



PREQIN QUARTERLY UPDATE: INFRASTRUCTURE Q3 2017

Insight on the quarter from the leading provider of alternative assets

Content includes:

- Fundraising
- Funds in Market
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- Deals
- Fund Performance and Dry Powder

FOREWORD - Tom Carr, Preqin

Fundraising for unlisted infrastructure picked up in Q3 2017, with 17 funds securing an aggregate \$12bn in capital commitments, up from 14 funds at \$7.6bn in Q2. However, the capital raised remains below the record \$32bn raised in Q1, which was largely due to the \$15.8bn close of Global Infrastructure Partners III in January 2017.

The trend towards capital concentration has become more pronounced over time, reflected in the future plans of investors in the asset class, with institutions continuing to commit larger sums of capital to a smaller number of funds. The proportion of investors active in infrastructure that are planning to deploy \$500mn or more in the next 12 months increased from 3% in Q3 2016 to 15% in Q3 2017, while the proportion looking to commit to fewer than three funds also rose from 70% to 78% over the same period.

The large sums of capital raised by mega funds have also contributed to the growing amount of dry powder earmarked for infrastructure investment. Standing at a record high of \$154bn as at September 2017, dry powder has increased by 111% from the \$73bn held by unlisted infrastructure funds at the end of 2012. With dry powder levels rising, and asset valuations remaining high, fund managers face the challenge of successfully deploying this capital while maintaining the strong risk-adjusted returns that have previously attracted investors to the asset class.

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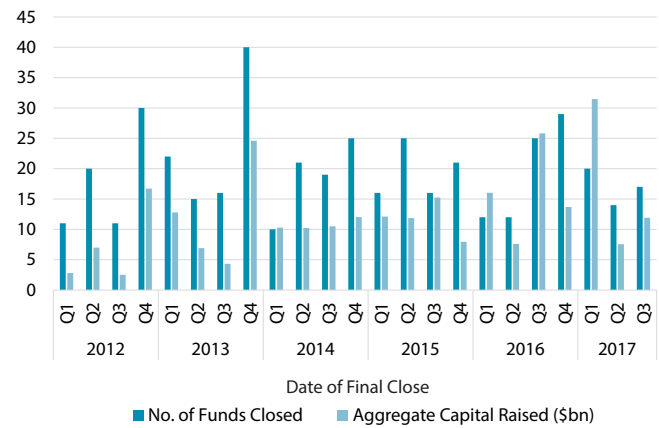
FUNDRAISING

Seventeen unlisted infrastructure funds reached a final close in Q3 2017, securing an aggregate \$12bn in institutional capital commitments. This represents a 32% drop in the number of funds holding a final close, as well as a decrease of \$14bn in aggregate capital compared to Q3 last year (Fig. 1). The significant amount raised in this quarter last year was largely a result of the closure of Brookfield Infrastructure Fund III, which secured \$14bn in July 2016 and represents 54% of the Q3 2016 total.

In line with previous years, North America and Europe continue to lead the fundraising market: North America-focused funds account for 54% of the aggregate capital raised since the beginning of 2016, while Europe-focused vehicles represent 31% (Fig. 2).

Infrastructure funds closed this year have had more success in meeting their fundraising targets than in previous years, achieving an average of 107% of their target (Fig. 3). This was bolstered by the closure of funds including BlackRock Global Renewable Power Fund II, which secured 165% of its initial \$1bn target. The

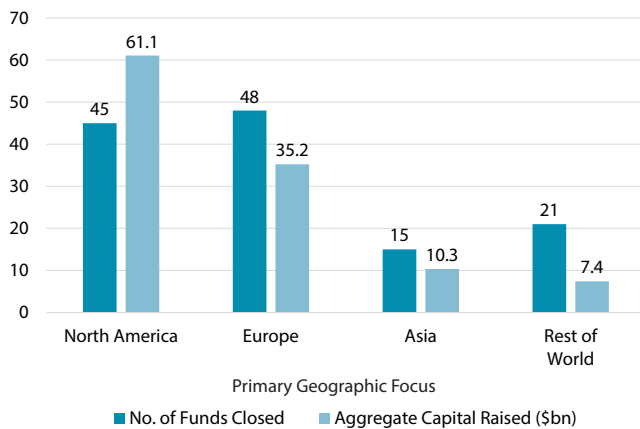
Fig. 1: Unlisted Infrastructure Fundraising, Q1 2012 - Q3 2017



Source: Preqin Infrastructure Online

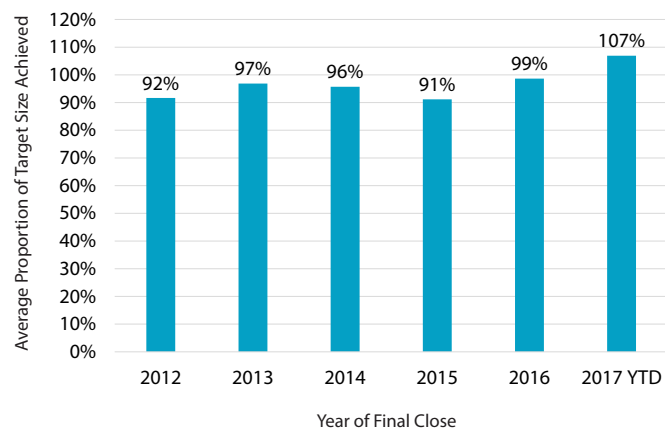
largest infrastructure fund closed in the quarter was AMP Capital Infrastructure Debt Fund III, which raised \$2.5bn, 25% above target.

Fig. 2: Unlisted Infrastructure Fundraising by Primary Geographic Focus, 2016 - 2017 YTD



Source: Preqin Infrastructure Online

Fig. 3: Average Proportion of Target Size Achieved by Unlisted Infrastructure Funds, 2012 - 2017 YTD



Source: Preqin Infrastructure Online

Fig. 4: Five Largest Unlisted Infrastructure Funds Closed in Q3 2017

Fund	Firm	Fund Size (mn)	Geographic Focus
AMP Capital Infrastructure Debt Fund III	AMP Capital Investors	2,500 USD	Australasia, Europe, North America, OECD, West Europe
BlackRock Global Renewable Power Fund II	BlackRock	1,650 USD	Australia, Europe, Japan, North America, OECD
BlackRock Renewable Income UK Fund	BlackRock	1,100 GBP	UK
First Infrastructure Capital	First Infrastructure Capital Advisors	1,000 USD	US
Equitix Fund IV	Equitix	758 GBP	Denmark, Italy, Spain, UK

Source: Preqin Infrastructure Online

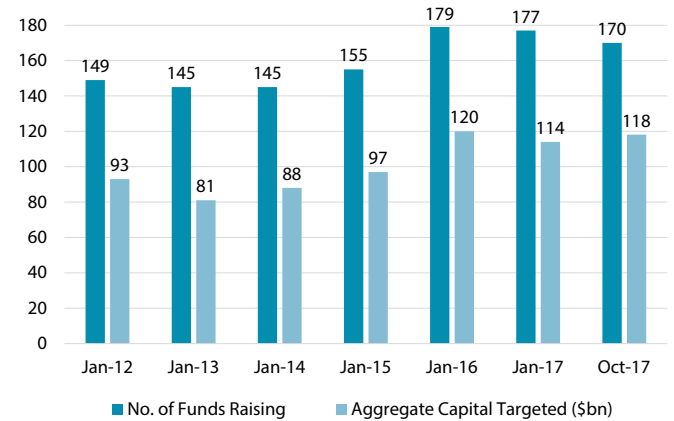
FUNDS IN MARKET

At the start of Q4 2017, there are 170 unlisted infrastructure funds in market collectively seeking \$118bn in capital, compared to 177 funds targeting \$114bn at the beginning of the year (Fig. 5). While the number of funds on the road has declined slightly over this period, these vehicles are targeting a further \$4.1bn.

Europe-focused unlisted infrastructure funds represent the largest proportion (42%) of funds currently in market, compared to North America (25%), Asia (9%) and all other regions (24%). However, North America-focused unlisted infrastructure funds on the road are targeting just \$5.4bn less than their Europe-focused counterparts (Fig. 6). There remains a significant disparity between the average target size of funds in market across these regions: North America-focused funds are targeting an average of \$1.2bn, compared with \$1.1bn and \$637mn for Asia- and Europe-focused funds respectively.

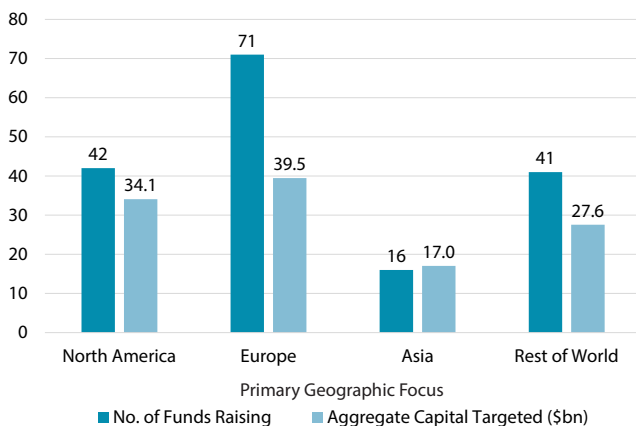
Competition for investor capital in the market remains high, and is reflected in the length of time these funds are spending in market: the majority (63%) of funds have been on the road for over a year (Fig. 7), while the average time spent on the road so far by unlisted funds currently in market is 21 months.

Fig. 5: Unlisted Infrastructure Funds in Market over Time, 2012 - 2017



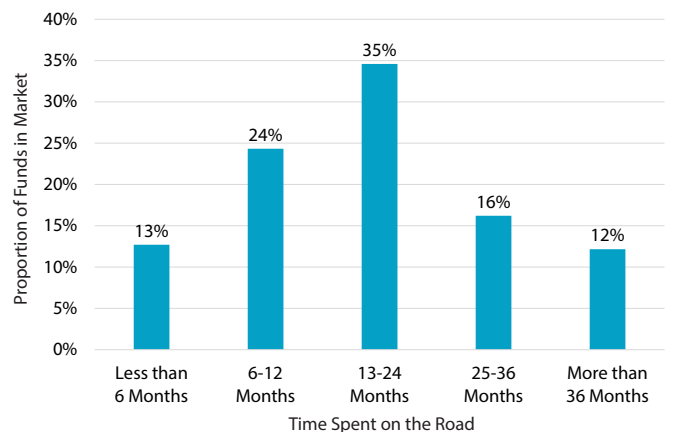
Source: Preqin Infrastructure Online

Fig. 6: Unlisted Infrastructure Funds in Market by Primary Geographic Focus



Source: Preqin Infrastructure Online

Fig. 7: Time Spent on the Road by Unlisted Infrastructure Funds in Market



Source: Preqin Infrastructure Online

Fig. 8: Five Largest Unlisted Infrastructure Funds in Market

Fund	Firm	Target Size (mn)	Geographic Focus
Alinda Infrastructure Fund III	Alinda Capital Partners	5,000 USD	Europe, North America
Green Ecological Silk Road Investment Fund	Green Ecological Silk Road Investment Fund	30,000 CNY	Emerging Markets, Greater China
Copenhagen Infrastructure III	Copenhagen Infrastructure Partners	3,000 EUR	Europe, North America
Macquarie Infrastructure Partners IV	Macquarie Infrastructure and Real Assets (MIRA)	3,500 USD	North America
West Street Infrastructure Partners III	GS Infrastructure Investment Group	3,000 USD	Europe, North America, West Europe

Source: Preqin Infrastructure Online



INSTITUTIONAL INVESTORS

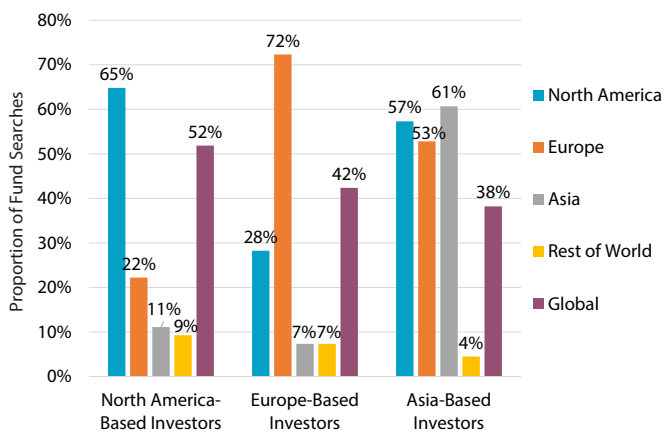
Over the next 12 months, most institutions will predominantly target domestic infrastructure opportunities (Fig. 9). North America-based investors prefer to gain access to foreign markets through the use of global vehicles, more so than Europe- and Asia-based investors. Asia-based institutions, however, are continuing to diversify their investment portfolios, with over half of these investors targeting North America and Europe.

Unlisted funds remain the favoured route to market for the majority of active investors in the next 12 months (Fig. 10). However, the proportion of Europe-based investors with a preference for unlisted funds has fallen eight percentage points from Q3 2016, and the proportion looking to make direct

investments has risen four percentage points over the same period; as such, investors in Europe maintain a greater interest in making direct investments in the asset class than their North America- and Asia-based counterparts.

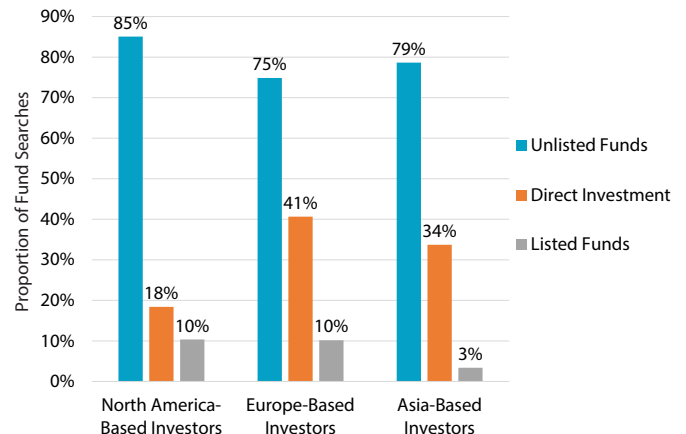
The proportion of active institutions seeking to deploy \$500mn or more has increased by 12 percentage points, rising to 15% in Q3 2017 (Fig. 11). However, investors are typically looking to allocate this capital to fewer funds, with the proportion looking to commit to less than three funds rising from 70% in Q3 2016 to 78% in Q3 2017 (Fig. 12).

Fig. 9: Regions Targeted by Infrastructure Investors in the Next 12 Months by Investor Location



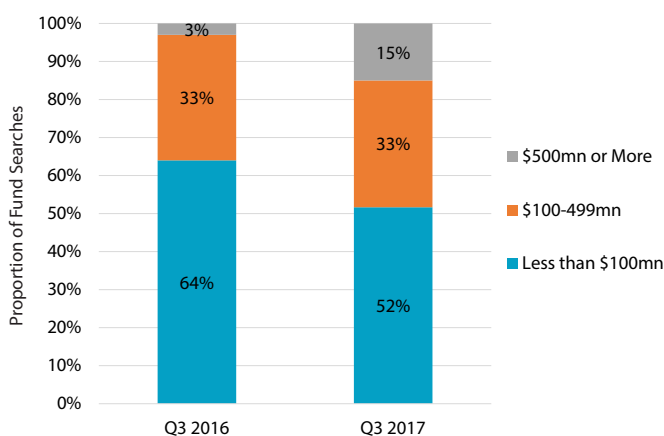
Source: Preqin Infrastructure Online

Fig. 10: Preferred Route to Market of Infrastructure Investors in the Next 12 Months by Investor Location



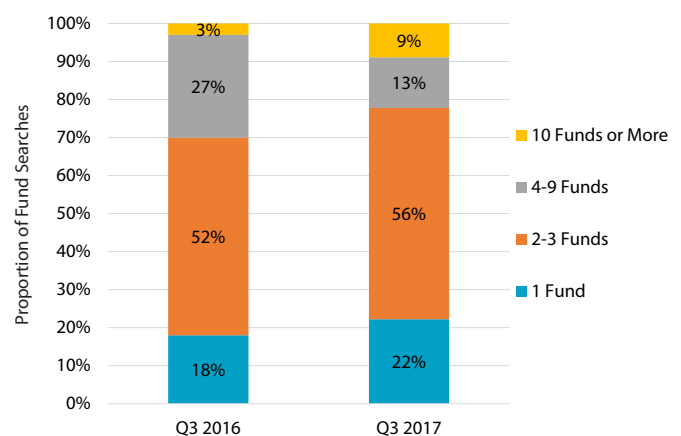
Source: Preqin Infrastructure Online

Fig. 11: Amount of Capital Investors Plan to Commit to Unlisted Infrastructure Funds in the Next 12 Months, Q3 2016 vs. Q3 2017



Source: Preqin Infrastructure Online

Fig. 12: Number of Unlisted Infrastructure Funds Investors Plan to Commit to in the Next 12 Months, Q3 2016 vs. Q3 2017



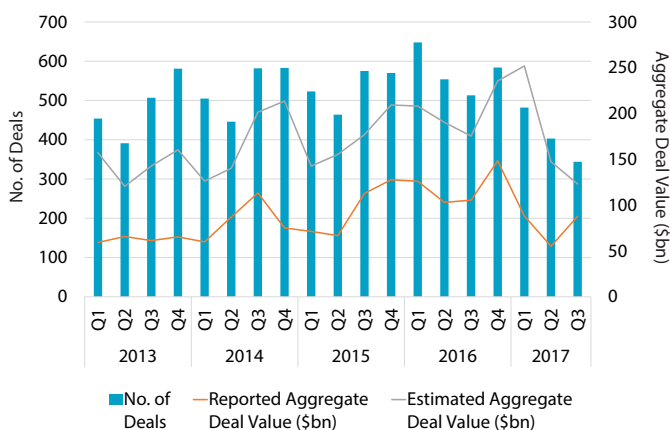
Source: Preqin Infrastructure Online

DEALS

In Q3 2017, 344 infrastructure transactions worth an estimated \$123bn were completed (Fig. 13). The number of completed deals fell by 15% from the previous quarter; the estimated aggregate value of these transactions fell by \$24bn over the same period, and the average deal size fell for the second consecutive quarter to \$358mn (Fig. 14). The difference in the number of deals completed and estimated aggregate deal value between quarters has been more pronounced over the past year, representing 33% and 30% declines from Q3 2016, respectively.

European deals account for the largest proportion (46%) of infrastructure deals completed in Q3 2017, marking a 16-percentage-point rise from the corresponding proportion in Q3 2016 (Fig. 15). The proportion of North America-based transactions completed over the same period fell from 35% in Q3 2016 to 29% in Q3 2017.

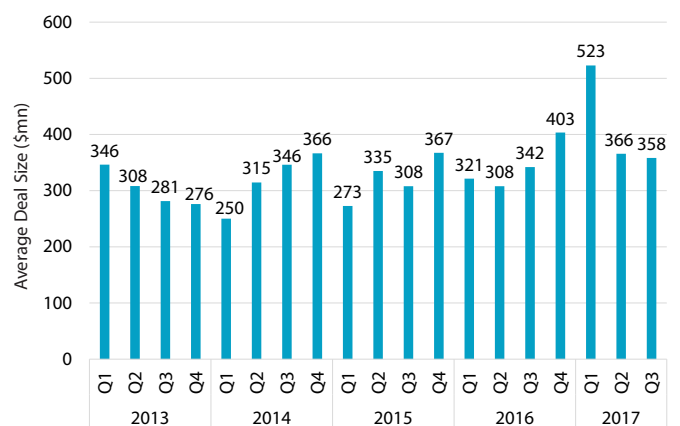
Fig. 13: Infrastructure Deals Completed Globally, Q1 2013 - Q3 2017



Source: Preqin Infrastructure Online

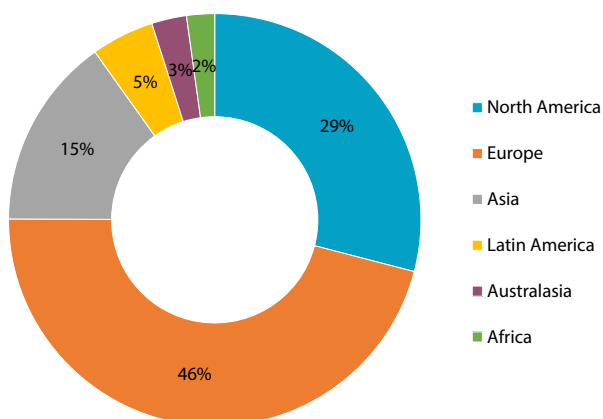
Similar to previous quarters, the renewable energy sector represents the majority (60%) of completed deals in Q3 (Fig. 16), with 77% of these transactions involving the acquisition of secondary stage assets. One notable deal in Q3 2017 involved Borkum Riffgrund II Offshore Wind Farm, a 450 MW, 97-turbine wind facility located in Germany. In August 2017, Global Infrastructure Partners III acquired a 50% stake in the asset for €1.17bn.

Fig. 14: Average Infrastructure Deal Size, Q1 2013 - Q3 2017



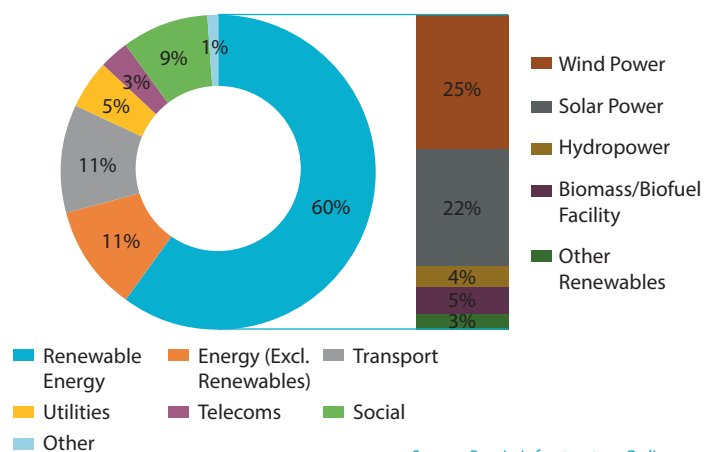
Source: Preqin Infrastructure Online

Fig. 15: Completed Infrastructure Deals in Q3 2017 by Region



Source: Preqin Infrastructure Online

Fig. 16: Completed Infrastructure Deals in Q3 2017 by Industry



Source: Preqin Infrastructure Online



FUND PERFORMANCE AND DRY POWDER

The latest performance data on Preqin's **Infrastructure Online** shows the consistent returns of infrastructure funds over the long term, with median IRRs averaging 10% across vintages 2004-2014 (Fig. 17). Furthermore, Fig. 18 shows that infrastructure returns have experienced relatively low volatility between vintages 2005 and 2013. Infrastructure is the best performing asset class of all private capital funds for 2014 vintage funds; although the median net IRR is high, it is still very early in these funds' lifespans.

The PrEQIn Infrastructure Index stands at 197.5 index points as at December 2016 (rebased to 100 as of December 2007), meaning that the infrastructure index has almost doubled in value over this

period (Fig. 19). These funds have returned slightly more than the All Private Equity index, and have significantly outperformed the S&P Global Infrastructure TR Index over this period.

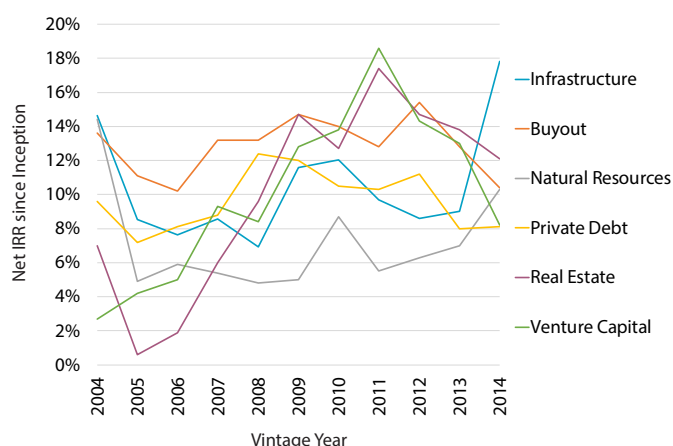
Total dry powder held by unlisted infrastructure funds has reached a record high of \$154bn as at September 2017, marking an increase of 111% from the \$73bn held by unlisted infrastructure funds in 2012 (Fig. 20). Most of this growth is attributed to Europe-focused funds, for which dry powder has increased by \$12bn since the start of the year; institutional capital held by Rest of World-focused funds has more than doubled over the same period, from \$7bn to \$16bn.

Fig. 17: Unlisted Infrastructure: Maximum, Median and Minimum Net IRRs by Vintage Year



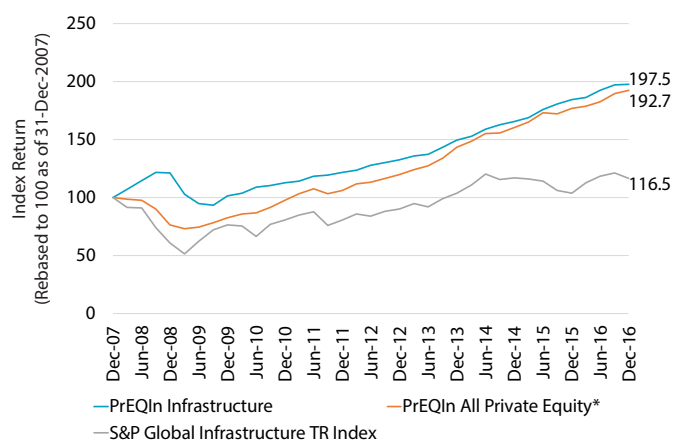
Source: Preqin Infrastructure Online

Fig. 18: Median Net IRRs by Vintage Year: Unlisted Infrastructure vs. Other Private Capital Strategies



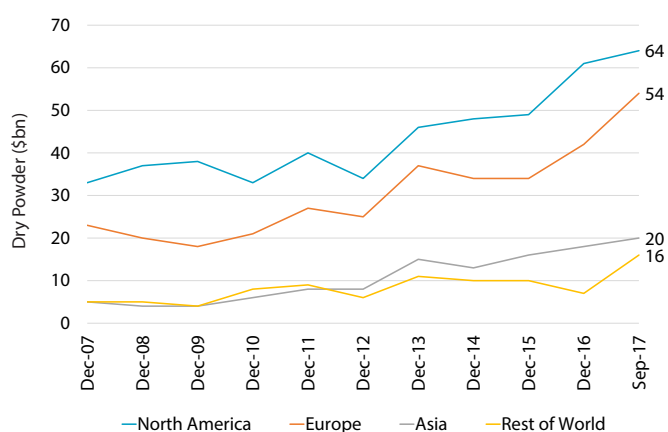
Source: Preqin Infrastructure Online

Fig. 19: PrEQIn Index: Infrastructure vs. All Private Equity and S&P 500 Global Infrastructure TR Index



Source: Preqin Infrastructure Online

Fig. 20: Unlisted Infrastructure Dry Powder by Fund Primary Geographic Focus, 2007 - 2017



Source: Preqin Infrastructure Online

*PrEQIn All Private Equity Index comprises private equity, real estate, infrastructure, natural resources and private debt (excluding direct lending).



INFRASTRUCTURE ONLINE

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