:	20200729	Currency:	USD

Residual Values Forecast



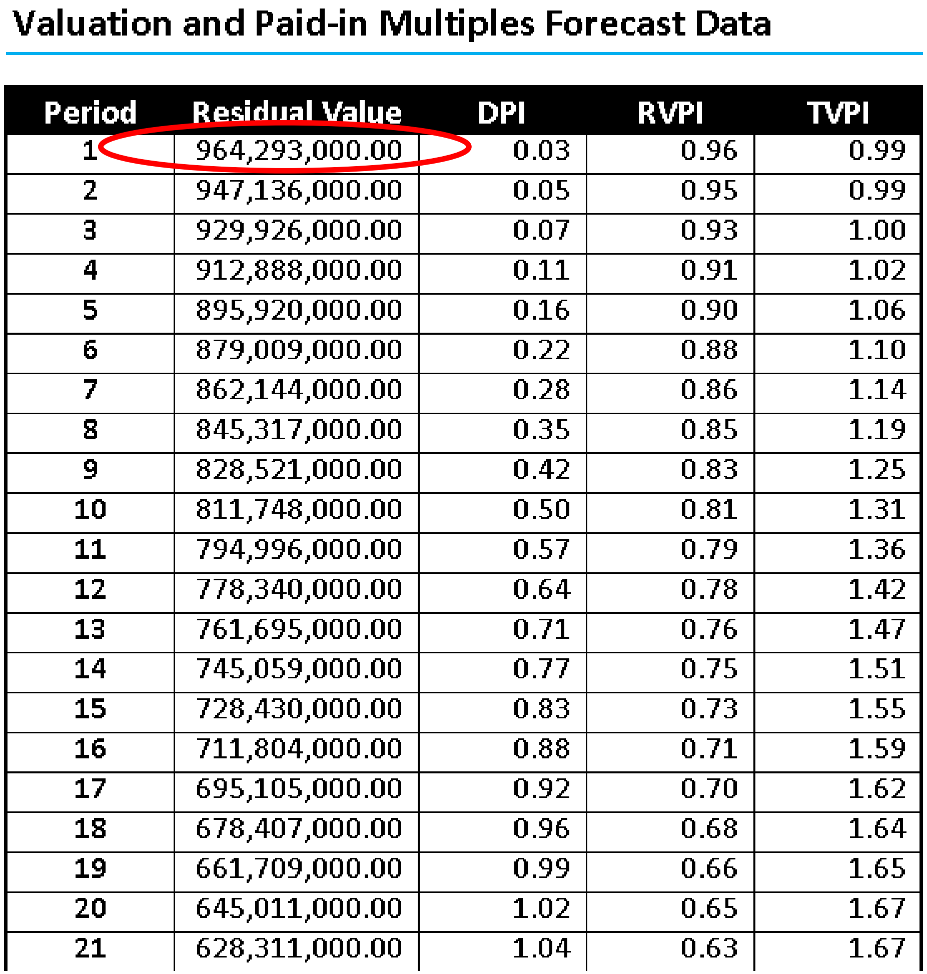
Current Value – LP Fund Investment



Valuation and Paid-in Multiples Forecast Data

Period	Residual Value	DPI	RVPI	TVPI
1	972,535,000.00	0.03	0.97	1.00
2	956,514,000.00	0.05	0.96	1.00
3	930,933,000.00	0.07	0.93	1.00
4	895,865,000.00	0.11	0.90	1.01
5	852,071,000.00	0.16	0.85	1.01
6	800,853,000.00	0.22	0.80	1.02
7	743,856,000.00	0.28	0.74	1.02
8	682,899,000.00	0.35	0.68	1.03
9	619,822,000.00	0.42	0.62	1.04
10	556,371,000.00	0.50	0.56	1.05
11	494,113,000.00	0.57	0.49	1.06
12	434,373,000.00	0.64	0.43	1.07
13	378,199,000.00	0.71	0.38	1.08
14	326,359,000.00	0.77	0.33	1.09
15	279,344,000.00	0.83	0.28	1.10
16	237,392,000.00	0.88	0.24	1.11
17	200,528,000.00	0.92	0.20	1.12
18	168,596,000.00	0.96	0.17	1.13
19	141,307,000.00	0.99	0.14	1.13
20	118,276,000.00	1.02	0.12	1.14
21	99,062,000.00	1.04	0.10	1.14
22	83,198,000.00	1.06	0.08	1.15

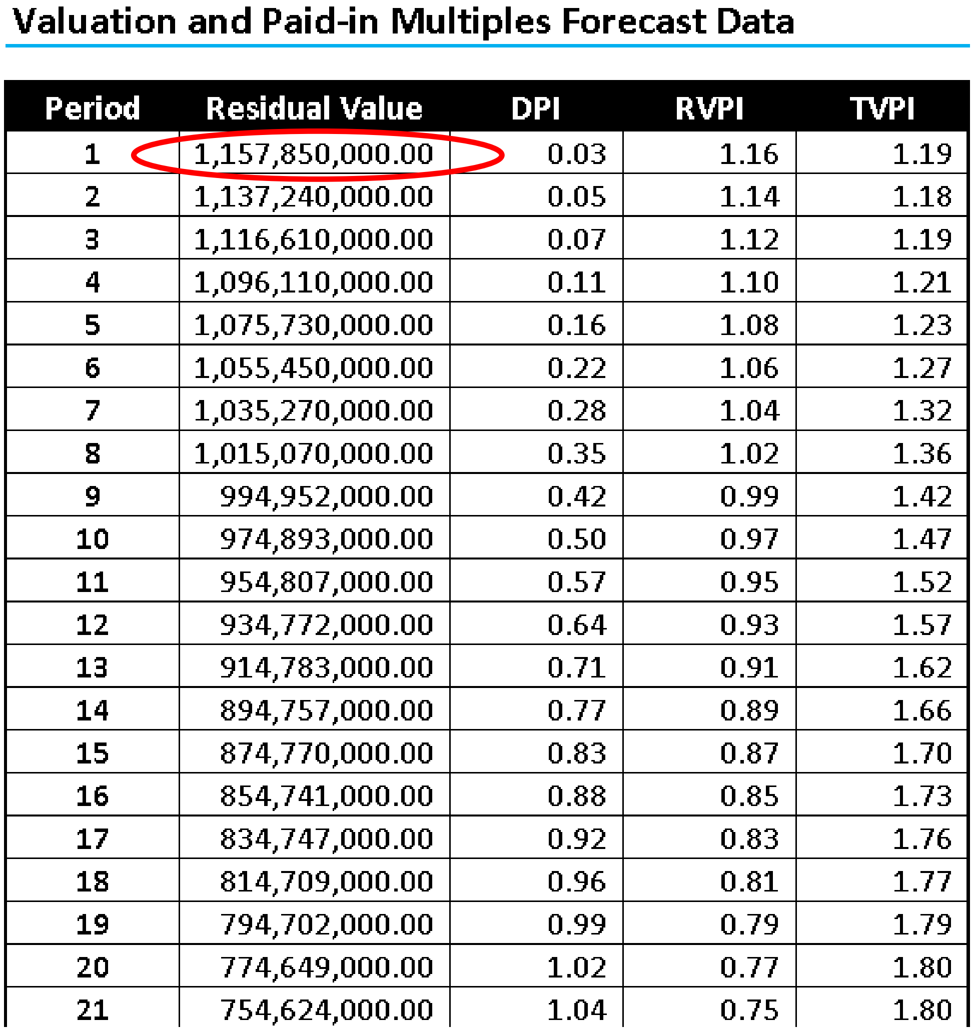
Current Value – Co-Investment 1



Valuation and Paid-in Multiples Forecast Data

Period	Residual Value	DPI	RVPI	TVPI
1	964,293,000.00	0.03	0.96	0.99
2	947,136,000.00	0.05	0.95	0.99
3	929,926,000.00	0.07	0.93	1.00
4	912,888,000.00	0.11	0.91	1.02
5	895,920,000.00	0.16	0.90	1.06
6	879,009,000.00	0.22	0.88	1.10
7	862,144,000.00	0.28	0.86	1.14
8	845,317,000.00	0.35	0.85	1.19
9	828,521,000.00	0.42	0.83	1.25
10	811,748,000.00	0.50	0.81	1.31
11	794,996,000.00	0.57	0.79	1.36
12	778,340,000.00	0.64	0.78	1.42
13	761,695,000.00	0.71	0.76	1.47
14	745,059,000.00	0.77	0.75	1.51
15	728,430,000.00	0.83	0.73	1.55
16	711,804,000.00	0.88	0.71	1.59
17	695,105,000.00	0.92	0.70	1.62
18	678,407,000.00	0.96	0.68	1.64
19	661,709,000.00	0.99	0.66	1.65
20	645,011,000.00	1.02	0.65	1.67
21	628,311,000.00	1.04	0.63	1.67

Current Value – Co-Investment 2



Valuation and Paid-in Multiples Forecast Data

Period	Residual Value	DPI	RVPI	TVPI
1	1,157,850,000.00	0.03	1.16	1.19
2	1,137,240,000.00	0.05	1.14	1.18
3	1,116,610,000.00	0.07	1.12	1.19
4	1,096,110,000.00	0.11	1.10	1.21
5	1,075,730,000.00	0.16	1.08	1.23
6	1,055,450,000.00	0.22	1.06	1.27
7	1,035,270,000.00	0.28	1.04	1.32
8	1,015,070,000.00	0.35	1.02	1.36
9	994,952,000.00	0.42	0.99	1.42
10	974,893,000.00	0.50	0.97	1.47
11	954,807,000.00	0.57	0.95	1.52
12	934,772,000.00	0.64	0.93	1.57
13	914,783,000.00	0.71	0.91	1.62
14	894,757,000.00	0.77	0.89	1.66
15	874,770,000.00	0.83	0.87	1.70
16	854,741,000.00	0.88	0.85	1.73
17	834,747,000.00	0.92	0.83	1.76
18	814,709,000.00	0.96	0.81	1.77
19	794,702,000.00	0.99	0.79	1.79
20	774,649,000.00	1.02	0.77	1.80
21	754,624,000.00	1.04	0.75	1.80

Observations

- The Co-investments have payoffs concentrated in one short period in the future – this provides little diversification of payoff over time
- Slight increase of volatility of periodic cash flows comes form higher idiosyncratic risk, but the main increase of multi-period volatility is due to the lack of time diversification
- It can be seen that even with the saving of management fees and carried interest the risk adjusted current value of the Co-Investment 1 is lower than the current value of a conventional LP Fund investment
- Only when performance of the Co-investment deal itself is notably improved – Co-Investment 2 – then it justifies the decrease of diversification of cash flow timing and portfolio deals
- **Implication:** *Saving fees and carried interest on its own does not justify co-investing*

Broader LP Considerations

- Clearly, the main factor of in superior Co-Investment performance is higher than average expected payoff

- If all LP's pay fees to have a fund managed, how would GPs identify an equitable way to qualify LPs to offer superior deals for co-investing

- If the management team identifies those deals as superior, why are they not included in the fund

- If there is a perception that GPs reward certain LPs as they expect them to lead future fundraising rounds in new LP fund vehicles, then there has to be transparency in the LP Agreement what are the co-investor qualification criteria

- If certain LPs get preferential treatment due to history or size, how are they assured that the deals are actually superior: saving management fees on its own is rarely a good reason, as we show

Broader Consideration (Cont'd)

- SEC has recently has started paying increased level of scrutiny into the practice of Co-Investment offerings by private equity firms
- It has found, not infrequently, that there are irregularities in the way Co-Investment deals are offered to Limited Partners that are not in line with Limited Partnership Agreements
- In other cases it has been found that there is not a clearly defined way in which Co-Investment opportunities are to be handed to Limited Partners
- While, in principle, General Partners are bound to investors by fiduciary duty, the SEC has found that an increasing number of LP Agreements depart from the guidelines of fiduciary responsibility, with co-investment being a material theme in this development

Summary

- Qualitative assignment of Co-Investment as “superior”, and “privileged” falls short of capturing the actual attractiveness of a deal in relation to a comparable conventional LP fund investment stakes

- Quantitative analysis that reflects the risk and return characteristics of the periodic and cumulative cash flows of the investment, as well as the estimation of its current risk adjusted value, are the ultimate way to make this determination

- As a general principle, LPs should look for co-investment deals that offer clearly superior expected outcomes and not simply rely on saving of management fees and carried interest to get superior performance

- Co-investment carry risks for both LPs and GPs from regulatory and ethical infringements, which should be properly accounted for and addressed

Question and Answer Session

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