

Unpacking Private Equity

Characteristics and Implications by Asset Class



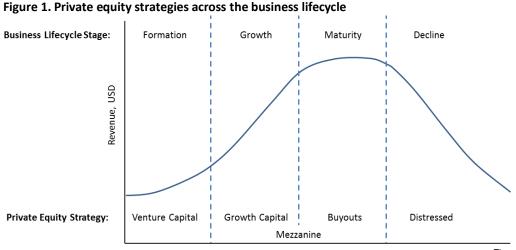


Unpacking Private Equity: Characteristics & implications by asset class

The term private equity is often treated as a catchall, used interchangeably to describe a broad variety of investments. Such loose use of the phrase fails to capture the range of nuanced business ownership strategies it refers to and risks branding an entire asset class with characteristics and implications that are typically relevant to only a particular sub-category. Recently, this has especially been the case given the outsized global attention placed on the leveraged buyout deals of Bain Capital, a private equity firm founded by Republican U.S. presidential candidate Mitt Romney. In this context, popular discourse has inappropriately attached the label of private equity to a general practice of debt-fueled corporate takeovers that disproportionately focus on cost cutting. In reality, however, private equity refers to an array of investment strategies each with a unique risk-return profile and differing core skillsets for success.

This article is intended to help family office executives better understand the nuances of the various sub-categories of private equity. It seeks to draw high-level distinctions, serving as a practical guide for investors entering the private equity arena, be it directly or through a more curated fund structure. Ultimately by understanding the characteristics and implications of each asset class, the reader should be equipped to make an educated choice regarding the most relevant and appropriate strategy for their unique profile.

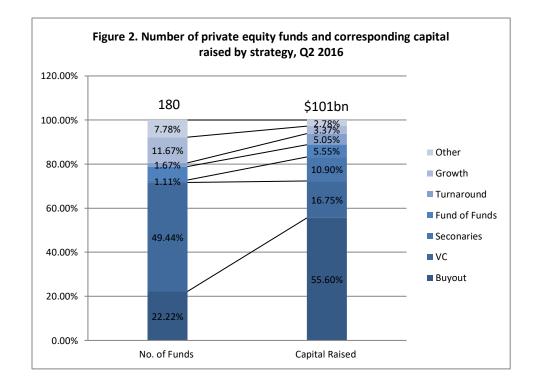
From a technical perspective, private equity is nothing more than making investments into illiquid non-publicly traded companies— i.e. companies not regulated by the SEC or a comparable regulatory body. It is the umbrella term for an asset class that can be segmented into six broad investment strategies: (1) venture capital, (2) growth capital, (3) mezzanine financing, (4) buyouts, (5) distressed investments, and (6) real estate. The first five strategies correspond to the progressive stages of a business' natural lifecycle, illustrated in Figure 1, while the latter is subject to its own set of development stages, examined separately at the end of this article.



Time



Private equity has yet to recover from its 2007 peak, when global capital deployed reached \$835 billion.¹ Despite bouncing back from a 2009 low of \$100 billion, deal volume was only \$243 billion in 2011, due mainly to continued weakness in the buyout market amid the global credit crunch. Nevertheless, the relative market sizes across private equity categories have remained relatively stable, with buyouts, typically, absorbing the largest share of capital, followed by growth, venture capital, distressed, and mezzanine financing. Distribution of capital is not necessarily proportional to deal activity, as seen in Figure 2. Though buyouts represent the majority of capital in private equity, they represent a smaller share of deals because of the correspondingly larger investment sizes. Venture capital, on the other hand, comprises a large number of smaller sized deals.



Source: Preqin

Each private equity strategy possesses a unique risk-return profile and characteristics that have implications regarding the nature of the ideal target, the deal structure, and the necessary investor skillsets typically required for success. As depicted in Figure 3, risk-return profiles typically decline across business lifecycle stages with the exception of distressed, which deviates from this trend due to the level of uncertainty involved. Recent empirical data suggests that the relative risk-return

¹ Boston Consulting Group & DealMarket, Private Equity Market Analysis & Sizing 2012



profiles may not always hold, insinuating that certain asset classes are systematically more attractive than others.

It is valuable to become familiar with these private equity strategies and their boundaries in order to (1) avoid losses stemming from a misalignment of risk perspectives, (2) choose the asset classes where your unique skillsets and experience can add the most value, and (3) capitalize upon less-efficient opportunities that fall between the "cracks" of more rigid, institutional investors.

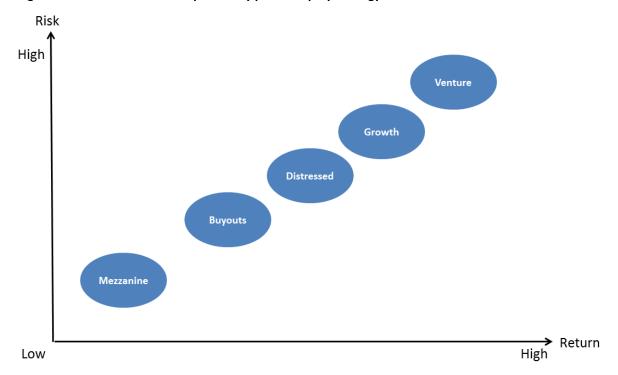


Figure 3. Illustrative risk-return profiles by private equity strategy

In investing, there is obvious value in asset class expertise that typically manifests itself in superior deal sourcing, negotiation of terms, and pricing, among other forms. In fact, empirical studies show that a 20 percent increase in asset class diversification in private equity funds results in a 6 percent fall in IRR— interestingly, diversifying across countries is found to neither add nor subtract from returns.² As a result, it is best practice for an investor to focus on a particular category and its

² Lossen, Ulrich. "The Performance of Private Equity Funds: Does Diversification Matter?" Munich School of Management, Paper No. 2006 -14, June 2006.

Paper calculates asset class diversification by using a Herfindahl-Hirschmann-Index (HHI) that assigns each portfolio company to one of the following financing stages: (1) seed and early stage VC, (2) second, expansion and later stage VC, (3) buyout, (4) listed securities, and (5) other financing stage. HHI takes on the value of 0% for a fund, which is not diversified at all (i.e., a fund which invested only in one asset class) and the value of 100% for a perfectly diversified fund.



immediate adjacencies, as observed by most institutional funds, which commit to a strict investment mandate. Moreover, it is difficult to mentally recalibrate when assessing opportunities across categories because of the respective mindsets required to analyze each. In particular, risk tolerances for individual deals generally decline as you move across the private equity continuum from highly speculative earlier stage deals (i.e. venture capital) toward more mature companies, with stable financial histories. The higher risk levels and failure rates of the former are compensated by the potential for much greater upside. If you applied the same liberal risk perspective from venture capital—where success is predicated on hitting a few homeruns and tolerating a majority of failed deals—to buyouts of established companies, you're likely to do poorly given the much smaller margin for error inherent in their higher initial valuations.

That said, if you do seek to invest across private equity classes, it would be more prudent to do the opposite, and err on the side of applying a more conservative perspective to riskier categories. In this case, you would be, at worst, guilty of committing 'false negatives' — turning away "winners" —rather than 'false positives' that result in heavy losses. As the sage investment saying goes, "the easiest money to earn is the money you don't lose."

There may also be worthwhile opportunities that straddle complementary private equity categories. For example, consider the upcoming auction of new top-level domain names on the Internet that will sell the rights to owning registrations related to .SHOP, .BOOK, .INC, etc. This opportunity may not present enough upside potential for a venture capital fund since cash flows would more closely resemble those of physical real estate. However, the novelty of this offering and its remoteness from the comfort zone of growth capital or real estate funds may result in them passing it up as well. Opportunities like these can be captured in direct investments by significant families, whose structure affords them to be opportunistic and to not leave money on the table. Such families can utilize a flexible approach that balances their allocations across categories, as appropriate, investing directly in areas that best fit their capabilities and preferences, and as a limited partner in a fund for strategies they feel less comfortable with.

Additionally, private equity strategies experience unique investment cycles where deal availability and valuations rise and fall, becoming more/less attractive to investors. As a result, in deciding where, when, and how to allocate resources across private equity, it is valuable to have a general understanding of the typical features of each major category. The prevalence, characteristics, and implications of these strategies are summarized in the following charts and are discussed more fully below.

Private Equity Strategies Summary 1 of 3

	Venture Capital	Growth Capital	Buyouts	Mezzanine Financing	Distressed Assets	Real Estate
Category description	Investments in innovative early-stage startups Investing in option value Ideal company characteristics include: 1. significant market size, 2. fast growth, 3. defensible position, 4. high gross margins, and 5. low capital intensity Concentrated in patent dependent technology sectors and consumer internet firms	Expansion capital to fund growth of profitable businesses, taking them to the next level Generally execution-oriented middle market firms; May be capital intensive	Purchase of mature businesses, typically financed using high degrees of leverage Targets mature companies	 Subordinated loans typically used to finance acquisitions or recapitalizations Typically also receive small grant of warrants Similar target companies to growth capital or buyouts—Often work in conjunction 	 Investments in poorly performing, neglected companies at a discount to "true value" Involves purchasing debt claims to gain firm ownership and turn company around Most relevant when distress is caused by internal problems(i.e. overlevered) rather than external factors 	Equity investments across varying phases of the real estate lifecycle Development— Speculative construction Value -Add— Preexisting properties needing physical, financial, or operational improvements Core — Pre-existing properties that yield stable cash flows
Cash flow characteristics	Cash flow negative; often pre-revenue Returns generated completely from exit	Cash flow positive Profits typically reinvested into company rather than paid out as dividends; Therefore, returns generally generated from exit	 Cash flow positive, margins may have room for improvement Demonstrated history of stability or growth & strong collateral 	 Cash flow positive Demonstrated history of stable cash flows Returns primarily from ongoing interest + principal loan repayments 	Cash flow negative Returns typically generated from exit	 Generally cash flow positive, with exception of development Returns generated both from ongoing rent and capital appreciation
Risk-Return profile	 Aggregate returns target +30% IRR* (no leverage used) For individual deals, hurdle rate of +50% IRR High degree of failure—Performance distribution is typically: 60-70% total loss 20% breakeven 10-20% "home run" success 	 Levered returns targeting ~30% IRR Unlevered returns 17-22% IRR More moderate risk-return profile than venture capital given proven business model and underlying fundamental value Moderate likelihood of significant losses 	 Levered returns targeting +25% IRR Unlevered hurdle rates range from 12-17% IRR Moderate likelihood of significant losses 	 Aggregate return of 15-20% IRR, including equity 'kicker' Loan interest rate of 12-15% Low likelihood of significant losses Seniority over equity reduces risk-return profile 	 Levered returns targeting 25-30% IRR High potential for losses given uncertainty involved in legal risk and turning around operations 	Target rates typically increase across the developmental-to-core continuum and vary with use of leverage: Development—+20% IRR unlevered, +30% IRR levered Value-Add—8-12% IRR unlevered, 15-20% IRR levered Core—4-8% IRR unlevered, 10-14% IRR levered
Capital uses	 Capital goes into company Used to finance product development and initial operating expenses 	 Capital goes into company and/ or to owners (typically a partial buy-out) Used to finance expansion 	Capital goes to business owners	Capital goes into company or to owners as a recapitalization	 Capital goes to cash out current creditors Used to finance 'turnaround' efforts and necessary capital expenditures 	Capital goes to owners or to construction/ renovation costs



	Venture Capital	Growth Capital	Buyouts	Mezzanine Financing	Distressed Assets	Real Estate
Leverage	0%, traditional term loans with stipulated interest payments rarely used	• 10-60% LTV	• 50-80% LTV	N/A, mezzanine financing is a debt instrument	• 10-70% LTV	50-85% LTV, depending upon nature (lower for development & greater for stabilized properties)
Core value drivers	Identifying disruptive ideas & competent management teams Developing commercially viable products/ services Explosive product uptake trajectory Coordinating IPO or sale to large incumbent	 Sourcing attractive businesses at low valuations "Multiples arbitrage" Expansion via organic revenue growth or bolt-on acquisitions Professionalization to ready firm for sale to larger incumbent 	 Financial engineering Streamlining operations Aligning management incentives with financial performance Bolt on acquisitions 	Sourcing safe, stable borrowers with low probability of default Minimization of fraud risks Cost-efficient monitoring of outstanding loan portfolio Salvaging/ working out troubled credits	 Purchasing assets at significant discount to "true value" Successfully navigating multi-party negotiations Cost cutting Diagnosing & mitigating company performance issues 	Choosing attractive locations at low prices Managing build timeline & cost overruns (for development) Maximizing occupancy of existing properties Often sale to entities with lower cost of capital (higher valuation)
Skillset implications	 Ability to estimate market size Variety of "soft skills" enabling the assessment of management team quality Cultivating human capital of portfolio companies— recruiting talent to fill gaps Relationships with relevant potential customers, partners, & acquirers 	Corporate development skillsets M&A experience Business development (e.g., JV's, etc.) Strategy Sales and marketing capabilities to oversee expansion plans Relationships to source proprietary deals without auctions	Experience with levered finance (typically acquired through investment banking) Performance improvement skills Lean six sigma Working capital cycle improvements	Deal sourcing capabilities Underwriting skills—Financial sensitivity analysis Commercial loan workout experience	Underwriting & valuation skills of opaque assets Corporate Bankruptcy/Restructuring legal experience "Turn around" experience Activity based accounting Headcount and capacity reduction	For development and value add: Strong pulse on the local market to determine highest and best use; project management skills to minimize cost overruns For core: Sales skills to fill up vacant units and property management capabilities to operate assets at the lowest possible cost
Investment size & nature	Size increases with each subsequent round: Seed: <\$200k Angel: <\$1mm Series A: \$1.5-3.5mm Series B: \$4-8mm Series C: \$8-15mm Minority investments: 10-25% equity received per round	 Equity capital invested ranges from \$5-\$100mm Generally control investments assuming 50+% of target's equity Minority positions sometimes occur, albeit with strong negative covenants 	 Equity capital invested ranges from \$20mm-\$2bn depending on company size Typically complete ownership 	 Loan amounts range between \$5-\$500mm Typically unsecured facility subordinated to bank financing 	 Equity capital invested ranges from \$10mm-\$1bn depending on company size Almost always control investments Investment deployed by purchasing "in the money" claim 	 Total equity capital ranges between \$1-\$200mm Typically complete ownership



Private Equity Strategies Summary 3 of 3

	Venture Capital	Growth Capital	Buyouts	Mezzanine Financing	Distressed Assets	Real Estate
Investment duration	Opportunistic exit occurring 5-10 years from initial funding Portfolio approach progressively "funds winners and kills losers"	Opportunistic exit occurring between 3 -6 years	Opportunistic exit occurring between 3 -6 years	5-8 years finite term loans	Opportunistic exit occurring 3-7 years out, given high transactional and operational intensity	Wide duration, ranging from 3 to 10 years Typically duration increases across development-to- core continuum
Importance of geographic proximity	High Unstable nature of these early stage companies requires constant close monitoring and mentoring to add value	 Medium Professional operators are typically hired and relied upon Assistance with strategic planning along with quarterly Board meetings typically occurring on site 	Low to medium Professional operators are typically hired and relied upon Quarterly Board meetings may be on site	Low Ongoing loan monitoring can primarily be done remotely Annual check-in meetings with executives No involvement in ongoing operations	Medium Despite professional management teams, financial distress requires significant "on the ground" involvement to address immediate challenges	Medium to high; Development and value add is highly localized and contextual; Core fairly insensitive to location
Deal structure variability	Low to medium— most deals follow standardized templates (i.e. National Venture Capital Association)	Medium-range of structural options	Medium-range of structural options	Low to medium—fairly standardized industry accepted terms and conditions	High— highly contextual based upon company and stakeholder characteristics	Medium- range of structural options; More diverse for development & value add projects
Negotiation approach	Collaborative—creation of long ongoing partnership	Collaborative— creation of long ongoing partnership	 Transactional, with some collaborative elements (e.g., earnouts) 	Transactional	 Transactional, with room for creative deal making amongst creditors 	Transactional
No. of investments (Fund level)	15-30 companies given small deal size & need to diversify against high failure rates	8-12 companies; lower number than venture capital given larger deal sizes & lower probability/magnitude of failure	5-10 companies given large deal sizes	15-20 companies; greater capacity given less intensive due diligence and monitoring efforts	5-8 companies given high transactional/ operational intensity and large deal sizes	 Wide range depending on strategy <5 for development 5-8 for value add +12 for core



VENTURE CAPITAL

Venture capital involves investing in innovative early-stage start-ups, with an extremely high risk-return profile. These companies typically target existing markets that are ripe for disruption or address latent demand for products where no market previously existed. Generally cash flow negative, they almost always have outstanding questions regarding the viability of their underlying business model. Consequently, rather than earning returns from the ongoing operating profits, investors are generally exclusively dependent upon an eventual exit, typically occurring via sale to a strategic buyer or an initial public offering (IPO)³. Moreover, given their pioneering nature, venture capital investments generally exhibit a binary success profile, either losing everything or yielding significant returns. In aggregate, "winners" must generate a significant multiple of capital invested — in excess of 10x —in order to compensate for the high number of failures.

Venture capital is best viewed as a series of progressive options that increasingly sheds light on the real value of the company. Investors stage their financing against the achievement of pre-set milestones with the intent of doubling down on winners, and perhaps more importantly, cutting their losses on less compelling opportunities. As in poker, an investor is faced with the option of paying for the right to see new information that will help them determine whether to continue to fund the enterprise or fold. With each round of financing, the company should make progress towards informing or eliminating key uncertainties regarding the soundness of its fundamental business model—i.e. does demand exist; is there a significant willingness to pay; will partners be willing to work with us, etc. Valuations are fundamentally driven by the ability to address key reservations regarding the investment's long-term potential.

In practice, venture capital takes the shape of consecutive financing rounds starting with seed and angel financing, followed by a "lettered" series of institutional raises (Series A, Series B, etc.). The amount of funds raised (and corresponding valuations) generally increases across these financing rounds. While official data is scarce, anecdotal evidence indicates that the average seed round ranges between \$25,000 and \$200,000, with angel rounds averaging \$250,000 to \$1 million. Data show that Series A rounds typically raise \$1.5 to \$3.5 million for a 15 to 25 percent equity interest, while Series B and C rounds average between \$4 to \$8 million and \$8 to \$15 million, respectively.⁴ As startups meet their milestones and progress through

³ Despite the disproportionate attention received, less than 10% of successful VC exits occur via IPO (percentage is relatively greater for growth capital and buyout investments)

⁴ Wilson, Sonsini, Goodrich, & Rosati, The Entrepreneur's Report: Private Company Financing Trends. Q1 2016 Ed.



additional rounds, their pre-valuations escalate 50 to 70 percent per round⁵, providing the headroom for founders to raise larger amounts of capital while experiencing relatively lesser levels of dilution. As seen in Figure 4, the entire lifecycle of a successful venture— i.e. from founding to exit—typically ranges from 5 to 10 years.

Figure 4. Venture capital cycle

Staged-financing filters out poor deals & graduates "winners"						
Seed	Angel	Series A	Series B	Series C+		
• Raise: <200k • Cash duration: ≤ 6 mo. • Target return multiple: 25+x • Source: Family & friends • Illustrative Milestones: - Market research validating business model potential - Prototype development	• Raise: \$200k-\$1mm • Cash duration: ≤1 yr • Target return multiple: 20+x • Source: Angel groups/ private investors • Illustrative Milestones: - Successful pilot - Product development	• Raise: \$1.5-3.5mm • Cash duration: ~1 yr • Target return multiple: 10-20x • Source: VC funds/Private investors • Illustrative Milestones: - Successful commercialization - Product refinement - Key team hires	Raise: \$4-8mm Cash duration: 1+ yr Target return multiple: 6-8x Source: VC funds Illustrative Milestones: Expansion via sales & marketing efforts, improved dist. channels, etc. Hire functional teams	Raise: \$8-15mm Cash duration: 2+ yrs Target return multiple: 3-5x Source: Later stage VC funds Illustrative Milestones: Cont'd expansion Developing partnerships with exit in mind		
Pre-product	Pre-revenue	Initial revenues	Scaling revenues	Approaching profitability		

While the range of amounts raised varies dramatically across rounds, the average institutional venture capital investment is below \$2 million. This suggests, that many venture capital investments fail to move on beyond the Series A round, let alone successfully exit, underscoring the magnitude of risk in this asset class.

Seed vs. Venture Capital

When discussing startup financing, the various stages of venture capital are often mentioned in the same breathe. But, while they draw on similar strategies in practice, it is worth noting that seed, angel, and later stage capital usually differ in formality of structure, amount of funds raised, and risk involved.

Seed funding is a capital raise for very early stage — often pre-launch—businesses. The investment is meant to pay for preliminary operations such as initial market research and product development that position the company for a more formal capital raise soon thereafter, assuming results are favorable. Sources of seed capital typically include founders themselves, friends and family, and incubator/ accelerator programs that invest for an initial equity stake. Seed capital involves significantly

⁵ Fenwick West LLP, Silicon Valley Venture Capital Survey. Q1 2016 Ed.



higher risk since investors make their decision whether to fund a project *entirely* based on the perceived strength of the business idea, and the capabilities, skills, and history of the founders. Rather than spending the effort to negotiate a valuation and the corresponding ownership stake, these deals are often structured as convertible loans that provide the right to convert into equity in the next financing round at a stipulated discount—typically between 10 and 25 percent⁶. The discount is intended to compensate these earlier supporters for the greater risk incurred relative to future incoming investors. Considering this period presents the highest level of risk for a start-up and later-stage institutional rounds typically increase in value 50+% for each subsequent fundraise, this is generally a poor risk-adjusted return.

While not universal, most successful ventures raise additional intermediate funding from "angels" (accredited investors) that enable them to gain sufficient operational traction to garner the attention of formal venture capital funds. Typically this capital is used for further product development and initial operating expenses, though significant questions about the viability of the business model often remain. By this point, investments are almost always structured as preferred stock, and typically mandate a preferred return (expressed either in terms of accrued interest or as a multiple of the original investment–e.g., 1.5x), which must be achieved before the common shares can participate.

Later-stage investments typically are dominated by institutionalized venture capital funds. These discretionary funds typically manage a minimum of \$100 million assets under management, which they allocate across a portfolio of approximately 20 ventures.⁷ Note this does not mean each company is allocated the \$5 million average. The vast majority will only receive \$1 million or less before the "plug is pulled," enabling money to be reallocated to "double down" on the successful start-ups as they achieve their milestones⁸—Cumulatively, these "winners" may receive over \$10 million in capital allocations. Over the past decade, venture capital funds have systematically moved towards larger, later-stage deals, because of the perceived superior risk-return tradeoff. Additionally, the larger deal sizes can better accommodate their fee structures, including the significant overhead of professional staff.

Characteristics of Venture Capital Investments

⁶ New York Venture Hub, 2016 Trends in Convertible Note Deal Terms. Alon Y. Kapen. 2016

⁷ Venture capital typically invests in 15 to 30 investments per fund

⁸ As a general rule of thumb, for every one dollar initially invested in a company, venture funds typically reserve an additional \$2-3 for future rounds



As shown in Figure 59, venture capital investments are concentrated among patent-dependent technology sectors (such as biotech, computer technology, etc.) and consumer internet firms. The reason for this is these industries generally share a common set of underlying characteristics, which are well suited for the targeted return profile. *Ideal venture capital investments occur in businesses with the potential to achieve most or all of the following characteristics:* (1) *significant market size,* (2) *fast growth,* (3) *defensible market position,* (4) *high gross margins, and* (5) *low capital intensity.*

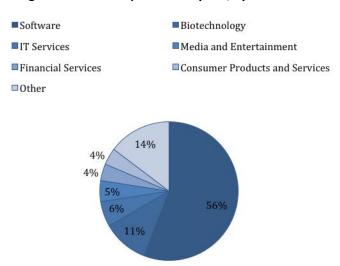


Figure 5. Venture capital industry mix, by number of deals

As a general rule of thumb, professional venture capitalists limit their consideration to markets that have the potential of reaching a minimum of \$200 million in annual revenues. Given the reality that captured market share will rarely exceed 50 percent, this size is necessary to yield the outsized investment returns sought by the category.

Additionally, growth is paramount to justify the lofty acquisition prices that these ventures receive upon sale. Given the exorbitant cost of winning in a fierce market place (i.e. product discounting, sales and marketing expenses, etc.), anticipated growth should be driven from growth of the overall market rather than stealing market share from current incumbents. As opposed to traditional small businesses, intellectual property-based start-ups are rarely constrained by geographic barriers, and therefore can experience explosive, yet cost-effective growth, accessing broader national and international markets.

⁹ NVCA Money Tree Rport, Thomson Reuters Q2 2016



Having market power also enables a firm to sustainably defend its position from new entrants and other competition. This strength can either derive from structural barriers, such as patents, or from brand loyalty to a differentiated product. Although often overrated, first mover advantages can sometimes handicap later competitors, particularly if the market benefits from network effects or has a tendency towards standardization.

Moreover, the potential for high gross margins is important to substantiate such significant valuations. As a general rule, good investment candidates exhibit margins over 70 percent. Some products, such as software, have margins approaching 100 percent, as there is little to no incremental cost to producing additional items, once initially developed.

Similarly, low capital intensity enables the scalability that allows significant growth without a corresponding increase in capital invested. In order to minimize the amount of committed capital, companies should have positive working capital cycles (typically achieved via little to no inventory), require minimal headcount, and remain "asset light", preferring leasing over ownership of property or equipment. While this "asset light" strategy does preclude obtaining bank financing and leaves little salvage value if the venture fails, it helps facilitate the high return on equity targeted by venture capital investments.

Core Investor Skillset

Venture capital investors should be directly adding value to their portfolio companies by assisting them to reach their growth potential. These efforts typically include introducing companies to new customers and partners, helping them recruit world-class engineering, technical, and managerial talent, and coaching them on how to expand and professionalize various corporate functions—e.g., marketing, sales, HR, legal. Interestingly, we observe a skills paradox here. While venture capital is a financial activity, successful investors in this space are characterized by a solid set of soft skills that are grounded in qualitative directional improvements, rather than precise financial engineering. Taking the opposite angle on this issue, the causes of poor performance in new ventures are widely attributed to deficiencies in human capital, often taking the form of ineffective senior management. *In sum, while having the right management team will not guarantee success in venture capital, the wrong one will almost undoubtedly preclude it.*

One important related factor to consider is management's alignment with an investor's exit objectives. While management's goal is generally to maximize the value of the company via an eventual exit, differences in expectations often occur. Any



indication that the founder will irrationally hold out (because of emotional attachment or unreasonable valuation expectations) is a cause for concern given the investor's minority position. Thus, investors are well served by a collaborative deal making process that ensures all parties are on the same page. While forced sale clauses and other legal protections can be helpful tools to avoid intractable conflicts, ultimately founder teams are expected to remain post-acquisition and, thus, their being "on board" is typically a prerequisite for a successful exit. Consequently, nothing can replicate an aligned founder—Failing to address doubts up-front will only lead to headaches down the road.

Core Risk Management Practices

Venture capital is almost always hit or miss and, like baseball, you miss more often that you hit. Aside from a plethora of legal protections negotiated within specific deals, three key lines of defense help to mitigate this high-risk profile: (1) staged financing, (2) portfolio diversification, and (3) conservative valuations.

Investors use *staged financing* for three primary reasons. First, it provides option value, minimizing losses in the event the business fails. Secondly, it motivates management to remain lean and to use capital efficiently. Finally, given the negative cash flow of startups, staging helps strengthen the hand of investors, ensuring founders remain responsive to their views.

While management can implicitly pursue alternative investors for their future capital needs, this is a lengthy and uncertain process. Obtaining additional capital from current investors is almost always faster and easier than having to raise funds from new outside sources. While a completely motivated new investor generally takes between 30 to 60 days to complete due diligence and legal formalities, a far greater amount of time is typically necessary to pique interest beforehand. Because of these dynamics, startups often err on the side of fundraising early (usually 6 to 9 months in advance of running out of cash) to ensure that they have alternatives if a current investor chooses not to participate.

The second line of defense in managing startup risk involves investing across a *well-diversified portfolio*. As a rule of thumb, 60 to 70 percent of venture capital investments are expected to fail, likely resulting in a total loss since little underlying salvage value exists, 20 percent are expected to roughly breakeven, and 10 to 20 percent are expected to "hit it out of the park." Financial returns are predicated upon the outsized returns from these few "homeruns" more than compensating for all of the other losses. The ability to accurately predict beforehand which investments will be high-performing versus weak is nearly impossible, even amongst the most successful



professionals. As a result, venture capital is a volume game— in order to increase the likelihood that an investor has committed to a few winners, they must deploy enough investments.

Given the magnitude of resources needed to run a venture capital portfolio with a high-degree of success, family offices typically choose to gain exposure to the category through fund structures. Such investment vehicles, however, expose investors to certain drawbacks, in particular, the forfeiting of discretion to affirmatively approve individual deals— see McCombie Group's forthcoming whitepaper on fund structures for greater detail. One alternative to retain control and still be exposed to a roughly similar risk-return profile would be to pursue an angel strategy¹⁰, investing smaller amounts across a high number of startups. Nevertheless, when accounting for the opportunity cost of their time, many investors decide this approach is not justified.

The prior risk management strategies, while critical, would be all for not, if investors buy in at the wrong price. As a result, the third and most important line of defense, is *buying at a sufficiently low price* to provide "cushion" against underperformance. Since startups generate losses over the near-term, their valuations cannot be based upon traditional discounted cash flow techniques. Furthermore, there is rarely fundamental salvage value that can anchor a startup's worth. Instead, returns rely almost entirely on an enterprise's exit potential. This stands in contrast from other forms of private equity, like growth capital and buyouts, in which returns derive from both capital appreciation and operating profits.

While heavily dependent upon market cycles, every industry has its own relevant industry benchmarks, which drive the exit potential of a firm— e.g., price per unique monthly viewer, subscriber, patient, etc. As a result, strategic emphasis is often placed on maximizing these affiliated metrics, even if it comes at the expense of interim profitability. Given publicly available information, there is often a surprising consensus among experienced investors regarding the potential value of a company if it achieves its goals. Yet, estimating potential exit value is more art than science, since it fundamentally is driven by assessing the realistic likelihood of management achieving its stated targets. Even with the best of intentions, there is a clear tendency to underestimate the likelihood of setbacks and the ferociousness of competition. One useful tactic is to cross-reference sales projections against verifiable reference points, such as estimated market share, or to compare expected growth relative to analogous industries— e.g., this consumer electronics venture is assuming customer adoption faster than the iPod, etc. The latter tactic is particularly valuable when assessing ventures creating new products where no market previously existed. Accounting for

¹⁰ Given their early-stage bias, the risk-return tradeoff is typically a bit higher.



all of these factors, an investor must develop their own perspective regarding a plausible exit value.

Given the sky-high prices paid for start-ups with little to no profit, many view them as a speculative "house of cards." Nevertheless, incumbents can often achieve profitability when plugging in these products and services into their pre-existing infrastructures (both given their superior economies of scale and widespread sales and distribution networks). Moreover, many purchases are viewed as strategically valuable to the buyer for more than their future expected cash flows. Facebook's high-profile purchase of Instagram for \$1 billion seems irrational if based purely on the numbers, since the start-up did not even have revenues. However, many industry experts have speculated that the move was done to preempt the actions of future competitors and to signal to the market its commitment to winning in the vital mobile space.

As stated before, even high-performing venture capital funds derive nearly all of their returns from just 10-20 percent of their portfolio investments. Accounting for fees and the average six year lifespan of most venture capital investments, an early-stage fund would need to return to investors 5 to 6 times their initial capital in order to achieve its aggregate IRR goal of at least 25 percent. Because of the inherently high rate of failure, an investor therefore needs to target a return multiple of 10 to 20 times (equivalent to an approximately 50 percent IRR hurdle rate over the average deal lifespan) for any particular deal. As shown below¹¹, early stage deals need relatively higher multiples to compensate them for the greater risks incurred as well as to provide a buffer against the inevitable dilution from future financing rounds.

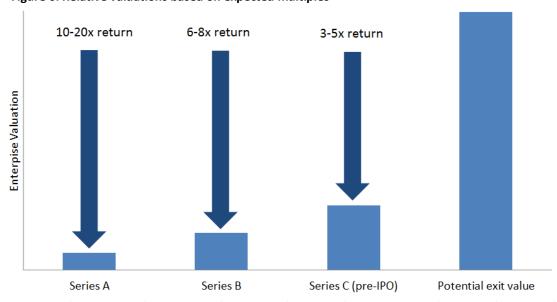


Figure 6. Relative valuations based on expected multiples

¹¹ Figure 6 adapted from Berkey, Dermot. Raising Venture Capital for the Serious Entrepreneur. McGraw Hill. 2008



Given the estimated potential exit value, investors then work backwards from their target return multiples to calculate an entry price (by dividing potential exit value by this target multiple). The calculated output is a "post-money" valuation¹², which determines the amount of equity received for a given capital contribution. Because of the high hurdle rates and extended timeframes, demand for precision in estimating exit valuations is relatively unimportant, particularly in the earliest stages when expected multiples are highest. Being directionally correct is sufficient as there is little difference between benchmarking against an eventual exit of \$175 million or \$200 million. For such an enterprise, an investor seeking a target return multiple of 20x for a \$1 million investment, corresponds to receiving 11 versus 10 percent equity in the company, respectively.¹³ Ultimately, the agreed upon price and terms are highly dependent upon negotiating leverage, market factors, and the perceived urgency (desperation) for funding.

GROWTH CAPITAL

Funding revenue expansion

While venture capital is geared toward investing in firms with a high risk-return profile, growth capital seeks already proven, profitable businesses that are looking to scale operations, either organically or through acquisitions. When reaching this stage in their lifecycle, companies should have eliminated any doubts regarding the viability of their underlying technology or business model. Instead, investors are fundamentally assuming the risk of the value proposition's scalability and management's ability to execute. The primary goal is no longer to fund new product development and refinement, but the expansion of distribution and marketing resources to achieve broad market penetration.

Though running "lean" and efficiently is also important, the greatest "return on investment" in growth capital is typically achieved by emphasizing growing the bottom-line through top-line revenue growth. Because of their relative immaturity, growth capital targets have significant "headroom" for increasing revenues, both through market share gains and expansion into product line and geographic adjacencies. Investments can span a wide range of industries, with ideal candidates experiencing faster-than-average revenue growth (>20% annually). Nevertheless, target

^{12&}quot;Pre-money" values can easily be calculated by subtracting the amount raised from this "post-money" valuation.

 $^{^{13}}$ \$200mm/20x = \$10mm post-money valuation and investing \$1mm implies 10% equity (\$1/\$10mm), while \$175mm/20x = \$8.75mm post-money valuation and investing \$1mm implies 11% equity (\$1mm/\$8.75mm).



companies are more likely to be execution-oriented middle-market firms in relatively stable industries that observe linear success patterns.

Size, returns & duration

Growth capital investments are often larger than venture capital infusions, ranging from \$5 to \$100 million in equity commitments. Capital concentrations are higher in this space, with funds targeting only 8 to 12 deals at a time, because of the larger deal sizes and lower need to diversify relative to venture capital. Levered target hurdle rates remain high, however, at approximately 30 percent, with unlevered returns generally ranging between 17 and 20 percent. Given the sounder operating fundamentals of this category, a growth capital investment can sometimes yield strong returns on a cash flow basis alone. Yet, the finite lifespan of private equity funds mandates an exit, which occurs either through an IPO or sale.

A successful growth capital cycle typically lasts 3 to 6 years, and with few exceptions, capital is disbursed in full upfront. Growth capital strategies are not characterized by a phased-financing approach since investors typically have majority control and, thus, there is no further influence they can gain by rationing funds. If majority control is untenable, investors generally negotiate control-like protections into the shareholder's agreement, such as "forced sale" clauses.

Growth capital's Catch-22

The strategy of growth capital is to court already successful, cash flow positive firms and take them to the next level. However, a catch-22 exists, since the best investments are typically into companies that are not seeking outside capital. Current owners often grow complacent with their company and its trajectory, particularly if performance is already strong. Moreover, given the positive cash flow nature, they retain the option to self-finance growth. Consequently, it is not uncommon for investors to have to woo compelling opportunities for months or even years, before successfully closing. Investors should be wary of target companies that seem too eager to receive a capital injection, as this may signal deeper structural issues regarding the quality of their earnings. Ultimately, many current owners turn to growth capital as a means to "take some money off the table" by selling a portion of their shares, while still maintaining exposure to further upside.

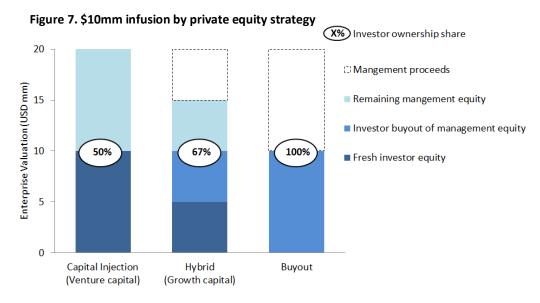
Valuation implications

Valuations are determined by traditional techniques such as discounting future projected cash flows or using comparable transaction multiples applied to historical earnings—i.e. EBITDA. Given the lower margin of error inherent in the higher initial



valuations and the risk of hidden pre-existing liabilities, growth capital investors must be more conservative than venture capitalists from a risk tolerance standpoint. Consequently, skill in due diligence and legal structuring tends to be relatively more important.

From a structural standpoint, growth capital can be viewed as a hybrid between venture capital and buyouts, since it typically combines injecting additional capital into the company to fuel growth, while simultaneously "buying out" a portion of management's shares. This mix of capital use has an implication when computing the company's post-money valuation and ultimately the associated ownership percentages. Figure 7 below illustrates three different permutations of how \$10 million could be deployed into a company currently valued at \$10 million.



Unlike venture capital where you start with a determined post-money valuation (computed based upon ownership percentage received in exchange for capital) and work backwards to determine the corresponding pre-money valuation, here we do the opposite. Growth capital assesses the value of the company on a stand-alone basis (what it would have been worth without the capital infusion) and then adds the capital contributed into the company to determine post-money valuation.

When negotiating the terms of this "hybrid" transaction, it is important for investors to be collaborative in their deal making approach. Unlike buyouts, where investors are incentivized to negotiate in a more transactional manner with outgoing owners (i.e. "squeezing every last penny"), in growth capital, you will need to maintain an ongoing working relationship with your counterpart. Thus, in the interest of maintaining a solid partnership, investors should go out of their way to demonstrate a willingness to seek a fair and balanced outcome from the onset.



Growth skillset

Value add in growth capital generally derives from two reinforcing sources. First, earnings are boosted via aggressively growing revenues and improving operations. Secondly, the market tends to apply higher multiples to firms whose earnings exceed certain thresholds, otherwise known as "multiples expansion." For example, a company with \$5 million in annual earnings may have been purchased for \$25 million (5x multiple), and is eventually sold for \$70 million after reaching \$10 million in earnings (7x multiple). Part of this phenomenon is explained by professionalization of a company's processes, reporting, and controls (remember many of these companies were initially run as informal family firms), which eases the burden of integration into a strategic buyer's corporate infrastructure.

This growth is achieved either through acquisitions where adjacent companies are "bolted on," or through the strategic pursuit of organic growth. *A solid corporate development skillset is extremely valuable*—While the former approach is best suited for former investment bankers or individuals with significant deal-making experience, the latter is best achieved by former strategy consultants or operators with marketing experience. Intimately understanding the industry landscape and end-customers' evolving needs is vital to discerning and capturing future geographic and product line expansion opportunities.

BUYOUTS

Buyouts represent most people's conception of private equity, as portrayed in bestselling books like *Barbarian's at the Gate*, among others. In such deals, investors acquire controlling stakes of mature, cash flow stable companies financed with debt, resulting in modest to moderate risk profiles. Negotiations are typically less collaborative and more transactional in nature than in venture or growth capital, as the seller typically cashes out completely, and if they remain, retains only a minority interest— i.e. less than a 20 percent equity stake. The equity contribution of the buyer, usually a single or consortium of a private equity firms, typically ranges from \$20 million to \$2 billion and targets a levered return of over 25 percent. (This corresponds to an unlevered return between approximately 13 and 17 percent.) Given the sheer size of these deals and operational intensity required to manage them, funds generally deploy 5 to 10 buyout investments, leaving little margin for error. While buyout investments are often profitable, nearly all operating cash flows are dedicated to servicing the sizeable debt load taken on to purchase the company, as further described below.



Financial returns are, therefore, achieved upon a successful exit, usually 3 to 6 years after the investment, via an IPO or sale to a strategic buyer.

Demystifying buyouts

Targets for buyouts can be either private or public companies. While megabuyouts of public companies receive most of the press headlines, these deals are rare since only a few funds—e.g. KKR—can execute them and, even then, public takeovers do not present the majority of their deal flow. In fact, the Boston Consulting Group reports that deals worth over \$1 billion constituted only 7 percent of all private equity transactions between 2007 and 2011. Instead, the more common source of buyouts is smaller private companies with the archetypical example being a firm selling out as a result of a generational transition in leadership. Usually, in this context, firm ownership is spread across heirs who are not capable or willing to assume the business and, thus, want to sell. Here, as in other forms of private equity, buyouts add value through increased alignment between managerial and shareholder interests. This is achieved by replacing "passive" family members/shareholders with a smaller group of new equity investors, who have a greater motivation to monitor management performance. In addition, to receiving equity or other similar financial incentives, top executives are strongly encouraged (if not required) to commit a significant portion of their net worth to the business.

Additional primary value sources in buyouts include use of financial leverage, as well as operational improvements, predominantly cost cutting. Each of these strategies and their corresponding skillsets are described in turn.

Leverage: Double edged sword

Buyouts are often referred to as "leveraged buyouts" because they are typically levered 50 to 80 percent in order to minimize the amount of needed equity, boosting returns on investment. The exact amount of leverage taken on is determined by industry norms and deal-specific conditions such as the volatility of the company's earnings and quality of the underlying collateral (historically, total debt levels have averaged between 4 and 6 times the firm's EBITDA). All other things equal, the more stable the industry and company cash flows the greater access to leverage investors have. Typically leveraged buyouts incorporate a variety of lenders. Secured lenders are collateralized against the hard assets of the company and a working capital pledge of its accounts receivables and, thus, receive a low interest rate. Unsecured lenders, such as mezzanine investors and revolving credit facilities, are not protected with collateral and are subordinate to secured debts. As a result, they are compensated with a higher interest rate. Many times these subordinate loans are financed by the seller



themself, as a substitute for a portion of the purchase price. Overall, these debts are generally non-recourse to the financial sponsor or any of their other portfolio investments.

A leverage buyout devoid of any operational improvements affects the liabilities and equity of a company's balance sheet, not the assets. A buyout simply rearranges the ownership structure, replacing most of the equity with a cheaper cost of capital and redirecting the savings to the remaining shareholders. In this context, value is not created, but instead transferred. In reality, increased leverage can also improve earnings generated through two main channels. First, the firm's taxes are reduced because of the increase in deductible interest payments, so greater operating income flows through to investors. Second, the continued pressure to service debt, forces managers to operate as leanly as possible— A highly levered firm cannot afford any fat.

Despite its potential benefits, leverage is, nevertheless, a double edged sword that can also amplify downside risks. Increased leverage can quickly lead to company instability should operating profitability decline. In this context, interest payments will eat away at earnings and, in the extreme case, result in losses just when there is little equity cushion available to absorb them, thus, accelerating firm failure. Rising interest rates can cause similar havoc, in addition to reducing a firm's capacity to absorb and rollover debt. Moreover, it places downward price pressure on exits since future buyers will have to finance at higher rates. Unless performance is improved, success in leveraged buyouts is predicated on an environment of low or declining interest rates.

Leverage: Skill implications

It is important to note that drastically increasing a company's leverage requires investors to have robust financial capabilities. Within the portfolio companies, a strong CFO must be in place to tightly manage finances and to manage the various lenders. In particular, they should be adept in navigating the company's finances without breaching covenants and in the event one is broken, skillfully renegotiating terms or seeking alternative financing. Solid financial modeling skills are vital to accurately projecting returns and valuation. While valuing a potential buyout candidate is theoretically straightforward on an unlevered basis, as it is based on traditional cash flow modeling and historical numbers, the addition of leverage requires intense analytics. Specifically, buyouts include various debt schedules, including some that revolve, meaning they are not tied to a fixed number of payments or payment amount, but rather assumed operational needs.

Operational improvements & value creation



The days of using leverage to exclusively drive returns for buyouts are increasingly in the past, as financial engineering, once a black art, is now widely practiced. Increased competition for target companies with low debt profiles has narrowed the field for "easy" returns. *Thus, yields from buyouts are also increasingly stemming from profitability improvements.* While external consulting firms are sometimes used to recommend these improvements, private equity firms are increasingly building these capabilities internally.

Mature companies targeted by leverage buyouts are typically prime candidates for cost cutting initiatives. These are often the immediate routes to enhancing profitability. Focus is usually on limiting unnecessary capital expenditures and streamlining excess working and human capital needs that stem from inefficiencies neglected in the previous growth ramp-up. Usually this includes the implementation of measurement-based strategies like Six Sigma that focus on process improvement and reduction in cost volatility. Cost-cutting should be deliberately planned since long term impairments to the financial potential of the firm will result in discounted valuations by future acquirers— as the saying goes, "you shouldn't cut your nose to spite your face."

Finally, buyouts supplement these efforts with efforts to expand sales, through many of the same tactics used in growth capital. Given the maturity of buyout targets, this typically involves the introduction of new products and entry into new geographies rather than share growth in existing markets. Because of the scale of revenue needed to materially boost profitability, these objectives are often met through acquisitions or strategic partnerships with existing businesses. As a result, leveraged buyout investors should also possess a solid corporate development skillset that can draw on successful experiences in targeting and integrating M&A candidates and joint venture partners.

MEZZANINE FINANCING

Investors can also choose to invest in similar companies targeted by growth capital and buyouts, with a lower risk-return profile through mezzanine investments. Mezzanine capital describes a variety of debt instruments sitting between equity and secured debt—i.e. it can take many different technical manifestations. Typically it's structured as a fixed term loan¹⁴ (typically 5 to 8 years in length) that binds the company to regular payments and features a small grant of warrants, commonly called an "equity kicker". The "kicker" typically represents less than 5 percent of the shares outstanding and can be exercised by the lender if the investment turns out to be attractive. As a result, it provides a small amount of additional upside potential in

¹⁴ Borrower usually has the option to retire debt earlier by paying a pre-payment "penalty"



addition to the contractual loan payments, akin to the proverbial "cherry on top."

Size, returns & terms

Given its requirement to meet regular payments, mezzanine capital is clearly intended for companies well past the startup phase with stable histories of strong cash flows. Mezzanine loans typically range from \$5 to \$500 million, financing not more than 20 to 30 percent of a company's total value. Terms are usually more flexible than traditional bank financing—specifically, mezzanine lenders have a greater tolerance for higher leverage ratios. Interests rates charged vary between 12 to 15 percent. While interest can be payable on a straight cash basis, it can also just accrue (called payment in kind-PIK) or be a mixture of the two. In total, returns average 15 to 20 percent, when including the value of the "kicker". Given the safer risk profile of these debt-like cash flows, the returns of mezzanine are naturally lower than their equity fund counterparts.

Mezzanine financing is typically deployed by funds that target underwriting 15 to 20 loans. This number of disbursements is incrementally greater than growth capital or buyouts, because of the more passive nature of both due diligence and operational involvement. Additionally, these characteristics enable mezzanine lenders to consider a greater diversity of deals, in terms of sectors, geographies, sizes, etc.

Attractive alternative for owners

Typically mezzanine loan capital is a form of supplemental financing that businesses turn to because cheaper senior debt options have been exhausted—it is rarely used in isolation unless the company has few tangible assets to encumber. In fact, businesses often pursue mezzanine capital in an effort to secure senior loans on more favorable terms, since banks typically view access to mezzanine capital as a validation of the company's sophistication and soundness.

Mezzanine capital is an attractive capital source of capital for owners who want to accomplish a strategic goal such as an acquisition or expansion while minimizing equity dilution. Moreover, many owners utilize these loans as a preferred alternative to a partial buyout since they can still maintain ownership while taking some money "off the table" through a recapitalization.

Capital stack implications

Within the capital structure hierarchy, mezzanine financing is subordinate to most other forms of debt, but has priority over equity — see Figure 8. Being sandwiched in the middle of the capital stack is laden with its own unique set of risks. Should the company fail, more senior debt claims will be paid first, leaving the mezzanine lender



exposed to the risk of being partially or wholly wiped out, if there is insufficient company value to cover claims. While mezzanine investors attempt to restrict their lending to firms with sufficient salvage value, it is far more valuable to select high-performing companies that have a low probability of getting into trouble in the first place. As long as the underlying firm is solvent, lenders are typically restricted from having any "hands-on" operational involvement. Nevertheless, negative covenants are typically put into place requiring affirmative lender approval before any significant changes are made or if the company is further encumbered. To further protect themselves, debt coverage ratios ratchet up influence should financial performance start to deteriorate.

Senior Secured Debt

Secured Claims

Mezzanine Financing

Unsecured Claims

Preferred Equity

Common
Equity

Figure 8. Typical capital stack

In the worst case scenario, should the company enter into bankruptcy or restructure, mezzanine lenders typically have the right to assume ownership. In such cases, they will generally seek to minimize losses by either working out the loan or quickly selling the company to a financial buyer that specializes in turning around distressed firms, a separate private equity strategy discussed later in this article. Ultimately, mezzanine investors are typically not operators and therefore prefer not to take control of operating businesses.

Transactional skillset

Given the more arm's length nature of mezzanine lending, the required skillsets are more skewed towards underwriting and valuation capabilities. Specifically, mezzanine lenders must be adept at sourcing high-quality borrowers with solid historical cash flows, and sober expansion plans. In general, mezzanine lenders typically prefer situations with few pre-existing debt holders, but this consideration may be attenuated, if a company's value is sufficiently attractive.



Most due diligence comes "pre-packaged"— already researched and digested by equity investors with a subordinated claim. Consequently, less emphasis is placed on researching strategic questions and more on modeling the sensitivity of returns to various financial, operational, and macroeconomic shocks. Additionally, significant effort is expended on legal due diligence to validate the status of the company's assets and any corresponding encumbrances.

Ongoing monitoring tends to remain relatively passive until any covenants are at risk of being breached, signaling a jeopardized economic position. Mezzanine lenders usually receive the same monthly financials and management reports provided to the Board. While they sometimes assume a Board Observer role, they typically are satisfied "piggy backing" off the vigilance of lead investors. At a minimum, they should be meeting with executives once a year to check in.

DISTRESSED ASSETS

Turnaround culture

buying and improving neglected businesses. It involves purchasing debt claims—nearly always at a discount— on a company that is cash flow negative and careening toward default in order to gain ownership, turn the company around, and sell it. Ideally, the source of distress derives from addressable internal problems (e.g., overlevered balance sheet, cost overruns, etc.) rather than external factors, such as an obsolete business model. Often, these firms have strong fundamentals, but are in mature industries that are ripe for consolidation— e.g. manufacturing. All other things equal, companies with 'encumberable' fixed assets are preferable to service firms highly reliant upon intangible assets (e.g., human capital).

Troubled companies are also especially in need of strong, reliable leadership, as they are characterized by a "broken culture" of widespread distrust that motivates stakeholders to curtail their exposure to the firm, destroying company value. For example, employees may be planning departures for more certain opportunities; customers may be reluctant to buy over concerns of honoring warranty claims; or suppliers may deny credit and require cash on delivery. At this point, operating the company as a "going concern" will require the balance sheet to be restructured through forgiveness of debt or conversion into equity.

Taking the long view



Distressed private equity stands in contrast to hedge funds that intend to quickly flip undervalued claims for a profit. *Private equity takes a longer view, seeking to actually take possession and operate the business as equity holders.* Value is created by successfully addressing structural issues and returning the firm to profitability. Eventually, an exit via acquisition or IPO can be orchestrated.

Like leveraged buyouts, there is little room for error in distressed private equity. Investments typically range from \$10 million to \$1 billion, limiting funds to no more than 5 to 8 deals at a time, and command hurdle rates of 25 to 30 percent due to the level of uncertainty involved. From purchase of initial interests to exit, distressed deals typically last 3 to 7 years¹⁵ and require investors to have both strong transactional and operational capabilities. Each skillset is described in turn within the context of the overall strategy.

Capital stack strategy

Success in distressed private equity is contingent on securing a valid creditor claim that eventually leads to ownership. This is a strategically intense process and this section is limited to only a top-level overview of it; a fuller treatment of distressed debt analysis can be found in books solely devoted to this topic.¹⁶ That said, the first step when considering an investment in a distressed company is to inventory its assets and liabilities in order to determine which claims should be purchased. Since most companies have an array of formal and informal creditors, investors should rank all liabilities according to their legal priority compared against a conservative valuation. The goal is to purchase at a discount a "fulcrum security", which is a claim that is marginally "in the money." Since full satisfaction of the amount outstanding cannot be guaranteed, the claimant will be granted ownership over the company. Buying into the right layer of the capital stack, however, does not necessarily guarantee a successful takeover. Until a final court resolution or agreement to the contrary, current shareholders retain the option to extinguish debt by paying off the outstanding claims (both principal and accrued interest). This of course is an attractive consolation, as you receive full payment for claims that were recently purchased at a steep discount.

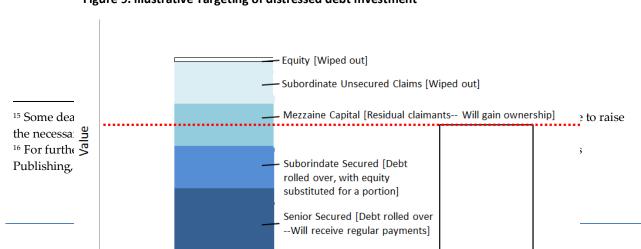


Figure 9. Illustrative Targeting of distressed debt investment



In general, available assets should be easy to inventory when examining a company's books; determining liabilities, however, is not as straightforward. Given the poor reporting and controls often found in distressed firms, there exists a wide variety of potentially unknown creditors. Aside from accounts payable to a disperse array of smaller service providers and vendors, which may have not be recorded properly, executives may have accepted or guaranteed unauthorized liabilities, which only become known after the fact. Moreover, future, unknown tort and product liability victims—e.g. asbestos—are also considered unsecured creditors. Courts typically create a reserve, which future victims can sue to access.

Existing creditors often have differing skillsets and interests. Very few are in the business of successfully navigating the uncertainty of a restructuring and ultimately operating a company—Most are satisfied with minimizing their losses and quickly returning back to business as usual. Consequently, this provides new investors with the opportunity to purchase claims at a significant discount relative to their "true value." Once a liability is selected and negotiated, investors must be capable of conducting a proper due diligence that verifies that the claim is valid and acknowledged by the debtor. For example, if an outstanding account receivable is purchased from "Joe the Plumber", you must be able to backup that the work was actually conducted and never paid for.

Valuation implications

In order to maximize value, a company's future cash-flow-generating capability should be compared against the alternative of liquidation. If the assets have little prospect of generating profits, even on an unlevered basis, the conclusion may be that the firm should be sold off. Assessments of liquidation value can vary dramatically based upon the assumed sale conditions— i.e. "fire sale" versus an orderly process. Since cash flows are negative, historical cash flow modeling is irrelevant to valuing a firm as a "going concern." Instead, earnings potential is often benchmarked (at a discount) against the value of similar, healthy firms that are unencumbered by unsustainable debt obligations. Moreover, historically accrued net operating losses



(NOLs) can be highly valuable from a tax perspective to potential acquirers, who can use them to offset their own earnings.

Keeping it simple

The ideal distressed deal is one that is complicated with the least number of material claimants. In this context, investors face less uncertainty as to which layer of the firm's capital stack they should buy into. Moreover, a voluntary restructuring is more likely since there are fewer participants that have to be collectively persuaded to accept an offer. If no agreement can be achieved between all parties voluntarily, a formal bankruptcy will be necessary. This can be a drawn out and expensive process, often taking years and burning through up to 5 to 10 percent of the firm's value through attorney's and other professional fees. However, one important advantage is that bankruptcy is the only mechanism to extinguish all liabilities, certifying the assets as unencumbered, which is valuable for firms that are suspected to have latent environmental or product liability risk. Regardless of the approach used to reorganize the firm, most creditors will accept the substitution of some equity consideration for their claims, rather than fully rolling over their loans onto the restructured entity, in order to enable a more sustainable (i.e. less leveraged) capital structure.

Typically, the most straightforward deal structure is akin to the "cash for keys" offerings recently made popular in the midst of the foreclosure crisis. Here an investor agrees to buy out the lender's claim— e.g. mortgage—at a discount and incents the distressed owner to voluntarily transfer ownership with a nominal payment, in order to avoid a formal bankruptcy proceeding. As a result, an investor's negotiating position should demonstrate a collaborative willingness to make the best of a sour situation.

Debt restructurings that involve multiple material creditors can be an especially complex process that risks devolving into a zero-sum game characterized by aggressive, transactional deal making. Typically, claimants at the top of the capital stack are incentivized to underestimate a company's valuation, so they can push out other claimants and seize ownership of the company. Alternatively, claimants at the bottom of the stack are incentivized to exaggerate the company's valuation, so they can at least receive a partial recovery. Here again, a willingness to creatively "sweeten" the proverbial pot can help negotiations reach a mutually beneficial solution.

Finishing the job

Wrestling ownership is only half the battle in distressed private equity. Recall that the real value is added in returning the company to profitability; thus, success in this space is also contingent on investors being savvy business operators. Turning a company around often requires significant cost cutting and refocusing the business

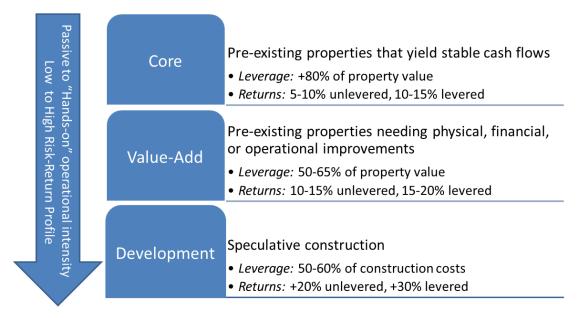


strategically. Typically, this involves reducing excess capacity through consolidation or execution of an industry "roll up" strategy. Additionally, success is frequently dependent upon changing the business' underlying culture, which is usually characterized by low morale and insufficient skills because of an ongoing "brain drain." The firm's best people systematically choose to leave for better opportunities leaving behind the lower performers, who have fewer options. In this context, a distressed private equity investor is taxed with the double duty of being capable of resurrecting a lean company, while recruiting and inspiring qualified human capital.

REAL ESTATE

Investors can utilize private equity investment structures to gain real estate exposure. In fact, this is by far the most prevalent direct investment for most families given the "intuitiveness" of the asset class and their pre-existing familiarity with buying and selling personal homes. Like private equity in the realm of operating businesses, real estate offers a diverse array of risk-return profiles. Broadly speaking, there are three main strategies for investing in real estate, each with their own profiles and differentiated skillsets for success. These include core, value-add, and development real estate investing, which, when examined together, represent a spectrum of increasing investor involvement and risk-return tradeoffs.

Figure 10. Real estate investing continuum



Investors typically move from a capital preservation to a wealth generation posture when transitioning from more passive *core* to more "hands-on" real estate *development*. Because of this dynamic, real estate fund managers typically only receive



flat management-based fees for core strategies, while charging a mix of management and incentive-based fees for riskier value-added and development investments.

In practice, preexisting real estate properties are valued using capitalization rates, (which are essentially the reciprocal of the earnings multiples used to value operating businesses). These "cap rates" are applied to historical net operating income (real estate's functional equivalent to EBITDA) to determine a price. "Cap rates" are positively correlated with macroeconomic drivers like inflation and interest rates and are informed as well by more localized and deal-specific factors like real estate inventory, tenant quality, tenant industry concentration, etc.

Core investing

Core real estate investing resides at the low-risk / low-return end of the continuum. It typically involves investments in pre-existing office, industrial, multifamily and / or retail properties that yield stable cash flows and are located in major metropolitan markets. A diversified core portfolio generally includes a broad range of property types or geographies, specializing in one dimension and diversifying across the other. That said, when individuals make these investments privately, they often concentrate with regards to both dimensions, given capital constraints and preference for familiarity.

Core properties aspire to generate stable cash flows through high occupancy levels. This typically involves higher-tier properties filled with tenants who have good credit. Nevertheless, some sub-prime residential properties, such as low-income housing, can be considered "core" because of the financial backstop provided by public subsidies. Commercial properties are generally occupied by national chains, such as CVS Pharmacies, that are locked into long-term leases. While this mitigates the risk of losing tenants, it is a double-edged sword in an inflationary environment, since rents cannot be quickly raised. The range of sizes can vary dramatically, but given its higher valuations, the average deal size of "core" properties tends to be larger than that of value-add or development investments.

Among core properties, there is rarely need for significant improvements, and day-to-day operations are generally outsourced to property management firms. Given the passive nature, and the fierce price competition for deals by institutional investors, pursuing this strategy is akin to privately replicating a customized real estate investment trust (REIT)¹⁷. *As a result, core investing actually shares very little with*

¹⁷ A REIT is a security that sells like a stock on the major exchanges and invests in real estate directly, either through properties or mortgages. Their revenues come principally from their properties' rents.



other private equity strategies described in this article, except compliance with the technical definition that it is not a publicly traded security.

Returns from core properties are primarily earned on a cash flow basis; less emphasis needs to be placed on property disposition. Unlevered returns for core properties typically range from 4 to 8 percent because of the minimal risks involved. As in a leveraged buyout, returns on equity can be bolstered through increased use of debt in the capital structure. As a result, success is contingent on securing the lowest cost of capital. Overall, core real estate can take on significant debt loads—leverage ratios typically range from 70 to 85 percent—given its sound fundamentals and, therefore, deliver levered returns averaging 10 to 14 percent. Achieving this upper range of leverage requires supplementing senior debt from banks, institutional investors—i.e. insurers, pensions, etc.—and mortgage-backed security instruments, with higher interest rate mezzanine facilities.

Core returns, while robust, are typically part of a broader wealth preservation, rather than a wealth creation, strategy. Core properties are, in fact, viewed often as an inflation hedge. Empirical analysis suggests that rental income closely tracks inflation in relatively low inflationary environments, though this relationship may not persist during periods of extreme inflation stress. For example, rental income growth in the U.S. did trail in the period of high inflation from 1977 to 1982.

Value-add investing

Value-add investing makes up a wide range of strategies that fall in between conservative core investments and more speculative development projects. As the name implies, value-add investments typically feature an improvement of the physical, financial, or operational characteristics of the underlying property. Traditional examples of value-add investments include properties that require physical renovation or market repositioning— i.e. changing property offerings to a higher, more valuable use; sometimes accomplished through rezoning—or a combination of the two. This segment can also include distressed properties with poor cash flows because they are over indebted or poorly run. As with distressed businesses, success in distressed properties requires patience and deep legal knowledge to unwind the various competing claims in order to own the property outright and to remedy any operational deficiencies.

Value-add investments tend to produce moderate income and rely most heavily upon property appreciation, which is ultimately realized upon exit. Unlevered returns from value-add investments range between 8 to 12 percent. Value-add strategies use moderate leverage, given the higher volatility and lack of availability of many kinds of



debt financing, such as mortgage-backed securities. Debt loads are typically in the range of 50 to 65 percent, resulting in levered returns of 15 to 20 percent.

Development investing

Development represents the highest risk-adjusted return potential within real estate. It typically involves speculative construction from the ground up and the completion of unfinished projects. Unlike the other real estate categories, which have some historical precedents to validate demand levels, risk comes not only from the pricing / income side, but also from initial costs—significant uncertainty may exist regarding construction cost and timing overruns. Additionally, developers often have a herd mentality, which creates booms and busts from spikes in inventory. As a result, volatility in investment performance is high. Moreover, returns are predicated upon exit since profitability is only reached once the development is built and stabilized with tenants. Once a property is stabilized, there are fundamentally two options: investors can either sell, or "convert" it into a core property through a recapitalization (typically with bank financing).

Unlevered expected returns for development investments are typically at least 20 percent— this is lower than venture capital, despite some risk parallels, given the greater underlying salvage value of the property that makes total losses less likely. Moderate bank leverage, typically ranging from 50 to 60 percent of development costs, boosts levered return on equity to 30 percent and above. Note once a property is completed, its collateral basis steps up from the property's cost to its value, supporting significantly greater debt. In the wake of the U.S. real estate collapse, construction financing has been scarce.

Skills for success in development include construction project management as well as a deep understanding of the local market's unique characteristics and anomalies. Choosing reputable partners with complimentary expertise is also very important. Together, they should be positioned to directly add value by leveraging key relationships that can minimize the likelihood of construction cost and time overruns (stemming from zoning, environmental, and code review bureaucracy), and can expedite the sale / leasing of units at the most favorable rates.

Core versus Non-Core Real Estate Investing

Individual investors seeking to invest directly into real estate should focus in areas where they can generate and capture greater value than a fund or public market alternatives. Typically these opportunities are in non-core properties since they allow for value creation on both the front- and back-end of deals. Regarding the entry price, value-added and development projects tend to be less competitive, which provides



scope for greater upside. This is especially the case for investors who are patient enough to wait for opportunistic deals. Such prospects rarely exist within core investment strategies, which often pursue the same deals as REITs, and thus are exposed to the pricing efficiency of public markets (Note that this may not hold true in emerging markets where no suitable public market vehicles exist). Additionally, by nature of their active involvement, non-core investments are the only real estate opportunities that allow investors to add material value. As a result, a skilled direct investor can potentially do better than a fund structure since competition is not simply in the domain of picking the right deals, but also revolves around vision and operational performance. Hence, greater potential exists to generate above average net returns by investing directly in non-core assets, relative to core properties, which are likely to track the same low returns found in passive portfolios.

PUTTING ALL TOGETHER

In private equity, as in real estate, it is all about "Location, Location, Location." Where you are positioned with respect to an enterprise's lifecycle has a number of different implications, ultimately influencing investment decisions. As we have observed, risk-return profiles generally decrease along the business lifecycle continuum—with the notable exception of distressed assets that more closely resemble startup financing given the uncertainty involved. As risks decline, investments sizes typically increase, a trend that is reinforced by greater access to leverage. Returns, and in particular growth from organic operations, often plateau, however, when businesses mature. Such contexts, underscore the importance of key skillsets to create and sustain value such as buying-in at opportunistic valuations, generating efficiency gains, and broadening corporate development plans, among others highlighted.

It is valuable to have a general understanding of the typical features of each major private equity category and their requisite skills to determine not only how much to invest, if at all, but also to determine how to deploy that investment. It may be that reading this article has reaffirmed your desire to gain exposure to buyouts as well as venture capital, but helped you realize that your internal investment team is well positioned to only lead the latter. In that case, you would be best served by investing in venture capital directly and in buyouts through a more curated fund structure. Both strategies are fraught with nuances. Thankfully, they are addressed by our past¹⁸ and forthcoming studies; so stay tuned.

¹⁸ McCombie, David. *Direct Investing: A Pathway to Family Stewardship*. Nov 2012 http://www.mccombiegroup.com/direct-investing/





About the author:

David McCombie is Founder and President of McCombie Group, LLC— an innovative advisory firm supporting family offices and ultra- high net worth individuals across their direct private investments and operating businesses. Its professionals serve as transparent fiduciaries, objectively representing clients' interests from A to Z—from initially selecting, analyzing, and consummating an investment, all the way through continued monitoring and performance improvements.

David is a former McKinsey & Company management consultant—A specialist in corporate strategy, he managed multiple client teams across a variety of industries to quickly develop strategic recommendations within complex, uncertain environments. In 2009, he was selected as a McKinsey Global Institute Fellow to further develop the firm's regulatory capabilities (approximately 10 of 10,000 McKinsey consultants selected/ year). Prior to joining McKinsey, he briefly worked as an associate within the financial institution group at Citigroup Global Banking in New York.

David graduated from Harvard Law School where he focused on corporate law & negotiation strategy, and also did extensive coursework in corporate finance at the Harvard Business School. His thesis, "Hispanic Private Equity: A Cultural Approach to Achieving Superior Investment Returns" was published in the Harvard Latino Law Review. He graduated Phi Beta Kappa from the University of Miami with a degree in Economics/Finance, where he was a Cuban American National Foundation Mas Scholar. He is a licensed Florida attorney.