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PERSPECTIVES
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JUNE 2015

Private Equity Outlook

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Executive summary

Current environment

MARKET ENVIRONMENT

- Private equity (PE) funds have generated solid returns over the past year driven by the accommodative exit environment.
- Valuations are high both in the U.S. and Europe. As long as credit remains cheap, valuations will likely remain elevated.
- Investment volume is well below that of the prior cycle.
- Exits reached an all-time high in 2014.
- PE commitments have increased in absolute terms but buyout dry powder has been relatively constant since 2007.

STRATEGY HIGHLIGHTS

- Middle market buyouts are attractive as they generally trade at lower multiples, use less debt and have a wide range of exit options as compared to larger buyouts.
- Private capital continues to be compensated for originating loans both in the U.S. and Europe.
- High-yield bond defaults are at record lows but issuance volume and a market correction could create a large future distressed opportunity.
- Recent pricing of secondaries at or near par is less than ideal. However, current PE investment activity at high valuations may provide a favorable future entry point.
- Managers that have unique sourcing angles, operational expertise, investment patience during times of elevated valuations, and an opportunistic approach to selling appear capable of generating attractive returns.

Report overview

STRATEGIC PERSPECTIVES AND TACTICAL OPPORTUNITIES

- In past outlooks, we focused on opportunistic allocations created by dislocations from the Global Financial Crisis and subsequent recovery.
- Now that we are seven years removed from the crisis and well into a global, albeit modest, economic expansion there appear to be fewer opportunistic plays. This new environment allows us to address the rationale supporting a strategic approach to PE allocations.
- PE Funds, while sensitive to the current valuations, competition for debt and equity capital, and exit environment are inherently structured to take a long-term view. Investments are made over a five year period, exits are seven to fifteen years away, and new funds will likely bridge both expanding and contracting market environments.
- Investors may reasonably decide to allocate some capital on an annual basis to managers who have demonstrated a disciplined acquisition pace, skilled operational focus, and ability to make opportunistic exits. Tactical decisions related to private equity, credit focused or venture orientated funds can be applied year-by-year depending on the market environment.
- This outlook provides a general PE market update as well as perspectives and recommendations to investors who intend to allocate capital over the next 12-18 months across buyout, private credit, venture capital, secondary or co-investment vehicles.

Summary of findings

Outlook	Unattractive	Neutral	Attractive

Market Attributes	Commentary
Valuations	Fully valued equity markets coupled with low cost floating rate debt encourages buyers to stretch on purchase price.
Exits	Economic expansion and accommodative equity and credit markets suggests it will remain a sellers market for the foreseeable future. Elevated corporate cash balances encourage strategic acquisitions.
EBITDA Growth / Multiple Expansion	Peak margins and expansion via layoffs and/or delayed CAPEX could prove problematic if economic growth slows or retreats.
Manager Selection	Managers with unique sourcing angles, operational expertise, investment patience during times of excess, and an opportunistic approach to selling appear capable of generating attractive returns.

Strategy	Outlook	Pricing Overview	Macro Environment (Beta)	Manager Environment
Buyouts	*U.S. Small* *U.S. Middle* *U.S. Large* *European* *Rest of World*	High valuations and accommodative debt are fueling record exits. Companies purchased at the top may be challenged during a correction. Middle markets generally trade at lower multiples, use less debt, and have a wider range of exit options as compared to large buyouts.	The U.S. recovery is in year seven and history suggests a correction may not be far off. The European recovery lags the U.S. recovery and may have more room to expand. The rest of world consumer growth story is attractive but exits and country specific risks are challenging.	Favor managers that have a sector, regional or other demonstrable competitive advantage. Additionally, proven sourcing capabilities, operational expertise, and a stable team structure may help managers differentiate themselves and generate consistent returns.
Venture and Growth Capital	*Seed Stage* *Early Stage* *Growth Stage* *Late Stage*	Late stage valuations soar as firms stay private longer. Seed and early stage investments are less impacted by valuations as a binary outcome is marginally changed by purchase price increases on smaller investments.	Mobile technology, start-up cost reductions and measurable revenues have created an active VC environment. The industry has consolidated as marginal players have given way to established firms, as well as new sources of capital.	Returns are concentrated amongst top managers, many of which are closed to new investors. Success requires more than an equity check and draws on established networks, experience and introductions.

Summary of findings cont.

Outlook	Unattractive	Neutral	Attractive

Strategy	Outlook	Pricing Overview	Macro Environment (Beta)	Manager Environment
Private Credit	*U.S. Direct Lending* *European Direct Lending* *U.S. Distressed* *European Distressed*	Private Capital continues to be compensated for originating loans both in the U.S. and Europe, generating attractive risk adjusted returns. There is little current distressed activity as high-yield bond default rates hover near all-time lows.	Structural changes have reduced bank appetite for originating smaller loans. However, a large amount of private capital has been raised to address this opportunity. Record high-yield bond issuance may point toward a future distressed opportunity.	Non-sponsored direct lending, (w/o PE backing) have more pricing power but also more underwriting risk. Decisions about where to lend in the capital structure could differentiate return expectations if the economic environment changes. Distressed managers look for idiosyncratic deals as they wait for a dislocation.
Secondaries	*All Strategies*	Elevated private equity exits and valuations levels have increased pricing. Many assets trading at or around par.	Market flows have equalized as sellers rationally trim their portfolios (asset class, manager, strategy exposure). PE dry powder and valuations are leading indicators of a potential future opportunity.	Absent a pricing dislocation, managers look toward complex transactions such as "zombie funds" and team spinouts to drive deal flow and competitive pricing.
Co-investment	*All Strategies*	Co-investment prices are a function of the general PE market and, as such, high valuations are fueled by increased debt availability.	PE funds report fewer co-investments are executed than perceived investor demand. While co-investments have been around for years, the surge in interest and capital raised suggests many programs' returns have not been through a full investment cycle.	Co-investments are difficult to execute as timing, governance and experience challenge individual investors. A FoF approach raises concerns about team skills as allocating capital to managers is markedly different than making direct investment decisions.

Strategy reviews

U.S. buyout

Small Buyout	**Neutral**
Middle Market Buyout	**Attractive**
Large Buyout	**Unattractive**

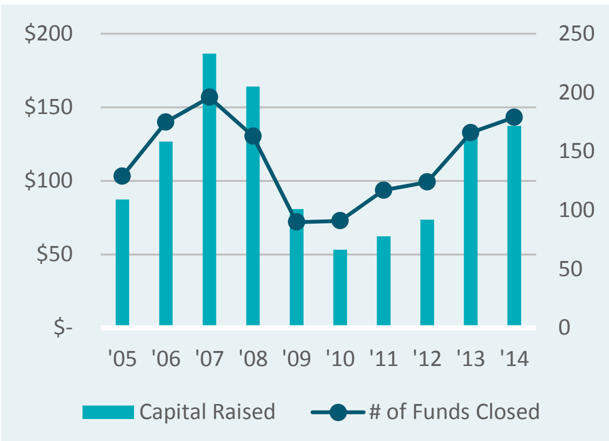
U.S. buyout fundraising has seen a meaningful jump in the last two years. Average fund sizes are down but recent bulge-bracket LBO closings suggest investors are increasingly more comfortable committing capital to "mega" funds. GPs continue to exit investments at a record pace and some may have learned lessons from the prior cycle's buying euphoria as transaction pace and volume remain well below pre-crisis highs.

— ***Capital Flows:*** Fund raising has increased in recent years but has not returned to pre-recession levels.

— ***Investments:*** The amount of capital invested remains well below the 2007 peak. The $2.5b+ deals that drove 2007 investment volume have given way to a well-rounded mix of deal sizes.

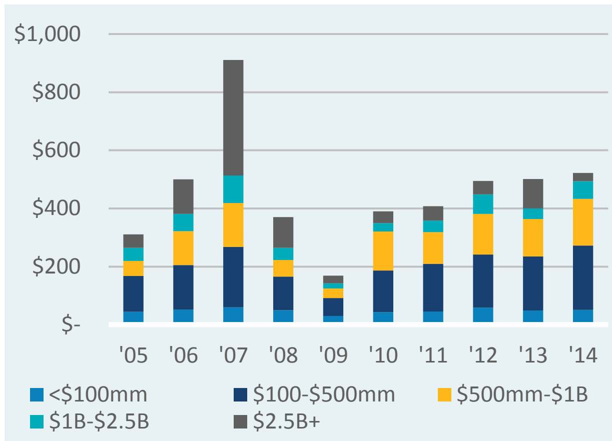
— ***Exits:*** The exit window is open to deals of all sizes and $1b+ exits led the way in 2013 and 2014.

CAPITAL RAISED ($B)



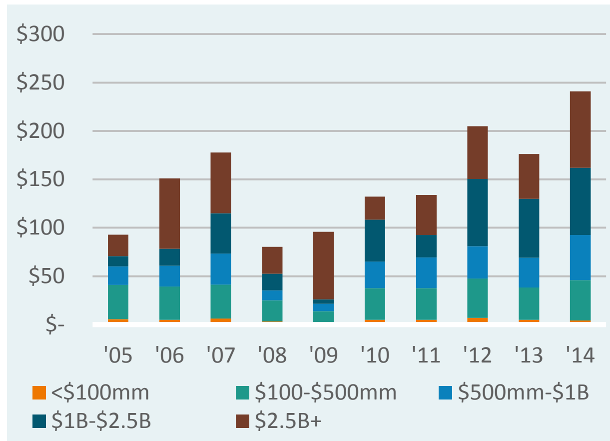
Source: Pitchbook as of 3/31/2015

CAPITAL INVESTED BY SIZE ($B)



Source: Pitchbook as of 3/31/2015

CAPITAL EXITED BY DEAL SIZE ($B)



Source: Pitchbook as of 3/31/2015

U.S. buyout cont.

Small Buyout	**Neutral**
Middle Market Buyout	**Attractive**
Large Buyout	**Unattractive**

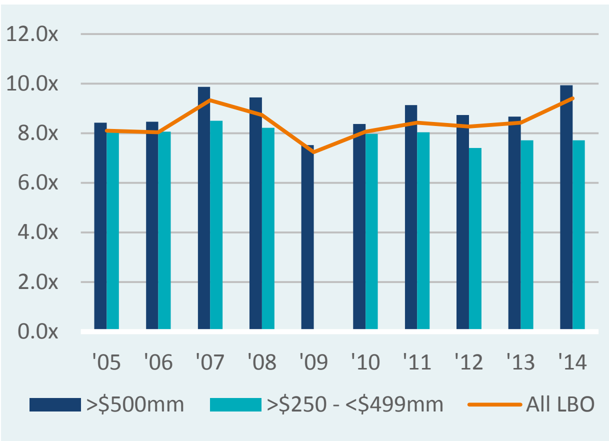
Public equities are fully valued, margins are at peak levels, and debt usage is high. Investments made at these valuations may become challenged if interest rates rise and economic conditions deteriorate. These challenges are exacerbated by the nature of large buyouts.

— ***Valuations:*** While transaction volume is below 2007 levels, increased debt usage has pushed valuations to near-record highs. However, as compared to 2007, large LBO transactions have significantly higher cash flow coverage.

— ***Deal Dynamics:*** Only 30% of the 2014 sponsored loan volume was used to finance LBO transactions and, of the remainder, 38% either refinanced existing debt or paid a dividend recap. Equity contributions are well above the 2007 lows.

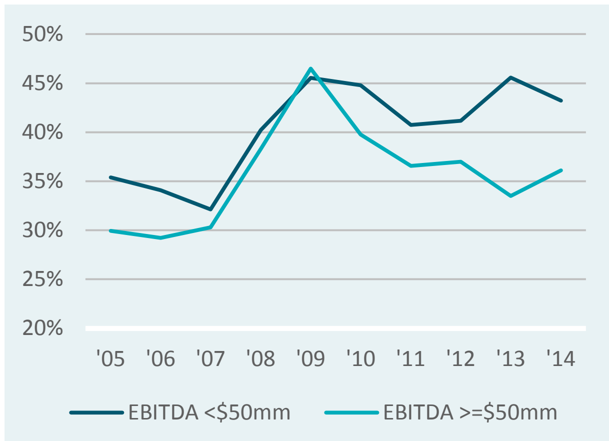
— ***Deal Size:*** The underserved middle-market typically trades with less debt, at lower investment multiples and has more exit routes than large buyouts, presenting an attractive proposition in today's environment. Small buyouts share many of the same attributes as the middle-market but commitment size limitations and small fund risks make the space more challenging to allocate capital.

PURCHASE PRICE MULTIPLE BY DEAL SIZE



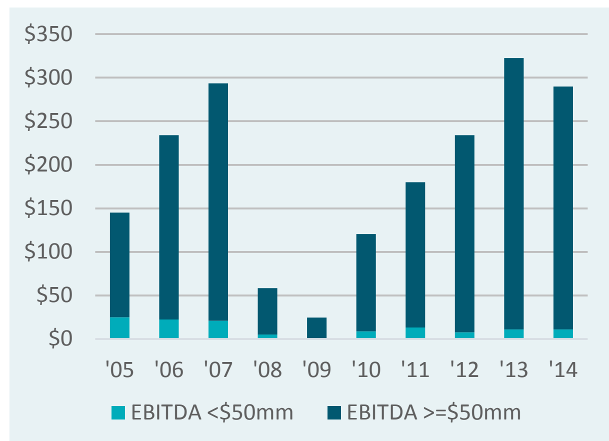
Source: S&P LCD's Leveraged Buyout Review – 4Q14. 2009 data for deals >$250 - <$499mm not statistically significant

EQUITY CONTRIBUTION BY DEAL SIZE



Source: S&P Middle Market Quarterly Review – 4Q14.

SPONSORED LOAN VOLUME BY DEAL SIZE ($B)



Source: S&P Middle Market Quarterly Review – 4Q14. S&P LCD's Leveraged Buyout Review – 1Q15.

European buyout

European Buyout	Neutral

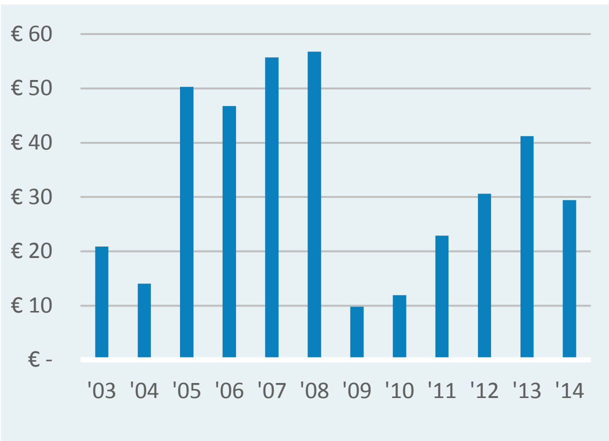
European buyout has fewer managers and less capital looking for opportunities than in the U.S., but high valuations and uncertainty around future economic growth prospects impact investment decisions. The strength of the U.S. dollar may entice U.S. funds to increase European investments.

— ***Capital Flows:*** European buyouts attracted €29 billion of capital in 2014, a decrease from 2013 and well below the 2007 peak of €57 billion.

— ***Valuations:*** Purchase multiples are near record levels, suggesting that recent transactions may require prolonged economic expansion in order to grow into their capital structures.

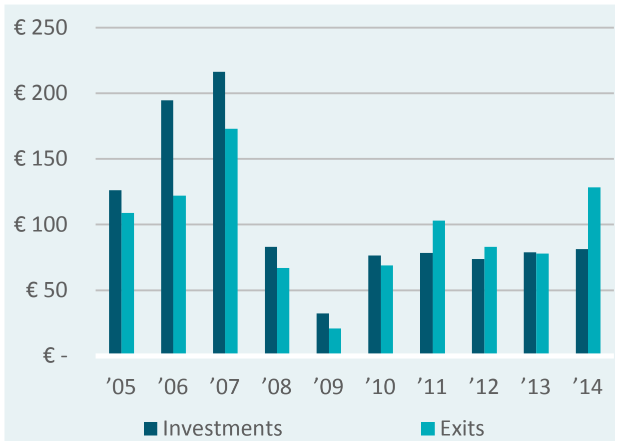
— ***Investments / Exits:*** European buyout activity remains well below 2007 peak levels. Lower investments may be a sign of managers exercising discretion in light of elevated investment multiples. However, it also may be indicative of fewer investment opportunities.

COMMITMENTS TO EUROPEAN BUYOUT/GROWTH FUNDS (€B)



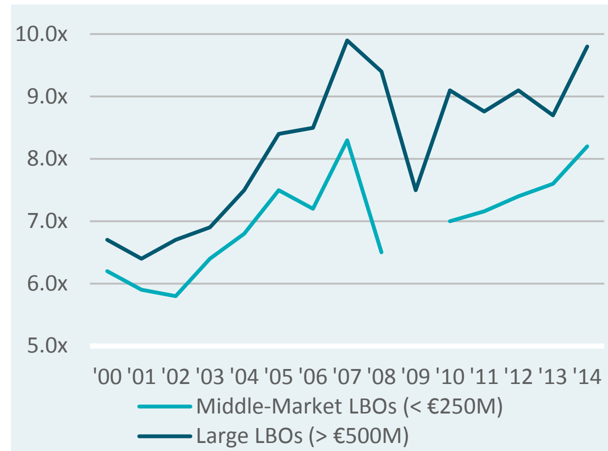
Source: Probitas Partners

EUROPEAN BUYOUT INVESTMENT AND EXIT ACTIVITY (€B)



Source: Thomson Reuters, Incisive Media, and HarbourVest analysis of Asia from AVCJ, APER, EMPEA, and GP reporting

EUROPEAN AVERAGE LBO PURCHASE PRICE/ADJUSTED EBITDA MULTIPLES



Source: Standard & Poor's LCD. For middle-market LBOs, data from 2009 not statistically significant

Rest of world buyout

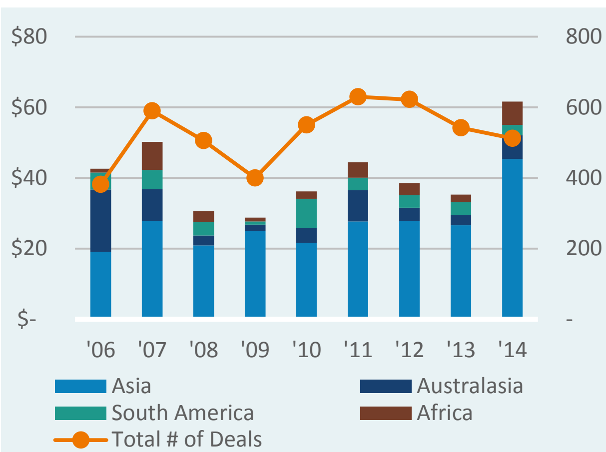
Rest of World Buyout	Neutral

Key investment drivers include: GDP growth, historically shorter economic cycles, the relative strength of the U.S. dollar, and the disposable income of the growing middle-class. Countries with economic growth tied primarily to natural resources are not attractive. The ability to exit cannot be overlooked as capital market closures, currency fluctuations, and foreign capital rules, among other concerns, can change without notice.

— ***Investor Sentiment:*** Investors are most interested in developed Asia and South America. Surprisingly, from 2013 to 2014, investor interest in Brazil increased despite headline corruption scandals. Despite this interest, these scandals serve as a reminder of the country-specific risks associated with emerging market investing.

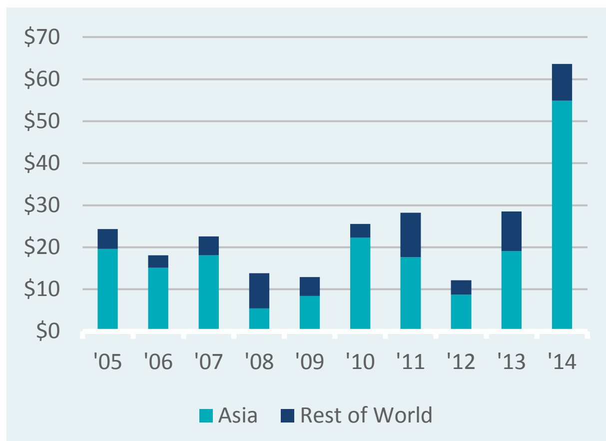
— ***Investments / Exits:*** Asian exit activity was particularly strong in 2014 as PE firms took advantage of the open Chinese IPO window. The Asian PE market appears to be maturing following the increase of investments and exits.

BUYOUT INVESTMENTS ($B)



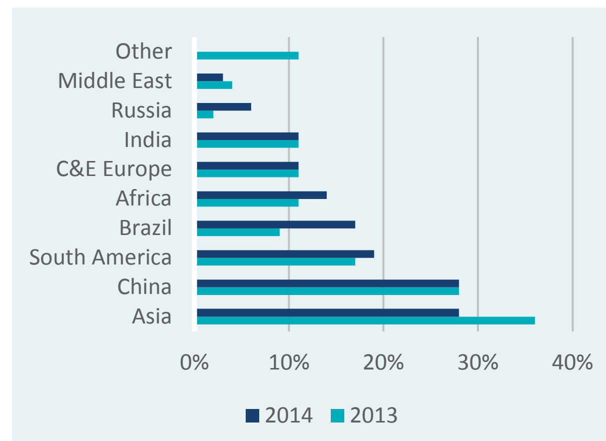
Source: Preqin as of 5/4/15

BUYOUT EXITS ($B)



Source: Thomson Reuters

SURVEY: EMERGING MARKETS THAT PRESENT BEST OPPORTUNITY



Source: Preqin Investor Interviews, as of 12/2014

Venture and growth capital

Seed / Early Stage	Neutral
Growth / Late Stage	Unattractive

Early stage managers are less impacted by valuation. Late stage valuations are high as “unicorns”, or those companies with $1b+ valuations, become commonplace. Managers that can differentiate themselves by providing introductions and drawing on related investment experience may have a tangible advantage over new entrants that simply provide capital.

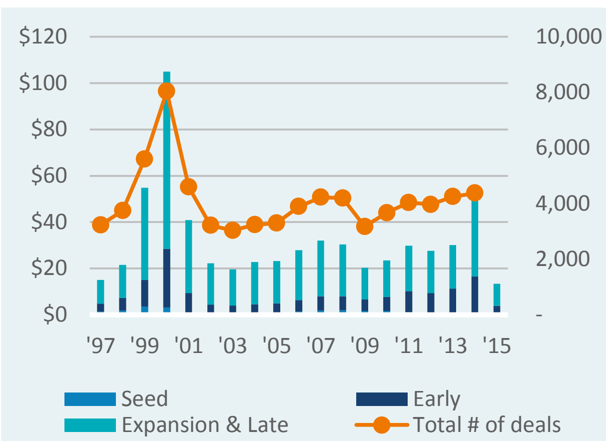
— ***Capital Flows:*** Allocations to established VC funds are often oversubscribed, limiting direct investor access.

— ***Investments/Exits:*** Driven by late stage deals, VC investments totaled $49.5 billion in 2014 but remained well below the $104 billion invested in 2000. IPOs were active in 2014 and acquisitions led all exit routes.

— ***Returns:*** After a decade of marginal returns, $500mm+ funds lead the pack with strong one and three year trailing IRRs.

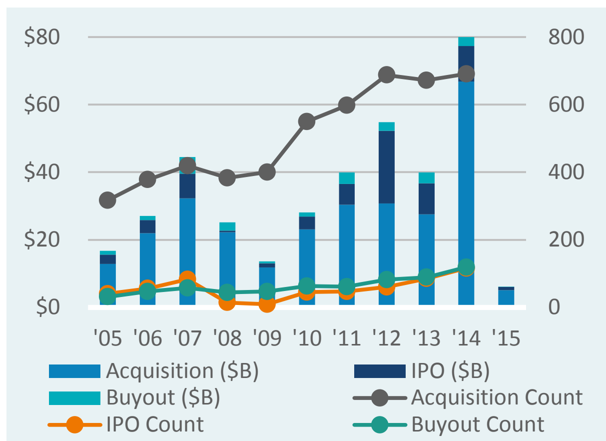
— ***Market Dynamics:*** Mobile technology, start-up cost reductions, and measurable company revenues have all contributed to an active VC environment.

EQUITY INVESTMENTS IN VC COMPANIES ($B)



Source: PwC/NVCA MoneyTree™ Report, Data: Thomson Reuters. As of 1Q 2015

VC CAPITAL EXITED BY TYPE ($B)



Source: Pitchbook as of 3/31/2015

GLOBAL VC IRR BY FUND SIZE

Source: Pitchbook as of 2Q 2014

Private credit

U.S./Europe Direct Lending	Attractive
U.S./Europe Distressed	Neutral

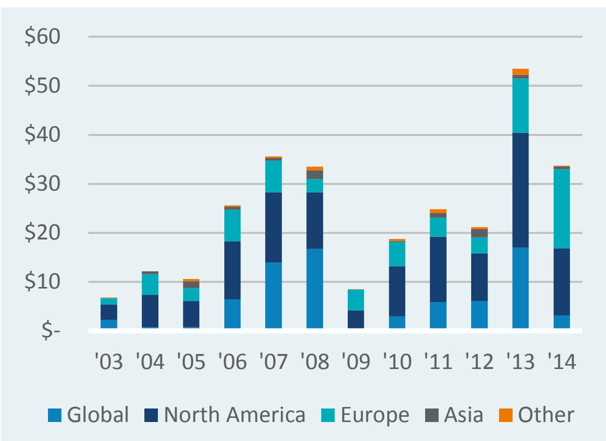
Competition to provide debt to PE-sponsored companies has squeezed large deal pricing and increased borrower-friendly terms. Regulatory changes have limited traditional middle-market bank lending, but significant private capital has been raised. Distressed deals are quickly crowded.

— ***Capital Flows:*** 2014 was another strong year for global private credit fund raising.

— ***Pricing:*** Competition has driven down direct lending pricing. Lenders to PE-sponsored transactions are price takers whereas lenders to non-sponsored companies may be able to generate more attractive terms. Distressed managers look for pricing dislocations at troubled companies or out-of-favor sectors.

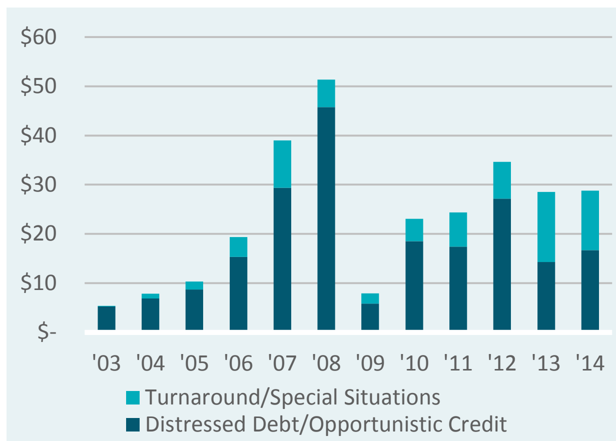
— ***Market Dynamics:*** While default rates remain historically low, record high-yield bond issuance combined with a market correction could create significant future distressed opportunities. The U.S. recovery is more established than Europe, and rate increases, while partially offset by LIBOR floors, could hamper the ability of firms to cover debt obligations.

GLOBAL PRIVATE CREDIT FUND RAISING ($B)



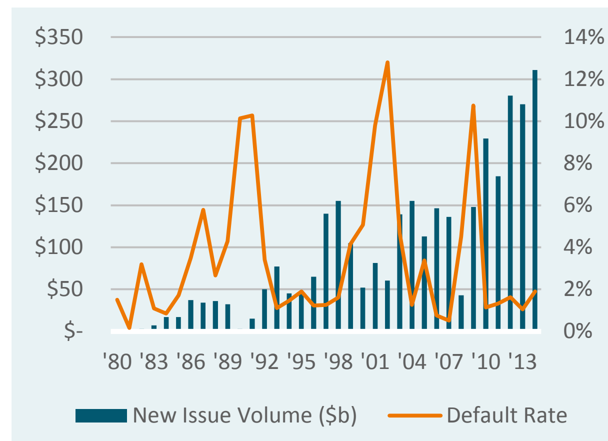
Source: Probitas Partners

GLOBAL DISTRESSED FUND RAISING ($B)



Source: Probitas Partners

HIGH-YIELD BOND ISSUANCE AND ANNUAL DEFAULT RATES: 1980-2014



Source: NYU Stern School, Moody's, Standard & Poor's

Direct lending

U.S./Europe Direct Lending	Attractive

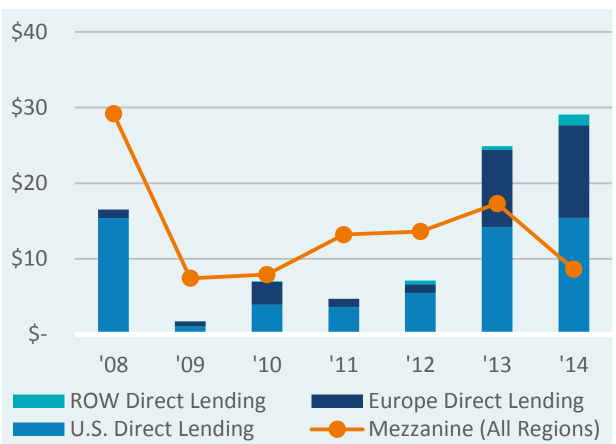
The European private credit market is smaller and more fragmented than the U.S. and, as such, commands a slight pricing premium. Structures in both markets have call protections, up-front fees, and high current yields. Managers with strong underwriting capabilities and the discipline to maintain seniority in the capital structure still appear capable of generating attractive risk-adjusted returns.

— ***Capital Flows:*** Direct lending capitals flows into Europe have increased in recent years. The U.S. remains the dominant market for both mezzanine and direct lending.

— ***Reduced Bank Lending:*** Basel III and other regulatory restrictions have increased equity requirements and risk retention rules, making it more challenging for banks to originate and hold loans. While not out of the market, bank lending has been reduced.

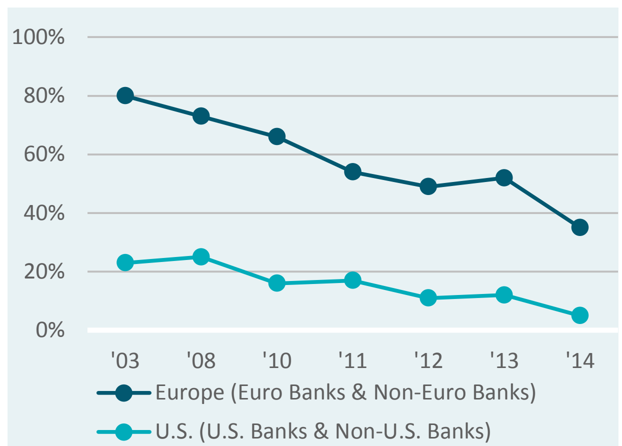
— ***Middle Market:*** The middle market structures are most attractive to lenders in a modest growth environment where companies remain current and continue to borrow without growing too large or too quickly to access the high-yield market or other cheaper sources of capital.

DIRECT LENDING & MEZZANINE FUND RAISING ($B)



Source: Preqin Private Debt Online

PERCENTAGE OF U.S. & EUROPEAN LOAN MARKET SERVICED BY BANKS



Source: LCD Leveraged Loan Review, 4Q 2014. Please note, 2009 is not included due to no data points being available

ILLUSTRATIVE RETURNS AND DEBT STRUCTURE OF PRIMARY MIDDLE MARKET BUYOUTS

Debt Type	U.S.	Europe
1st/2nd Lien Senior Secured	**Target: 5.5 - 6.75%** LIBOR Floor, 2-3% fee	**Target: 6 - 8%** 3-4% fee
Unitranche	**Target: 7.5 - 9.5%** LIBOR Floor, 3% fee, call protection	**Target: 9 - 11%** 3-4% fee, call protection
Mezzanine	**Target: 12 - 14%** 2% fee, 2pts. avg. call protection	**Target: 12 - 15%** 3% fee, potential warrants

Source: Estimates by the Ares Direct Lending Group as of 12/31/2014. Based on hypothetical transactions and a review of current market conditions.

Secondaries

Secondaries	Unattractive

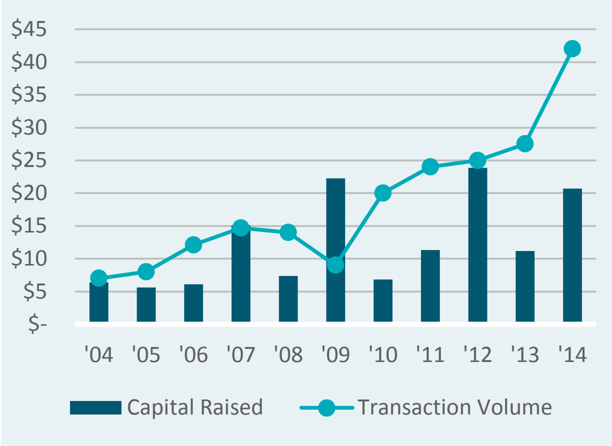
Increased pricing and transaction volume may impact expected returns. However, for those purchased at or around par, some maturing LP interests may still provide the j-curve mitigation typically associated with discounted secondaries.

— ***Capital Flows:*** Secondary transaction volume reached $42 billion in 2014 driven by a surprising number of $1+ billion transactions. For the last few years, annual commitments have been lower than transaction volume, which suggests a balanced market.

— ***Valuations:*** Pricing has increased in recent years. Buyers anecdotally suggest stressed selling has given way to healthy LPs re-allocating capital through culling manager, strategy, and regional exposures, which may sustain increased prices.

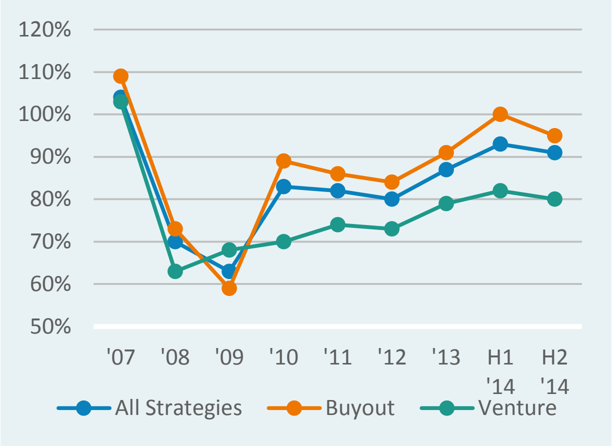
— ***Market Dynamics:*** Elevated secondary pricing mutes potential returns. A general increase in primary PE investments, at high valuations, followed by a market correction may provide a favorable future entry point.

SECONDARY FUND TRANSACTIONS VOLUME & CAPITAL RAISED BY SECONDARY FUNDS ($B)



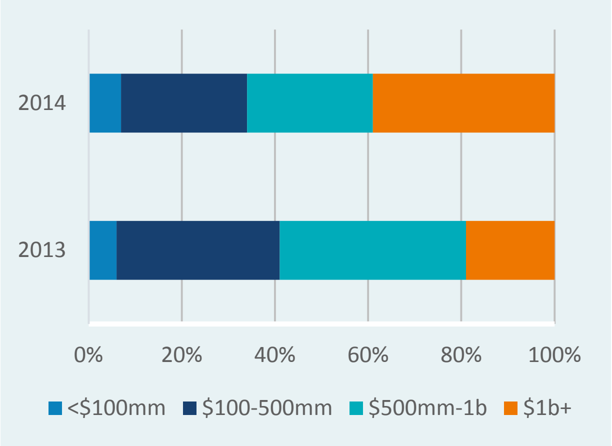
Source: : Probitas Partners

SECONDARY PRICING OVER TIME



Source: Cogent Partners Secondary Market Trends & Outlook, 01/2015

TRANSACTION VOLUME BY DEAL SIZE



Source: Cogent Partners Secondary Market Trends & Outlook, 01/2015

Co-investment

Co-investments as a whole are neither attractive nor unattractive, as they refer to opportunities in all sectors and regions. However, most investors are not structurally equipped with the adequate governance or staffing to execute co-investments. While co-investments have surged in popularity, buyers should be aware that returns are generally not representative of a full market cycle.

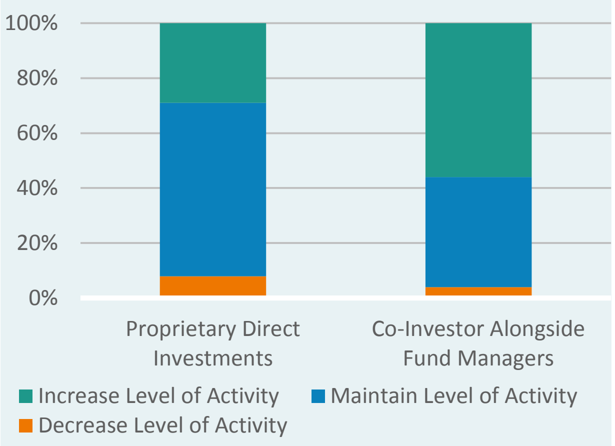
— ***Investor Interest:*** There appears to be a disconnect between investor interest for co-investments and the actual execution of co-investments.

— ***Market Dynamics:*** There are adverse selection issues as GPs may look to syndicate deal risk through co-investments. Additionally, some co-investments have replaced the pre-crisis "club" deals where GPs often invested outside their comfort zone. Finally, many co-investments are executed through fund-of-funds which raises questions about investment team capabilities as manager allocation decisions require markedly different skills than direct capital investing.

CO-INVESTMENT OFFERED AS A PERCENTAGE OF EQUITY INVESTED

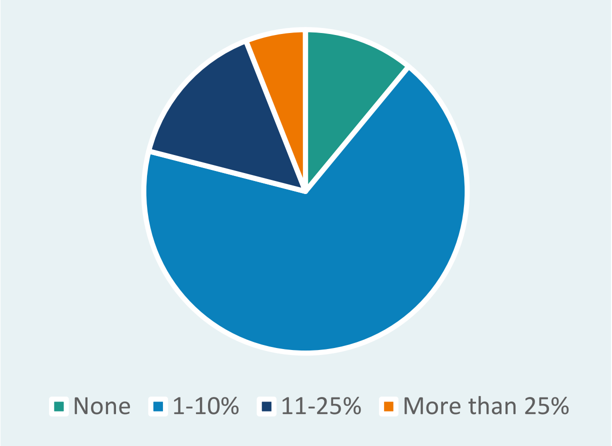
Source: StepStone Analysis of 400 co-investments across 97 GPs

SURVEY: INVESTORS' EXPECTATIONS OF THEIR DIRECT INVESTMENT ACTIVITY IN THE NEXT 12 MONTHS



Source: Preqin Investor Outlook: Alternative Investments H1 2015

SURVEY: PRIVATE EQUITY FUNDS – CURRENT NUMBER OF INVESTORS WHO CO-INVEST



Source: E&Y 2015 Global Private Equity Survey

Focus: Middle market buyout

Market environment

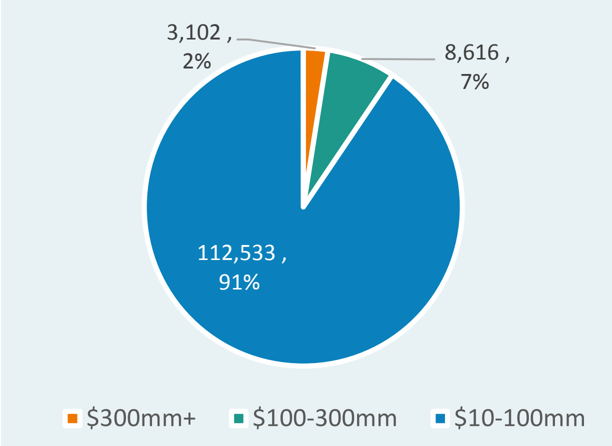
The Middle market buyout (MMB) investment universe is broad and has historically attracted less capital than the larger buyout market.

— ***Market Size:*** The middle market, defined as companies with less than $300mm in revenue tally 121,149 or 98% of total U.S. companies. As these companies are small, numerous and geographically diverse, they may have difficulty accessing public capital, and thus operate in a less efficient market.

— ***Capital Flows:*** While middle market companies comprise 98% of total U.S. companies, only 27% of aggregate PE fund raising has been earmarked for this opportunity set (please note, however, a portion of $1b+ funds may also focus on the middle market).

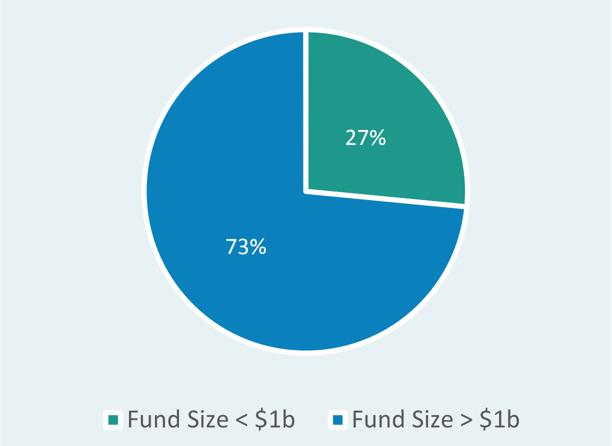
— ***Competition:*** Fund raising for MMB has increased. In addition, the pricing environment has slowed the pace of large deal activity moving large funds into the middle- and upper middle- market. However, these large funds are hampered by the amount of capital they need to put to work.

NUMBER OF PRIVATE COMPANIES IN THE U.S. (BY REVENUES)



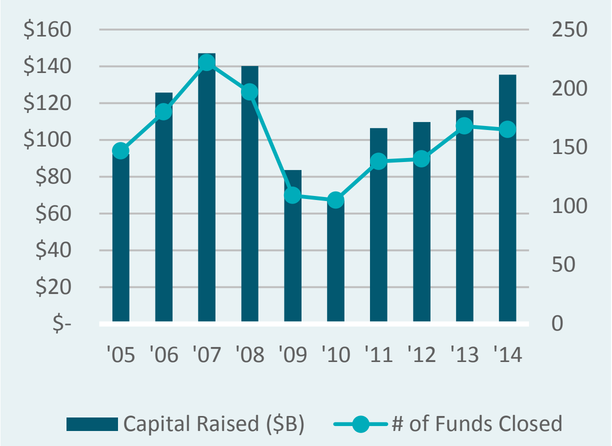
Source: Factset 2/28/2014

TOTAL PE FUNDRAISING 2005 – 2014 BY FUND SIZE ($ RAISED)



Source: Pitchbook

U.S. MIDDLE MARKET FUNDRAISING ($B)



Source: Pitchbook

Valuations and exits

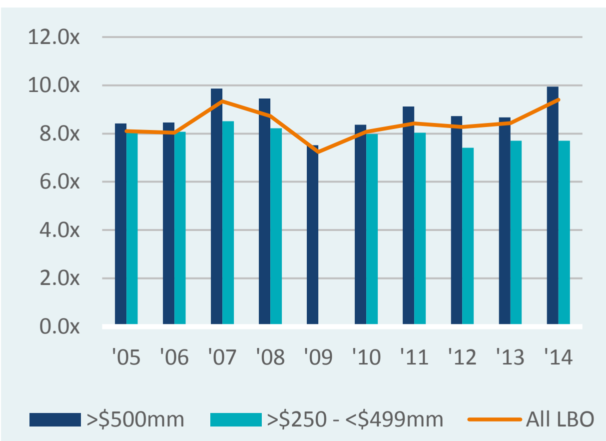
The middle market often transacts at lower valuations with less debt. While IPOs are a viable exit option, the middle market is less reliant on the IPO window and most exits are to strategic acquirers.

— ***Valuations:*** Middle market investment multiples remain below both the 2007 peak and the large buyout space. These deals use less debt and, while debt is more readily available than in 2007, debt usage by MMB funds remains constrained.

— ***Exits:*** As compared to the larger end of the market, middle market LBOs are less reliant on the IPO window. Corporates remain active within the middle market, and secondary buyout sales to another PE firm have also been an attractive exit route.

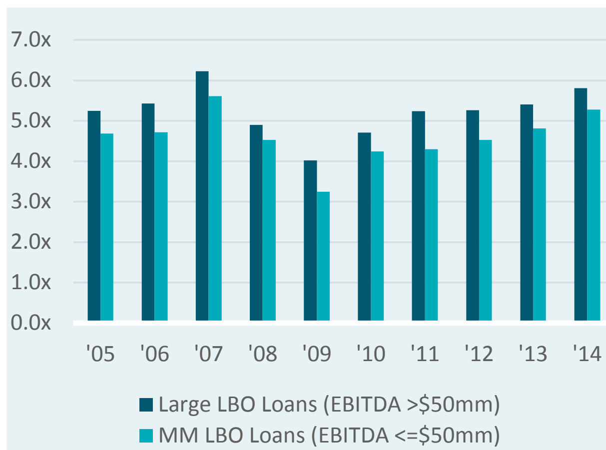
— ***Timing:*** Strategics often buy companies for non-financial reasons and, therefore, may be wiling to transact at times when other exit paths are challenged by the broader economic environment.

U.S. LBO PURCHASE PRICE MULTIPLES BY DEAL SIZE



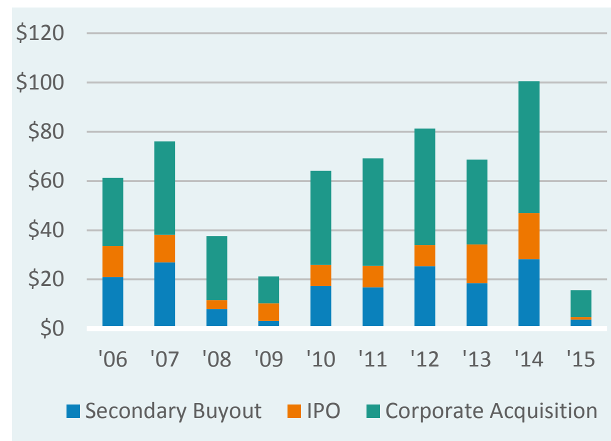
Source: S&P LCD's Leveraged Buyout Review – 4Q14

U.S. LBO DEBT/EBITDA BY DEAL SIZE



Source: S&P LCD's Leveraged Buyout Review – 4Q14

MIDDLE MARKET EXITS BY TYPE ($B)



Source: Pitchbook. Data as of 3/23/2015

Opportunities, risks and returns

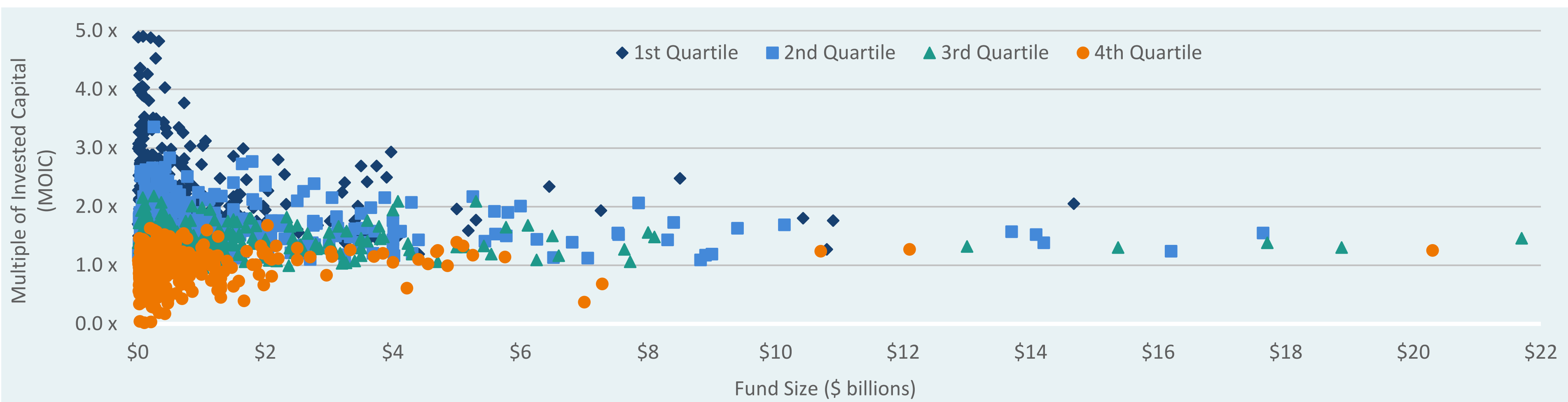
Managers that have unique sourcing angles, operational expertise, a track record of investment discretion when valuations are high and have shown prudent decision making across all economic conditions, may be able to generate attractive returns.

— ***Opportunities:*** The number, size and geographical dispersion of the middle market may facilitate more proprietary deal flow than the larger auctioned market. Smaller companies are more likely to be undermanaged, providing MMB funds an opportunity to drive accretive operational change. Again, varied exit routes allow managers to be nimble.

— ***Risks:*** Increased competition may impact valuations and encourage poor decision making. Accommodative credit markets could increase debt usage and rising interest rates without economic growth may curtail debt servicing.

— ***Returns:*** First and second quartile middle market funds have, on average, generated stronger multiples than the "mega" funds. However, manager selection matters, as there is a larger dispersion of returns amongst the middle market funds.

PERFORMANCE BY FUND SIZE



Source: Preqin, as of 5/13/2015. Vintage years funds 2000-2012. All regions, all investment strategies. Quartile determined by fund performance relative to vintage year. Performance is as of 3/31/2015 or latest available date.

Focus: Private energy

Market overview

WHAT HAPPENED

- Oil prices fell >50% last fall, and rigs have come offline. Varying views on U.S. production dynamics, Saudi output relative to currency reserves, and global demand creates uncertainty as to the timing and type of recovery.
- Large CAPEX associated with the U.S. shale revolution pushed high-yield energy borrowing to record levels, accounting for 17% of high-yield debt issued in 2014[1].
- In addition, banks were active lenders in the space. The bank borrowing base, set by commodity prices and reserves, resets in April and October. The April reset tripped covenants and lenders provided a grace period (probably not for altruistic reasons).
- New borrowing is curtailed. Many bonds are trading at distressed levels. Mid-stream companies and service providers are cutting costs as quickly as possible, laying off teams and idling equipment.

INVESTOR RESPONSE

- Private capital has flooded the space with traditional energy players, private credit managers and hedge funds all raising dedicated vehicles. Many of these managers, with little or no prior energy experience, have built out large teams and reallocated internal resources to cover the space.
- The oil and gas industry is complicated and it seems unreasonable to think new entrants can gain a technical advantage over a short period of time.
- The abrupt price decline shed light on possible opportunities, but only a prolonged period of low prices will exacerbate the dislocation. At this point it appears the large amounts of capital chasing these opportunities will marginalize potential returns.

Is this a "marketing for dollars" opportunity or a true opportunity for allocating dollars?

(1) Source: JP Morgan

Fund raising

Capital is being raised across the private equity and private credit spectrum with the majority of capital seeking opportunities in challenged credits as well as direct lending. The following table breaks down the types of funds in market.

	Private Equity		Private Credit	
Style	**Equity Investments** *(Generally upstream)*	**Trading** *(Entire energy value chain)*	**Distressed for Control** *(Generally up-/mid-stream)*	**Direct Lending** *(Generally up-/mid-stream)*
Approach	Finance drilling activities by partnering with experienced management team. Retain well/basin investment decisions.	Standard distressed trading strategy. Purchase oversold debt where intrinsic value exceeds current trading price.	Standard distressed-for-control strategy. Buy fulcrum security, own post re-organization equity.	Provide mostly senior-secured lending to companies that appear capable of weathering the dislocation.
Opportunity	Servicing costs have come down, E&P capital has vacated, acreage costs are lower, and larger players are selling assets. Management teams look to exploit these dynamics.	Spreads have widened and indiscriminate sector selling could present buying opportunities.	Belief that later in the cycle there will be companies that, after right-sizing, will be going concerns. Bank debt borrowing base resets in October, which could exacerbate balance sheet issues.	Similar theme to other credit plays. Companies need credit, high-yield and bank debt no longer available. Companies with assets / cash-flows to survive the dislocation are candidates for these loans.
Important Traits	Differentiated sourcing/basin data. Partner with experienced management teams. Incremental investments that are based on milestones.	Differentiated data. Local resources with energy experience (not a generalist entering the space).	Differentiated data. Local resources with energy experience. Deep understanding of company assets (reserves, cash flows, etc…). Ability to manage energy company post re-org.	Local team. Differentiated deal sourcing. Meaningful experience lending to energy firms. Deep understanding of company assets (reserves, cash flows, etc…).
Headwinds	Many plays are uneconomic at today’s pricing. Further reduction in oil prices or prolonged low price environment could dampen returns.	Significant capital raised, some firms without meaningful energy experience. Many tout “80 name watch list”; suspicious of overlap and competition. An oil rebound marginalizes the opportunity.	Significant capital raised, some firms without meaningful energy experience. “Winners” may overpay and not be prepared to run an energy company. An oil rebound marginalizes the opportunity.	Significant capital raised. Larger deals are picked over and price competition could loosen covenants or push lenders down the capital structure.

Regardless of whether or not this is an attractive entry point, we favor managers and teams who have been long-term energy investors across equity and debt deals.

Market environment

Performance

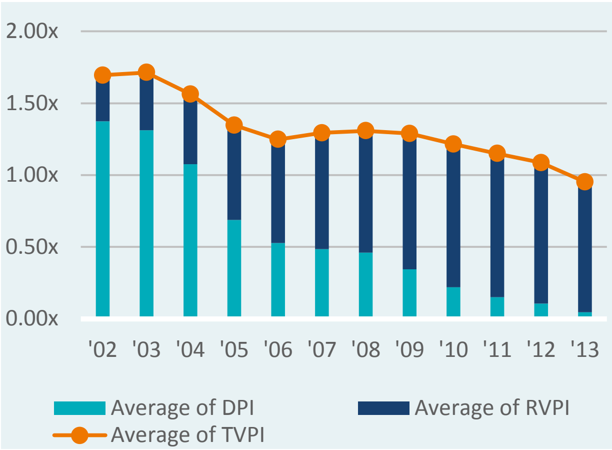
Status – Private equity funds have generated solid returns over the past year, driven by the accommodative exit environment. While over the long-run PE funds look attractive, there is much vintage year variability.

— Recent vintage years are marked above cost, but significant capital remains unrealized. The 2014 exit spree is not fully captured in this data which would increase the Distributions to Paid in Capital ("DPI").

— VC funds and distressed debt funds have experienced large annual return swings, while FoFs have the lowest volatility and returns.

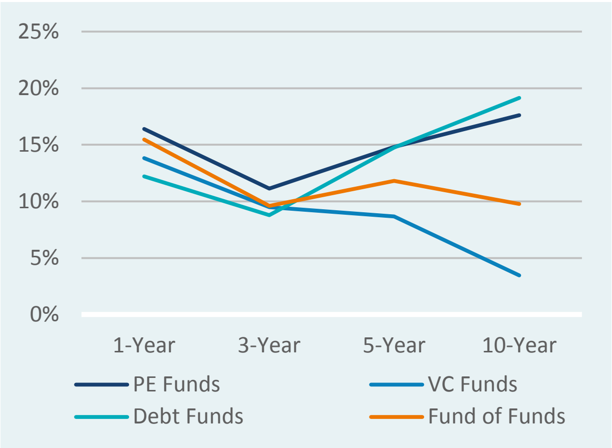
Potential Concerns – We are in year seven of a protracted economic recovery and the exit environment is supportive. Changes to this dynamic may create exit headwinds which could prolong holding periods and ultimately impact returns.

GLOBAL AVERAGE PE FUND RETURN MULTIPLES BY VINTAGE



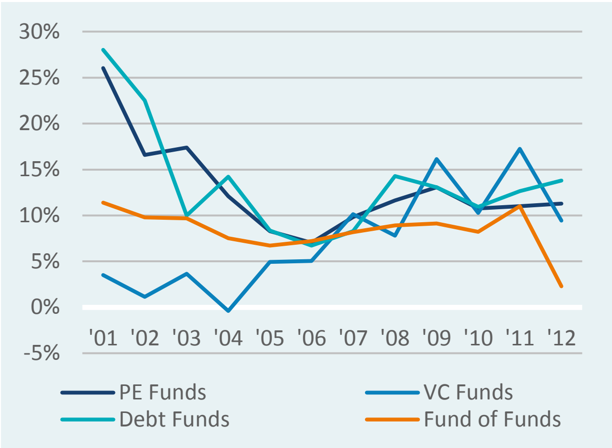
Source: Pitchbook, returns are net of fees - Q2 2014, as reported by LPs.

GLOBAL HORIZON IRR BY FUND TYPE



Source: Pitchbook, returns are net of fees - Q2 2014, as reported by LPs.

GLOBAL MEDIAN IRR BY FUND TYPE AND VINTAGE YEAR



Source: Pitchbook, returns are net of fees - Q2 2014, as reported by LPs.

Performance cont.

Status – Year-over-year, PE returns can vary significantly by sub-strategy, highlighting the difficulty of market timing.

PE FUND RETURN BY VINTAGE YEAR

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Euro Buyout 26.7%	Global Buyout 41.0%	Euro Buyout 32.1%	US Large/Mega 26.4%	Global Buyout 35.7%	Growth Equity 21.7%	Distressed Debt 8.7%	Growth Equity 15.5%	Other 18.7%	Global Buyout 22.4%	Real Estate 34.5%	Secondary FoF 35.7%
Real Estate 20.1%	Euro Buyout 35.9%	Distressed Debt 20.6%	Euro Buyout 20.4%	Rest of World 26.9%	Global Buyout 16.7%	US SMID 8.4%	Venture Capital 15.0%	Venture Capital 18.6%	US Large/Mega 19.1%	Venture Capital 24.4%	Venture Capital 26.6%
US Large/Mega 19.5%	Distressed Debt 26.2%	US SMID 20.1%	US SMID 19.8%	Euro Buyout 24.9%	Venture Capital 15.2%	Secondary FoF 7.3%	Secondary FoF 12.9%	Growth Equity 18.3%	Venture Capital 17.4%	Secondary FoF 24.0%	Real Estate 22.7%
Rest of World 14.9%	US SMID 24.7%	Other 17.0%	Mezzanine 12.6%	US Large/Mega 16.1%	US Large/Mega 10.9%	Venture Capital 7.0%	US SMID 11.7%	US SMID 16.4%	US SMID 16.6%	Growth Equity 13.7%	Mezzanine 16.3%
Growth Equity 13.5%	Rest of World 21.4%	Secondary FoF 16.3%	Real Estate 7.7%	US SMID 11.9%	Distressed Debt 9.2%	Global Buyout 6.9%	Distressed Debt 10.8%	Global Buyout 15.8%	Real Estate 14.6%	US SMID 13.6%	Global Buyout 15.3%
Other 13.2%	Real Estate 19.6%	Venture Capital 1.7%	Other 7.3%	Distressed Debt 10.5%	Other 9.0%	US Large/Mega 6.3%	Global Buyout 10.2%	Distressed Debt 15.7%	Other 13.9%	Euro Buyout 11.8%	Distressed Debt 13.7%
Secondary FoF 10.9%	Other 16.3%	Real Estate -4.3%	Distressed Debt 5.2%	Secondary FoF 9.5%	Rest of World 7.8%	Growth Equity 6.0%	US Large/Mega 9.4%	Secondary FoF 13.9%	Distressed Debt 13.5%	Distressed Debt 10.8%	US SMID 13.3%
US SMID 10.3%	US Large/Mega 11.4%		Venture Capital -0.3%	Venture Capital 8.9%	US SMID 7.6%	Euro Buyout 5.1%	Mezzanine 7.4%	Rest of World 12.0%	Euro Buyout 12.2%	Mezzanine 9.9%	Growth Equity 12.8%
Mezzanine 9.7%	Mezzanine 8.4%			Other 6.1%	Euro Buyout 7.1%	Rest of World 3.7%	Rest of World 5.7%	Mezzanine 10.5%	Rest of World 10.6%	Rest of World 8.2%	Other 12.1%
Venture Capital 0.1%	Venture Capital 3.3%			Mezzanine 2.5%	Secondary FoF 6.9%	Mezzanine 3.6%	Euro Buyout 5.6%	Euro Buyout 9.5%	Growth Equity 1.1%	Other 2.9%	US Large/Mega 8.3%
				Real Estate -4.0%	Mezzanine 6.3%	Other 2.6%	Other 4.6%	US Large/Mega 9.1%			Euro Buyout 7.8%
					Real Estate -0.5%	Real Estate 2.1%	Real Estate 3.7%	Real Estate 5.7%			Rest of World 3.0%

Source: Hamilton Lane Fund Investment Database 08/2014

Valuations

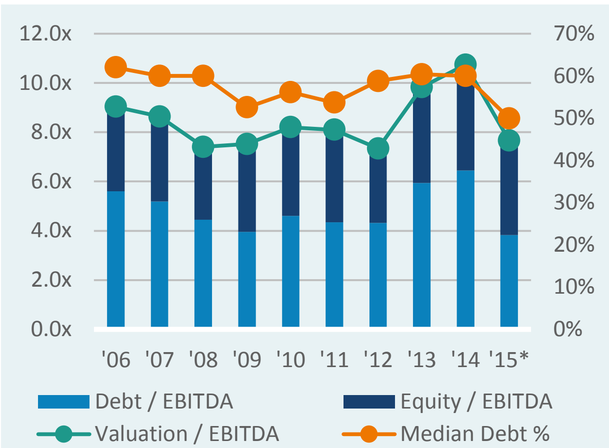
Status – Valuations are high both in the U.S. and Europe. As long as credit remains cheap, valuations will likely remain elevated. The public markets are broadly trading above the private markets at spreads last seen in 2005-2007.

— Record exits have been achieved in each of the last few years and PE firms continue to monetize their existing portfolios. As PE funds take advantage of these valuations, the remaining companies at older vintage funds may be underperformers.

— Continued economic growth may allow companies purchased at these elevated levels to grow into their capital structures.

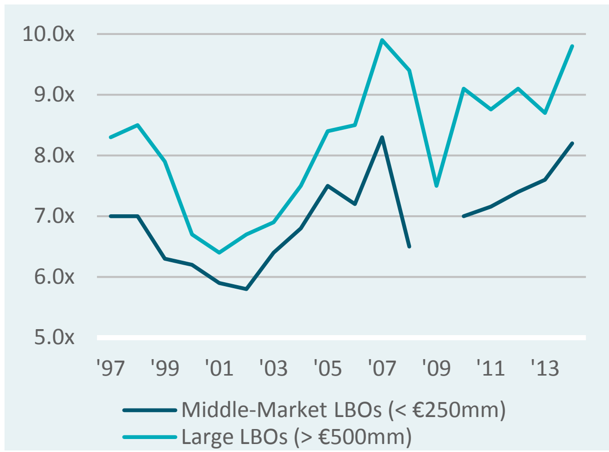
Potential Concerns – High valuations have made it difficult for PE firms to put capital to work and dry powder continues to grow. Rising interest rates combined with floating rate debt may make it difficult to cover increased debt obligations.

US BUYOUTS MEDIAN EBITDA MULTIPLES AND DEBT PERCENTAGE



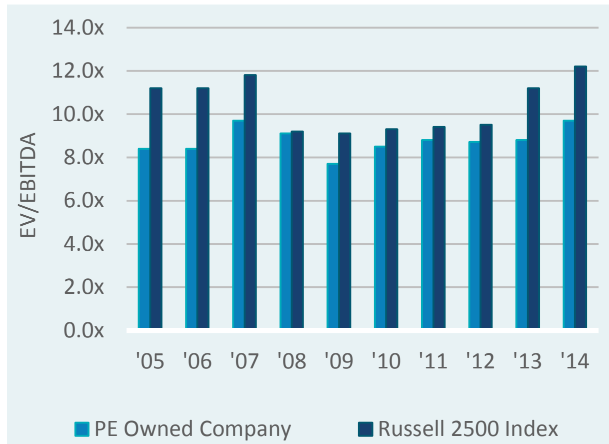
Source: Pitchbook; 3/31/15

EUROPEAN AVERAGE LBO PURCHASE PRICE/ADJUSTED EBITDA MULTIPLES



Source: Standard & Poor's LCD. For middle-market LBOs, data from 2009 not statistically significant

PRIVATE VS. PUBLIC EBITDA PURCHASE PRICE MULTIPLES



Source: S&P LCD 4Q14, Factset, JP Morgan; 12/31/14

Investments / exits

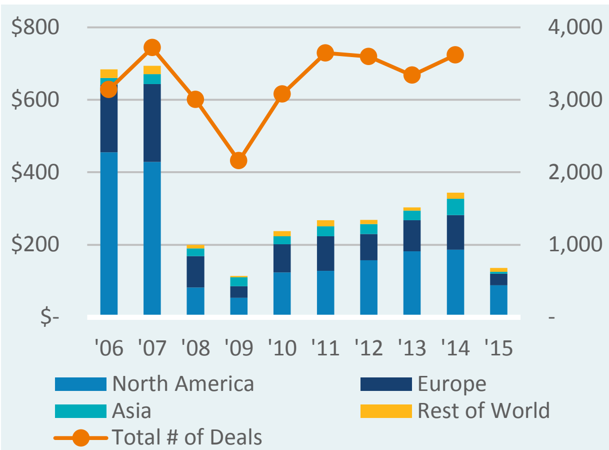
Status – Investment volume is well below that of the prior cycle, and exits reached an all-time high in 2014. While investment volume is down, the number of deals executed has remained relatively constant, suggesting smaller average deal sizes.

— In the last few years there have been significantly fewer investment made above $5b. This is likely a function of both manager discretion as well as fully priced equity markets, making it expensive to execute large public to private transactions.

— Many of the firms that completed "mega" deals in 2005-2007 have quietly drifted down to the upper-middle market.

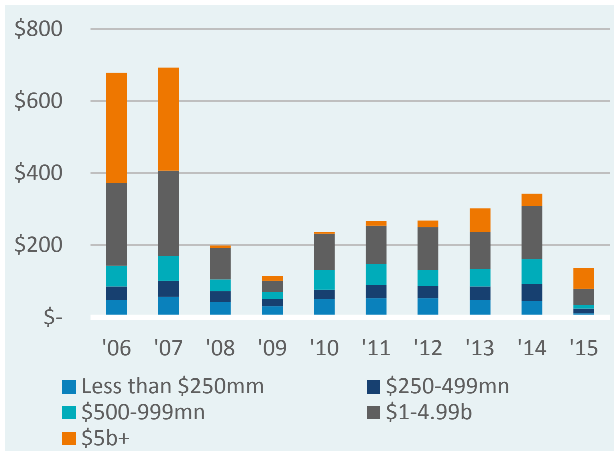
Potential Concerns – As investment periods come to an end, expiring dry powder may force asset purchases at less than ideal valuations. Additionally, the global exits that are converted into new PE fund commitments may exacerbate these concerns.

INVESTMENTS BY REGION ($B)



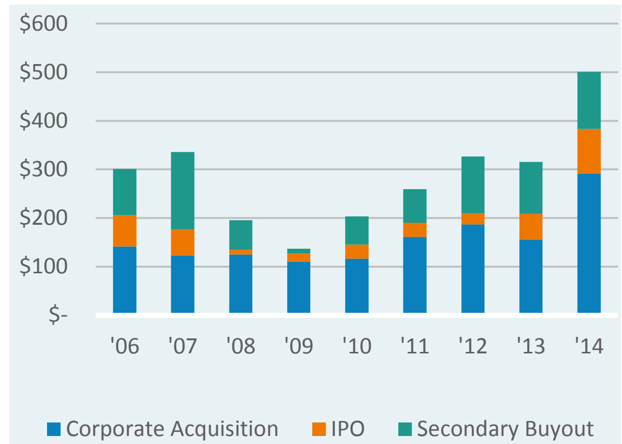
Source: Preqin as of 5/4/15

INVESTMENTS BY DEAL SIZE ($B)



Source: Preqin as of 5/4/15

GLOBAL EXITS ($B)



Source: Pitchbook as of 12.31.14

Fund raising

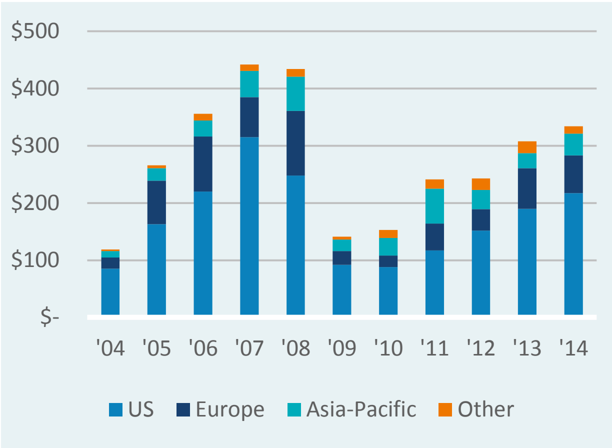
Status – The U.S. accounts for the majority of global PE commitments. Buyout remains the most popular investment structure both domestically as well as internationally.

— Following a challenging fund raising environment, managers are closing smaller funds at a quicker pace. The average fund size was $968mm in 2007 and $697mm in 2014. Managers spent 20.3 months marketing a fund in 2010 and 14.1 months in 2014.

— The PE market continues to evolve as increasing amounts of capital are being funneled into strategies and markets that previously saw little activity.

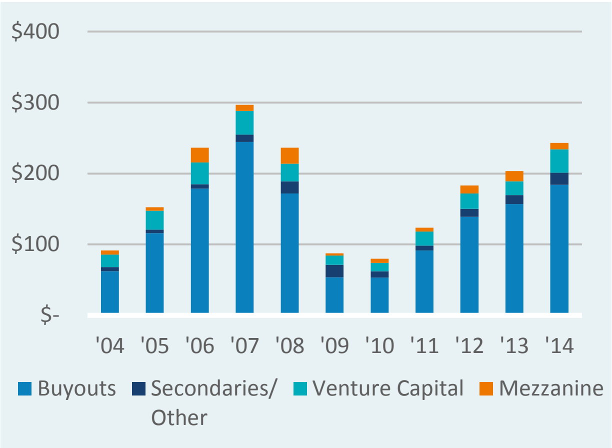
Potential Concerns – Fund raising without increased investment activity builds dry powder, which pressures investment activity and impacts purchase multiples. The current environment appears to be a balancing act between exercising discretion at today's valuations and the need to put capital to work.

GLOBAL PE FUNDRAISING ($B)



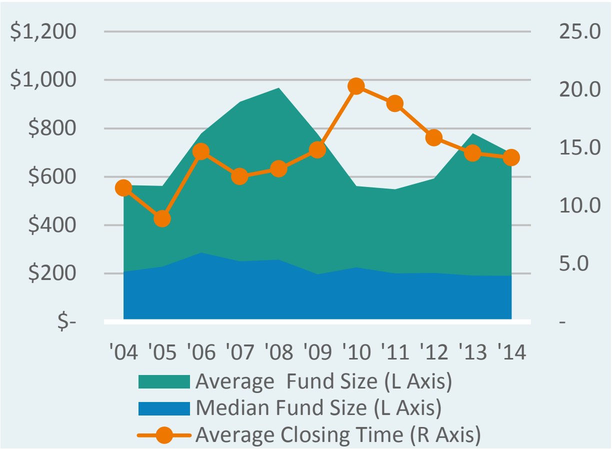
Source: Thomson Reuters. As of 3/31/15. Comprises buyout, venture capital, distressed and subordinated debt, energy, infrastructure and other fund strategies.

U.S. PE FUNDRAISING ($B)



Source: Private Equity Analyst

MEDIAN & AVERAGE PE FUND SIZE ($MM), AVERAGE TIME TO CLOSE (MONTHS)



Source: Pitchbook

Capital overhang

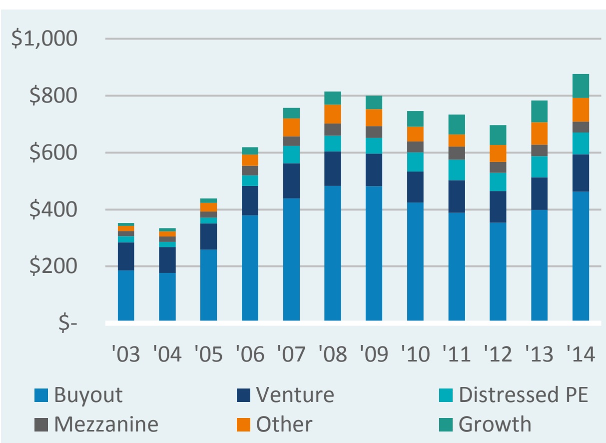
Status – The PE capital overhang continues to grow, reaching record levels in 2014.

— While PE capital has increased in absolute terms, buyout dry powder has remained relatively constant since 2007. Vintage year funds 2011 or older, which have or are approaching the end of their investment periods, account for 26% of dry powder.

— PE firms own around 14,000 companies, nearly double the number owned in 2006. The challenged investment environment and record exits have slowed the rate the growth. Of these firms, 5,300 were purchased before 2008.

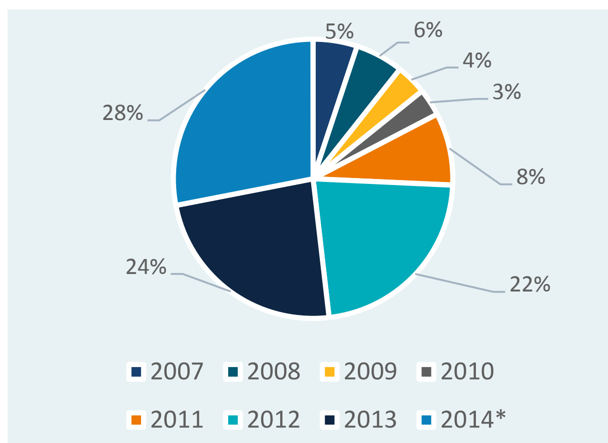
Potential Concerns – The number of companies owned by PE firms and the amount of dry powder are at record highs. These companies will need to be sold and if the exit environment becomes less attractive, holding periods will likely increase, reducing returns.

PE DRY POWDER BY STRATEGY ($B)



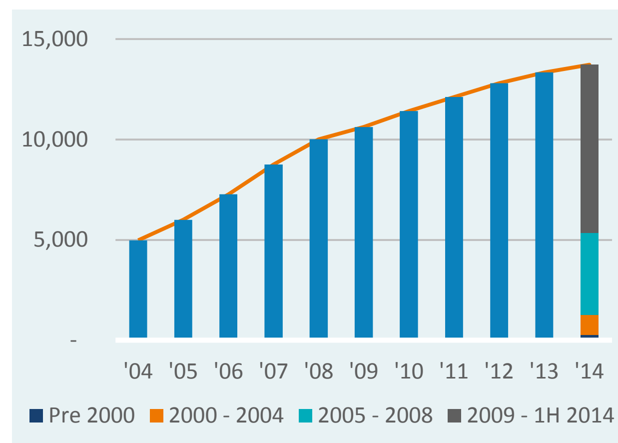
Source: Preqin

PE CAPITAL OVERHANG BY VINTAGE



Source: Pitchbook as of 6/30/14

CURRENT GLOBAL INVENTORY OF PE-BACKED COMPANIES



Source: Pitchbook as of 6/30/14

Forthcoming research: Private market asset class assumptions

Private market asset class assumptions

Forthcoming research may lead to new perspectives on how we forecast expected private market returns.

— To inform portfolio allocation decisions, investors forecast the likely risk and return of each asset class.

— Most asset class assumptions are constructed based on a readily available set of indexes that represent the investable universe of a given asset class.

— Public market asset class assumptions predict the risk and return of an index – the beta of the market. The alpha generated from hiring an active manager is not considered.

— Private market asset class exposures, by their nature, require the hiring of an active manager. Therefore, their forecast implicitly includes a forecast of beta and alpha.

— Comparing the beta returns of the public markets to the beta + alpha returns for the private markets may lead to confusion.

— In addition, recent academic studies[1] are more closely investigating the return characteristics of the private markets.

(1) Source: Ludovic Phalippou, SSRN Working Paper, "A comment on recent evidence on private equity performance". March 2012.

Private market asset class assumptions

The following table provides a summary of possible ways to forecast private market asset class assumptions. We continue to evaluate the merits of each approach.

Approach	Summary	Pros	Cons
Public Market Index (Include illiquidity premium) Maintain the status quo	– Recognize that a comparison to other asset classes is not apples to apples – Acknowledge that private market return expectations include both beta and alpha	– Most common industry approach – Increases return expectation relative to public markets and therefore may increase allocation to private markets	– Is not directly comparable to public asset classes – Blurs alpha and beta return sources – Increases return expectation relative to public markets and therefore may increase allocation to private markets
Public Market Index (Exclude illiquidity premium)	– Use a public equity index to proxy private market returns – Increase comparability with other beta sources	– More comparable to other asset classes – Clarifies the role of active management in generating private market returns – Acknowledges recent research	– Contrary to common industry approach – May underestimate the beta returns of the private market – More complex
Create Factor Adjusted Public Market Index	– Synthetically construct an index that breaks out beta and alpha return factors – Use the public markets as a proxy for each of the factors	– More comparable to other asset classes – Clarifies the role of active management in generating private market returns – Acknowledges recent research	– Contrary to common industry approach – May be challenging to deconstruct factors – More complex
Create New Private Market Index	– Leverage recent industry advances in tracking private market fund level information – Use private market fund return streams to create an index – Separate beta and alpha components	– More comparable to other asset classes – Clarifies the role of active management in generating private market returns – Acknowledges recent research – Constructed with actual private market return streams	– Contrary to common industry approach – Data availability and access to underlying return components may limit such an undertaking – If implemented, will take time to construct

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