The Future of Private Equity Investing is all about Post-Acquisition Operational Value Add (PAOVA)

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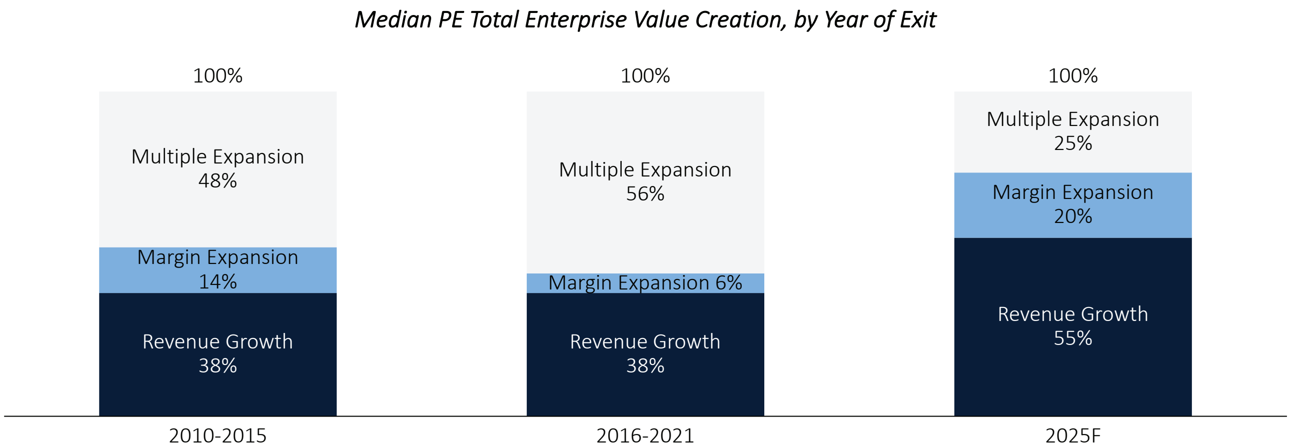
Over the past decade, Private Equity (PE) sponsors have generated outsized returns more easily than ever before in the history of the asset class. Falling interest rates have boosted returns in most asset classes, including buyouts that benefit from high leverage and low borrowing costs, as well as venture capital and growth equity that benefit from low discount rates inflating back-ended cash flows.

Many firms have achieved 2x+, 15%+ gross returns simply by acquiring high-margin, high-growth businesses with abundant cash flow generation, riding their growth wave, and selling them to a larger PE sponsor. Even today, more than 25% of PE firms employ no value creation team members, and many others either rely on relatively disengaged and non-exclusive operating partners or distribute value creation work for one deal across multiple PE firms.[1] In our view, it is not surprising that multiple expansion, mainly reflecting the inverse relationship valuations have with discount rates, is the top driver of historical returns over the past decade, as shown in Exhibit 1.

We have reported for years that returns would inevitably compress, and that the record levels of private equity funds raised have left too much capital chasing a limited set of investment opportunities. What we had not emphasized enough in that earlier forecast was that the real turning

[1] AlpInvest, From Financial to Operational Engineering: Organizational Aspects, November 2021; Sample includes 3,949 deals from 212 buyout and distressed debt funds raised between 2004 and 2015

Exhibit 1: In a rising rate environment, we believe earnings growth will emerge as the core source of PE value creation



Source: CEPRES Market Intelligence; Partners Capital Analysis. Includes fully realized global buyout deals with >$50M in invested capital; excludes deals with missing data as well as real estate and infrastructure deals; 2021 data as of December 14, 2021. Excludes leverage.

point in the PE industry would not occur until the end of low inflation and falling interest rates. We now believe a shift is well underway, with nearly all PE investors (LPs and GPs) focusing almost exclusively on the earnings growth achievable through the private equity owner's post-acquisition operational value add (PAOVA) as the core source of PE value creation.

As a consequence of this paradigm shift, we anticipate a significant shake out in the private equity world as many firms have not developed adequate value creation capabilities to justify their high fee levels (in the absence of multiple expansion). Competition among PE LPs will become intense, pivoting toward those firms with the greatest skill in adding value to their portfolio companies.

Due Diligence in a PAOVA Age

We have made the case that sponsors will bifurcate into two clear camps – alpha detractors and alpha generators – based on their ability to implement PAOVA initiatives at their respective portfolio companies. At Partners Capital, we take that view one step further. In Newtonian physics, the rate of change is equal, in both magnitude and direction, to the force imposed upon an object. It follows in our view that, to the extent the PAOVA paradigm shift drives dispersion between sponsors, it will proportionally impact the very group that invests in those sponsors, private equity limited partners (LPs). As such, we similarly anticipate LPs will struggle to generate alpha above manager fees – as well as their own costs – unless they can successfully adapt to a PAOVA age.

So, what does it mean to adapt to a PAOVA age? The first step in our view is to acknowledge we are in the early innings of a transformation in how private equity fund LPs generate outperformance. Even before the advent of this new age, buyouts were already the least persistent sub-asset class in private markets. Past headline performance was less likely to be a reliable indicator of future performance. For example, over the past two decades, top quartile buyouts managers produced a subsequent fund in the top quartile c. 33% of the time, versus 45% of the time for venture capital managers.[2] Recognizing the lack of performance persistence in buyouts, LPs post-GFC pivoted their strategies to take favorable strategic asset allocation skews, mostly to growtheir pockets of private equity. However, in this new age of buyout investing, LPs can no longer simply rely on asset allocation within private equity. Simply allocating to high growth sectors such as technology and healthcare, or to teams that avoid cyclicality or capital intensity, or to teams that 'minimize' equity at acquisition, or even to lower middle market companies which historically have simply achieved higher earnings growth on their own, will be insufficient. To justify our roles, LPs will have to dramatically increase investment into their own due diligence capabilities to find the small subset of firms that truly generate consistent value-add.

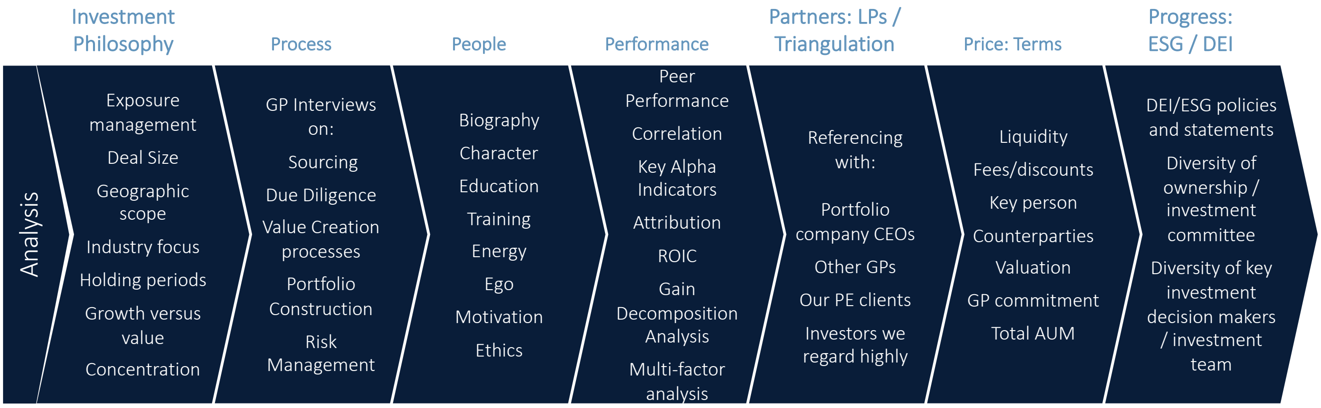
Over the next decade, we believe due diligence intensity – previously viewed as an impediment to transaction speed and the certainty of winning competitive offerings – will emerge as a core competitive advantage that separates outperformers and underperformers among LPs. At Partners Capital, our typical primary fund due diligence team is five to six team members, consisting of two members of the investment committee (e.g., Asset Class Head and CIO), a Principal (project lead), and two to three Associates / Senior Associates that collectively spend 300-500 hours over six to ten weeks evaluating a single potential fund investment. We principally evaluate managers based on our '7P framework' as shown in Exhibit 2 below, with input from our five-member asset class investment committee ("ACIC"). The time estimate cited above excludes the work of 3-4 additional team members across legal and operational due diligence, which can also be substantial.

[2] Source: "Has Persistence Persisted in Private Equity? Evidence from Buyout and Venture Capital Funds. Robert S. Harris, Tim Jenkinson, Steven N. Kaplan and Ruediger Stucke. March 2022". Burgiss Data for 2001-2015 vintage venture capital funds as of December 2020.

The Future of Private Equity Investing is all about PAOVA

Exhibit 2: 7P Manager Evaluation Framework

Partners Capital has honed an exhaustive and thorough "7Ps" process for identifying top pedigree asset managers in all asset classes. The process looks at both quantitative and qualitative dimensions



Certain components of the 7Ps framework have proven to be particularly critical in due diligence over the past few decades where we estimate we have performed due diligence on over 1,000 private equity firms. The key diligence workstreams that drive investment decisions are:

1) Portfolio performance attribution analytics
2) Referencing
3) GP interviews going deep into the investment process
4) Market mapping

Given the focus on PAOVA, we go particularly deep on portfolio analytics, moving far beyond the headline track record to evaluate whether the sources of prior investment performance can be underwritten to occur in the future fund. In essence, we will not invest unless we can get to the bottom of how funds have generated performance in the past and conclude from an assessment of the future investment environment and fund size, such returns can be replicated. To this end, we seek to attribute past performance to sector, geography, company and deal size, and most critically, to distinguish between beta and alpha. Beta, or market-driven sources of gains, include industry average revenue growth, margin growth, and multiple growth and the effects of leverage. Alpha, is what the PE GPs add in the form of faster than average revenue and margin growth and multiple expansion in excess of sector averages. Over the past 20 years, we have developed proprietary tools to inform this assessment including:

(1) Deal by deal performance benchmarking which compares the level and source of each deal's value creation to a database of over 30,000 transactions

(2) Overall sector EBITDA growth benchmarking versus specialist and generalist peers

(3) Portfolio "hit rate" analysis where we assess the quality of returns, measuring consistency, attribution of "home run" deals, all by sector and size of deal

(4) Partners Capital 'Gain Decomposition Analysis' (GDA), which quantitatively attributes the sources of historical deal by deal gains to the various beta and alpha drivers.

At Partners Capital we have had a lingering concern that, particularly for large and mega-cap sponsors, rising tides had lifted all boats post-GFC, and as a result, the majority of firms with funds >$5B may not have produced a substantial illiquidity premium over public markets once we adjust for the falling discount rates and the benefits of sector selection and leverage. Many of the larger buyout firms have shifted their portfolios into the faster growth sectors. Over the last 3 years, technology deals comprised c. 45% of deal value among all buyouts >$1B versus 21% for the MSCI All Country World Index.[3] Finding the true value creators for our underlying clients is the primary purpose of our

Gain Decomposition Analysis (GDA) tool shown in Exhibit 3 below.

The GDA tool decomposes deal by deal historical realized returns into the three 'alpha categories' which are defined as those sources of gains which are unlikely to have happened without the active involvement of the PE owner, and the three 'beta categories' which we attribute to uncontrollable market factors and do not attribute to the PE owners. The three alpha categories are: (1) above-market revenue growth, (2) above-market EBITDA margin expansion, and (3) above-market GP multiple expansion. We view (1) and (2) as the most repeatable drivers of outperformance, and we primarily value (3) for lower middle market / middle market funds, which in our view have far higher potential to precipitate a 're-rating' by professionalizing and growing smaller companies.

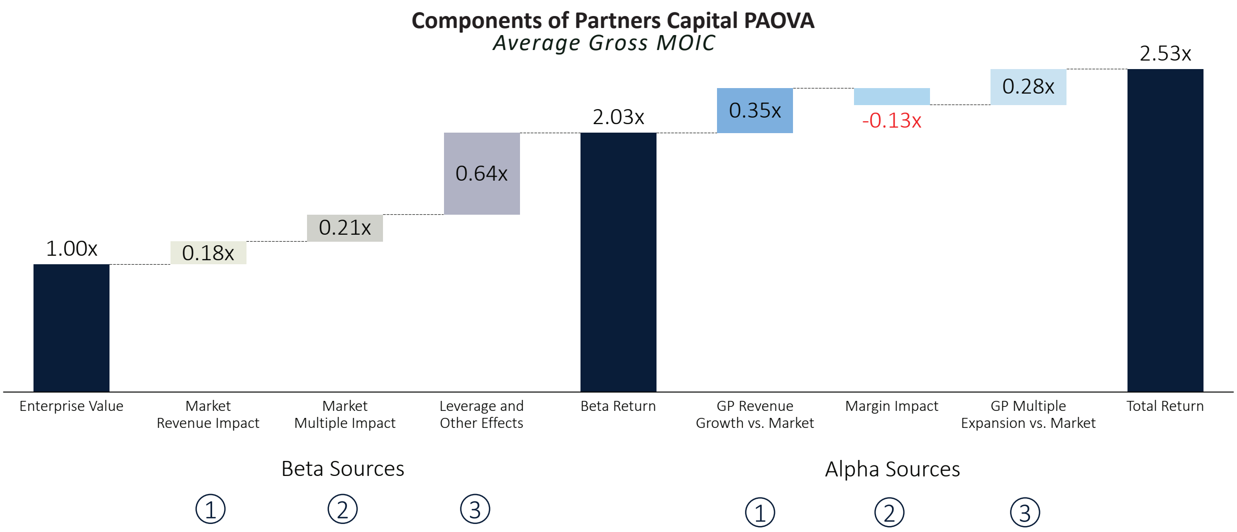
The three 'beta' categories, for which we do not believe we should be paying fees or attributing the value added to the private equity owners include: (1) market revenue growth impact, (2) market multiple impact, defined as average EV/ EBITDA appreciation in a particular sector in the public markets, and (3) the effects of leverage. In some cases, there can be an alpha component to leverage where skilled structuring is deployed (e.g., for downside protection) and the GP has access to exceptionally low-cost debt.

To validate our GDA tool, we pressure tested it on a sample of more than 300 deals across five mega cap firms, with each firm's most recent respective vintage having raised $10B or higher. All five sponsors generated average returns of 2.3x to 2.9x gross MOIC on deals of >2 years' maturity which aligned with the average realized gross return of 2.4x MOIC across the broader buyout industry achieved over the last 20 years. The sources of value creation differ significantly among sponsors. Across two key alpha categories, above-market revenue growth and margin expansion, the best performing manager earned c. +11.5% alpha per annum and the worst performing sponsor earned c. +3.7% per annum. One firm drove 43% of total enterprise value (TEV) growth through operating improvements, whereas two firms drove 80%+, versus the market average of 56%.[4] The dispersion was even higher than we expected; the findings from this analysis led us to consolidate our mega cap generalist buyout portfolio from four relationships to two.

The creation of the GDA is just one example of how we continue to invest in our capabilities to address the PAOVA age. In 2015, we collaborated with PE firms who we believed at the time had demonstrated the highest and most consistent operational value

[3] Pitchbook 2022 Annual PE Breakdown; Preqin; Bloomberg
[4] DealEdge

Exhibit 3: Partners Capital's PAOVA analysis tool attempts to attribute performance to manager skill versus the effects of sector exposure, market multiple expansion, or leverage



added in order to identify the 'special sauce' that had driven their historical success. While each firm acknowledged the criticality of operating intervention skill, the PAOVA playbooks diverged substantially across the sponsors if we look at their operational focus (costs, new products, sales & marketing, digital transformation), organizational resources, and timing of implementation. We aggregated these learnings into a 'best practices document' which we share on an anonymized basis with existing and prospective GPs, so that they may better their own PAOVA capabilities. The learnings from our PAOVA best practices document drove a strategic shift towards teams with internal portfolio group models regardless of the sector or equity investment sizes. Over 70% of our recent buyout commitments have been made to firms with internal portfolio groups, versus 18% being allocated to such firms by the broader PE investor universe, as shown in Exhibit 4 below. Our PAOVA best practice playbook is a 'living' document we continually refine as we see more advanced PAOVA practices across the firms we encounter in our investment process which has us meeting over 150 new buyout firms each year, performing deep due diligence on 60 and investing in 10. "Kissing a lot of frogs" is increasingly important as the pattern of behavior is for incumbent firms to grow beyond their "sweet spot" and the competition for access to newer firms with strong value addition capabilities is intensifying in the PAOVA era.

The analysis we complete for all managers on PAOVA are usually complemented by three other key workstreams: referencing, interviews with GPs to understand their investment process and market mapping.

Referencing is particularly pivotal in lower middle market manager relationships, and for teams spinning out of approved platforms, but is important in all projects. We walk through relative strengths and weaknesses, validate deal attribution, verify the managers' explanation around key events (team departures, value creation initiatives in specific deals), and assess the likelihood of scaling the franchise exponentially. We also complete character referencing to identify if the GP is the type of individual (ethics, motivations, reputation) that we want to partner with for 10+ years. For all funds, it is critical to talk to portfolio company CEOs, other sponsors with whom they have collaborated,

Exhibit 4: Our approaches to value add

	Deal Team Driven / Advisor Network Model		Operating Partner/Specialist Model		Internal Portfolio Group Model	
Model	No Advisors	Advisors	Generalist	Functional	Functional	Consulting-Based
Description	• Similar to public equity investing –relies on a set of insights about investment • Rely on the change of ownership, good company fundamentals and strong management	• External network of senior advisors that assist in sourcing • Advisors usually take a board seat • Incentives based on ability of advisor to invest individually, have a fee free commitment to the fund or small equity incentive in portfolio company	• Single layer of executives on PE firm payroll with generalist expertise; do not necessarily have equity stake • Heavy monitoring against KPIs and milestones	• Single layer of executives on PE firm payroll with functional expertise; not necessarily an equity stake • Project based involvement across many portfolio companies • Typically paid consulting-type fees	• Project based involvement across many portfolio companies • Typically paid consulting-type fees but may receive meaningful carry	• Multilevel group of operating professionals on PE payroll • Heavy involvement throughout the life of the investment • May engage external industry consultants as well as functional experts • Work on fewer portfolio companies
Resource Type	• Pure sector and security selection • Improvements driven by deal teams	• Former CEOs and CFOs	• Former senior executives; high level general managers	• Former executives and consultants with functional expertise	• Former executives and consultants with functional expertise	• Large operating team of consultants with comparable compensation to deal team
PCIG Conviction in PAOVA Model						
Percent of Market[1]	27%		55%		14%	4%
PCIG Commitment	11% (8% with one sponsor)		15%		46%	27%

Source: AlpInvest, From Financial to Operational Engineering: Organizational Aspects, November 2021; Sample includes 3,949 deals from 212 buyout and distressed debt funds raised between 2004 and 2015 our PE clients who may have directly relevant experience (e.g., invested in the same vertical) or interacted with the fund, and former employees. We collectively take c. 15 references on average (three team members spend 30 minutes each), and then spend an additional 10-20 hours editing referencing and compiling investment committee memos highlighting key takeaways.

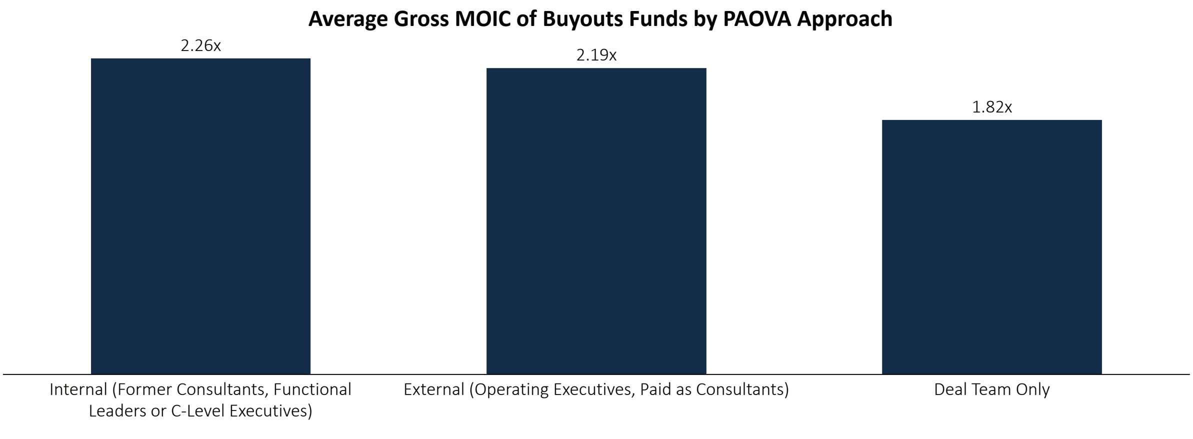
For **GP interviews to understand their investment process**, our entire due diligence (DD) team and at least one member of the IC travels onsite and spends 4-6 hours interviewing the team. We leverage our DD days with sponsors primarily to determine the extent to which processes around sourcing, structuring, and post-acquisition value creation have been codified, but also cover several other topics including ESG integration, digital transformation capabilities, carry allocation, team resourcing and bandwidth, and deal attribution. We should also spend several hours with our managers outside of the office to better assess their motivations, team culture, and ethics.

On **market mapping**, we often find that contextualizing the competitive set enhances our conviction in a particular fund. Here, we leverage primary (e.g., interviews) and secondary (e.g., market data) inputs to understand (i) what is the future opportunity set in the end-markets the fund is targeting in terms of number of deals and performance dispersion, (ii) what is the competitive landscape for deals in that end-market, and (iii) does the team have the correct experience set and structure to deliver outperformance versus its peers. This work often results in 20-30 pages of additional content that are presented to our asset class investment committee.

Conclusion

The golden age of private equity investing is over, and the future is all about identifying the firms with the greatest – and most repeatable – post acquisition operational value addition capabilities. As shown in Exhibit 5, there is already a significant performance edge (c. 0.44x MOIC, which we believe translates to a c. 5% higher net IRR, assuming a five-year deal holding period) between funds with dedicated internal or external operating resources versus those where value creation initiatives are primarily spearheaded by deal team members. We believe the future winning firms can be found within the c. 20% of the market that already have in place substantial in-house consulting-based or functional expert-based portfolio company operational teams. Our PE team's focus will be to carry on allocating our client's capital to the strongest PAOVA generators and continuously building our capability to assess PE GP's PAOVA skills. We believe Partners Capital has an edge over competition given our long historical focus on those firms with the greatest PAOVA. We also believe our PAOVA centric diligence methodology helps us to differentiate our firm from other LPs and secure larger allocations, Limited Partner Advisory Committee (LPAC) seats, and coinvestment deal flow. We remain focused on forging ever stronger relationships with these GPs based on our own ability to add value to their organizations.

Exhibit 5: Few firms have adequate PAOVA capabilities for the challenging environment ahead



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