

2017 PREQIN ALTERNATIVE ASSETS PERFORMANCE MONITOR

A full-page background image showing a person running away from the camera on a brick-paved path. The sun is low on the horizon, creating a strong silhouette effect and a warm, golden glow. In the distance, a city skyline is visible across a body of water. Another person is seen walking further down the path.

SAMPLE PAGES

Private Equity ■ Private Debt ■ Real Estate ■ Infrastructure ■ Natural Resources ■ Hedge Funds

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DATA PACK FOR THE 2017 PREQIN ALTERNATIVE ASSETS PERFORMANCE MONITOR

The data behind all of the charts featured in the Report is available to purchase in Excel format. Ready-made charts are included that can be used for presentations, marketing materials and company reports.

To purchase the data pack, please visit: www.preqin.com/pm



ALTERNATIVE ASSETS PERFORMANCE MONITOR: IN NUMBERS



\$4.59tn

Private capital AUM has increased by 7% since December 2015 to reach \$4.59tn as at December 2016.



\$3.35tn

Hedge fund AUM stands at \$3.35tn as at June 2017.



581

Number of unique fund managers that feature in the league tables this year.

RETURNS BY ASSET CLASS



353

PrEQIn **Private Equity** Index reached its highest point (353 index points) in December 2016*.



14.8%

Real estate funds achieved average positive returns across all vintages, with a net IRR of 14.8% for 2013 vintage funds.



10.90%

12-month net return generated by **hedge funds** to June 2016.



167.6%

Median DPI generated by vintage 2004 **infrastructure** funds.



130

PrEQIn **Natural Resources** Index (130) surpassed the S&P Global Oil Index TR (88) by 42 index points in December 2016*.



9 Years

The typical **venture capital** fund takes nine years to return LP capital.

INVESTOR PERCEPTIONS



25%

of **real estate** investors interviewed in June 2017 reported that the performance of their portfolios has exceeded expectations over the past year.



62%

of **private debt** investors plan to increase their allocation to the asset class over the longer term.



50%

of **natural resources** investors believe performance has fallen short of expectations over the past three years.



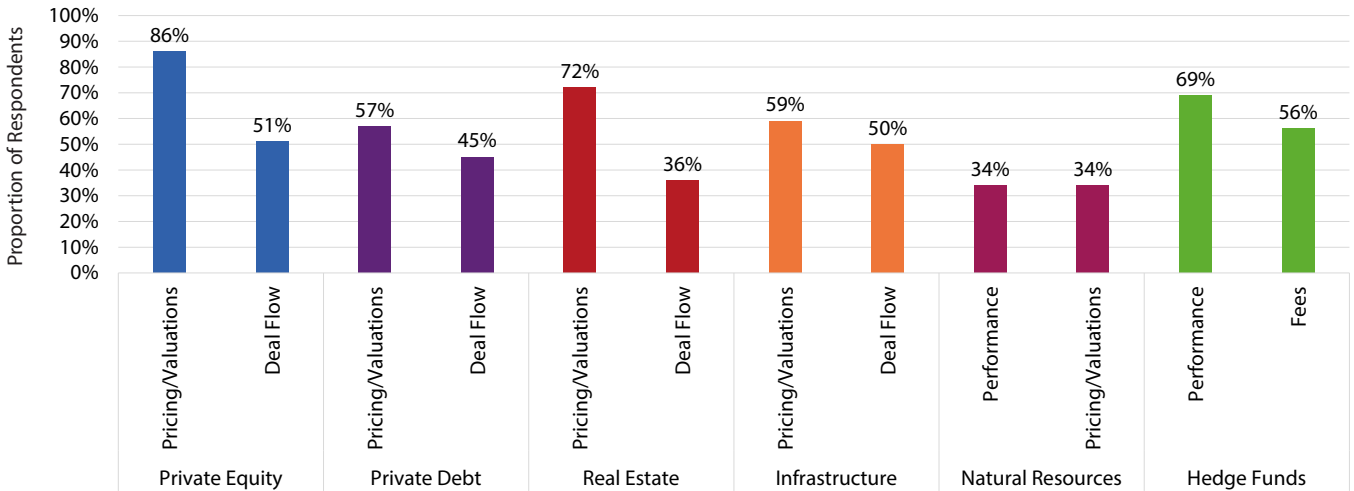
33%

of **hedge fund** investors expect their portfolios to perform better in the next 12 months than in the past year.

*Index rebased to 100 as of 31 December 2007.

INVESTOR OUTLOOK ON ALTERNATIVES PERFORMANCE

Fig. 1.5: Top Two Key Issues for Investors in Alternatives by Asset Class (Proportion of Respondents in Each Asset Class)



Source: Preqin Investor Interviews, June 2017

Alternative assets have attracted institutional capital at unprecedented rates in recent years, with private capital assets under management (AUM) growing to an estimated \$7.8tn as at December 2016. Among the many catalysts for the boom in alternatives have been the low correlation to traditional markets, attractive risk-adjusted returns and ever-increasing transparency in many areas of the industry. Although the objectives within each alternatives strategy can vary, positive performance that moves towards achieving these goals will define investor sentiment and confidence moving forward.

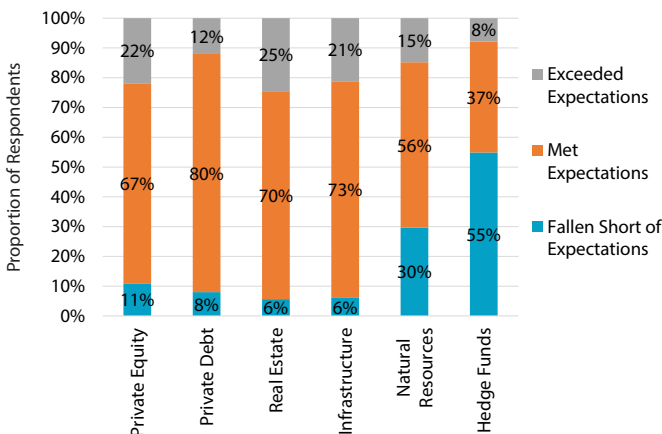
In June 2017, Preqin conducted more than 100 interviews with global institutional investors to understand their views of the alternatives industry moving into the second half of 2017 and beyond. Institutional investors' increasing allocations to alternatives have been driven by the push for strong returns, which could not be achieved without increased exposure to the space. On such a large scale, diversification away from traditional markets and debt instruments played and continues to play a vital role in investing to meet the liabilities of insurance companies, pension funds, endowment plans and other

organizations that participate in private markets.

KEY CONCERNS

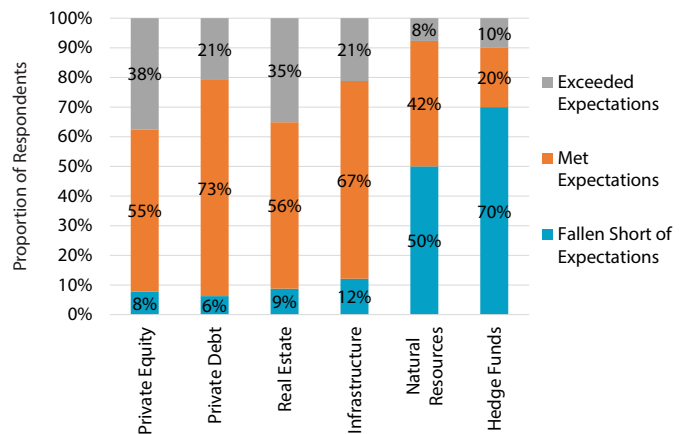
Performance ranked among the top two key concerns for investors in two out of seven asset classes tracked by Preqin – hedge funds and natural resources – compared with investors in five of six asset classes at the same time last year. Concerns centred greatly around pricing, valuations and deal flow in the industry at large, although performance was cited as at least the third most pressing concern in all seven alternative asset classes surveyed in 2017. Performance is the key concern

Fig. 1.6: Investors' Perception of the Performance of Alternative Asset Classes over the Past 12 Months



Source: Preqin Investor Interviews, June 2017

Fig. 1.7: Investors' Perception of the Performance of Alternative Asset Classes over the Past Three Years



Source: Preqin Investor Interviews, June 2017

VENTURE CAPITAL

KEY FINDINGS

- Early to mid-1990s vintage funds performed significantly well, with notable median net IRRs of 31.7% and 31.9% for 1993 and 1997 vintages respectively (Fig. 3.64). There was a significant drop in performance between vintage 1997 and 1998 funds, which could be attributed to the dot-com bubble.
- A decade of poor performance is reflected by the fact that 2003 is the last vintage for which the median venture capital fund has a DPI

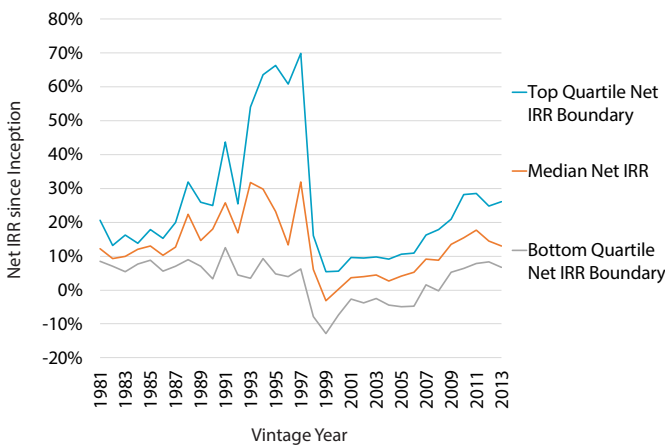
of above 100% – there are signs, however, that surpassing this target could be achieved by funds of more recent vintages, with median TVPIs exceeding 100% for funds of vintage 2006-2014 (Fig. 3.65).

- J-curves show the long-term nature of venture capital investments, with median IRRs taking between five and 10 years to emerge out of negative territory (Fig. 3.66).
- As seen in Fig. 3.67, the typical venture capital fund takes nine years to return LP capital, indicative of the

long-term nature of LP investments in venture capital funds, modelled using Preqin's cash flow data.

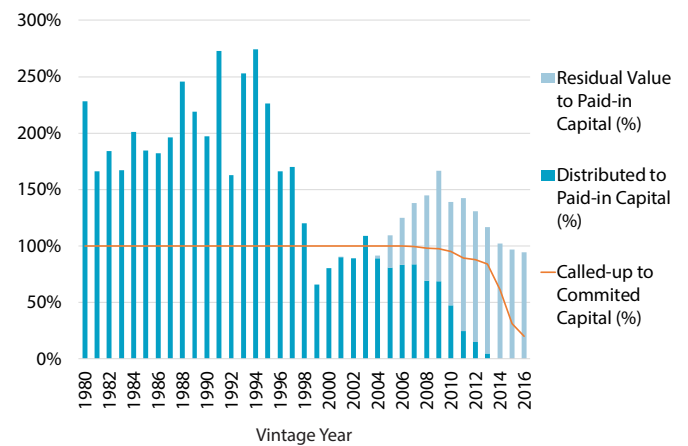
- Fig. 3.68 illustrates why a GP's track record is an important indicator for LPs, as consistency is seen among strong and poor performers: 67% of top-quartile funds are followed on by a top- or second-quartile fund. The same proportion of bottom-quartile funds are followed by below-average performance. Standard deviation of net IRRs across vintages is generally high for venture capital funds

Fig. 3.64: Venture Capital - Median Net IRRs and Quartile Boundaries by Vintage Year



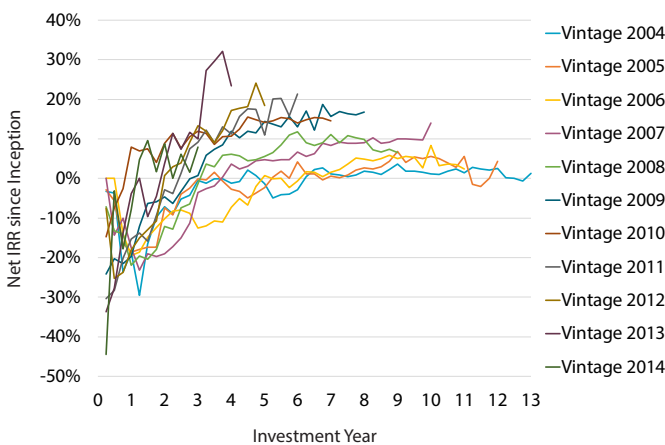
Source: Preqin Venture Capital Online

Fig. 3.65: Venture Capital - Median Called-up, Distributed and Residual Value Ratios by Vintage Year



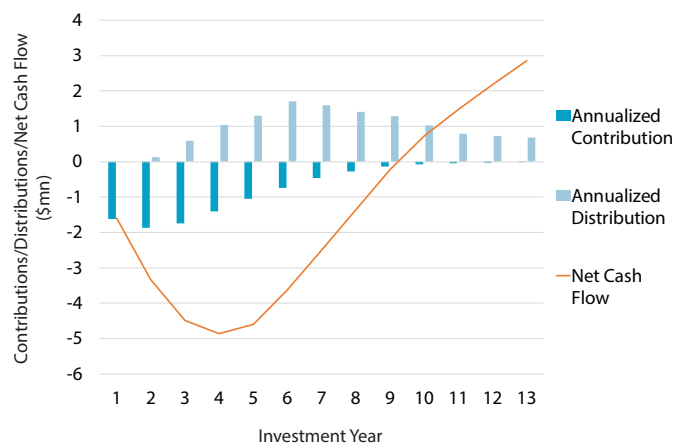
Source: Preqin Venture Capital Online

Fig. 3.66: Venture Capital - J-Curve: Annual Median Net IRRs by Vintage Year



Source: Preqin Venture Capital Online

Fig. 3.67: Venture Capital - Annual Contributions and Distributions with Net Cash Flow (LP with a \$10mn Commitment)



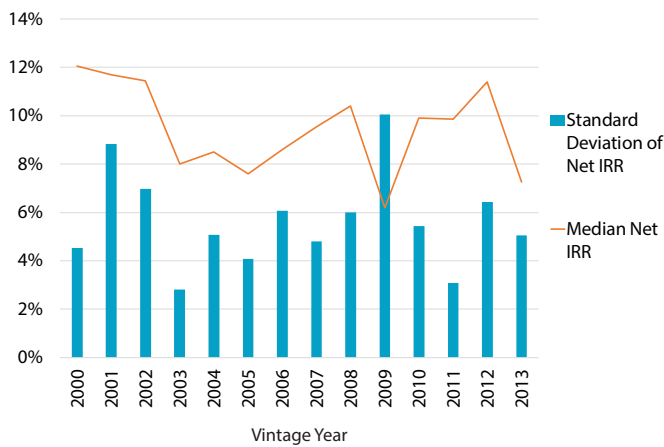
Source: Preqin Venture Capital Online

MEZZANINE

KEY FINDINGS

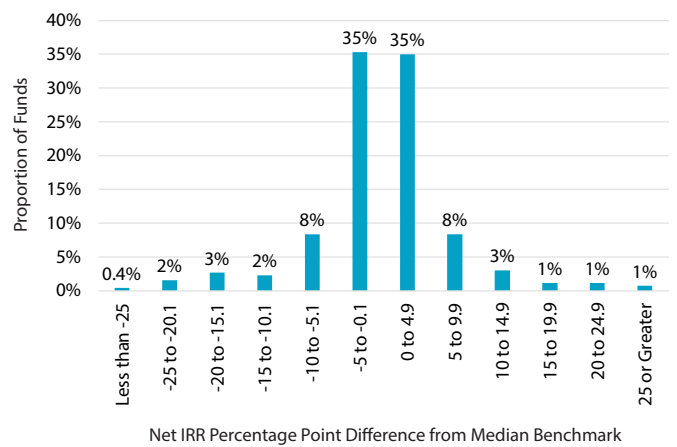
- Mezzanine funds have exhibited fairly consistent IRRs, with standard deviation below 9% for most vintages displayed (excluding 2009, Fig. 4.21).
- Fig. 4.22 further illustrates the low spread of data, with 70% of funds having deviated fewer than five percentage points either side of the median IRR.
- Median and money-weighted returns show consistent net IRRs fluctuating around the 10% figure (Fig. 4.23).
- As seen in Fig. 4.24, the average mezzanine fund takes between eight and nine years for the net cash flow to become positive (all capital paid into the fund has been distributed back to investors).
- According to Preqin’s latest investor survey, the largest proportion (48%) of investors see mezzanine funds presenting the best risk/return profile for all private debt fund strategies currently.

Fig. 4.21: Mezzanine - Risk/Return by Vintage Year



Source: Preqin Private Debt Online

Fig. 4.22: Mezzanine - Net IRR Deviation from Median Benchmark



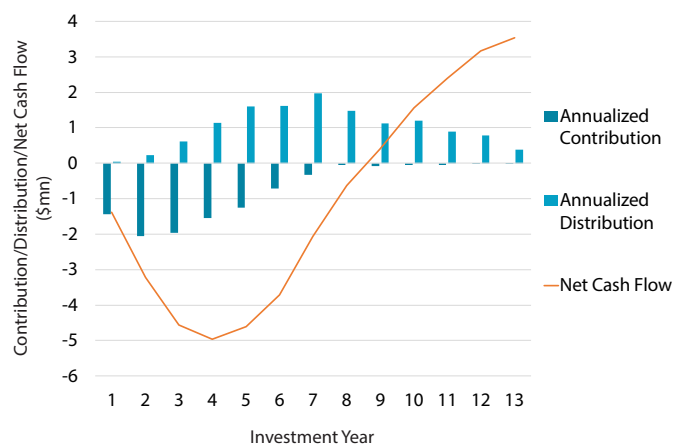
Source: Preqin Private Debt Online

Fig. 4.23: Mezzanine - Median and Money-Weighted Net IRRs by Vintage Year



Source: Preqin Private Debt Online

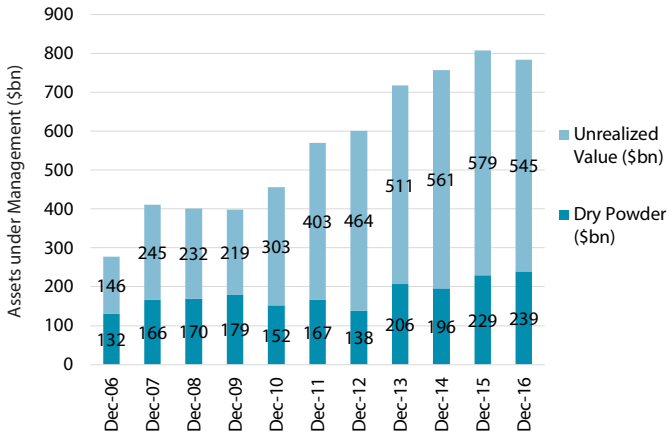
Fig. 4.24: Mezzanine - Annual Contributions and Distributions with Net Cash Flow (LP with \$10mn Commitment)



Source: Preqin Private Debt Online

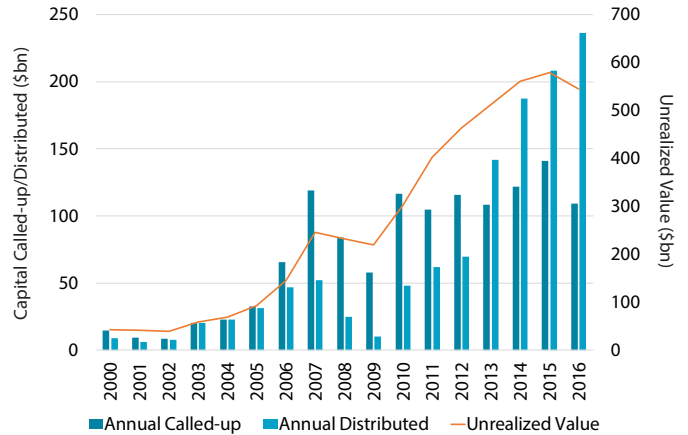
REAL ESTATE ASSETS UNDER MANAGEMENT

Fig. 5.1: Closed-End Private Real Estate - Assets under Management, 2006 - 2016



Source: Preqin Real Estate Online

Fig. 5.2: Closed-End Private Real Estate - Annual Capital Called-up, Distributed and Unrealized Value



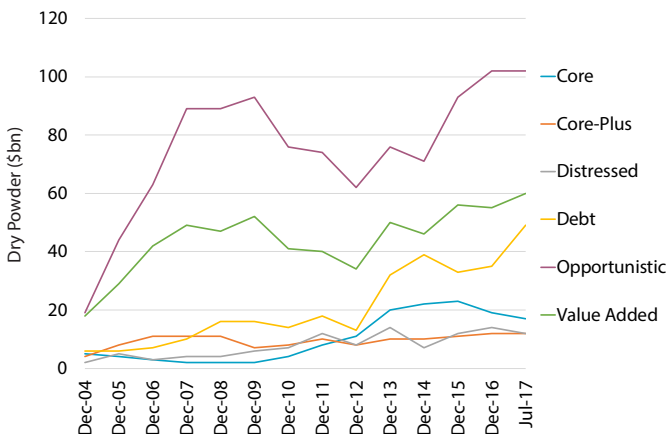
Source: Preqin Real Estate Online

Fig. 5.3: 10 Largest Closed-End Private Real Estate Fund Managers by Estimated Dry Powder (As at July 2017)

Firm	Location	Dry Powder (\$bn)
Blackstone Group	US	22.3
Lone Star Funds	US	12.2
Brookfield Property Group	Canada	6.6
Starwood Capital Group	US	4.9
Global Logistic Properties	Singapore	4.1
Carlyle Group	US	3.9
Rockpoint Group	US	3.8
Oaktree Capital Management	US	3.5
AXA Investment Managers – Real Assets	France	3.3
Angelo, Gordon & Co	US	2.7

Source: Preqin Real Estate Online

Fig. 5.4: Closed-End Private Real Estate - Dry Powder by Strategy, 2004 - 2017



Source: Preqin Real Estate Online

DATA SOURCE:

Preqin's Real Estate Online contains individual performance information for over 1,700 funds of all strategies.

Assess fund performance by size, vintage, type, called-up, distributed, unrealized value, multiple and IRR.

Get in touch today to arrange a demo of Real Estate Online:

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TOP PERFORMING NATURAL RESOURCES FUNDS

Fig. 7.5: Top 10 Performing Natural Resources Funds (Vintage 2001-2006)

Rank	Fund	Firm	Vintage	Fund Size (mn)	Geographic Focus	Net IRR (%)	Date Reported
1	WLR Recovery Fund II	WL Ross & Co	2002	400 USD	N. America	78.8	30-Sep-16
2	HitecVision Private Equity III	HitecVision	2002	690 NOK	Europe	72.0	30-Jun-17
3	Enervest Energy Institutional Fund IX	EnerVest	2001	239 USD	N. America	69.0	31-Mar-16
4	EnCap Energy Capital Fund IV	EnCap Investments	2002	525 USD	N. America	67.1	30-Jun-17
5	Lime Rock Partners II	Lime Rock Partners	2002	320 USD	N. America	55.0	30-Jun-17
6	Kayne Anderson Energy Fund II	Kayne Anderson Capital Advisors	2003	240 USD	N. America	53.0	30-Jun-17
7	Carlyle/Riverstone Global Energy and Power Fund II	Riverstone Holdings	2003	1,100 USD	N. America	52.7	30-Sep-16
8	First Reserve Fund IX	First Reserve Corporation	2001	1,375 USD	N. America	48.1	30-Jun-17
9	Overlord 2001 Investment	32 Degrees Capital	2001	2 CAD	N. America	44.3	30-Jun-17
10	Energy Trust Partners	Energy Trust Capital	2002	112 USD	N. America	38.0	30-Jun-17

Source: Preqin Natural Resources Online

Fig. 7.6: Top 10 Performing Natural Resources Funds (Vintage 2007-2009)

Rank	Fund	Firm	Vintage	Fund Size (mn)	Geographic Focus	Net IRR (%)	Date Reported
1	Aravis Energy I	Aravis	2009	47 EUR	Europe	448.0	30-Jun-17
2	EIV Capital Fund I	EIV Capital	2009	50 USD	N. America	61.7	31-Dec-16
3	EnCap Flatrock Midstream Fund I	EnCap Investments	2009	792 USD	N. America	45.0	31-Dec-16
4	Energy Spectrum Partners V	Energy Spectrum Capital	2007	612 USD	N. America	32.9	31-Dec-16
5	CIM Infrastructure Fund	CIM Group	2007	200 USD	N. America	19.2	31-Mar-17
6	Intervale Capital Fund I	Intervale Capital	2008	250 USD	N. America	19.1	30-Jun-16
7	Avista Capital Partners II	Avista Capital Partners	2008	1,800 USD	N. America	19.0	31-Dec-16
8	Quantum Energy Partners V	Quantum Energy Partners	2008	2,506 USD	N. America	18.4	31-Dec-16
9	Fondo Hidrocarburos de Colombia II	Latin America Enterprise Fund Managers	2008	67 USD	Latin America	18.0	30-Jun-17
10	Inspired Evolution Fund I	Inspired Evolution Investment Management	2008	800 ZAR	Africa	16.9	31-Mar-16

Source: Preqin Natural Resources Online

DID YOU KNOW?

If your firm has featured in any of our league tables throughout the 2017 Preqin Alternative Assets Performance Monitor, you can request award images and marketing materials from Preqin. Such materials can be used in your marketing campaigns or email signatures.

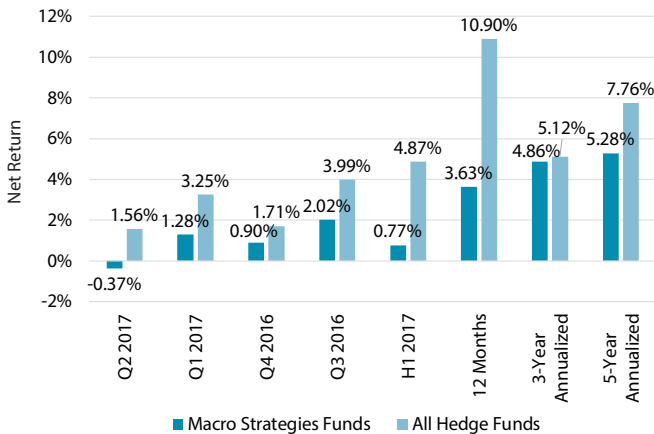
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MACRO STRATEGIES FUNDS

KEY FINDINGS

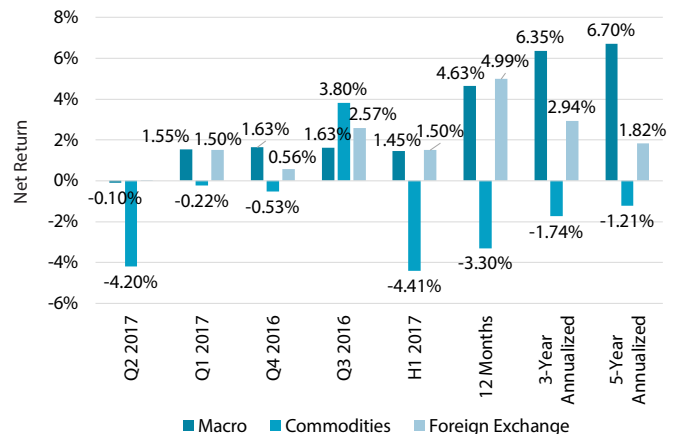
- Prolonged periods of market uncertainty have taken their toll on macro strategies over the past 12 months. As illustrated in Fig. 8.51, the Preqin All-Macro Strategies Hedge Fund benchmark has underperformed against the Preqin All-Strategies Hedge Fund benchmark in every quarter over the past 12 months. Ending Q2 2017 with a loss, the strategy has generated 3.87% in the 12 months to June 2017, just over seven percentage points less than that achieved by the wider industry over the same period.
- Commodity-focused vehicles continued to struggle during the first half of the year; following a particularly difficult second quarter, the strategy benchmark ended H1 2017 down 4.41% year-to-date (Fig. 8.52) as the only loss-making, macro-focused sub-strategy tracked by Preqin.
- This theme continues when comparing each sub-strategy's three-year cumulative return. While macro and foreign exchange vehicles have generated returns of 20.46% and 10.09% respectively, commodity-focused vehicles continued to perform poorly, generating losses in 34 out of the past 36 months.
- Despite posting only modest returns over the past four quarters, Fig. 8.55 shows that pure macro strategies vehicles offer a stronger risk/return profile compared with not only both other macro sub-strategies tracked by Preqin, but also the wider hedge fund industry. Conversely, commodity-focused vehicles have provided the greatest level of volatility in exchange for negative returns.

Fig. 8.51: Performance of Macro Strategies Funds vs. All Hedge Funds (As at June 2017)*



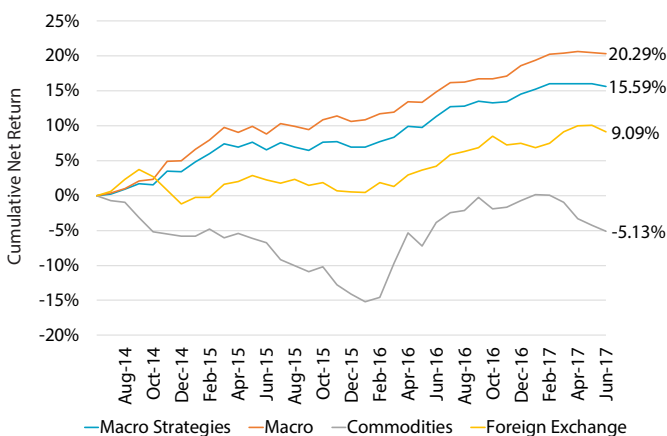
Source: Preqin Hedge Fund Online

Fig. 8.52: Performance of Macro Strategies Funds by Sub-Strategy (As at June 2017)*



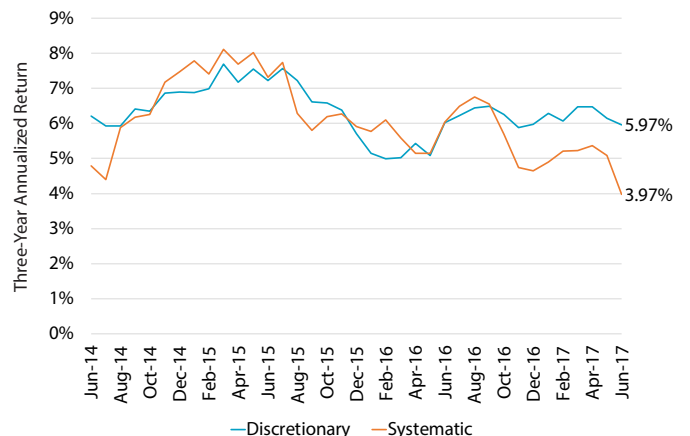
Source: Preqin Hedge Fund Online

Fig. 8.53: Cumulative Returns of Macro Strategies Funds by Sub-Strategy, July 2014 - June 2017*



Source: Preqin Hedge Fund Online

Fig. 8.54: Rolling Returns of Macro Strategies Funds by Trading Style, July 2014 - June 2017*



Source: Preqin Hedge Fund Online

2017 PREQIN ALTERNATIVE ASSETS PERFORMANCE MONITOR

The 2017 Preqin Alternative Assets Performance Monitor provides unrivalled insight into the performance of alternative assets funds, analyzing performance data for over 25,700 funds spanning the entire alternative assets industry, including private equity, private debt, real estate, infrastructure, natural resources and hedge funds.

This year's content includes:

- Analysis based on performance data for over 25,700 funds worldwide.
- League tables containing top performing funds, most consistent top performing managers and 'funds to watch' across different vintages, types and strategies.
- Overview and analysis of performance trends across alternative asset classes.
- Granular analysis of funds across different strategies and geographies by vintage year.
- Examination of risk vs. return for different asset classes and strategies.
- Investor outlook on alternatives performance.
- Data on assets under management and dry powder by asset class.
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