

PRIVATE EQUITY FORECAST & DESK BOOK FOR 2015



On an ongoing basis, Probitas Partners offers research and investment tools for the alternative investment market to aid its institutional investor and general partner clients. Probitas Partners compiles data from various trade and other sources and then vets and enhances that data via its team's broad knowledge of the market.

probity (prō'bĭ·tē)

n. [from Latin probitas: good, proper, honest.] adherence to the highest principles, ideals and character.

Probitas Partners is pleased to present its *Private Equity Forecast and Desk Book for 2015*. The purpose of this paper is to offer our forward view of likely trends for 2015 and beyond based on our review of 2014 and our ongoing dialog with (and surveys of) the global institutional investor marketplace. The paper starts with our forecast for this year, then presents a summary review of the dominant trends that shaped 2014 and the details behind those trends.

We encourage you to obtain copies of our research reports, surveys, and desk books from our firm's library at www.probitaspartners.com.

Contents

Private Equity Outlook
Private Equity Fundraising6
Deal Volume and Capital Overhang9
The Buyout Market: Investor Focus and Concerns 12
U.S. Venture Capital
Distressed Private Equity20
Asia 24
Europe27
Emerging Markets
Private Debt Markets
Energy and Private Equity34
The Secondary Market
Real Assets

Private Equity Outlook

Increasing Focus on Risk in the Buyout Market

- Relatively high purchase price multiples, increasing leverage, the return of covenant-lite debt and increasing dry powder have a number of limited partners that invest in developed market buyout funds worried that we are reaching a new market peak with more downside risk than upside opportunity. But most investors are not worried about a market meltdown similar to 2008; rather, most expect a more normal market down-cycle.
- Increasingly, these investors are more focused during due diligence on managers with experience across cycles and who maintain pricing discipline in expensive markets, preserving dry powder for a better pricing environment.
- A few investors are beginning to slow their commitment pace to buyout funds to limit their exposure even as maintaining allocation targets becomes increasingly difficult as private equity distributions remain high.

Energy Sector: Risks and Opportunities

- The dramatic decline in oil prices since the summer of 2014 has already shaken a number of funds with significant exposure to the oil industry, especially those with portfolio companies that are highly leveraged.
- A number of fund managers have rushed funds to market targeting distressed energy investments both in equity and debt plays, seeking to raise money quickly at what they perceive to be the bottom of an oil pricing cycle.
- The key question for both stressed legacy portfolio companies and new distressed opportunities is "At what price level will oil prices stabilize and how long will it take to reach that point?" a question for which there is no consensus.
- A number of investors are predicting that the sharp drop in oil prices will have significant negative impact on the renewable energy market. However, the renewable sector is heavily focused on electricity generation, and oil is a minor factor in that sector.

"Limited partners
... are worried
that we are
reaching a new
market peak with
more downside
risk than upside
opportunity"

Rebound in Venture Capital Interest

- Interest in venture capital rebounded in 2014 after a low the previous year, and the market is continuing to shift towards a barbell approach quite different from the late 1990s.
 - Growth Capital: Many of the largest funds have shifted to a growth capital/late stage focus taking advantage of a larger number of successful companies that seek to delay going public for various reasons.
 - Seed Stage and Angel Investing: Capital efficiency, in part driven by cloud outsourcing, is making seed stage and angel investing a more viable option for launching internet-focused companies with minimal capital needs, though seed stage vehicles are often too small to attract institutional investor interest.
- Early stage funds are still of interest to investors, but the dynamics of the market make them difficult to scale (a constraint not binding growth capital funds), while capital efficiency impacts competition on initially smaller transactions.

"SEC reviews ... [have] revealed a number of problems in fee and expense calculations"

United States: Regulation and Fees

- In the United States the first round of SEC reviews of private equity firms has revealed a number of problems in fee and expense calculations, and more are likely to follow.
- These revelations are likely to trigger increased investor focus on these issues when negotiating limited partnership agreements as well as an increased focus by limited partners on the verification of fee, expense and carry calculations.
- This issue also seems to be increasing the distrust of fund managers by institutional investors.

Europe: AIFMD and Access

- The intent of the Alternative Investment Fund Manager's Directive ("AIFMD") was to introduce a common Eurozone regulatory environment meant to protect institutional investors. However, the law of unintended consequences seems to have taken its place.
 - Fragmentation: The implementation of the directive by local regulatory regimes has created a hodgepodge of rules that vary significantly and are a fund manager's nightmare and a lawyer's dream.
 - European Passport: The differences in the country-by-country regulations are making it more difficult to institute a common passport across Europe. It was originally contemplated that the passport allowing marketing across the Eurozone for EU headquartered fund managers would become available by 2016, but there is increasing feeling that this target will not be reached.
 - Fortress Europe: These regulatory differences are much more difficult for fund managers outside of Europe to navigate, especially if as is now being discussed to some degrees the common passport will not be made available to foreign fund managers. There is already an increasing trend, especially among small middle-market and growth capital managers outside of Europe, to avoid Europe for fundraising altogether, limiting attractive choices in these sectors for European investors.
 - Switzerland: AIFMD does not apply to Switzerland, as it is not a member
 of the EU and was perceived to be a bit of a safe haven. However, it has
 recently adopted a registration requirement for foreign managers raising
 money from non-FINMA regulated Swiss investors that creates one more
 roadblock for smaller fund managers.

Private Debt or Illiquid Credit

- Private debt continues to gain in importance as a dedicated sector of alternatives, especially as banks continue to struggle for portfolio and regulatory reasons, expanding beyond mezzanine debt funds long considered part of private equity. The rise of direct lending funds as a partial replacement for bank lending is directly related to these issues.
- The sector is also expanding with the addition of a number of newer strategies such as unitranche, structured capital, and royalties. Certain investors are also looking at sectors of the distressed private equity market such as opportunistic credit and distressed debt investing as private debt as opposed to pure private equity plays.
- An open question is "Where will these investments reside in investors' portfolios?"
 as there is not a clear consensus nor is there complete consensus on what
 sub-sectors belong in private debt or illiquid credit.

Turbulence and Opportunity in Emerging Markets

- Interest in emerging markets is highly localized by geography, with political and general economic factors often taking precedence over factors specific to private equity. Over the last year, interest in Russian private equity provides an example of negative interest on investor demand, while Narendra Modi's election to be Prime Minister of India provides an example of a positive impact. In addition, tough times in one geography can benefit another; weakness in the Brazilian economy (as well as a past heavy concentration by investors on Brazilian funds) has led to an increased interest by international investors on the Andes region in order to diversify their Latin American exposure.
- The largest emerging market is China. However, the size of its economy, the broad scope of its private equity market and the availability of experienced managers begs the question "When will China be considered emerged?"

"Interest in emerging markets is highly localized by geography"

Private Equity Fundraising

Fundraising

Private equity fundraising increased slightly during 2014, driven by increases in North America that offset declines in Europe and a flat market in Asia. Established private equity investors' portfolio allocations continued to free up as exit activity surged earlier in the year and significant cash was returned to investors.

North America

- Private equity fundraising increased by 19% over 2013's total (Chart I), driven largely by commitments to buyout funds.
- Venture capital fundraising surged by nearly 70% during the year, returning to its 2007 level, though still considerably below its 2000 peak.

Europe

- European-focused fundraising decreased by 25% during the year, as concerns about the European economy revived and there were fewer large Pan-European funds in market (Chart II).
- Middle-market country-focused funds remain a mainstay of the European market in terms of the number of funds. Investors were focused on the stronger economies of Northern Europe, with the Nordic countries, the UK, and Germany leading investor interest.
- Not included in the private equity totals in this chart is the full range of private debt funds, which had fundraising success in Europe in 2014.

Asia

 Asian fundraising remained fairly flat during the year and is still noticeably below 2011's market peak, driven by continued concerns about the slowing of the Chinese economy (Chart III).

Latin America

- Latin American fundraising surged, nearly reaching 2011's peak fundraising year (Chart IV).
- However, fundraising was highly concentrated, with three funds raised by Advent, Gávea, and Patria accounting for 62% of 2014's total.

Other Emerging Markets

Fundraising for other emerging markets is not detailed in a chart; these niche markets are fairly volatile and long-term trend lines are less meaningful. It was notable, however, that in 2014, \$4 billion was raised targeting Sub-Saharan Africa, by far the largest annual total raised for that geography.

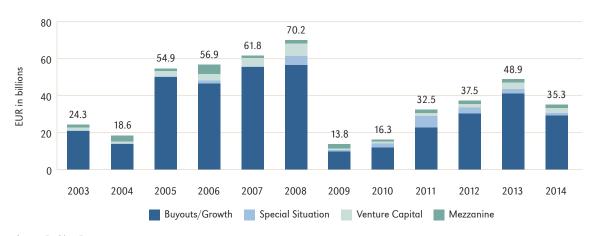
Chart I Commitments to U.S. Private Equity Partnerships by Sector



 $Source: Private\ Equity\ Analyst$

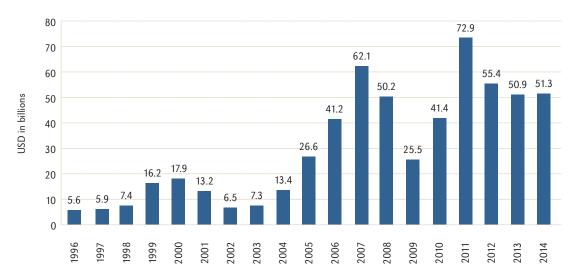
Note: Does not include fund-of-funds, infrastructure funds

Chart II Commitments to European Private Equity Partnerships by Sector



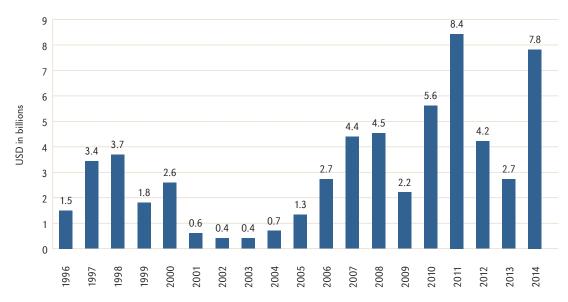
Source: Probitas Partners

Chart III Commitments to Asian Private Equity Partnerships



Source: Asian Venture Capital Journal; 2014 number is preliminary

Chart IV Commitments for Latin American Private Equity Partnerships



Source: EMPEA

"Private equity activity as a percentage of all mergers and acquisitions activity edged to a new all-time high"

Deal Volume and Capital Overhang

Funds are raised to be profitably deployed during their investment periods. At a high level, deal volume and capital overhang statistics offer some insight into that process and where we are in the cycle.

Global Deal Making

- Global private equity deal volumes increased significantly in 2014, driven by a very small number of mega deals, though they are still far below the peak year of 2006 (Chart V).
- Private equity activity as a percentage of all mergers and acquisitions activity edged to a new all-time high in 2014 of 21.9%. In the past, levels this high have usually indicated that private equity sponsors have been more likely to outbid strategic acquirers, often a danger signal on deal pricing.
- 2014's dollar deal volume was driven by a few very large transactions; the number of transactions only increased by 6% while dollar volume increased over 40%.

Chart V Global Private Equity Deal Volume and Percentage of Mergers and Acquisitions Activity



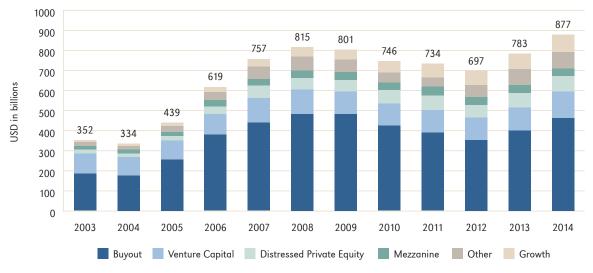
Source: Thomas Reuters

Capital Overhang or "Dry Powder"

- Dry powder or capital available for deployment continued to increase in 2014, exceeding the peak level reached at the end of 2008. This follows a decline in dry powder from 2010 through 2012, as capital raised during the market peak years was invested slowly coming out of the Financial Crisis (Chart VI).
- Buyout funds drive the capital overhang numbers; buyouts remain the largest sector of the global private equity market, and buyout dry powder increased 16% during the year.
- North America is the largest private equity market and has the largest capital overhang (Chart VII), but these totals include a number of U.S. headquartered mega buyout funds that invest globally.

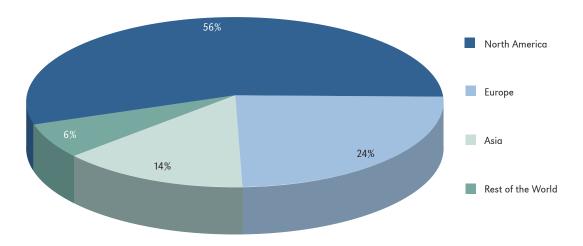
"Dry powder ...
increase[d] in
2014, exceeding
the peak level
reached at the
end of 2008"

Chart VI Private Equity Dry Powder by Investment Strategy



Source: PREQIN

Chart VII Private Equity Dry Powder by Geography, December 2014



Source: PREQIN

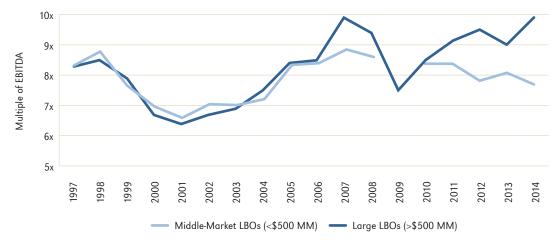
The Buyout Market: Investor Focus and Concerns

Buyouts are the largest segment of the North American and European private equity markets. Consequently, the key factors impacting buyout investments significantly impact the performance of most institutional private equity portfolios. Those factors include:

Purchase Price Multiples

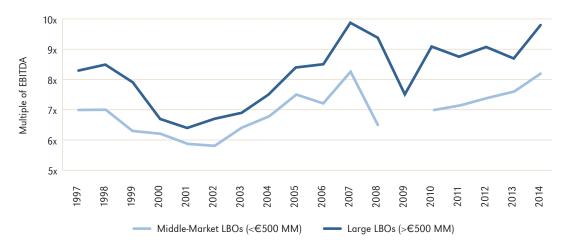
- Purchase price multiples at the large end of the market in both the United States and Europe increased sharply in 2014 after moderating in 2013 (Charts VIII and IX).
 The pattern for middle-market buyouts, however, was mixed as multiples declined in the United States and increased in Europe.
- The premium paid for large buyout deals compared to middle-market buyout deals has increased during this cycle in the United States and remains wide in Europe, causing increased interest in middle-market buyouts as investors search for more attractive deal entry prices.
- The current high purchase price multiples offer an excellent opportunity to exit investments already in portfolio but make it more difficult to purchase new companies at attractive prices.

Chart VIII Average U.S. LBO Purchase Price/Adjusted EBITDA Multiples



 $Source: Standard \ \& \ Poor's \ LCD \ for \ middle-market \ LBOs, \ data \ from \ 2009 \ not \ statistically \ significant$

Chart IX Average European LBO Purchase Price/Adjusted EBITDA Multiples

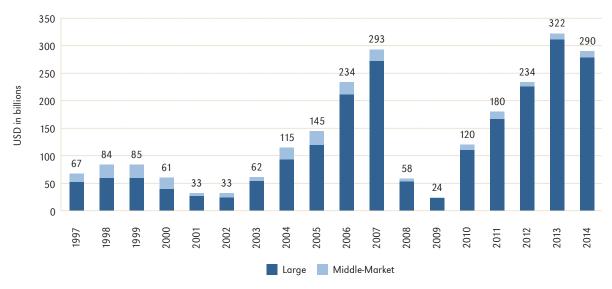


Source: Standard & Poor's LCD for middle-market LBOs, data from 2009 not statistically significant

Buyout Loan Volumes

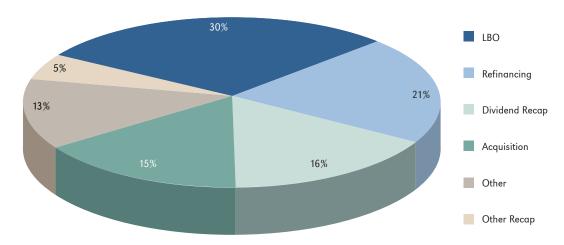
- U.S. loan volumes for sponsored transactions fell slightly in 2014 below 2013's all-time peak, and nearly equal to the 2007 pre-Crisis level (Chart X).
- Much of the loan issuance between 2010 and 2013 was used to refinance loans used to buy companies during the market peak. In 2014, as deal volumes increased, 30% of loans issued were to finance new leveraged buyouts, with another 15% used to finance add-on acquisitions made by portfolio companies (Chart XI). Loans used to refinance debt fell from 41% in 2013 to 21% in 2014.
- Over the last two years, investors hungry for yield have demonstrated increased willingness to take on "covenant-lite" structures in volumes not seen since the market peak.
- European loan activity fell in 2014 from its 2013 post-Crisis high (Chart XII). The Eurozone continued its slow economic recovery with many European banks still under stress a scenario that led to the creation of a number of private funds that provide senior debt in support of buyouts or other corporate purposes, and whose activity is not reflected in this chart.

Chart X U.S. Leveraged Sponsored Loan Volume



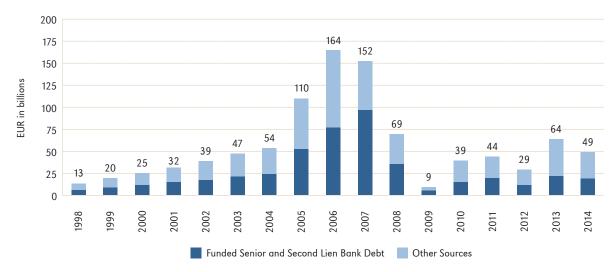
Source: Standard & Poor's LCD

Chart XI U.S. Leveraged Sponsored Loan by Purpose, 2014



Source: Standard & Poor's LCD

Chart XII European Buyout Loan Volume



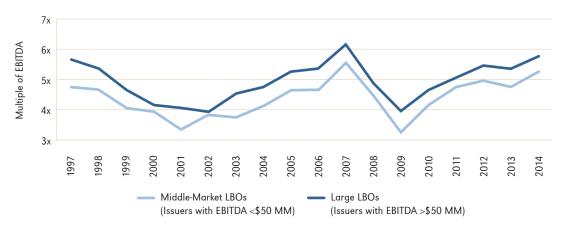
Source: Standard & Poor's LCD

Note: Reflects total sources of funding of initial and secondary buyouts by a private equity firm — excludes recaps, refinancing, etc.

Debt Multiples

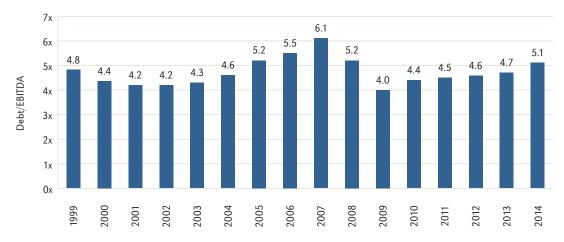
- Debt multiples on new corporate LBO loans in the United States and Europe increased noticeably in 2014 (Charts XIII and XIV) as deal volume increased.
- In the United States they advanced to nearly their pre-Crisis peak (and exceeded their previous 1997 peak) while a significant gap remained between middlemarket and large buyout multiples.
- Though debt multiples increased in Europe, they are still significantly below their pre-Crisis levels.

Chart XIII Average Debt Multiples of U.S. Corporate LBO Loans



Source: Standard & Poor's LCD

Chart XIV Average Debt Multiples of European Corporate LBO Loans



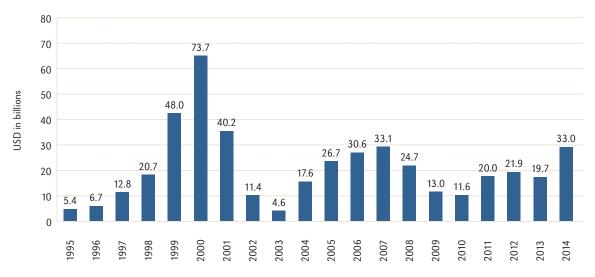
Source: Standard & Poor's LCD

U.S. Venture Capital

The U.S. venture capital market remains the largest, deepest, and longest-lived sector for venture investing and consequently sets the patterns for much of that market globally.

- After three years of flat fundraising, around the \$20 billion level, venture fundraising increased significantly in 2014 (Chart XV). However, this surge is still significantly below the amounts raised at the peak of the Internet Bubble in a fundraising trend line totally different from the buyout markets.
- U.S. venture returns (Table I) give further insight. 10-year horizon returns for venture capital have been weak since the bursting of the Internet Bubble in 2000, punctuated by negative 10-year horizon returns in 2010, though they have been steadily clawing their way back. The strong IPO market in the second half of 2013 and early 2014, evidenced by high level of current 1-year returns in the table, helped drive the surge in 2014 fundraising.
- A look at the ten largest funds raised in 2013 and 2014 (Table II) highlights other differences in fundraising between these two years. Though in both years the ten largest funds made up roughly 40% of overall fundraising, the 2014 funds skew much more towards late stage and growth capital investing.
- Probitas Partners' recent private equity survey highlights investor interest in venture capital sectors going into 2015 (Chart XVI). Notable is the lack of interest in pure cleantech funds as well as that 34% of respondents say they do not invest in venture capital, down from 44% last year. For the first time this year we also asked about interest in venture debt funds, which as expected, was quite low.

Chart XV Commitments to U.S. Venture Capital



Source: Private Equity Analyst

Table I U.S. Venture Capital Index Returns: IRR

For the Period Ending	Quarter	1-Year	3-Year	5-Year	10-Year	15-Year	20-Year
June, 30 2014	3.0	29.2	13.8	14.8	10.3	13.1	34.0
June, 30 2013	4.3	8.9	13.5	5.7	7.8	22.8	30.1
June, 30 2012	0.6	6.0	12.7	4.9	5.3	27.5	27.9
June, 30 2011	7.0	26.3	4.3	7.4	1.3	30.9	27.4
June, 30 2010	0.4	6.4	-2.7	4.4	-4.2	38.1	24.3
June, 30 2009	0.2	-17.1	1.3	5.7	14.3	36.3	22.7

Source: NVCA, Cambridge Associates

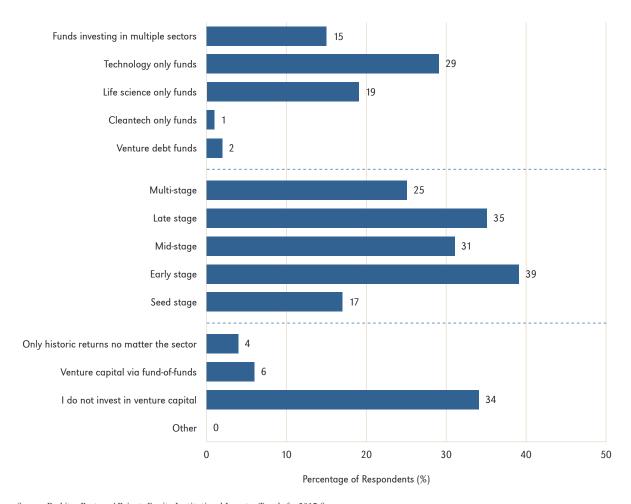
Table II Venture Capital Concentrations

Ten Largest VC Fundraises of 2	2013	Ten Largest VC Fundraises of 2014		
Fund	Capital Raised USD MM	Fund	Capital Raised USD MM	
Insight Venture Partners VIII	\$2,576	Tiger Global Private Investment Partners IX	\$2,500	
Greylock IV	\$1,017	Technology Crossover Ventures VIII	\$2,230	
Orbimed Private Investments V	\$735	Andreessen Horowitz Fund IV	\$1,500	
General Catalyst Group VII	\$675	Tiger Global Private Investment Partners IX	\$1,500	
SAP Ventures Fund II *	\$651	J.P. Morgan Digital Growth Fund II	\$1,184	
Battery Ventures X	\$650	Accel Growth Fund III	\$1,000	
Sequoia Capital US Venture Fund XIV	\$553	Founders Fund V	\$1,000	
Third Rock Ventures III	\$516	KPCB Digital Growth Fund II	\$750	
Matrix Partners X	\$450	Bain Capital Venture Partners 2014	\$718	
Spark Capital IV	\$450	Canaan X	\$675	
Total Top Ten	\$8,273	Total Top Ten	\$13,057	
Total Number of Funds That Raised Capital	205	Total Number of Funds That Raised Capital	317	
Ten as Percent of Total Fundraising	42%	Ten as Percent of Total Fundraising	40%	

Source: Probitas Partners; * SAP AG is the sole investor in the fund

Chart XVI Most Attractive Venture Capital Sectors

In venture capital, I focus on funds active in the following sectors or stages (choose all that apply):



 $Source: Probitas\ Partners'\ Private\ Equity\ Institutional\ Investor\ Trends\ for\ 2015\ Survey$

Distressed Private Equity

Investor activity in distressed private equity tends to be cyclical, surging as recessions roll through different economies or industry sectors, and then receding to more normal baseline levels. However, the Global Financial Crisis and its long aftermath have been anything but normal:

- The risks presented by the Global Financial Crisis were so intense that governments worldwide pumped unprecedented levels of liquidity into the system, an action that spurred more refinancings than bankruptcies.
- Correlations across different geographies and asset types seemed to converge in late 2008 and early 2009, reducing the benefits of diversification.
- Banking regulators globally eased pressure on banks' distressed loan portfolios in the face of the Global Financial Crisis, granting them more leeway to "kick the can down the road" or "amend, extend and pretend" rather than deal proactively with troubled assets.
- As a result, the "wall of debt maturities" that has frequently been discussed has been continually pushed back by ongoing waves of government created liquidity.
- To date, the "100-year flood" of distressed opportunities broadly anticipated in 2008 has become a more protracted affair, even as the Eurozone slipped into a second recession along with renewed central bank action.

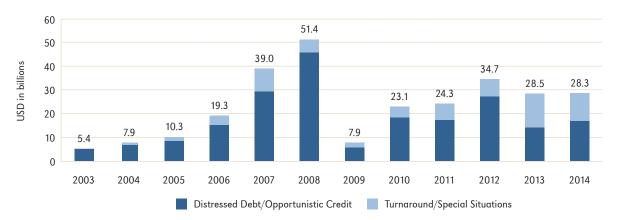
Where Do We Stand Now?

- Fundraising was up slightly for distressed private equity funds in 2014 (Chart XVII), driven by larger interest in distressed debt and opportunistic credit funds.
- The largest funds tend to have global mandates with the ability to shift resources depending upon where opportunities present themselves. The North American market remains the largest and longest-lived distressed private equity market (Charts XVIII and XIX). Asia is a newer geography for distressed investing, and most funds focused on Asia are special situations vehicles.
- Many funds in the distressed sector run hybrid strategies that combine various skill sets to address different sectors. Going into 2015, investors seeking exposure in "pure play" distressed strategies remained most focused on value-added approaches that can generate attractive multiples (Chart XX). Distressed debt for control strategies, though popular with investors, are becoming more difficult to execute as increased competition makes it more difficult for fund managers to build positions that will give them a controlling stake in a company at an attractive valuation.

"The '100-year flood' of distressed opportunities broadly anticipated in 2008 has become a more protracted affair"

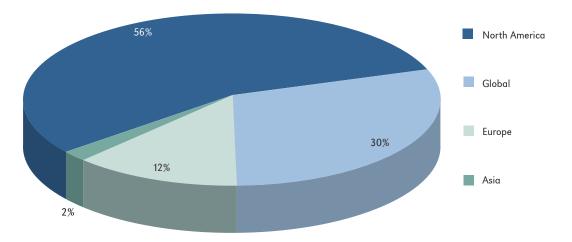
- For the first time in Probitas Partners' surveys, no respondents indicated an interest in distressed debt trading strategies.
- Opportunities for distressed investing do not march in lock step globally or in different market sectors. Many investors feel that the phased implementation of Basel III over the next couple of years will result in increased asset sales from European banks, and activity in that sector increased in 2014.
- The pattern of strongly increasing high-yield bond issuance followed by a sharp increase in default rates (Chart XXI provides the U.S. example) did not occur this cycle. Default rates remain extremely low, in large part because much of the bond and loan issuance over the last five years has been driven by refinancings instead of new issuance, a situation driven in large part by central bank liquidity policies and regulatory forbearance. In reaction, certain strategies in distressed private equity have broadened beyond corporate debt and also toward stressed but not distressed situations, moving a bit more into the private debt arena.
- Abnormally low interest rates have papered over problems at a number of companies, but have not solved those problems. As central banks move to allow higher interest rates, default rates are likely to increase as well.

Chart XVII Global Distressed Private Equity Fundraising



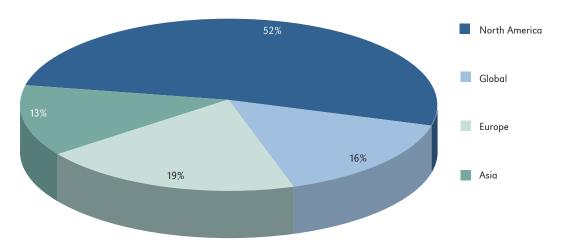
Source: Probitas Partners

Chart XVIII Capital Raised for Distressed Debt/Opportunistic Credit Funds, 2014 by Geography (In terms of USD raised):



Source: Probitas Partners, PREQIN, Private Equity Analyst

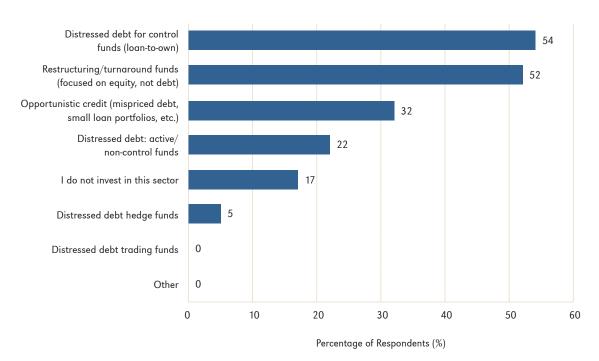
Chart XIX Capital Raised for Turnaround/Special Situations Funds, 2014 by Geography (In terms of USD raised):



Source: Probitas Partners, PREQIN, Private Equity Analyst

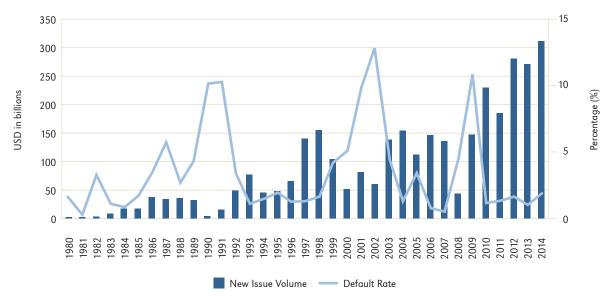
Chart XX Distressed Investments

Within the distressed debt/restructuring sector, I am most interested in (choose no more than two):



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2015 Survey

Chart XXI High-Yield Bond Issuance and Annual Default Rates: 1980–2014



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

Asia

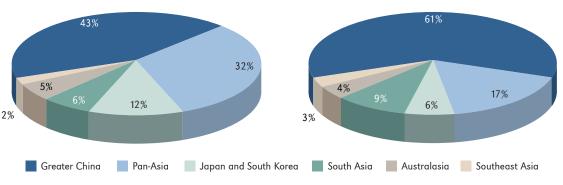
Asia is distinctively split between the developed economies of Australia, Japan, and South Korea and the emerging markets of China, India, and Southeast Asia. In the emerging markets, growth capital — not control buyouts — continues to drive overall activity.

- As noted in Chart III (on page 8), commitments for Asia-focused funds remained fairly flat in 2014, but is still 30% less than 2011 peak.
- There was a marked shift in geographic focus between 2011 and 2014 (Charts XXII and XXIII) from Greater China funds to Pan-Asian funds, driven by the closings of a number of Pan-Asian funds such as Barings, Carlyle Asia, CVC Asia, Morgan Stanley Asia, and TPG Asia. However, growth capital funds regained their spot as the most popular fund strategy (Chart XXIV).
- Fundraising for China-focused funds denominated in both U.S. dollars and RMB increased in 2014 due to a steep increase in funds denominated in U.S. dollars (Chart XXV). However, continued concerns over slowing economic growth meant that fundraising focused on China was still 45% off its 2011 peak.
- Even with these declines, China is still the primary focus for investors targeting Asia (Chart XXVI). Pan-Asian funds continue to be of strong interest to investors and, because these funds tend to be very large, they have an outsized impact on fundraising totals. Southeast Asia continues to attract significant interest in our investor surveys, while the Australian market is also targeted by a number of the respondents to Probitas Partners' latest survey. Interest in Japan, which had rebounded going into 2014 in reaction to hopes for a positive impact on private equity of Abenomics, has fallen back as investors looked forward to 2015. Interest in India, on the other hand, has picked up in the wake of its latest general election.

"China is still the primary focus for investors targeting Asia"

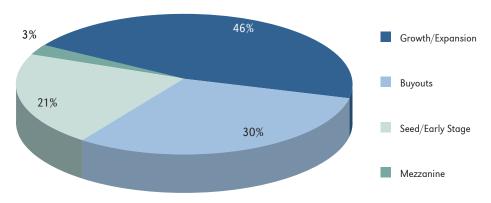
Chart XXII Asian Fund Commitments by Geography, 2014

Chart XXIII Asian Fund Commitments by Geography, 2011



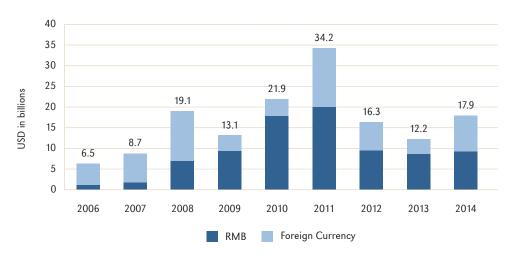
Source: Asia Private Equity Research Note: South Asia covers India, Pakistan, Sri Lanka and Bangladesh

Chart XXIV Fund Strategies for Asia-Focused Funds, 2014



Source: Asia Private Equity Research

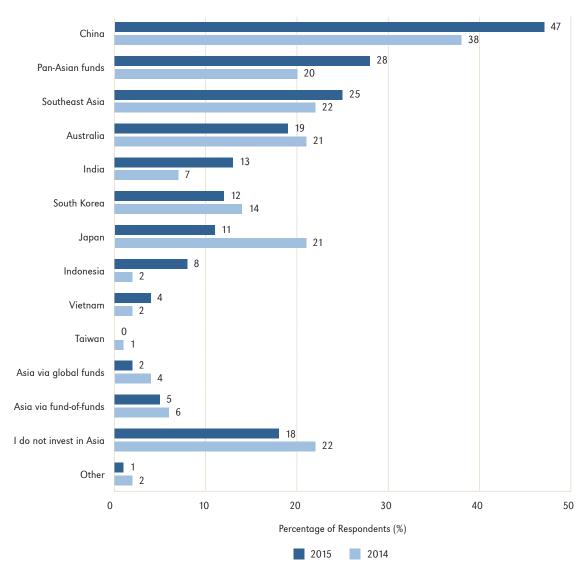
Chart XXV Commitments to China-Focused Funds by Fund Denomination



Source: Asia Private Equity Research

Chart XXVI Most Attractive Asian Markets

Which Asian markets do you find most attractive at the moment (choose no more than three):



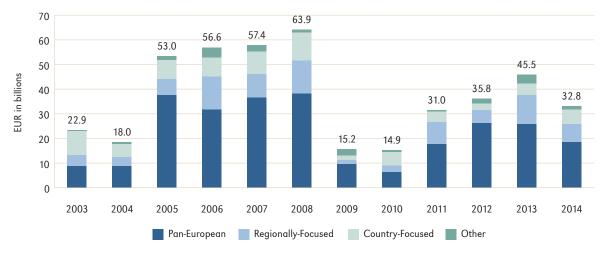
Source: Probitas Partners' Private Equity Institutional Investor Trends for 2015 Survey

Europe

Europe is the most developed private equity market with the longest history after the United States and is dominated by buyout funds. It is also a market under lingering pressure from a slow recovery after the Global Financial Crisis.

- As detailed in Chart II (on page 7), buyout/growth capital fundraising decreased nearly 30% in 2014, triggering a steep decline in overall European fundraising. As Chart XXVII shows, the reason for that was a significant decline in Pan-European and larger regionally focused funds. A number of these funds raised amounts of capital in 2013 and had cleared the market as 2014 began.
- On the other hand, amounts committed to country-focused funds actually increased by over 20% during the year. Though this sector dominates the market in Europe in terms of number of funds, each individual fund tends to be much smaller than its Pan-European brethren.
- Looking forward, our survey indicated strong interest in middle-market country-focused funds, especially those targeting the stronger economies of Northern Europe (Chart XXVIII) with interest in Central and Eastern Europe being notably weak even before the ongoing dispute between Russia and Ukraine.
- The most noticeable shift in interest between 2014 and 2015 was an increase in those targeting Spain, a trend that is even more marked among European respondents to our survey. It reflects the feeling that Spain has bottomed out and attractive private equity opportunities are increasing.
- Venture capital fundraising in Europe fell in 2014, the opposite of the trend in the United States (Chart XXIX). Investors were most interested in European venture funds that focus on technology, but it remains very much a niche at a fraction of U.S. fundraising. The best European fund managers continue to struggle to achieve comparable returns to top tier U.S. managers.

Chart XXVII Commitments to European Corporate Finance Funds by Geography

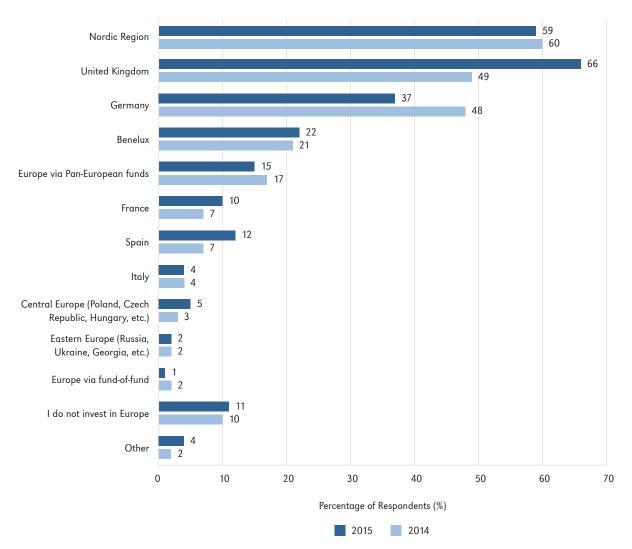


Source: Probitas Partners

Note: "Other" includes commitments to funds with a geographical focus on Eastern Europe, Cyprus, Greece, and Turkey

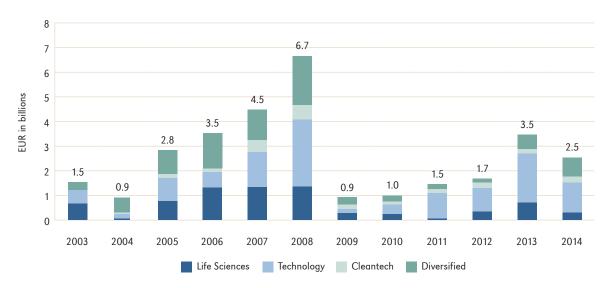
Chart XXVIII Most Attractive European Markets

For European country/regionally-focused funds, I find the most attractive markets to be (choose no more than three):



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2015 Survey

Chart XXIX Commitments to European Venture Capital Partnerships



Source: Probitas Partners

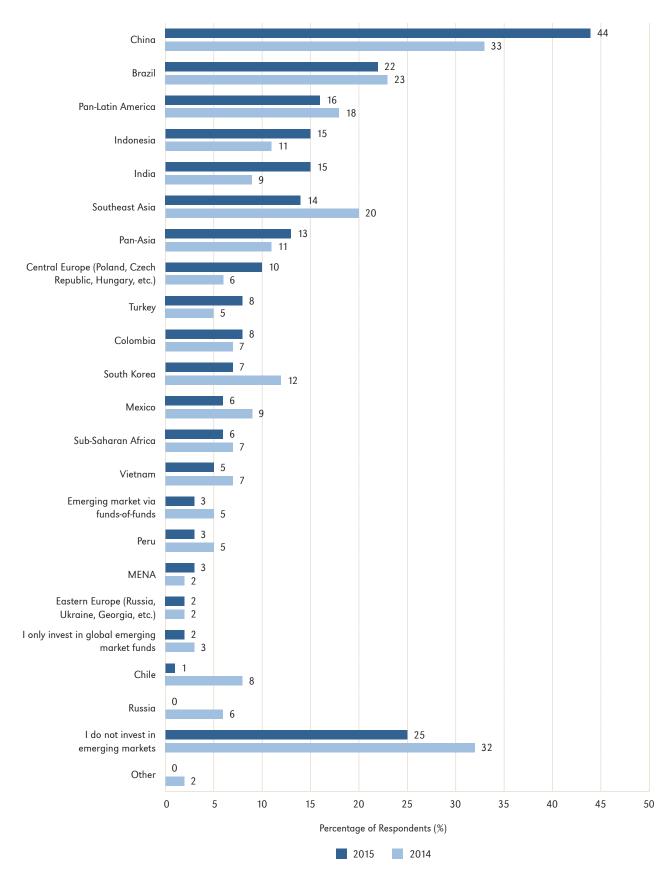
Emerging Markets

Private equity fundraising for emerging markets in its various country or regional sectors are a series of niche markets for which investor interest can vary strongly year-to-year based upon economic, political, regulatory, or technical factors. Sanctions against Russia over the Ukraine conflict and the closure of the IPO market in China in 2013 provide some recent negative examples. 2014's surge of Latin American fundraising, driven in large part by the fact that three of the five largest managers in Latin America all launched substantial funds last year that accounted for more than 60% of total fundraising, is a positive example.

- Though a number of investors still have concerns about China's economy, interest in China significantly rebounded going into 2015 (Chart XXX). China is by far the most developed private equity sector in the emerging markets; funds targeting China raised \$17.9 billion last year.
- At the other end of the BRICs scale is Russia. It has never been a major target for private equity investors, but in this year's survey literally no respondents were targeting it.
- A quarter of the respondents to the survey were not interested at all in investing in the emerging markets — though that is an improvement on the 32% who had no interest in emerging markets in last year's survey.
- There is increasing interest in the Andes region in Latin America as a number of investors look to diversify their exposure away from heavy concentrations on Brazil.
- The EMPEA has reported that 2014 was the largest year ever for commitments raised for funds focused on Sub-Saharan Africa, with \$4 billion raised.

Chart XXX Emerging Markets

Which emerging markets do you find most attractive (choose no more than four):



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2015 Survey

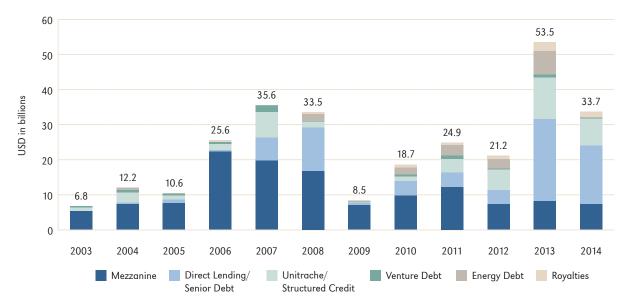
Private Debt Markets

Private debt markets are going through a period of turmoil and expansion that is creating new opportunities. In response to stresses at banks in North America and especially Europe, a number of new private vehicles have been launched targeting direct lending/senior debt while other sub-sectors have gained in importance as well.

- Probitas Partners tracks fundraising in six different private debt sectors:
 - Mezzanine, targeting subordinated debt with equity kickers.
 - Direct lending/senior debt, targeting senior debt investments made either directly or through secondary markets.
 - Unitranche/structured credit, funds that operate across the credit spectrum, often using preferred or common equity as well.
 - Venture debt, usually targeting early stage venture capital backed companies with a focus on generating returns through equity warrants.
 - Energy debt, funds focused on energy sector debt investments (unusual because most debt funds are diversified by industry).
 - Royalty funds, which invest in royalty income streams from patented products, mainly in the life sciences sector, which often have bond-like characteristics.
- Fundraising for these sectors was strong in 2014, but off the all-time peak of 2013 (Chart XXXI). Though mezzanine is the longest-lived and historically the deepest sector of the market, direct lending/senior debt and unitranche/structured credit funds have eclipsed it over the last three years.
- Energy debt had by far its largest fundraising year in 2013 but interest plunged substantially with the oil price fall in 2014.
- As far as geography is concerned, funds focused on North America and funds with a global mandate have tended to lead the market, but interest in Europe has surged over the last two years led by direct lending/senior debt funds (Chart XXXII). Asia and other emerging markets remain a small part of the market.
- Investor allocations to private debt vary tremendously, with certain investors placing investments into specific allocations to illiquid credit, others making commitments from special situations or tactical allocation buckets, while others make investments from private equity allocations — at least for certain strategies.
- There are a few investors who include distressed debt, real estate debt, and infrastructure debt into overall credit allocations, though many more investors consider these as part of distressed private equity, real estate, or infrastructure allocations, respectively.

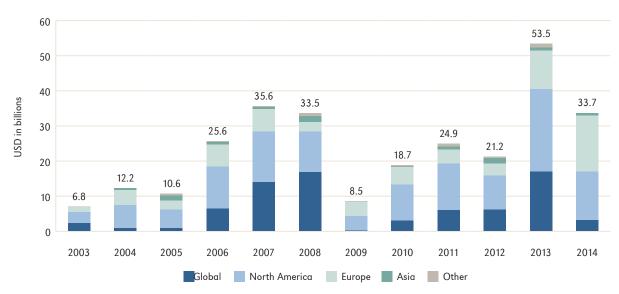
"Fundraising ...
was strong in
2014, but off the
all-time peak
of 2013"

Chart XXXI Global Private Debt Fundraising by Strategy



Source: Probitas Partners

Chart XXXII Global Private Debt Fundraising by Geography



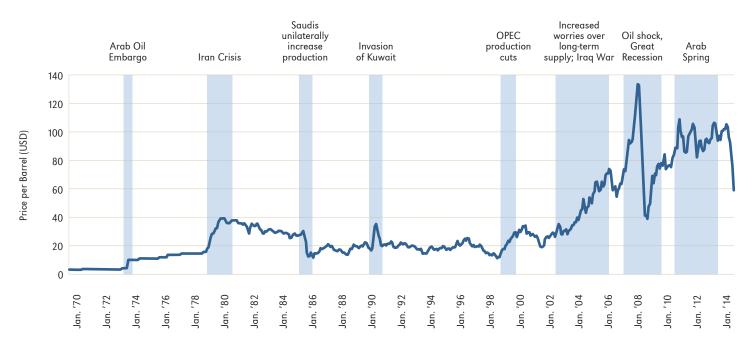
Source: Probitas Partners

Energy and Private Equity

Over the past five years investing in the energy sector had been of increasing interest to private equity investors, especially vehicles targeting fracking and other alternative production strategies in North America. As detailed in the previous section on private debt, there was also strong interest in energy debt during 2012 and 2013. The dramatic drop in oil prices that began in the summer of 2014 has upset those trends.

- The price of oil has a history of being stable for long periods interspersed with periods of extreme volatility and sharp price movements (Chart XXXIII). Many of the sharpest movements have been driven by political issues, and though over the long run the trend has been towards increasing prices, many of the changes have quickly reversed themselves before settling in at a new equilibrium.
- The current fall in oil prices has been caused by dramatically increased production in the United States driven by alternative methods of production coupled with Saudi Arabia's decision (for various reasons) to maintain production levels even as prices have fallen.
- Natural gas production and pricing in the United States tells a different story driven by similar factors. Chart XXXIV details U.S. natural gas prices over the last 20 years. Because natural gas is more difficult to transport overseas, its pricing is more dominated by local factors. Alternative production technologies and dramatically increased natural gas supply had a more immediate impact on U.S. natural gas prices, which have been relatively low over the last six years.
- The current steep decrease in oil prices is having a significant impact on a number of companies in private equity portfolios, dragging down reported performance. At the same time, it is also presenting new investment opportunities in energy companies under stress. In fact, there have recently been a few funds launched specifically targeting distressed energy investments, both in equity and debt. The depth of this opportunity, however, is highly dependent upon how long prices will be depressed and where prices stabilize factors impossible to predict at this point.

Chart XXXIII Crude Oil Prices, West Texas Intermediate, 1970-2015



Source: Federal Reserve Bank of St. Louis, current dollar basis

Chart XXXIV Natural Gas Prices (Henry Hub), 1997-2014



Source: Energy Information Administration (EIA)

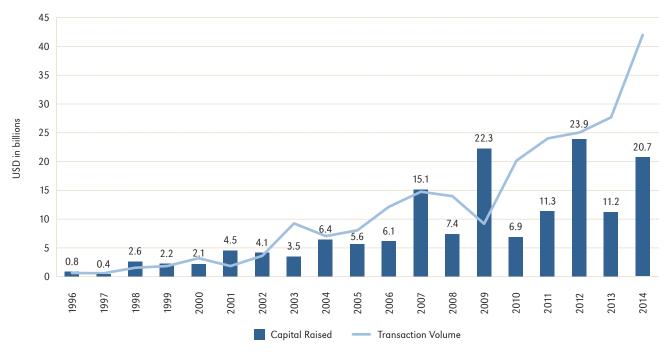
The Secondary Market

The secondary market for private equity has expanded rapidly over the last decade as more sophisticated investors have turned to secondaries as an investment management tool.

- Fundraising for secondary fund specialists rebounded strongly in 2014, though still below its all-time high of 2012 (Chart XXXV). Historically, fundraising in the sector has been volatile year-to-year driven more to the timing of a few large funds coming to market rather than any sharp change in investor interest.
- Secondary market transaction volume hit a dramatic new high in 2014, substantially above specialist secondary fundraising.
- This surge in transaction levels highlights the fact that large, sophisticated investors are increasingly buying positions directly instead of investing through specialized secondary funds (Chart XXXVI). When combined with amounts targeting secondaries through primary funds-of-funds, the amount of capital focused on secondaries in Chart XXXV is understated substantially.

"Large, sophisticated investors are increasingly buying positions directly"

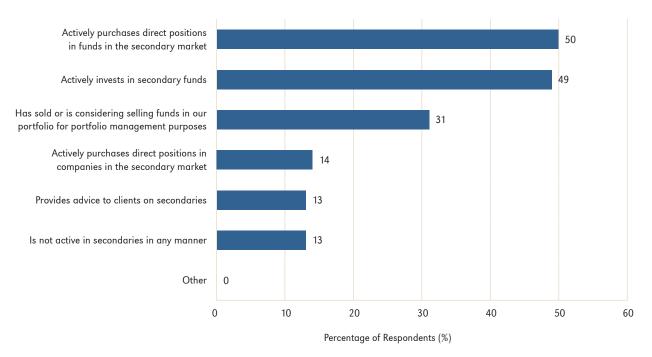
Chart XXXV Secondary Market Transaction Volume and Capital Raised by Secondary Fund Specialists



Source: Probitas Partners

Chart XXXVI Secondary Market Investments

In the secondary market, my firm (choose all that apply):



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2015 Survey

Real Assets

Real assets are a relatively new area of private equity investing with few funds in the sector having long track records, and consequently, long-term trend line analysis is not meaningful. The sector has developed impetus from sovereign wealth funds and public sector pension plans that are interested in assets that can act as an inflation hedge over a long investment horizon while providing some downside protection as well. In addition, many mature pension plans are interested in investments that generate some amount of current cash flow, as certain of these sectors do, to help meet their ongoing obligations to pensioners.

There are also a number of opportunistic strategies developing in certain sectors that focus on allied industries — such as food processing, storage, or logistics as opposed to investing strictly in agricultural land — in the same way that many buyout funds have invested for a long time in midstream energy companies are one step removed from direct exposure to commodity prices.

The sub-sectors of real assets that we track include:

- Agriculture: The newest sector with many first-time funds. The major focus is
 on producing farm or pastureland, though a number of funds will also invest in
 allied logistical areas. Certain of these funds focus on developed markets and
 fully developed producing properties, while other funds are more focused on
 transformative investments, often in emerging markets.
- Metals and Mining: Another newer area, though there are very few managers who have been active since the 1990s. As with agriculture, a few funds also invest in allied logistical areas. Many of these funds have some degree of exposure to emerging markets as these strategies are dependent on the location of the underlying resources.
- Oil and Gas: Though there are a number of private equity and infrastructure funds that invest broadly in energy, usually in midstream transactions, historically relatively few institutional funds invested solely in oil and gas exploration and production, though the fracking revolution in North America significantly changed that over the last five years. As covered previously, this sector is currently under some stress due to the sudden, steep decline in oil prices.
- *Timber*: Timber investing has the longest institutional investing history among real assets, though more of that investment has been made through separate accounts instead of through funds. The sector tends to be split into investments targeting slow growing hardwood and fast growing softwoods usually grown for pulp or chips.

Shipping and Aviation Assets: A few investors consider the purchase of ships or aircraft real assets, though there are very few funds in this sector. Though the underlying assets are certainly physical, they are not commodities. These markets are very cyclical and certain fund managers are focused on this sector through distressed private equity funds and not from real asset platforms.

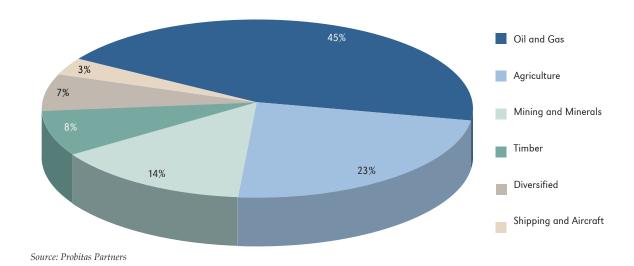
Infrastructure and real estate investing are two other sectors that certain investors include conceptually within real assets. However, these two asset classes are larger and better established, and most investors have separate, dedicated allocations for them.

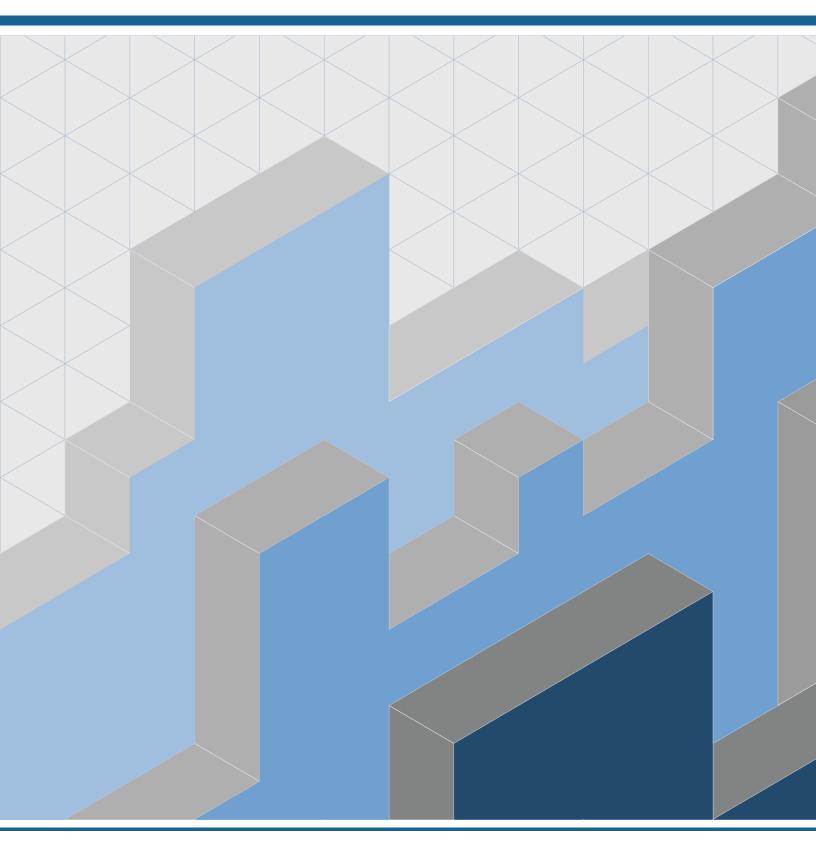
Chart XXXVII shows the sector focus of real asset funds raised in 2014; a total of \$8.2 billion was committed to the sector during the year. Though down considerably from 2013, oil and gas focused funds were still the largest sector of interest, followed by agriculture, which expanded during the year. It should be noted that there is a significant amount of fundraising done through separate accounts in the timber sector, so that activity is clearly understated.

Few institutional investors have dedicated allocations to all the sub-sectors of real assets. Depending on the individual fund strategy, they may invest through their private equity allocation or through inflation-linked or special situations mandates that have a broad investing remit. A few of them have specific allocations for narrow sectors such as timber. Many of these funds have significant emerging markets exposure, reflecting the geographic location of assets with strong competitive advantage — such as Brazilian soybean farms or Chilean copper mines.

Chart XXXVII Real Asset Fundraising, 2014 by Sector

(In terms of capital raised in USD):





Probitas Funds Group, LLC

425 California Street Suite 2300 San Francisco, CA 94104 USA

Tel: +1 415 402 0700

Probitas Funds Group, LLC

1120 Ave. of the Americas Suite 1802 New York, NY 10036 USA

Tel: +1 212 403 3662

PFG-UK Ltd.

1 Berkeley Street London W1J 8DJ UK

Tel: +44 (0)20 7016 9355

Probitas Hong Kong Limited

Nexxus Building Level 15 41 Connaught Road Central, Hong Kong Tel: +852 2533 3678

All rights reserved. Photocopy and reproduction permission is available from Probitas Partners by writing to John Murphy in the San Francisco office at jjm@probitaspartners.com. Any reproduction of this publication without Probitas Partners' prior consent is an infringement of copyright law. Confidential 2015 © Probitas Partners Private Equity Forecast and Desk Book for 2015