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probity (prō'bǐ·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 2017 Forecast and Deskbook*. The purpose of this paper is to offer our forward view of likely trends for 2017 and beyond based on our review of 2016 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 2016 and the details behind those trends.

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

CONTENTS

Private Equity Outlook2
Private Equity Deskbook 5
Deal Volume and Capital Overhang10
The Buyout Market: Investor Focus and Concerns 13
U.S. Venture Capital
Distressed Private Equity22
Asia27
Europe
Emerging Markets
Private Debt Markets
Real Assets
The Secondary Market

Private Equity Outlook

Increasing Focus on Risk — and Opportunity — in the Buyout Market

- High purchase price multiples, high leverage, increasing dry powder and increasing corporate bond defaults — these conditions are creating investor fears that we are reaching a new market peak for buyouts and that a recession (though not likely a financial meltdown like the Great Financial Crisis ["GFC"]) may be on the horizon.
- Though fears are increasing, there is no agreement on what the trigger event of a market downturn would be for this cycle — whether it would be mainly economic (such as a sudden fall in valuations or liquidity for mortgages or subprime car loans) or potentially a knock-on effect from a political event. Predicating which event would trigger a downturn, and exactly when, is extremely difficult.
- Certain experienced investors recognize that market down-cycles put downward pressure on purchase price multiples, creating a more attractive environment for acquiring companies likely to generate strong returns in the long run, and consequently seek to fund disciplined fund managers now to provide them with dry powder when prices fall.

Distressed Private Equity

- There are market signs that corporate debt defaults are at the beginning of a cyclical increase, driven at this point by the oil & gas and metals & mining sectors, but also with increasing weakness in the retail sector and the beginning of concern in hospitality. Increases in commodity prices late in 2016 relieved some of this pressure as we started 2017, but the retail sector remains weak.
- In addition to the market stresses noted above, central banks in the developed markets, that moderated the impact of the last distressed cycle by pumping massive liquidity into the system, have a much more limited toolkit today, that limits their ability to impact the market in an upcoming cycle.
- Many investors are looking more closely at opportunities in distressed debt, special situations or turnaround funds, though they are also being cautious. In 2006 and 2007 many investors felt that a "hundred-year flood" of distressed opportunities was coming but unanticipated actions by central banks and bank regulators reduced investing opportunities significantly.

Political Risk and Opportunity

The year 2016 brought political risk to the fore for alternative investors, along with its potential economic impacts in developed markets, with the Brexit vote and the election of President Trump surfacing issues likely to have wider impact on investments in several of the largest developed markets.

 Brexit: The electorate's decision to have the United Kingdom leave the European Union has generated uncertainty in the markets, especially in the UK. However, the details of how Brexit will be implemented and what framework "High purchase price multiples, high leverage, increasing dry powder and increasing corporate bond defaults—these conditions are creating investor fears"

that agreement would take, is meant to be a two-year process after formal notification has been made. As a result, the effects are happening in slow motion, with arguments going back and forth about potential differences between "soft" and "hard" Brexit (and a range of options in between), and the exact impacts of what specific options entail.

- Trump's administration: The results of the U.S. election caused the public markets to rise, driven by a general sense that the administration will be more business friendly. While change appears imminent, at this early point, few details are known and the actual impact of regulatory and other changes on specific industries or on foreign trade remains unknown.
- Frexit: Both the U.S. election and the Brexit vote have emboldened the National Front in France to the point of talk of Frexit creating the potential for more uncertainty in Europe. Conservative movements in other European countries are also testing the entire concept of the European Union, whose dissolution would have major economic impacts.

Venture Capital: Rebound or Bubble — or Deflation?

- Interest in venture capital increased in 2016 in both North America and Europe, with significant increases in fundraising. The market continued to shift towards a barbell approach quite different from the late 1990s that were dominated by early-stage funds.
 - 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 the Unicorns that seek to delay going public for various reasons and therefore require substantial additional private growth capital. However, as the market has developed over the last two years, several Unicorns have stalled out in both their growth rates and their private valuations, focusing the attention of many investors on the risk in these longer-term illiquid situations.
 - 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 — and therefore for new investors to access — a constraint not limiting growth capital funds.
- The Snap Inc.'s IPO in early 2017 brought the largest venture capital-backed offering to market in a long-time — though there is still a lot of discussion about whether this is the beginning of a new IPO trend or a one-off event.
- 10-year horizon returns for venture capital show continued strength as the "lost decade" that came after the bursting of the Internet Bubble recedes further into the past.

"Both the U.S. election and the Brexit vote have emboldened the National Front in France to the point of talk of Frexit creating the potential for more uncertainty in Europe."

Private Debt

- Private debt has grown into a major sector of alternative investing in Europe and North America, driven by regulatory changes imposed on banks since the GFC that have drastically impacted their ability to make high yield loans. Besides mezzanine debt funds, which have long been considered part of private equity allocations, direct lending funds targeting senior debt, subordinated debt and unitranche facilities have become increasingly important.
- Certain investors are also pursuing other structured debt strategies such as funds investing in debt secured by royalty streams — that they feel will both generate attractive returns and be less affected by a market down-cycle.
- Many of the fund managers in direct lending and structured credit are new, with limited track records before the GFC. The next few years may reveal how their portfolios perform under the stress of a market down-cycle.
- "Where will these investments reside in investors' portfolios?" The response to this is not uniform, and the answer depends upon an investor's perception of the risk/return spectrum. Mezzanine funds, which often combine subordinated debt, equity warrants and toe-hold equity positions, are most often found in private equity allocations, while funds focused on senior debt often receive commitments from fixed-income allocations. Other investors are creating risk-adjusted or special-purpose allocations that span the debt sector, sometimes including distressed debt and special situations funds that many investors consider part of private equity due to their focus on capital gains rather than current income.

"Private debt continues to gain in importance as a dedicated sector of alternatives, especially as banks continue to struggle with portfolio and regulatory issues."

Regulatory Issues: The SEC - Fees and Disclosure - and Dodd-Frank

- The U.S. Securities and Exchange Commission (SEC) has focused attention over the last year on fee calculations and fee disclosure for private equity funds. These issues have certainly caught the attention of major investors who are reviewing limited partnership agreements and financial statements provided by fund managers in much more detail.
- As far as the future is concerned, what exact role the SEC may play in the private equity industry is up in the air. One of the priorities of the Trump administration is to either repeal or significantly scale back Dodd-Frank with uncertainty for what that means for the relationship between the SEC and the private equity industry.

Private Equity Deskbook

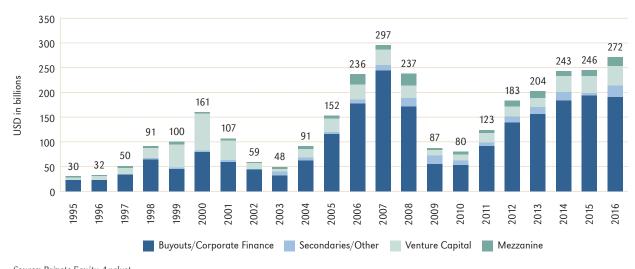
Fundraising

Global private equity fundraising was slightly up during 2016, with a small increase in North America and a large increase in Asia, offset to a degree by falls in Latin America and Africa. Many established private equity investors were both looking to redeploy capital returned to them through strong private equity exits and to boost private equity allocations in a weak return environment for many other asset classes.

North America

- Fundraising increased 10% compared to 2015's total (Chart I), though buyout funds, the largest sector of the market, declined slightly.
- Venture capital fundraising shot up 20% in 2016 for the largest year since its 2000 peak during the Internet Bubble.
- North America is the deepest and most developed private equity market, and data in Chart I clearly shows the three major market cycles in this market over the last 20 years the first cycle driven by the Internet Bubble and its bursting, the second cycle driven by debt pouring into corporate and asset-backed securities that ended with the GFC and the third cycle surge in fundraising over the last five years that has not yet turned down.
- Chart I is focused on capital raised for funds. Over the last decade co-investments and separate accounts investing alongside buyout funds have dramatically increased, and allocations to these are not included in the totals. This activity is difficult to track accurately, but at least as far as co-investments are concerned, it is not unusual for 20% to 30% of the capital deployed on a buyout fund to be matched with co-investments.

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

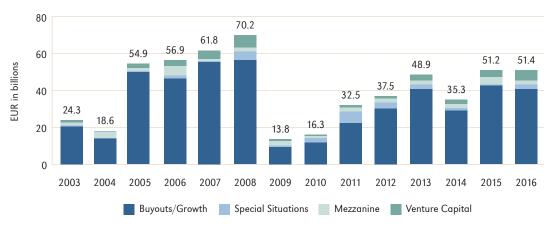


Source: Private Equity Analyst Note: Does not include fund-of-funds, infrastructure funds

Europe

- Fundraising in Europe was flat in 2016 after increasing by 45% during 2015.
 Buyout fundraising declined slightly while venture funding increased by 67% though off a very small base (Chart II).
- Buyout funds remain the largest sector of the European market, with investors heavily focused on the stronger economies of Northern Europe.

Chart II Commitments to European Private Equity Partnerships by Sector



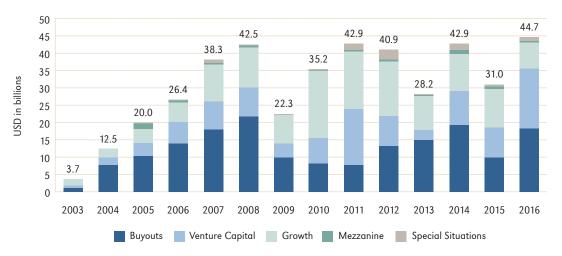
Source: Probitas Partners

"Fundraising in Europe was flat in 2016 after increasing by 45% during 2015."

Asia

- Asian fundraising rebounded in 2016, driven by increased interest in China and increasing commitments to buyout and venture capital funds (Chart III), while interest in growth capital slowed.
- Over the last five years, overall fundraising has been very volatile, flipping year-to-year with changing interest in China.
- The three largest sectors in the Asian market buyouts, venture capital, and growth capital usually make up 85% to 90% of the fundraising market.
- Though not detailed in Chart III, buyouts are dominant in developed markets, such as Japan and Australia, while growth capital is more important in the emerging markets.

Chart III Commitments to Asian Private Equity Partnerships by Sector

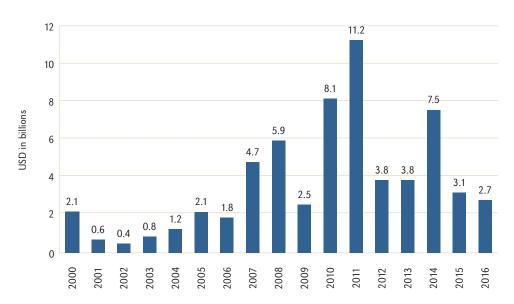


Source: Probitas Partners; PREQIN, as of February 2017

Latin America

- Fundraising for Latin America-focused funds remained low in part because of ongoing political and economic issues in Brazil and economic weakness in other major Latin American countries (Chart IV). Brazil's economy comprises over a third of Latin America's GDP and is dominant in Latin American private equity; it has a major impact on private equity throughout the region.
- H.I.G. Capital closed its largest fund targeting Latin America at \$740 million in 2016.

Chart IV Capital Raised for Latin American Private Equity Partnerships

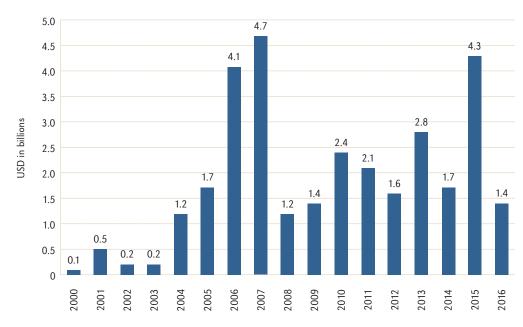


Source: PREQIN, as of February 2017

Africa

- African fundraising surged in 2015 with several investors beginning to target it for the first time, but new commitments fell by over 65% in 2016 (Chart V) as early adopters made their initial bets. Most of the funds active in the sector are regional vehicles targeting Sub-Saharan Africa or funds targeting South Africa (the largest economy in the region) or Nigeria (the second largest).
- The largest fund targeting Africa that held a final close last year was African Capital Alliance's fourth fund, raising a total of \$570 million.

Chart V Capital Raised for African Private Equity Partnerships



Source: PREQIN, as of February 2017

"[African fundraising]...fell by over 65% in 2016...as early adopters made their initial bets."

Deal Volume and Capital Overhang

Much of private equity is part of the larger mergers and acquisitions market, and trends in that market impact private equity — as does dry powder in private equity funds.

Global Deal Making

- Global private equity deal volumes fell sharply in 2016 (Chart VI). Overall
 mergers and acquisitions ("M&A") activity also fell from its 2015 high that
 was driven by a few very large public sector transactions.
- However, the steepest drop was in the first part of the year amid volatile public market prices and activity increased strongly in the second half of the year.
- Private equity as a percentage of total M&A fell in 2016 to 12.5% of the market from 14.9% in 2015 as private equity buyers became more conservative.

Chart VI Global Private Equity Deal Volume and Percentage of M&A Activity

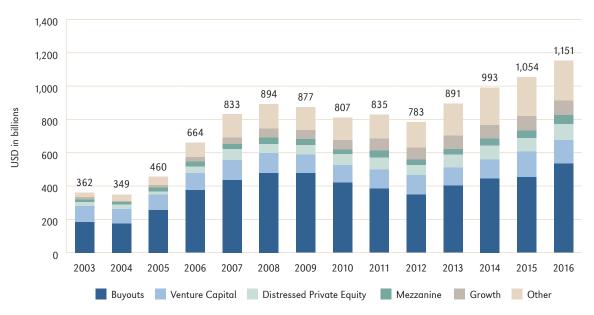


Source: Thomson Reuters

Capital Overhang or Dry Powder

- Dry powder continued its four-year trend of steeply increasing globally, hitting a new record of over \$1.2 trillion at the end of 2016 (Chart VII). This high level of dry powder is putting pressure on purchase prices and increasing competition among fund managers when buying or investing in companies.
- Buyout funds make up 46% of the overall dry powder total; they remain the largest sector of the global private equity market.

Chart VII Private Equity Dry Powder by Investment Strategy

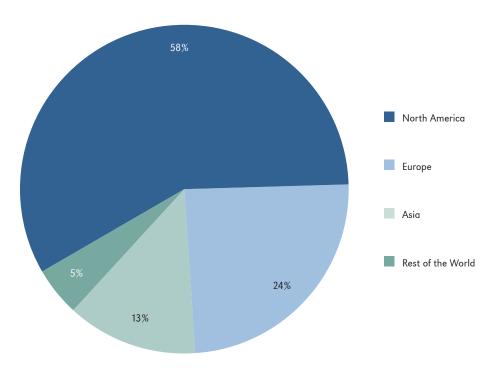


Source: PREQIN, as of February 2017

"Dry powder continued its four-year trend of steeply increasing globally, hitting a new record of over \$1.2 trillion"

- On a geographic basis, North America is the largest capital overhang with 58% of global dry powder (Chart VIII) with Europe following. The North American totals include several U.S.-based mega-buyout funds that invest globally.
- Dry powder for funds targeting emerging markets was the only sector that declined during the year 2016.
- The dry powder numbers do not include allocations to co-investment because they are not easily tracked, so these numbers are understated.

Chart VIII Private Equity Dry Powder by Geography



Source: PREQIN, as of February 2017

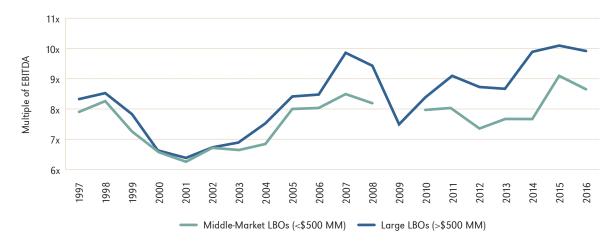
The Buyout Market: Investor Focus and Concerns

More money targets buyouts than any other private equity strategy, and they are the dominant strategy in the North American and European markets. Thus, key factors impacting buyout funds dramatically impact the performance of most institutional private equity portfolios.

Purchase Price Multiples

- Purchase price multiples for large buyouts in the United States fell slightly last year (Chart IX) but remained above the 2007 pre-GFC market peak. Middle-market multiples declined more sharply, but again they were still higher than the 2007 level.
- High purchase multiples offer an excellent opportunity to exit current investments for significant returns but make it more difficult to buy companies at attractive prices.

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

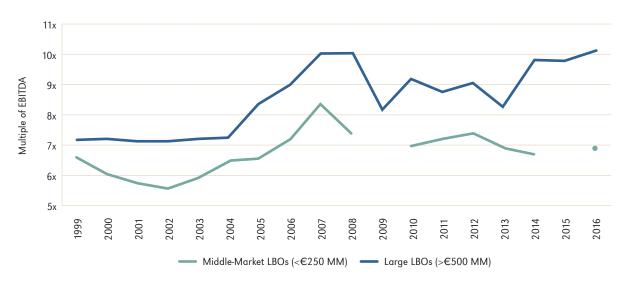


Source: Standard & Poor's LCD Note: For middle-market LBOs, data from 2009 not statistically significant

"High purchase multiples offer an excellent opportunity to exit current investments for significant returns but make it more difficult to buy companies at attractive prices."

- In Europe, multiples for large buyouts increased during the year and for the first time exceeded its 2008 peak (Chart X). In the middle market, there was not enough data available to calculate a statistically significant average in 2015, but the 2016 data shows a very large gap between large and middlemarket deals.
- In both the United States and Europe, the large gap in multiples between large and middle-market deals is one of the main reasons many investors target middle-market buyouts, searching for funds that target companies at more attractive purchase prices.

Chart X Average European LBO Purchase Price/Adjusted EBITDA Multiples



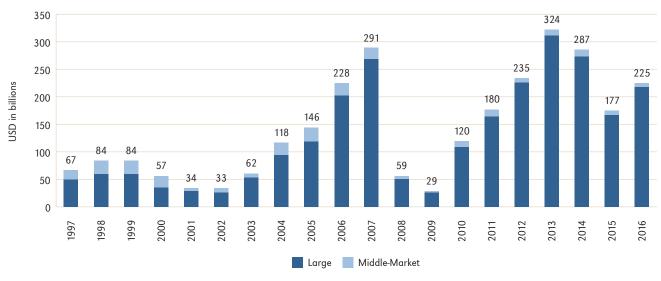
 $Source: Standard \ \& \ Poor's \ LCD$

 $Note: For\ middle-market\ LBOs,\ data\ from\ 2009\ and\ 2015\ not\ statistically\ significant$

Buyout Loan Volumes

U.S. loan volumes for sponsored transactions rebounded a little in 2016 from 2015's low level, but were still far below 2013's all-time peak (Chart XI). Notably, loan volumes for large transactions have risen to strong levels over the last five years, but middle-market activity has not come back nearly as much.

Chart XI U.S. Leveraged Sponsored Loan Volume

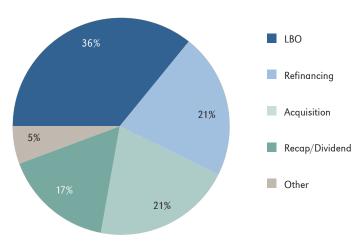


Source: Standard & Poor's LCD, as of February 2016

"loan volumes for large transactions have risen to strong levels over the last five years, but middle-market activity has not come back nearly as much"

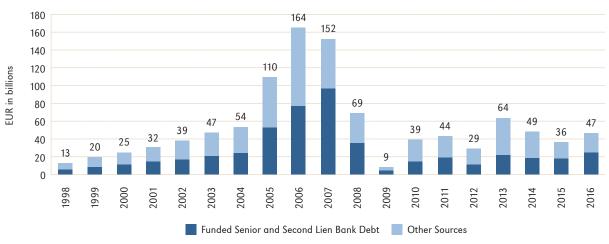
- The surge in loan issuance from the period 2010 to 2013 was driven more by the refinancing of sponsored loans already on the books instead of being used to buy new companies. That began to change over the last three years as deal volumes increased. For example, in 2016, 57% of loans issued were used to either finance new buyouts or to back add-on acquisitions, while in 2013 that number was 37% (Chart XII). Notably, the 2016 percentages were based on much lower volume than 2013.
- In Europe, loan activity supporting buyouts has not rebounded post-GFC with activity remaining very low (Chart XIII). Many European banks are under more stress than North American banks this has led to the creation of a large number of new private debt funds in Europe stepping into the bank's place.

Chart XII U.S. Leveraged Sponsored Loan by Purpose, 2016



Source: Standard & Poor's LCD

Chart XIII European Buyout Loan Volume



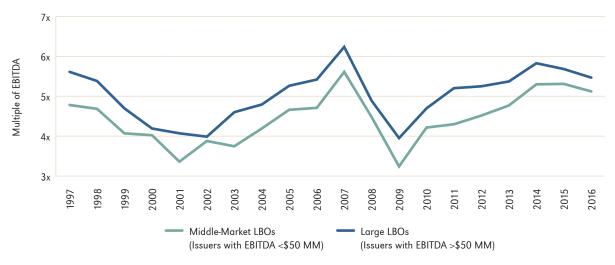
Source: Standard & Poor's LCD

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 loans supporting leveraged buyouts in both the United States and Europe fell slightly over the last two years (Charts XIV and XV), while deal volume decreased.
- In the United States, there was still a gap between large buyout and middle-market debt multiples, though it has narrowed over the last two years.
- Debt multiples in Europe over the last two years remained more than a full turn below their pre-GFC levels, as debt is still more difficult to access in Europe.

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



Source: Standard & Poor's LCD

Chart XV Average Debt Multiples of European Corporate LBO Loans



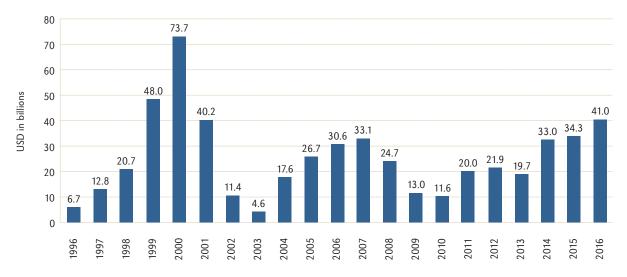
Source: Standard & Poor's LCD

U.S. Venture Capital

The largest and longest-lived sector for venture capital investing is the United States, and it is a target for investors globally. Trends in venture capital in this market often set patterns for much of the market.

- Fundraising set a new post-Internet Bubble high in 2016, increasing 20% from last year's commitments (Chart XVI), led by funds from Technology Crossover Ventures and Andreessen Horowitz.
- Venture capital fundraising is driven more by market events affecting key industry sectors such as technology, digital media or life sciences, than it is by the general economy.

Chart XVI Commitments to U.S. Venture Capital



Source: Private Equity Analyst

"Venture capital fundraising is driven more by market events affecting key industry sectors"

U.S. venture returns show a more mixed story (Table I). As of mid-year 2016, short-term returns fell substantially from the levels reported in 2015 and 2014. 10-year horizon returns, more indicative of returns over a fund's life, also declined slightly in 2016. Table I also shows that the dramatic fall in returns caused by the bursting of the Internet Bubble followed by a decade of weak returns has worked its way through the venture capital industry, culminating in negative 10-year horizon returns in 2010, though now showing up in the 15-year horizon returns. Recent 5-year horizon returns show strength, however.

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, 2016	0.7	-1.4	18.1	13.2	10.2	5.3	26.1
June 30, 2015	6.7	24.9	20.3	18.2	11.3	3.4	35.5
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: Cambridge Associates

- The ten largest funds raised in 2015 and 2016 (Table II) highlight other issues. 2015 seems to have been the recent peak year for concentration in the industry, with the ten largest funds comprising 46% of the money raised; this fell to 34% in 2016 as more funds were able to raise capital. In both these years investors were heavily focused on technology funds.
- Looking forward to 2017, Chart XVII covers investors expected interest in venture capital. Early-stage funds are clearly preferred as far as investment stage and cleantech funds are literally of no interest as far as industry sector. Also, 34% of limited partners say they do not invest in venture capital at all, and in conversations many investors say that it is extremely difficult to gain access to top performing managers. It should also be noted that this number has fallen from 44% only three years ago.

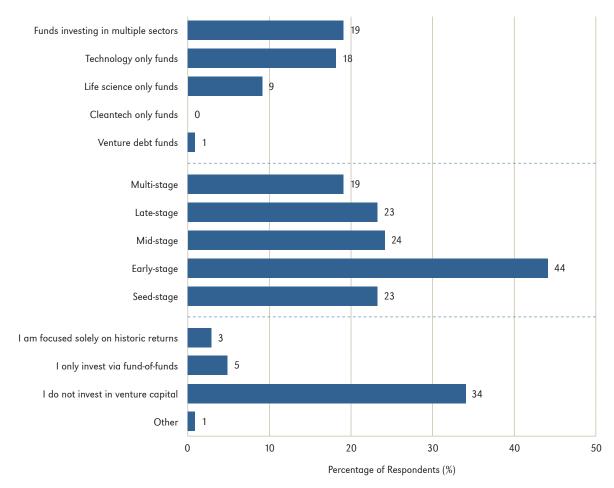
Table II U.S. Venture Capital Concentrations

Ten Largest U.S. VC Fundraise	s of 2015	Ten Largest U.S. VC Fundraises of 2016		
Fund	Capital Raised USD MM	Fund	Capital Raised USD MM	
Insight Venture Partners IX	\$3,446	Technology Crossover Ventures IX	\$2,500	
New Enterprise Associates 15	\$2,800	Andreessen Horowitz Fund V	\$1,500	
Tiger Global Private Investment Partners X	\$2,500	Institutional Venture Partners XV	\$1,400	
Bessemer Venture Partners IX	\$1,600	Founders Fund VI	\$1,300	
Institutional Venture Partners XV	\$1,400	KPCB Digital Growth Fund III	\$1,000	
Athyrium Opportunities Fund II	\$1,227	Greylock XV	\$1,000	
OrbiMed Private Investments VI	\$950	MF Venture Private Investments Infinity	\$950	
Vivo Capital Fund VIII	\$750	Lightspeed Venture Partners XI	\$715	
YC Continuity Fund	\$700	Thrive Capital Partners V	\$700	
Deerfield Healthcare Innovations Fund	\$550	Battery Ventures XI	\$650	
Total Top Ten	\$15,923	Total Top Ten	\$11,715	
Total Number of Funds That Raised Capital	337	Total Number of Funds That Raised Capital	235	
Ten as Percent of Total Fundraising	46%	Ten as Percent of Total Fundraising	34%	

Source: Probitas Partners; PREQIN, as of February 2017

Chart XVII 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 2017 Survey

"Early-stage funds are clearly preferred as far as stage"

Distressed Private Equity

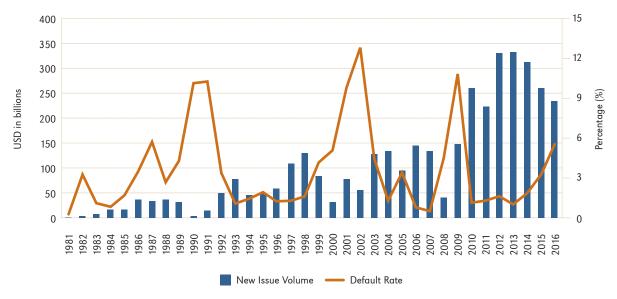
Investment activity in distressed private equity is usually countercyclical to returns in the buyout market, surging as recessions roll through different economies or industry sectors and falling when the buyout market is strong. That pattern did not exactly pan out in that way during the last recessionary cycle for several reasons:

- The risks in the Great Recession were so intense that central banks pumped unprecedented levels of liquidity into the market, causing a quick rebound after the sharp market fall and tilting the debt markets towards refinancing rather than bankruptcies.
- Globally, banking regulators reacted to the crisis by rushing to ease pressure on banks stressed and distressed portfolios, resulting in the trend to "amend, extend and pretend" rather than head to bankruptcy court.
- The "wall of debt maturities" that many investors expected to provide a "hundred-year flood" of distressed debt opportunities was instead washed away by ongoing waves of government and regulatory liquidity.

Where Do We Stand Now?

- Over the last 35 years there have been three cycles of sharply rising highyield bond issuance followed by a sharp increase in default rates (Chart XVIII provides the U.S. example). During the 2007–2009 Great Recession, the spike in default rates was very sharp but was short compared to previous cycles.
- There has been a very high level of new issuance since 2010, to record levels, but as has been true with sponsored loans, much of this new issuance has been geared to refinancing old debt at lower interest rates.
- Default rates began to rise noticeably in 2015, and in 2016 they rose above the long-term average of 3.5%, driven by trouble in both the oil & gas and retail sectors. Though not obvious in the Chart XVIII, some of that default pressure abated late in 2016 as oil prices began to rise.

Chart XVIII High-Yield Bond Issuance and Annual Default Rates: 1981–2016

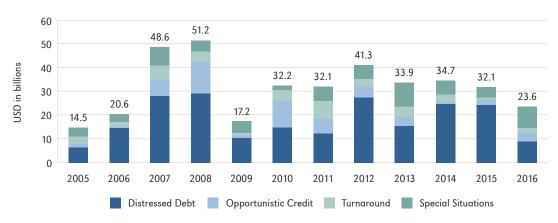


Source: SIFMA, Moody's

"Default rates began to rise noticeably in 2015 and in 2016 they rose above the long-term average of 3.5%, driven by trouble in both the oil & gas and retail sectors."

Even as defaults began to rise noticeably, fundraising for distressed private equity funds decreased last year (Chart XIX) driven by falls in commitments to distressed debt funds. However, distressed debt fundraising is dominated by a few very large funds in the market, and the decline in distressed fundraising may be more due to the specific timing of raises for large funds rather than a definitive market trend.

Chart XIX Global Distressed Private Equity Fundraising

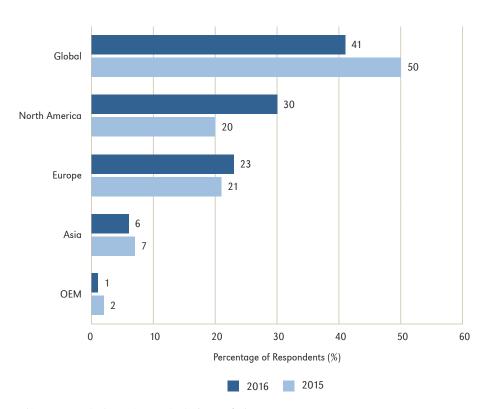


Source: Probitas Partners

"distressed debt fundraising is dominated by a few very large funds in the market, and the decline in distressed fundraising may be more due to the specific timing of raises for large funds rather than a definitive market trend" The funds with global mandates (more often focused on North America and Europe instead of being truly global) tend to be large and dominate the market (Chart XX). The funds targeting either North America or Europe specifically have strong adherents.

Chart XX Capital Raised for Distressed Private Equity Funds, by Geography

(In terms of USD raised)

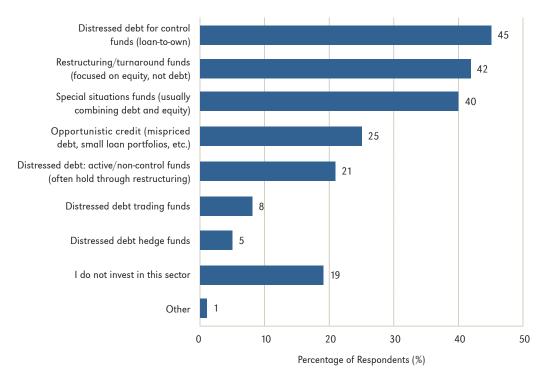


 $Source: Probitas\ Partners;\ PREQIN,\ Private\ Equity\ Analyst,\ as\ of\ February\ 2017$

- In distressed private equity, there are several funds that focus on "pure play" strategies (such as "loan-to-own" funds or equity turnaround vehicles), while others run hybrid strategies that combine various strategies in a single vehicle. Looking ahead to 2017, investors targeting "pure play" strategies remained most focused on investment approaches that can generate attractive multiples of return in the "loan-to-own," turnaround and special situations areas (Chart XXI). Though popular with investors, "loan-to-own" transactions are becoming more difficult to execute; increased competition and widely dispersed debt holdings make it more difficult to build a controlling stake in a company.
- Opportunistic credit funds that invest beyond corporate debt into such areas as stressed or distressed whole loan portfolios, asset-backed securities, residual positions in bankruptcy or niche areas such as shipping are also of interest to investors, with investments in this sector often coming from debt allocations as opposed to private equity allocations.

Chart XXI Distressed Investments

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



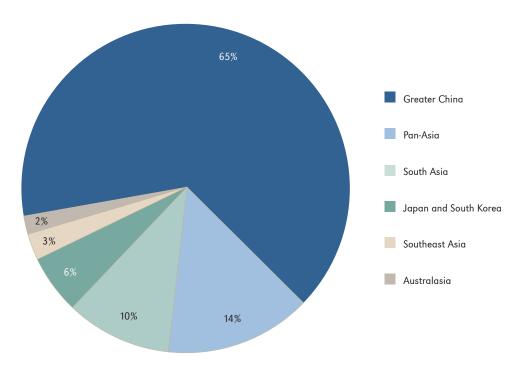
Source: Probitas Partners' Private Equity Institutional Investor Trends for 2017 Survey

Asia

In terms of development, Asia is split between the developed economies of Australia, Japan, and South Korea (where buyouts tend to dominate) and the emerging markets of China, India, and Southeast Asia (where growth capital is the more likely form of private investment). Funds targeting the emerging markets, as well as Pan-Asian funds which tend to straddle both sectors, drive Asian private equity.

- As noted in Chart III, fundraising for Asia rose in 2016, and this was driven by increasing interest in China. This is evident in Chart XXII where 65% of commitments to Asia last year came from funds targeting Greater China.
- Interest in Australasia was particularly low last year, with much more activity in infrastructure that is not tracked in this chart.

Chart XXII Asian Fund Commitments by Geography, 2016



Source: Probitas Partners

China-focused funds rebounded significantly in interest in 2016, though commitments were still below their 2011 peak (Chart XXIII). In China a significant portion of money raised is through funds denominated in the local currency, but last year's results were driven by funds denominated in foreign currency, with most of that activity in U.S. dollars.

Chart XXIII Commitments to China-Focused Funds by Fund Denomination



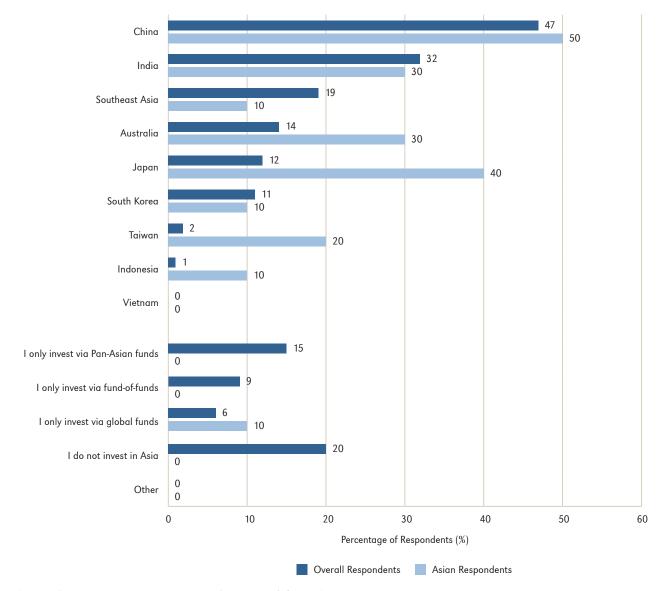
Source: Asia Private Equity Research, as of February 2017

"[China is unusual in that] a significant portion of money raised is through funds denominated in the local currency"

- Looking to 2017, China is also the focus for many investors targeting Asia (Chart XXIV) both among overall respondents to our survey and to Asian investors as well.
- Japan and Australia score higher in the Probitas Partners' survey as there were a larger number of Japanese and Australian respondents, and they strongly supported their home markets.
- On the other hand, Southeast Asia is a region with more support as an investment focus from investors outside Asia.

Chart XXIV Most Attractive Asian Markets

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



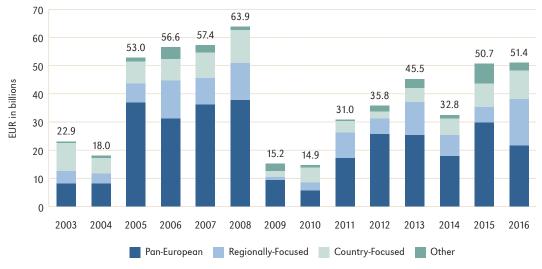
Source: Probitas Partners' Private Equity Institutional Investor Trends for 2017 Survey

Europe

The second most developed private equity market after the United States is Europe. It is dominated by buyout funds, with many funds focused on countries or regions where language and cultural affinity provide a competitive advantage.

- Commitments to Europe-focused funds ticked up slightly higher than in 2015 as detailed in Chart II, with buyout/growth capital fundraising leading the way as it usually does. As Chart XXV shows, a sharp increase in both regionally-focused and country-focused funds lead the way, with more of these funds reaching closes during the year.
- Looking towards 2017, our survey indicates strong interest in middle-market country-focused and regional funds, rather than Pan-European funds (Chart XXVI), though individual Pan-European funds are usually much larger. Investors are more interested in the stronger economies of Northern Europe, which are also the deepest private equity markets.
- The Brexit vote occurred in June 2016, and our survey was completed in October 2016. There was a significant decline in interest in the UK over the last year and, though not detailed in Chart XXVI, there was an even steeper fall in interest among Continental European and Asian investors.
- Similar to the United States, commitments to venture capital in Europe rose sharply in 2016 by 61% (Chart XXVII). In Europe, this was driven by strong interest in technology-focused and diversified funds, with nearly no money raised for cleantech.

Chart XXV Commitments to European Venture Funds by Geography

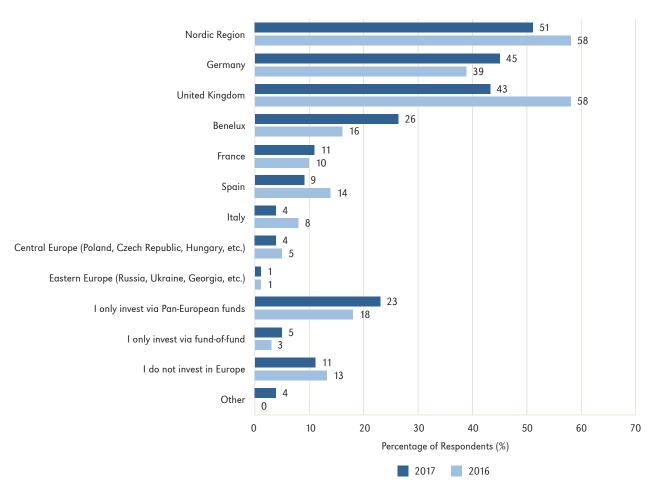


Source: Probitas Partners

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

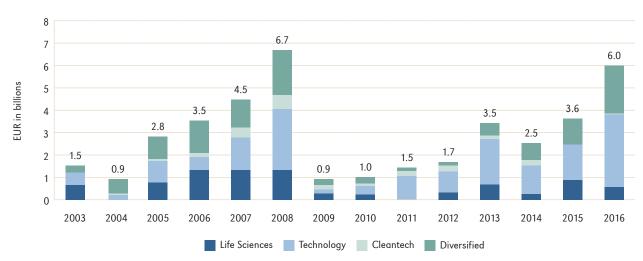
Chart XXVI Most Attractive European Markets

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 2017 Survey

Chart XXVII Commitments to European Venture Capital Partnerships



Source: Probitas Partners

Emerging Markets

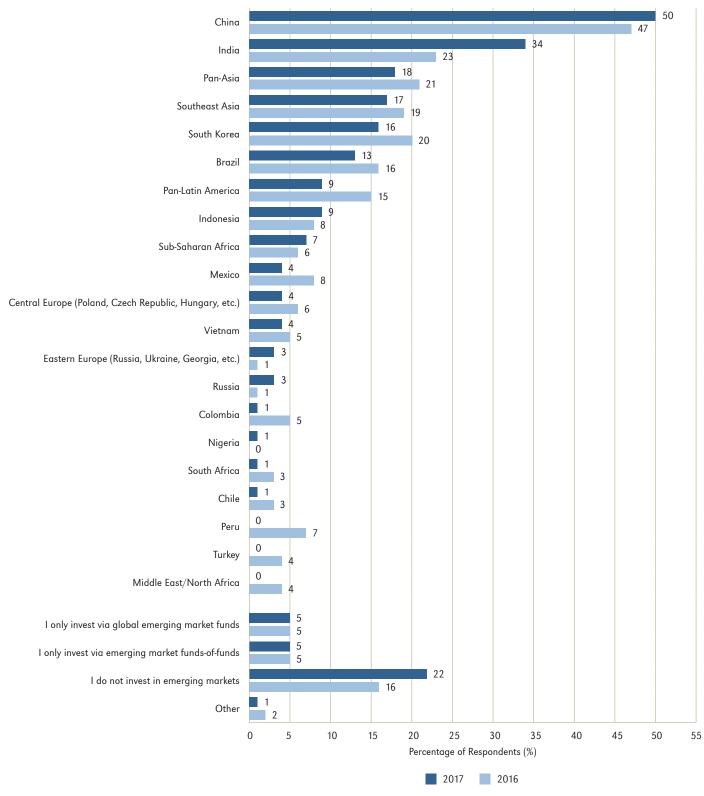
Interest in emerging markets private equity can be volatile year by year, driven both by broad economic issues that impact the sector overall as well as economic, political, regulatory, or technical factors that affect particular countries or regions. With the exception of China, many of these markets are quite small — both in the public and private sectors — and private equity activity is often dominated by a handful of funds.

- China is the leading country of interest in the emerging markets as it has been in all our past surveys (Chart XXVIII). It is the most developed private equity sector in the emerging markets; commitments to China-focused funds totaled \$28.3 billion last year, nearly ten times the amount raised for all Latin America (in what was a weak year for Latin America).
- In our survey of investor appetite for 2017, interest in most emerging market countries or regions declined. The major exception was India, where interest increased to 34% from 23% last year.
- 22% of investors were not interested at all in investing in the emerging markets — up from 16% last year though still far below the 32% who had no interest in 2014's survey.
- As detailed in Charts IV and V, commitments to Latin American and African funds declined noticeably in 2016.

"China is the leading country of interest in the emerging markets as it has been in all our past surveys"

Chart XXVIII Most Attractive Emerging Markets

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



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2017 Survey

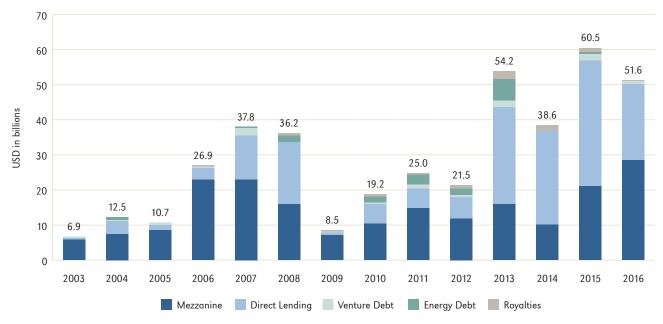
Private Debt Markets

Turmoil in the bank lending markets since the GFC has led to a major expansion in the private debt markets. A number of new private funds continue to be launched — especially in Europe — targeting direct lending and senior debt.

- Probitas Partners tracks fundraising in five different private debt sectors:
 - Mezzanine, targeting subordinated debt, often alongside equity co-investments or with equity kickers.
 - Direct lending, targeting senior debt or unitranche investments made either directly or, less frequently, through secondary markets.
 - 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 slowed in 2016 from the previous year's peak (Chart XXIX) as direct lending fell significantly while mezzanine commitments increased.
- Energy debt reached a peak of \$6.3 billion in commitments in 2013, the year before energy prices began their steep fall. Last year, only \$200 million was raised for that strategy.
- Global private debt funds (usually focused on the developed markets) and funds focused on North America have tended to lead the market, but European fundraising has increased dramatically over the last four years, led by commitments to direct lending funds (Chart XXX).
- Commitments to private debt funds come from various allocations, with certain investors making investments from illiquid credit allocations, others making commitments from tactical allocation buckets, while some commit from private equity allocations — at least for strategies with higher return profiles such as mezzanine.

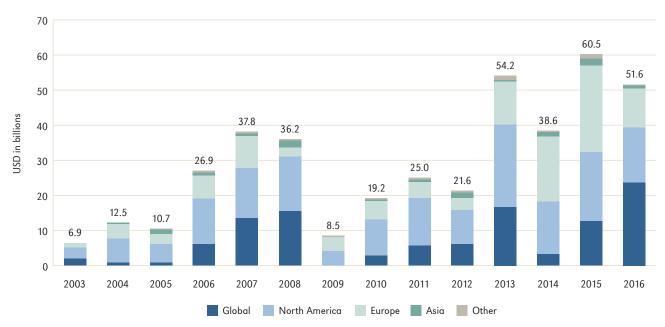
"Fundraising slowed in 2016 from the previous year's peak as direct lending fell significantly while mezzanine commitments increased."

Chart XXIX Global Private Debt Fundraising by Strategy



Source: Probitas Partners

Chart XXX Global Private Debt Fundraising by Geography



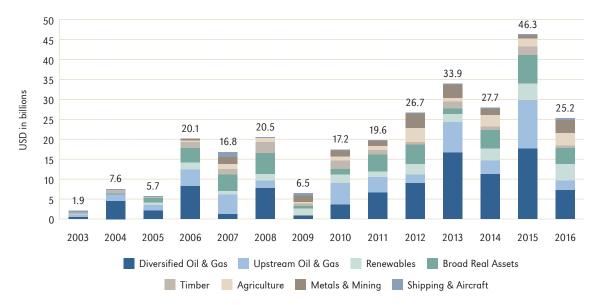
Source: Probitas Partners

Real Assets

Real assets as a sector is in many cases allied with private equity allocations but also often coming from tactical allocation or real assets allocations. A few investors define real assets very broadly to include infrastructure and real estate investing, though many more investors have separate dedicated allocations for those two sectors.

- The real assets sector began to expand in 2006 and, after a brief fall in 2009 during the GFC, it continued to grow, hitting its peak in 2015 (Chart XXXI).
- The biggest sub-sectors of real assets are in energy, either in diversified oil & gas, upstream oil & gas or renewables. That has especially been the case over the last seven years. Broadly diversified real assets funds usually have a component of energy exposure as well.
- Fundraising in 2016 fell 45% from 2015's market peak, driven by declines in commitments to diversified and upstream oil & gas funds. Interest in these funds remained strong in 2015 even after the dramatic decline in oil prices began in the summer of 2014 as investors thought the price declines would force companies under stress to sell at reduced prices, but that scenario did not play out as anticipated. The recent upturn in oil prices happened so late in 2016 that it did not impact fundraising.
- Notably, commitments to agriculture and metals & mining focused funds increased in 2016, but they are much smaller sectors.

Chart XXXI Real Assets Global Fundraising Fundraising by Strategy



Source: Probitas Partners; PREQIN, as of February 2017

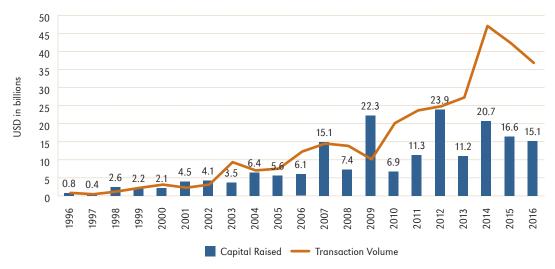
"Fundraising in 2016 fell 45% from 2015's market peak, driven by declines in commitments to diversified and upstream oil & gas funds."

The Secondary Market

Investors are increasingly using the secondary market as a portfolio management tool, actively using secondary purchases to mitigate the J-Curve and deploy capital more quickly or to adjust their exposures to particular subsectors or fund managers.

- Commitments made to secondary specialists declined for the second year in a row (Chart XXXII). As a quick glance at transaction volumes shows, however, significant amounts of capital are being directed at secondaries either directly by primary limited partners or from primary funds-of-funds, and the specialists do not dominate the market as they did a decade ago.
- Transaction volume is a surer measure of current activity. It also declined over the last two years, though it was substantially above specialist fundraising. Pricing for transactions remained high, with small or no discount to net assets value (NAV) in targeted sectors such as high-profile buyout funds.

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

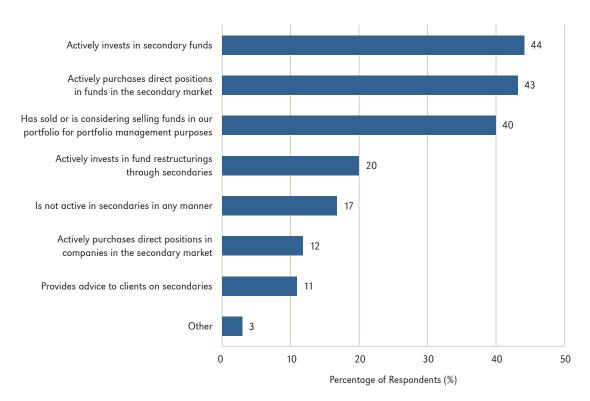


Source: Probitas Partners

- Large, sophisticated investors are increasingly buying positions directly, instead of investing solely through specialized secondary funds (Chart XXXIII) as they look to acquire positions for strategic as well as financial reasons.
- Increasingly investors both buy and sell positions in the market, using secondaries as a tool to actively rebalance their portfolios.
- Many of the large specialists are devoting more resources to structured secondaries used to restructure a fund in conjunction with a fund manager. These transactions are more complex and potentially more profitable, but have also drawn the attention of the SEC regarding potential conflicts of interest.

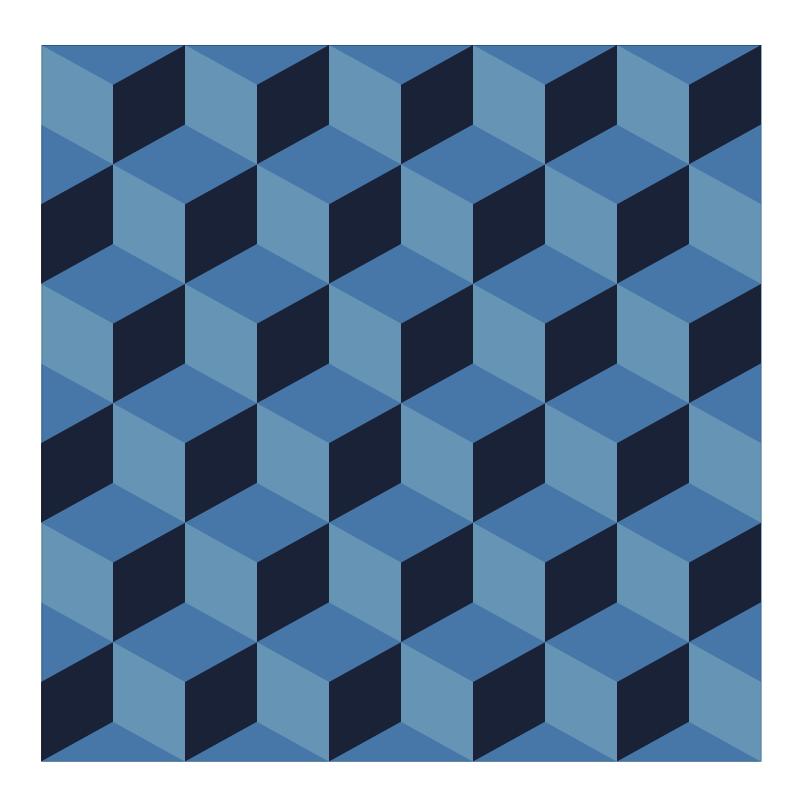
Chart XXXIII Secondary Market Investments

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



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2017 Survey

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