Infrastructure Institutional Investor Trends for 2017 Survey

PROBITAS PARTNERS

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probity (prō′bĭ·tē)
n. [from Latin probitas: good, proper, honest.] adherence to the highest principles, ideals and character.

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.

Infrastructure Landscape

- Fundraising soared in 2016, driven by massive closes for the two largest infrastructure funds ever raised, Brookfield III and GIP III. Together these two funds accounted for 32% of the money for closed-end funds last year (Chart I). While fundraising in the first half of 2017 was down from last year's record pace, 2017 is still likely to beat the fundraising totals for every year except 2016.

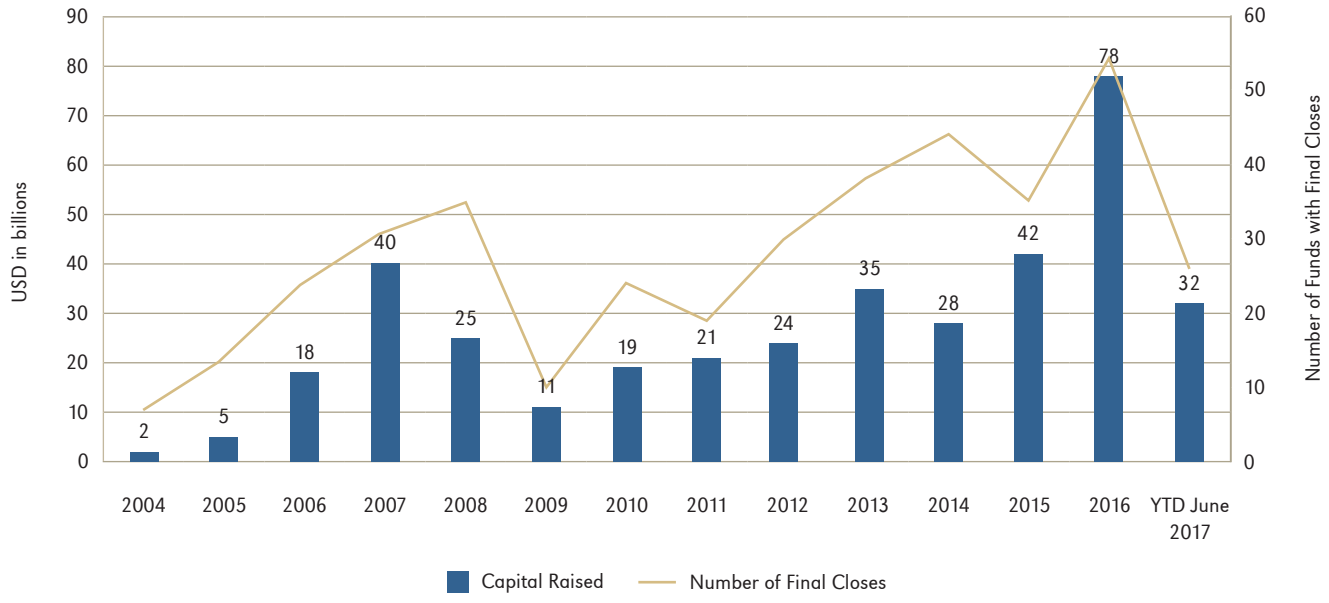
- Last year global funds like Brookfield and GIP dominated the market. For the first half of this year, fundraising was very balanced between North American, European and Global funds (Chart II). Fundraising for other emerging markets surged in 2017 driven by the large closing of Actis' Fund V.

- Brownfield/greenfield funds (targeting brownfield investing with some ability to invest in greenfield or value-added projects that are not core brownfield) continue to comprise the largest sector of the market, with 49% of capital raised (Chart III). Interest in pure core brownfield closed-end funds remains weak. Many investors targeting these strategies invest directly in projects or through open-end funds or separate accounts.

- Interest in infrastructure debt funds remains relatively weak, as does interest in funds solely focused on renewable projects.

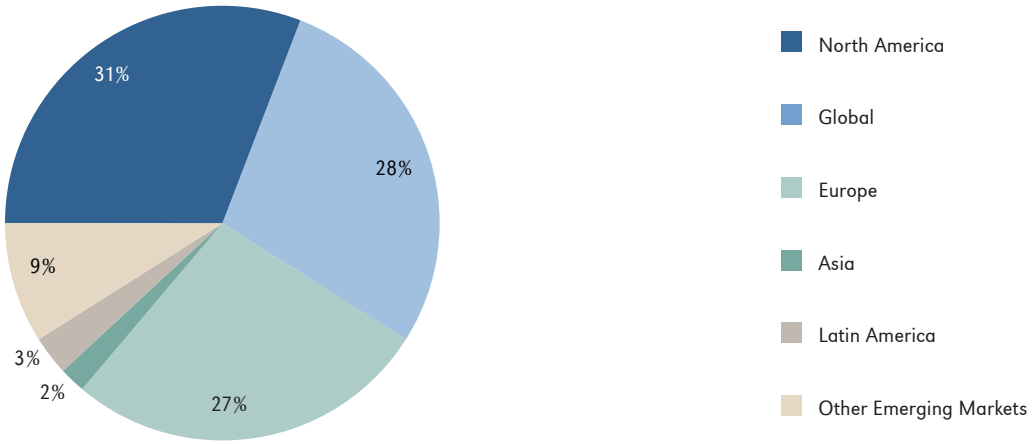
While fundraising in the first half of 2017 was down from last year's record pace, 2017 is still likely to beat the fundraising totals for every year except 2016.

Chart I Global Infrastructure Fundraising 2004–2017



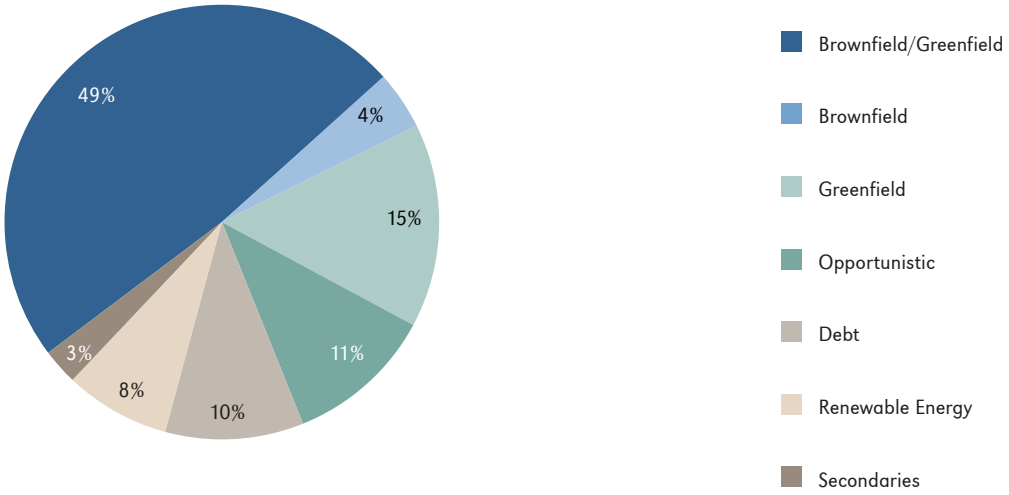
Source: Probitas Partners; PREQIN, Infrastructure Investor, Private Equity Analyst
Note: Does not include infrastructure funds-of-funds

Chart II Infrastructure Fundraising, YTD 2017 by Region
(in terms of capital raised in USD)



Source: Probitas Partners; PREQIN, Infrastructure Investor, Private Equity Analyst
Note: Does not include infrastructure funds-of-funds

Chart III Infrastructure Fundraising, YTD 2017 by Strategy
(in terms of capital raised in USD)



Source: Probitas Partners; PREQIN, Infrastructure Investor, Private Equity Analyst
Note: Does not include infrastructure funds-of-funds

Ten Largest Infrastructure Funds

- The ten largest closed-end infrastructure funds raised to date are listed in Table I. Brookfield and GIP hold the top four positions, and another GIP fund is ranked seventh.
- All these funds focus on developed market investing and they tend to target core and value-added brownfield projects with the flexibility to invest opportunistically in greenfield transactions.
- Most of these funds are denominated in U.S. dollars, even if they invest globally.
- Blackstone Group LP recently announced a $40 billion effort that is not detailed here as it has just launched.

Table I Ten Largest Infrastructure Funds, August 2017

Rank	Fund Name	Firm Name	Location	Year	Amount (MM)
1	Global Infrastructure Partners II	Global Infrastructure Partners	New York	2016	USD 15,800
2	Brookfield Infrastructure Fund III	Brookfield Asset Management	Toronto	2016	USD 14,000
3	Global Infrastructure Partners II	Global Infrastructure Partners	New York	2013	USD 8,250
4	Brookfield Infrastructure Fund II	Brookfield Asset Management	Toronto	2013	USD 7,000
5	GS Infrastructure Partners I	GS Infrastructure Investment Group	New York	2006	USD 6,500
6	Macquarie European Infrastructure Fund II	Macquarie Infrastructure and Real Assets	Sydney; London	2006	EUR 4,635
7	Global Infrastructure Partners I	Global Infrastructure Partners	New York	2008	USD 5,640
8	ArcLight Energy Partners Fund VI	Arclight Capital Partners	Boston	2015	USD 5,575
9	Energy Capital Partners III	Energy Capital Partners	Short Hills, NJ	2014	USD 5,095
10	Macquarie European Infrastructure Fund V	Macquarie Infrastructure and Real Assets	Sydney; London	2006	EUR 4,000
10	EQT Infrastructure Fund III	EQT Funds Management	Stockholm	2017	EUR 4,000

Source: Probitas Partners

Infrastructure Institutional Investor Survey

Probitas Partners annually conducts an online survey of institutional investors to gauge their interest in and perspectives on infrastructure. This year's survey was taken in mid-2017 and responses were received from 40 senior investment executives.

Highlights of Survey Findings

- ***What do investors fear at this point? A continual flood of money and the top of the market cycle:*** Investors are often concerned that too much money coming into the market will hurt their returns. That is the number one fear of investors this year, as it was last year. Notably, the number of investors who fear that we are at the top or nearing the top of the infrastructure investing market cycle more than doubled over the last year, moving from 28% of survey respondents to 62%.

- ***Core brownfield and infrastructure debt funds are under continued pricing pressure:*** Returns on both core brownfield projects and infrastructure debt have come under increasing pressure due to market forces impacting those strategies. In reaction, institutional investors continue to apply downward pressure on the fees and carried interest they are willing to pay for these strategies in a fund format.

- ***Even as fundraising and dry powder soar, investors' appetite remains strong:*** Both fundraising and dry powder for infrastructure have soared over the last 18 months. Investors are increasingly worried that we are nearing the top of a market cycle. However, few investors are seeking to decrease their allocations to the sector; 78% of respondents say that their appetite for infrastructure will either remain the same or increase over the next 12 months and only 6% say their appetite would decrease.

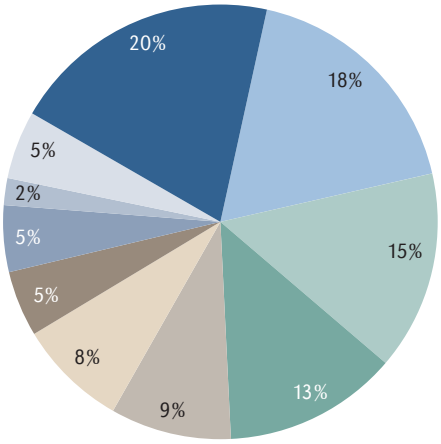
- ***Interest in long-duration funds remains low — but may be shifting:*** Though interest in open-end structures or long-dated funds with terms greater than 15 years is still low, there has been some movement away from 10-year maturity funds by investors more experienced in infrastructure investing.

- ***On the political front, little impact is expected from U.S. administration's infrastructure pronouncements or from Brexit:*** There are, however, some differences in perceptions on these issues between U.S. and European investors.

Profile of Respondents

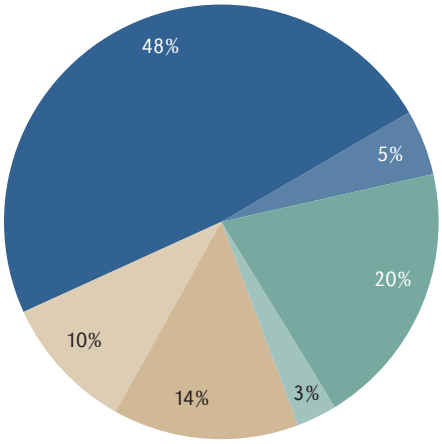
- A wide variety of types of institutions responded to the survey, though public pension plans, consultants, insurance companies, and funds-of-funds made up 66% of the respondents (Chart IV).
- North Americans made up just over 50% of the respondents, though there was significant participation from Europe and Asia as well (Chart V).
- 40% of respondents were very experienced, being active investors in the sector for five years or more, and with another 25% being consultants or advisors who have clients with various levels of experience (Chart VI).

Chart IV Respondents Categorized by Investor Type
"I represent a:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

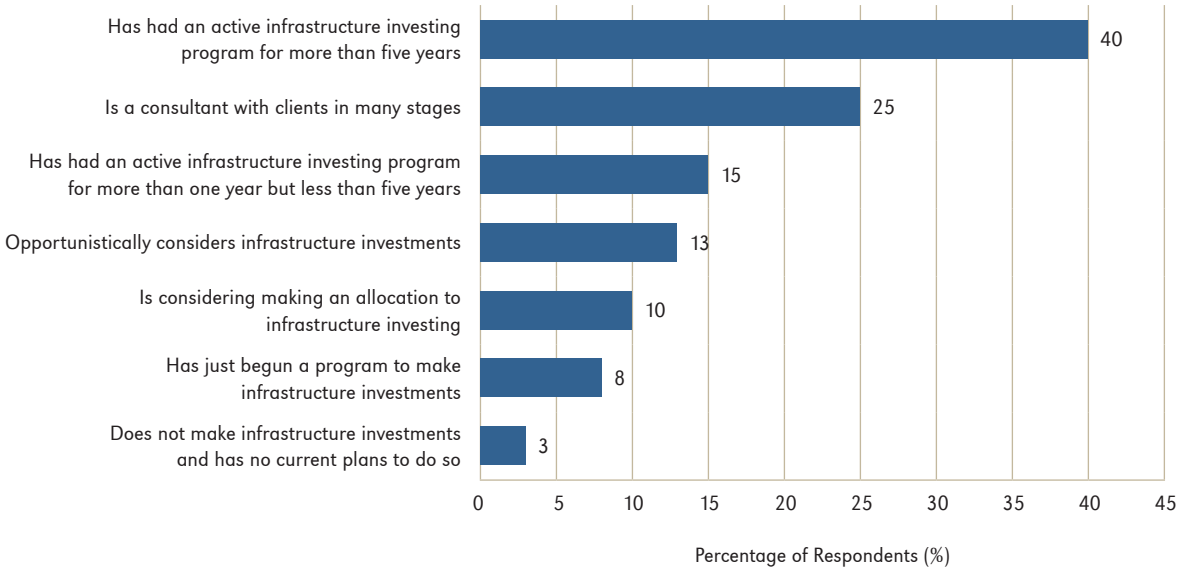
Chart V Respondents Categorized by Firm Headquarters
"My firm is headquartered:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Chart VI Plans for Infrastructure Investing

"As far as infrastructure investing is concerned, my firm (choose all that apply):"



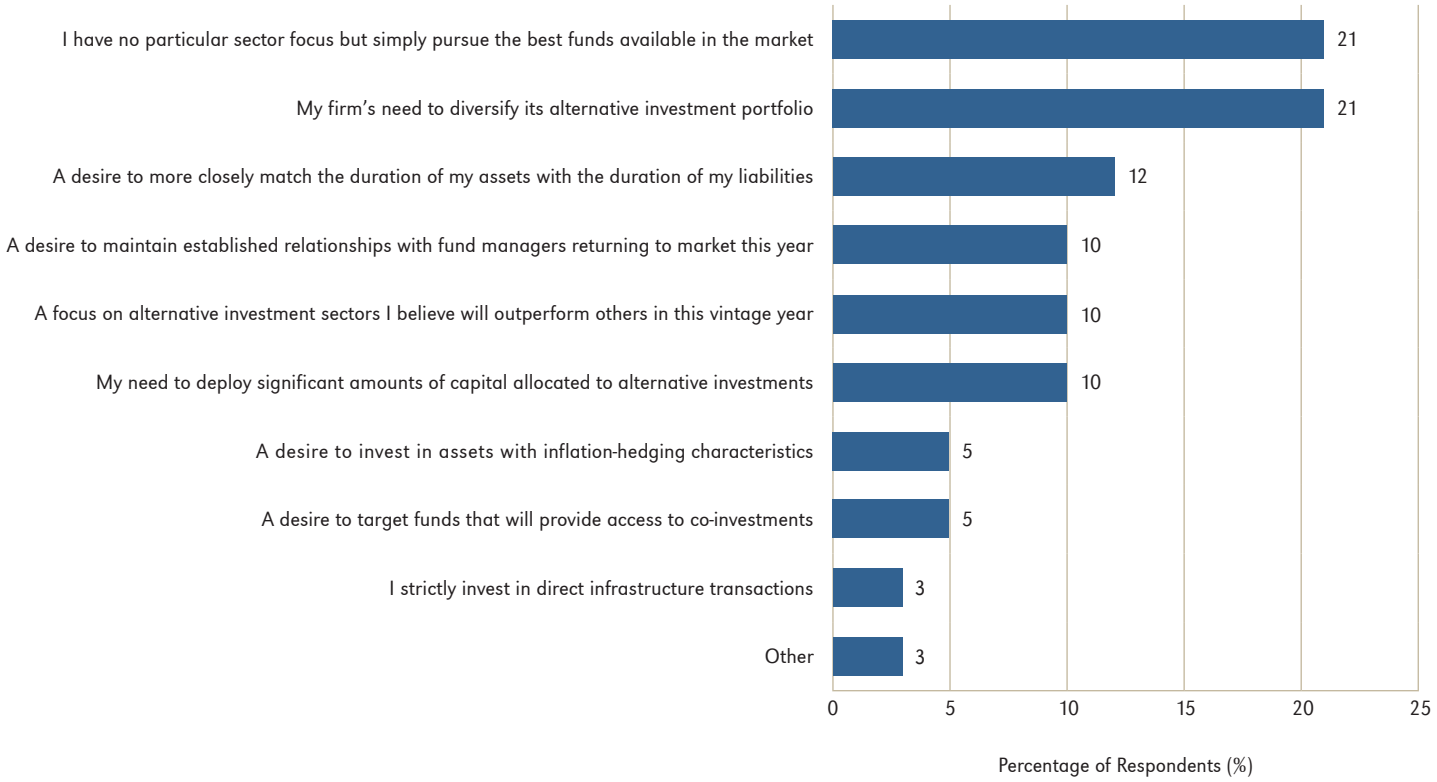
Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

40% of respondents were more experienced, being an active investor in the sector for five years or more

- Drivers of investor interest in infrastructure have become increasingly scattered over the last two years (Chart VII). In 2015, the largest driver was that respondents simply targeted the best funds available in the market (41%), down significantly this year to only 21%.
- In 2015, 13% of respondents said they were targeting funds that would provide access to co-investments, a response that was important to only 5% of participants this year. A desire to closely match the duration of assets increased from 3% in 2015 to 12% this year.

Chart VII Drivers for Sector Target Focus

"My sector investment focus over the next twelve months is driven by:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Plans for Infrastructure Investing

- In our first infrastructure survey in 2007, only 26% of respondents had separate infrastructure allocations, while 40% were making infrastructure investments out of their private equity allocations. As the sector has matured over the last decade, there has been a marked shift to investing out of separate dedicated infrastructure allocations or real asset allocations that include infrastructure along with other real assets; investment through private equity allocations has fallen dramatically (Chart VIII).

- Over the last three years, real assets allocations increased in popularity, moving from 22% in 2014 to 42% this year. (In a number of instances, separate infrastructure allocations are part of larger real assets allocations.)

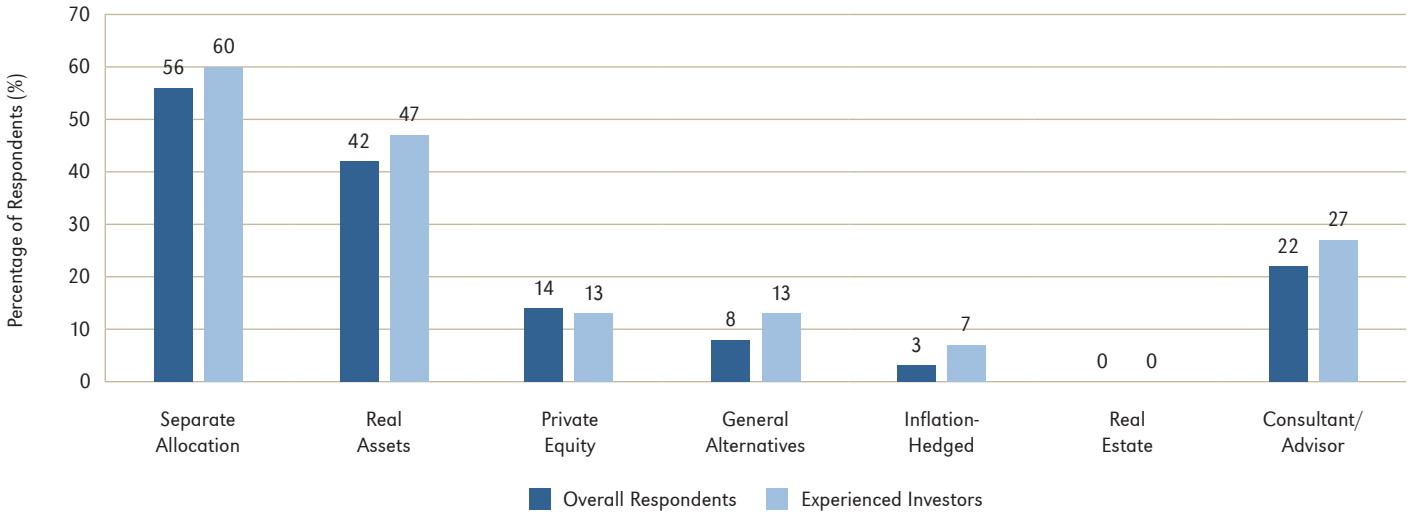
- North Americans are much more likely to include infrastructure as part of a real assets allocation, with 60% saying they do. Respondents outside North America are much less likely to do so, with only 19% doing so.

- In 2007, 11% of respondents made infrastructure investments from real estate allocations, a number that has gone to zero over the last two years.

- Consultants and advisors are listed in the chart as a separate category, as most of them have a number of clients that individually determine their allocations.

Chart VIII Categorizing Infrastructure

"Within our portfolio, infrastructure investments are or will be placed in (choose all that apply):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey
Note: "Experienced Investors" constitutes those investors who have been active in the sector for five years or more

- After 2016's huge fundraising year and the relatively strong start to 2017, a majority of investors felt that their appetite for infrastructure would remain the same over the next 12 months. The number of respondents expecting their appetite would either increase or decrease both declined (Chart IX).

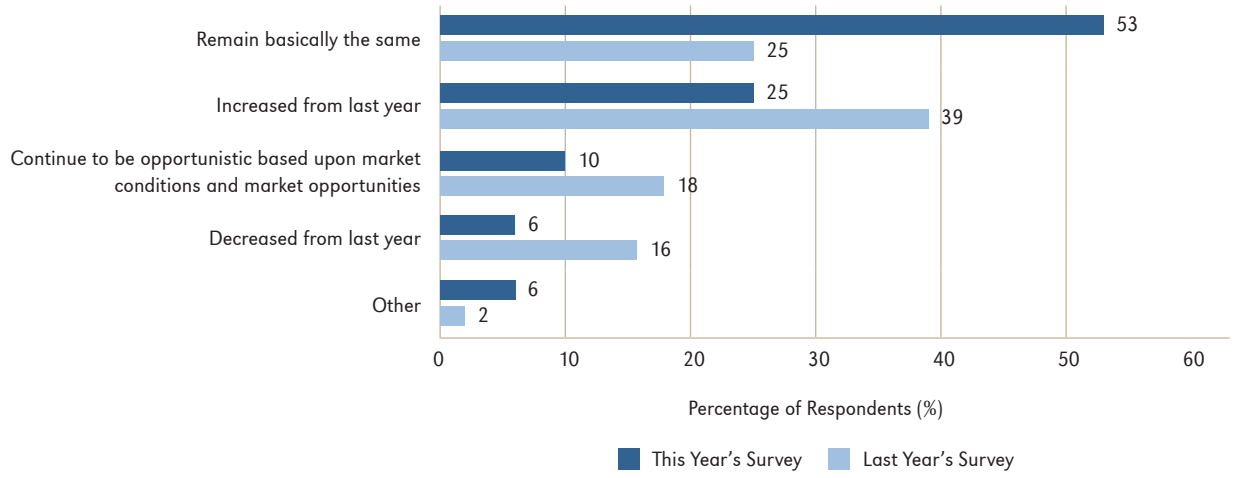
- The amount that respondents intend to deploy over the next 12 months is varied; those differences in size often impact investors strategy and investment plans (Chart X). Respondents who did not have a specific allocation are either consultants or those who only invest in the sector opportunistically.

- Nearly every respondent to the survey either actively or opportunistically invests in closed-end infrastructure funds. There is also strong interest in co-investments (Chart XI).

- Infrastructure funds-of-funds are the least favored strategy, with only 3% of respondents targeting them.

Chart IX Appetite for Infrastructure

"Compared to last year, I believe that my firm's appetite for infrastructure investments for the next twelve months will:"

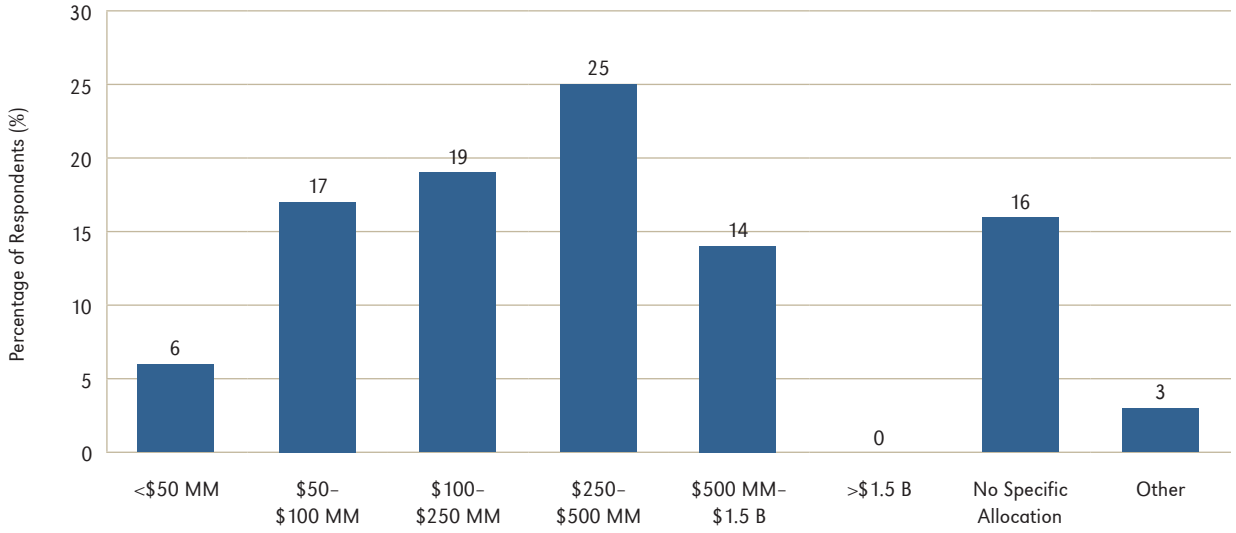


Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Nearly every respondent to the survey either actively or opportunistically invests in closed-end infrastructure funds

Chart X Infrastructure Allocations

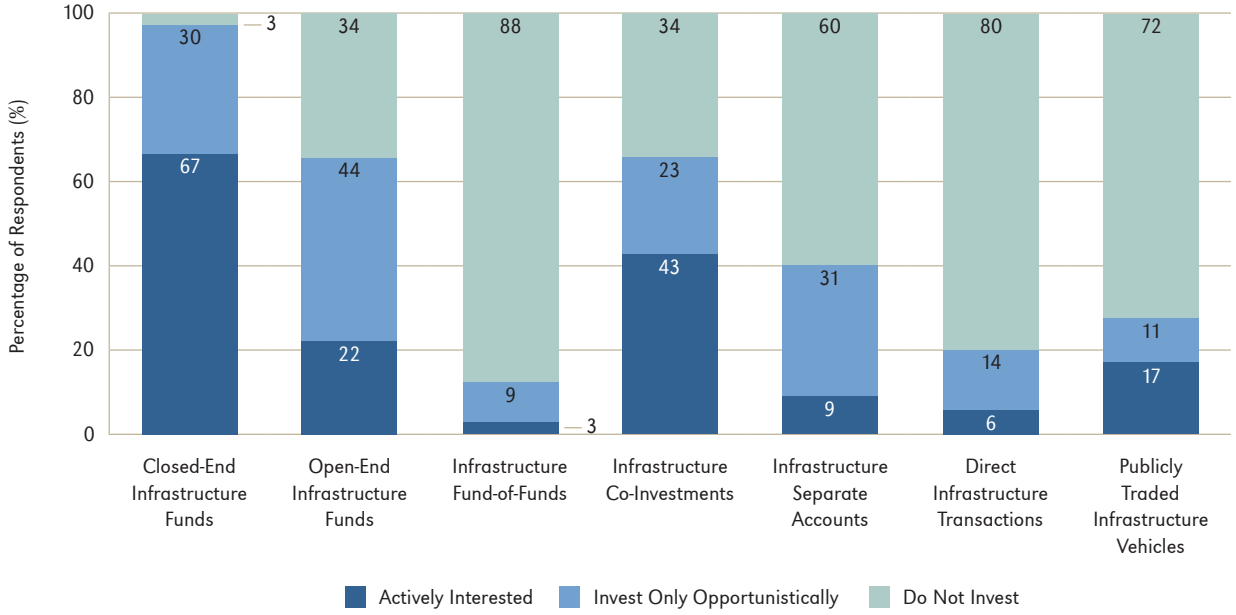
"Over the next year, my allocation to infrastructure commitments will be (in USD):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Chart XI Interest in Investment Structures

"My firm's interest in various investment structures is:"



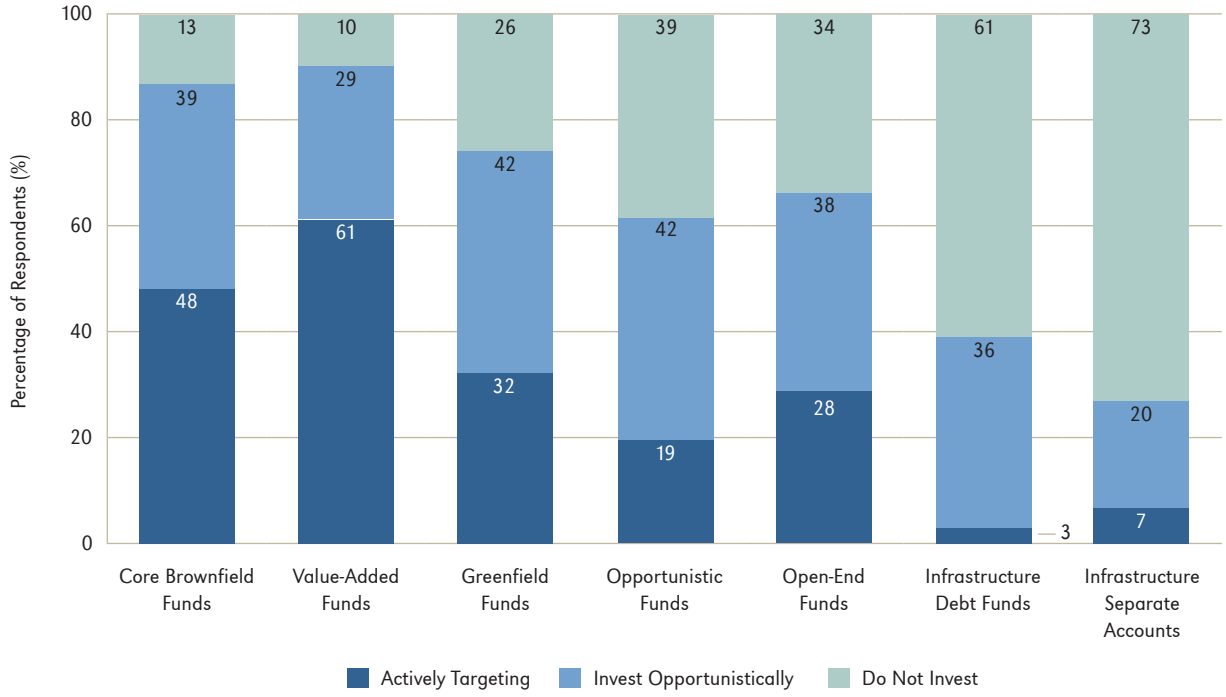
Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Sectors, Industries and Geographies of Interest

- For the first time since we began our surveys a decade ago, value-added brownfield funds constitute the largest sector of investor interest, moving ahead of core brownfield funds (Chart XII).
- Though interest in greenfield and open-end funds still trails brownfield funds, interest has increased in the last year; greenfield funds went from 19% to 32% and open-end funds moved from 11% to 28%.
- Respondents perceptions regarding the attractiveness of industry sectors was similar to last year, with the biggest difference being a decline in interest in water and waste management (Chart XIII).

Chart XII Interest in Fund Strategies

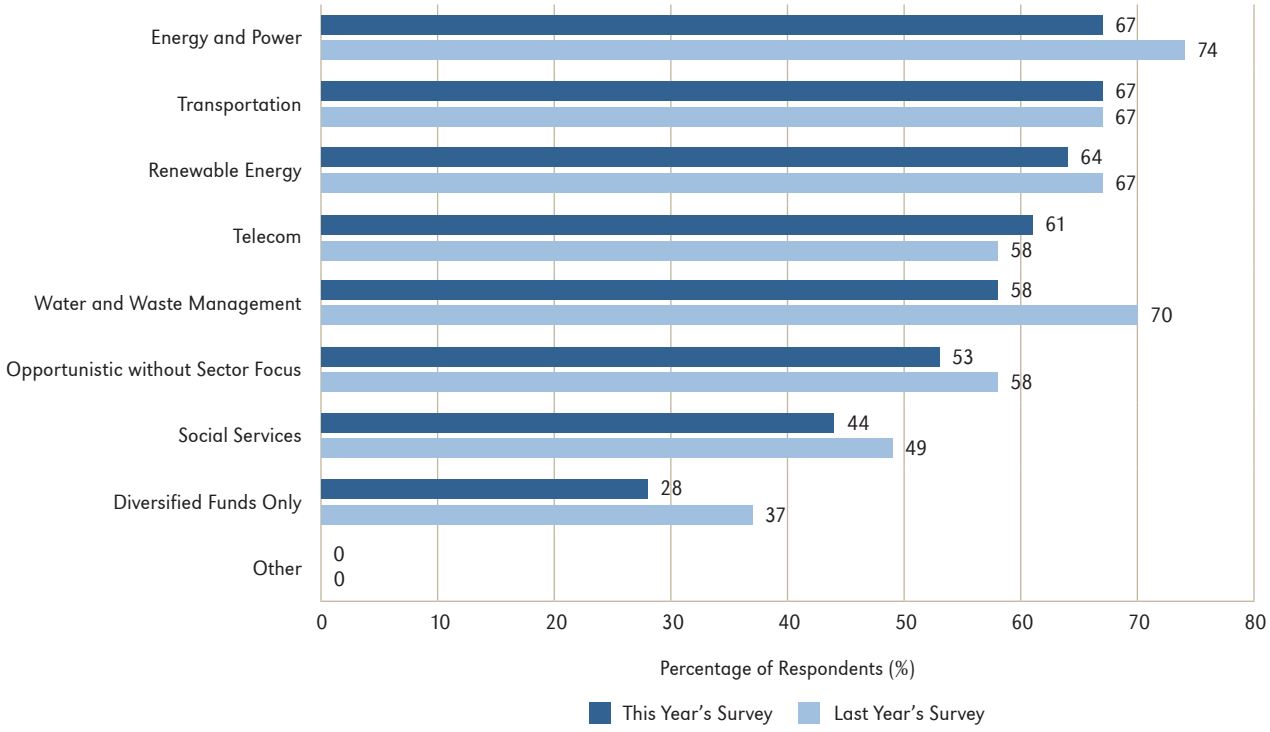
"My firm's interest in various fund strategies is:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Chart XIII Infrastructure Industry Sectors of Interest

"My firm seeks to invest in the following sectors (choose all that apply):"

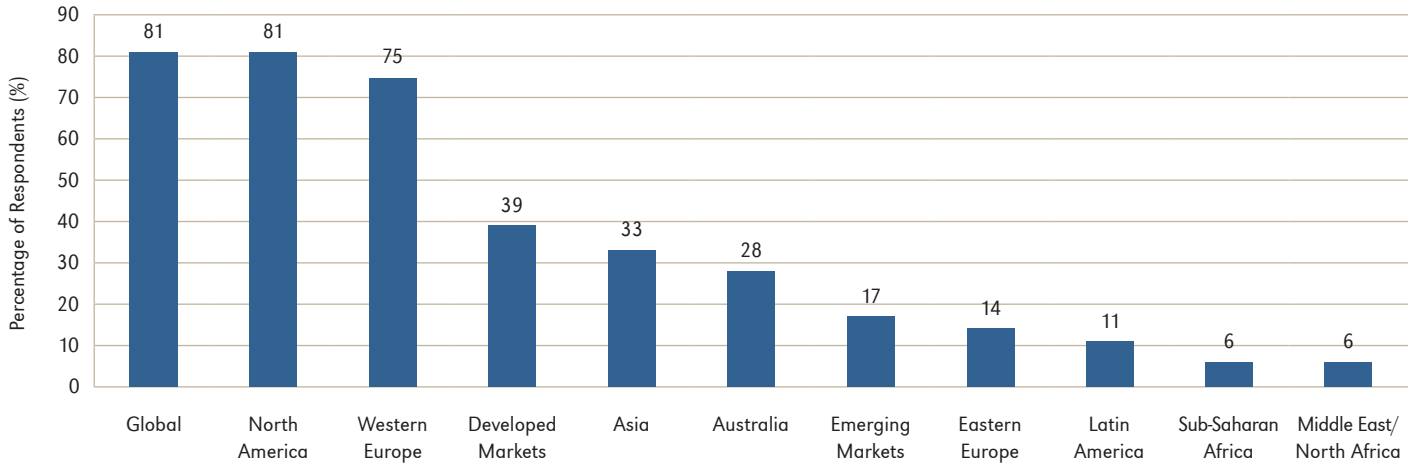


Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

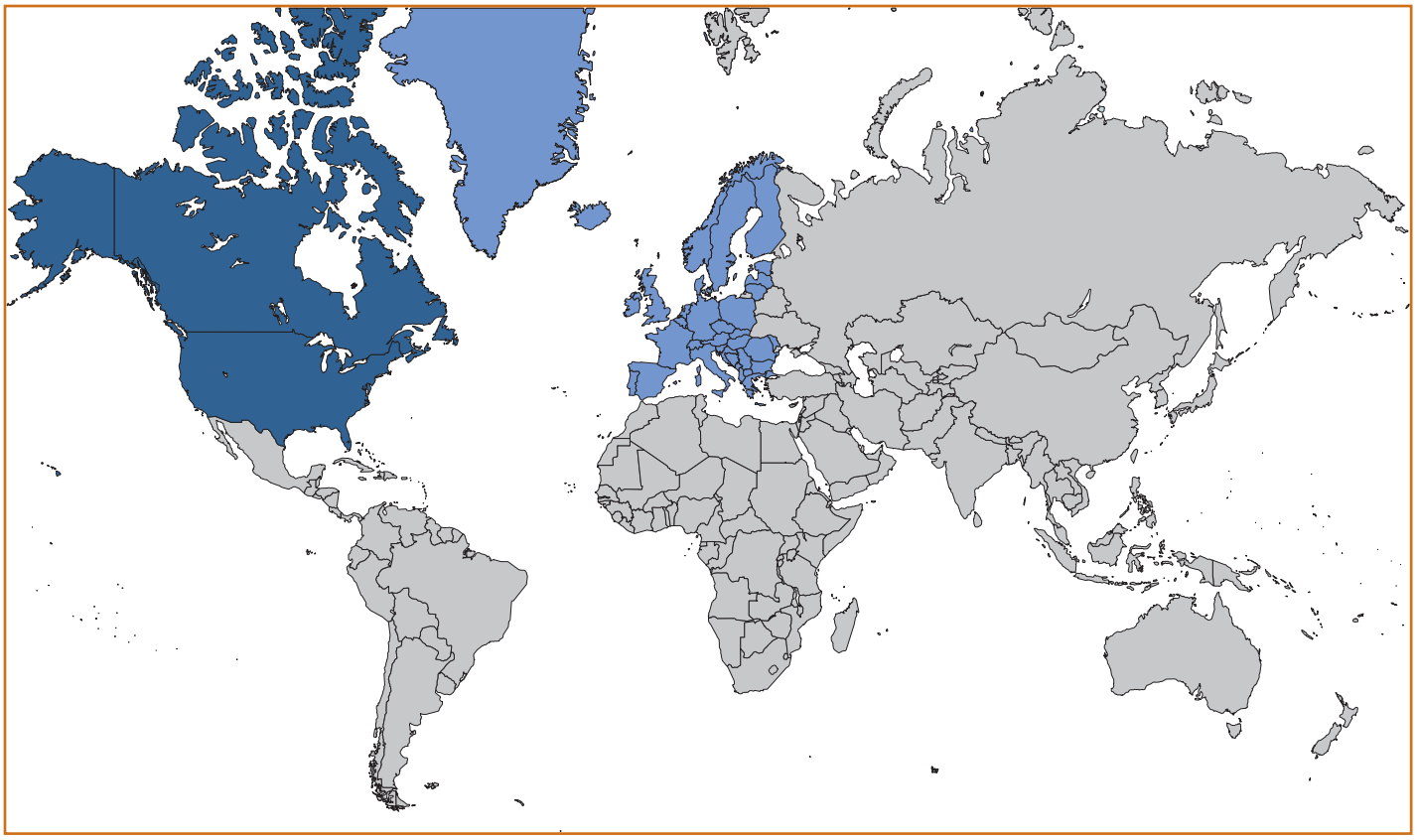
- Investors are most focused on the developed markets of North America and Europe, as well as on global funds that tend to focus on OECD countries (Chart XIV). Interest in certain specific emerging markets increased slightly this year.

Chart XIV Geographic Focus

"My firm invests in infrastructure funds with investment mandates focused on (choose all that apply):"



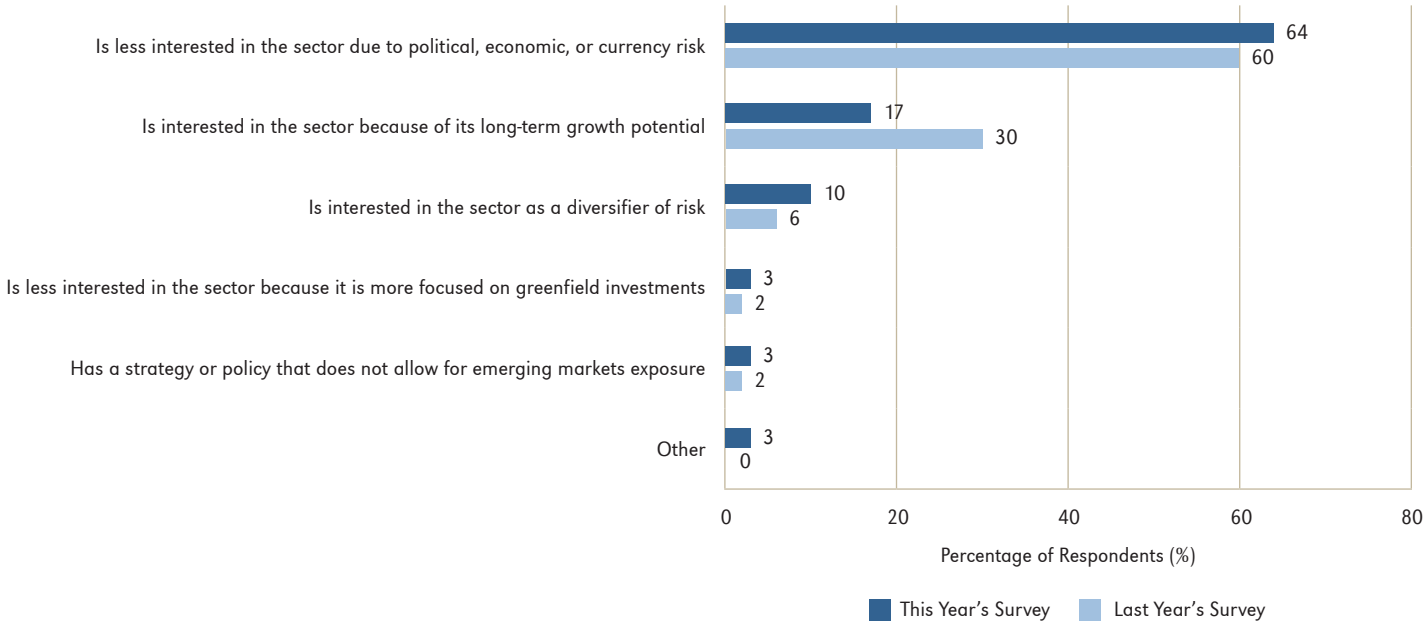
Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey



- In general, however, overall interest in emerging markets remained weak (Chart XV); the number of investors who said that they were interested in emerging markets due to long-term growth potential declined significantly.
- Notably, those less interested in the sector due to political, economic, or currency risk doubled over the last two years, moving from 32% in 2015 to 64% this year.

Chart XV Interest in Emerging Markets

"As far as my interest in emerging markets is concerned, my firm:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

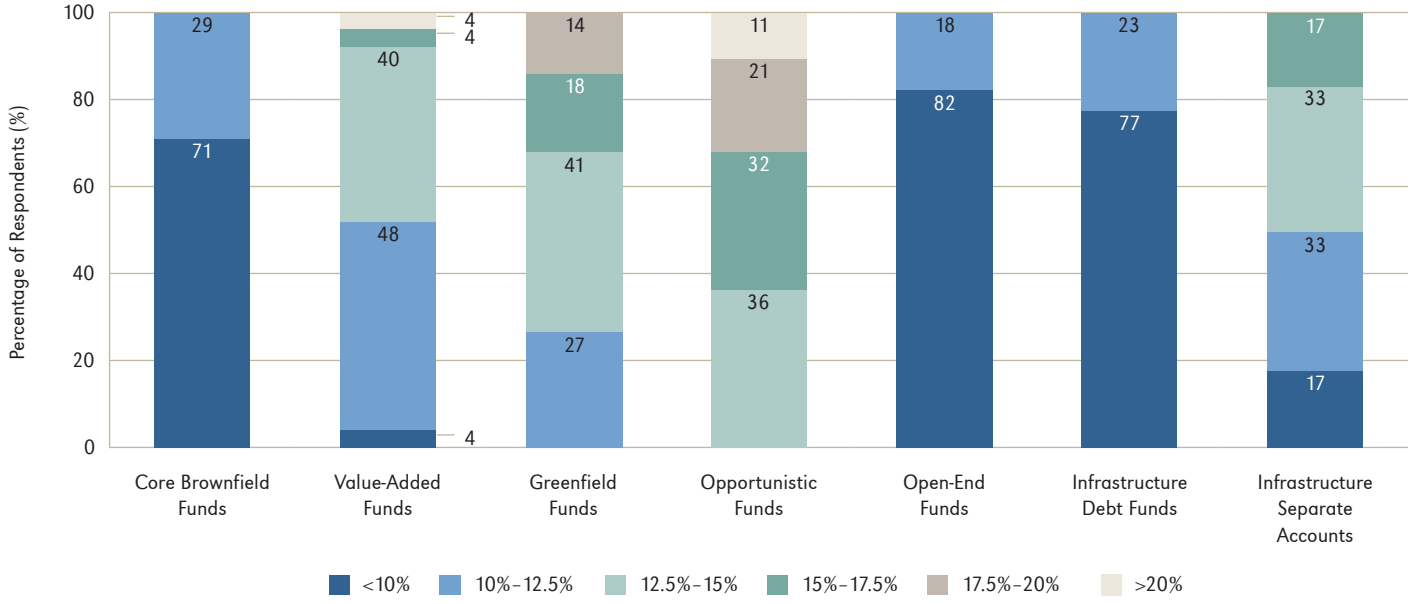
The number of investors who said that they were interested in emerging markets due to long-term growth potential declined significantly.

Targeted Returns and Fees

- Perceived risk drives investor's return expectations, as detailed in Chart XVI:
  - Expected returns among equity strategies clearly are the lowest for core brownfield funds (with 71% of respondents expecting Net IRRs of 10% or less), increasing across the spectrum to opportunistic funds whose return expectations are more in line with private equity funds.
  - Open-end funds (which usually have heavy allocations to core brownfield projects) and debt funds have very similar return expectations to core brownfield funds.
  - Non-North American respondents have significantly lower return expectations for core brownfield funds; 85% expect returns below 10% versus only 60% of North American respondents.
- Perceived risk and return expectations also drive management fee and carried interest expectations (Charts XVII and XVIII):
  - Expected core brownfield fund management fees and carried interest declined again this year, with 92% of respondents expecting fees below 1.25% (44% expecting fees below 1.00%), while 56% of respondents expected carry to be less than 10%.
  - For open-end funds and infrastructure debt funds, fees and carried interest are also under pressure and declined further this year. 60% of respondents expect open-end funds to charge management fees of less than 1.00% while 72% expect carried interest to be less than 10%. For debt funds, 73% of respondents are looking for management fees to be less than 1.00%, while 40% expect carried interest to be less than 5%.
  - Fee and carried interest expectations for the other infrastructure equity strategies progressively trend higher along with anticipated returns.

Chart XVI Target Net IRRs

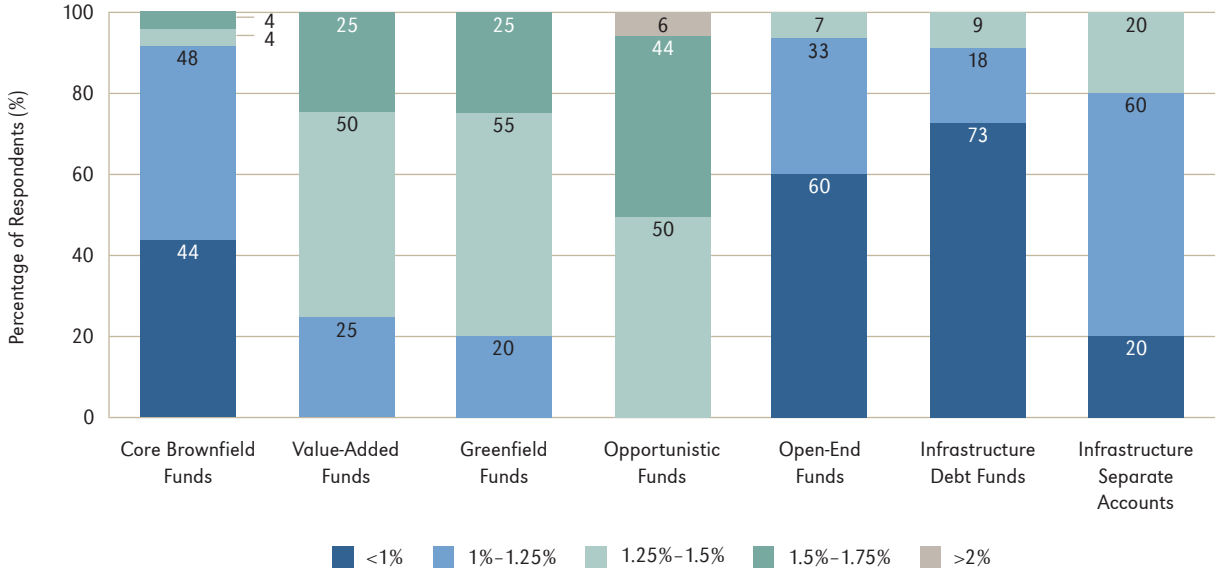
"For the major sectors of closed-end infrastructure funds operating in developed markets, my firm's target Net IRRs are as follows:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Chart XVII Targeted Annual Management Fees

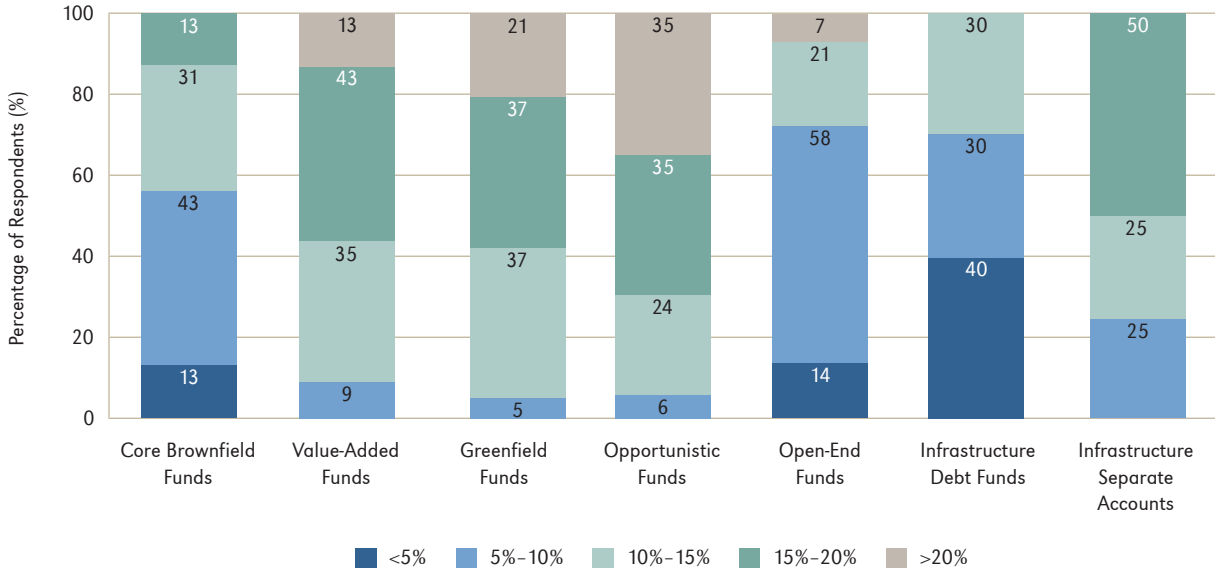
"For the major sectors of closed-end infrastructure funds operating in developed markets, my firm's targeted management fees are:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Chart XVIII Targeted Carried Interest

"For the major sectors of closed-end infrastructure funds operating in developed markets, my firm's targets for carried interest are:"

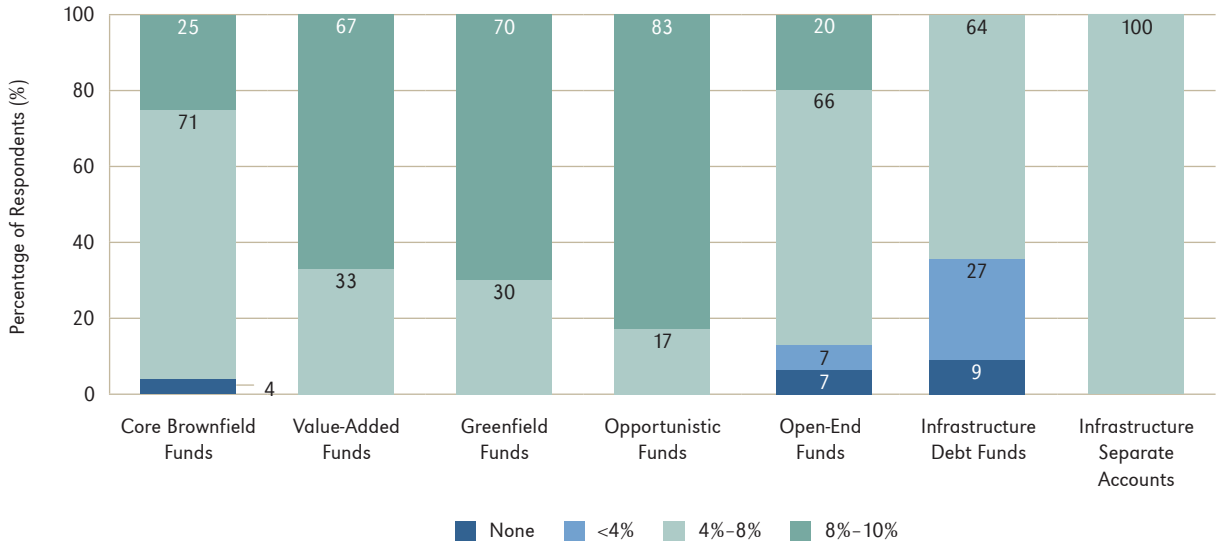


Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

- Chart XIX shows the same pattern of expectations regarding carried interest hurdles.
- Notably, a few respondents expect no carried interest hurdles at all for core brownfield, open-end and infrastructure debt funds.

Chart XIX Carried Interest Hurdle

"For the major sectors of closed-end infrastructure funds operating in developed markets, my firm's targets for carry hurdles are:"



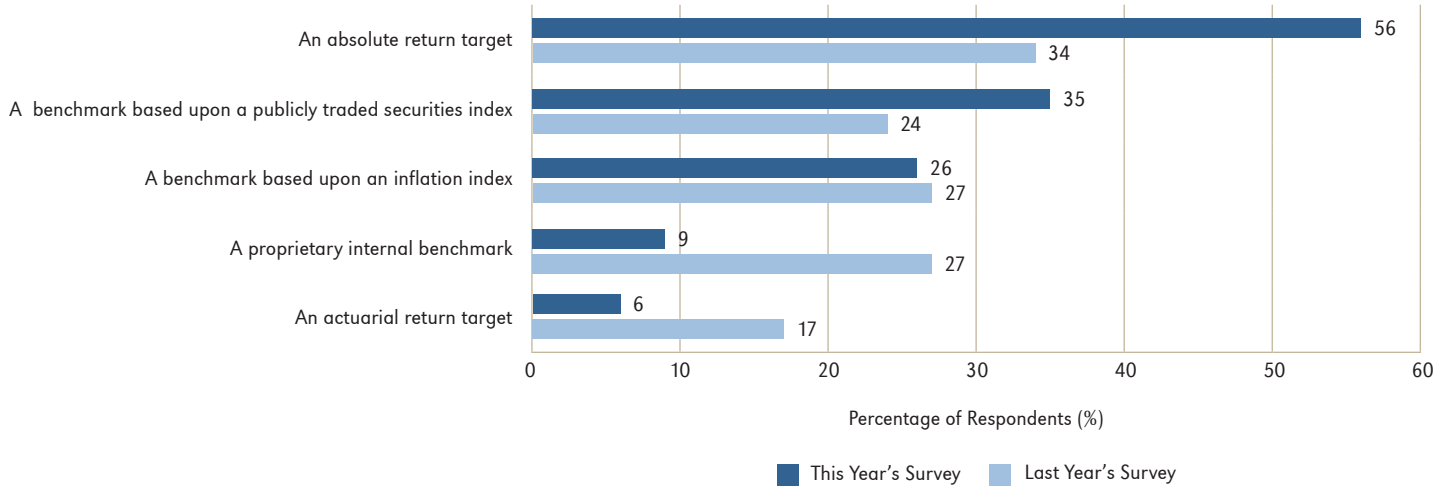
Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Portfolio Benchmarks

- A clear majority of respondents in this year's survey favored absolute return targets, while interest in proprietary internal benchmarks and actuarial returns fell from last year (Chart XX).
- A few respondents use multiple benchmarks and as a result the percentage totals in the chart below for both years are greater than 100%.

Chart XX Portfolio Benchmarks

"Regarding portfolio benchmarks for infrastructure, my firm uses (choose all that apply):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

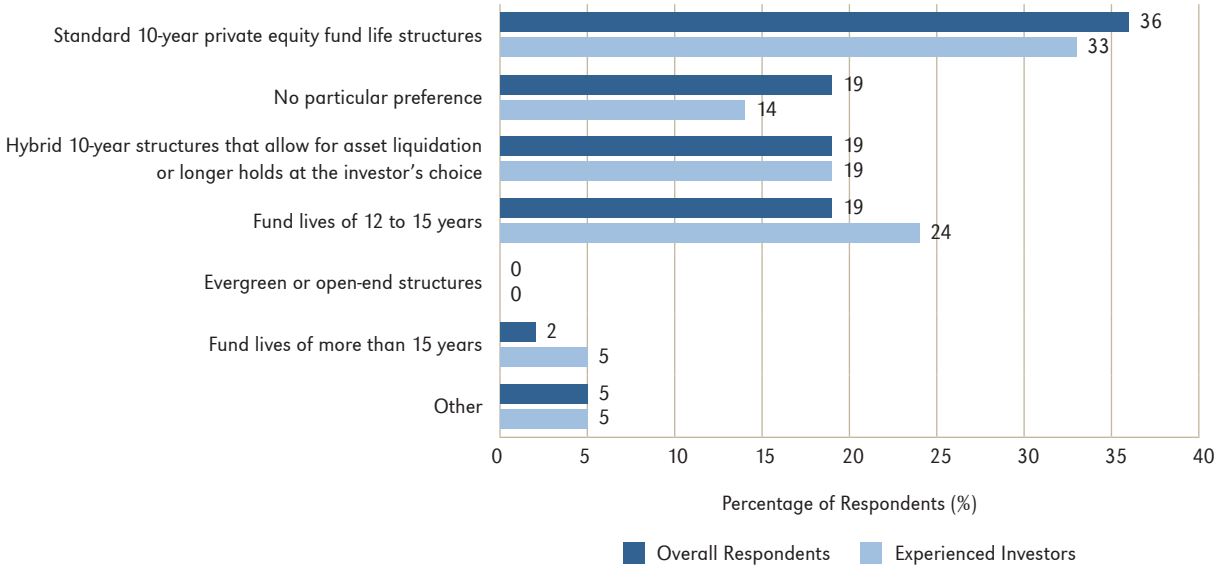
Interest in proprietary internal benchmarks and actuarial returns fell from last year

Investment Structures

- Unlike the private equity market, there is a broader variety of terms available in infrastructure.
- In last year's survey, there was not a tremendous difference in the preferences between overall respondents and experienced investors. The funds with 10-year average lives attracted a clear plurality of support (Chart XXI).
- This year's survey attracted more respondents with longer experience in infrastructure, and these investors were much less interested in 10-year structures (Chart XXII). There was a noticeable shift towards funds with 12- to 15-year maturities among both overall and experienced investors, and experienced investors were more likely to have no structural preference, being more flexible in their approach to the market.
- As in our previous surveys, interest in open-end or evergreen structures or funds with maturities greater than 15 years remains quite low.
- Independent managers continued to prefer the sponsored vehicles, a result in line with our previous surveys (Chart XXIII).

Chart XXI Preferred Terms Structures, 2016

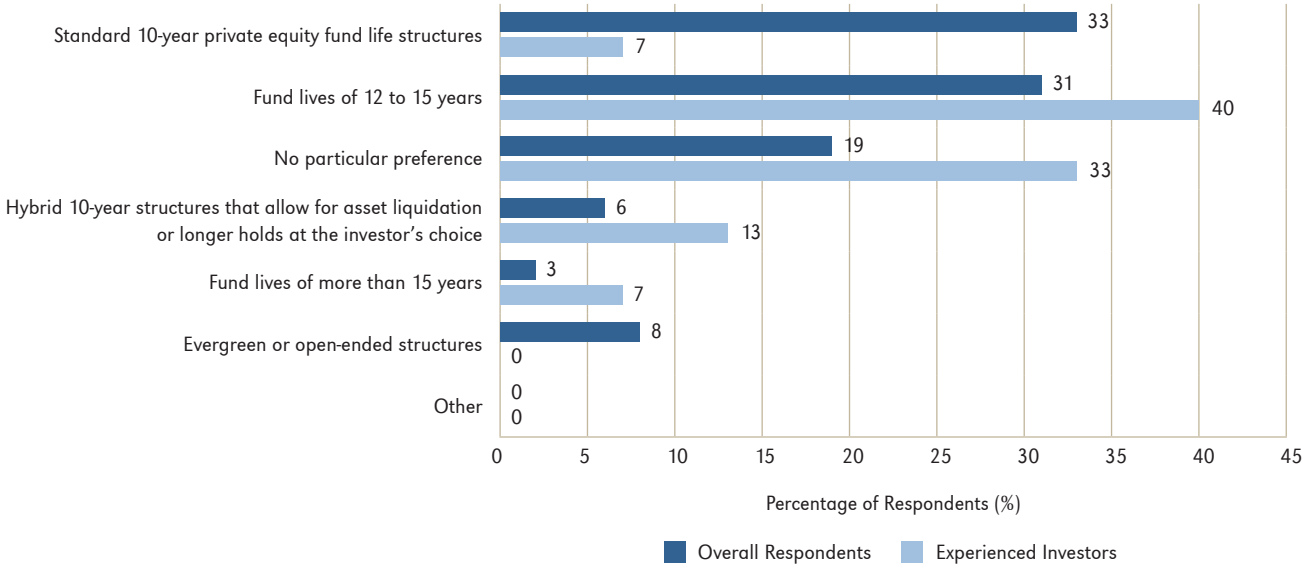
"My firm prefers to invest in vehicles with the following duration:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2016 Survey
Note: "Experienced Investors" constitutes those investors who have been active in the sector for five years or more

Chart XXII Preferred Terms Structures, 2017

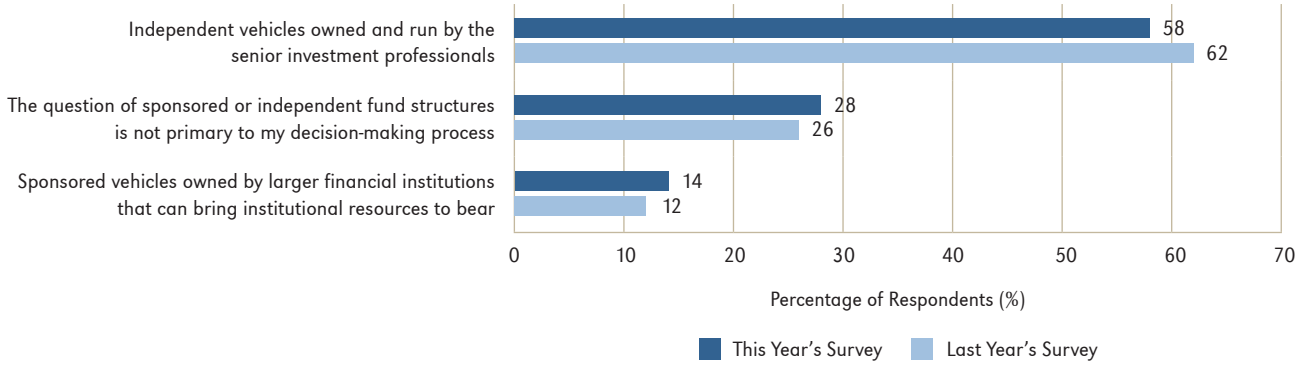
"My firm prefers to invest in vehicles with the following duration:"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey
Note: "Experienced Investors" constitutes those investors who have been active in the sector for five years or more

Chart XXIII Independent vs. Sponsored Fund Structures

"As far as terms and conditions are concerned, I would prefer to invest in funds that are (choose only one):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

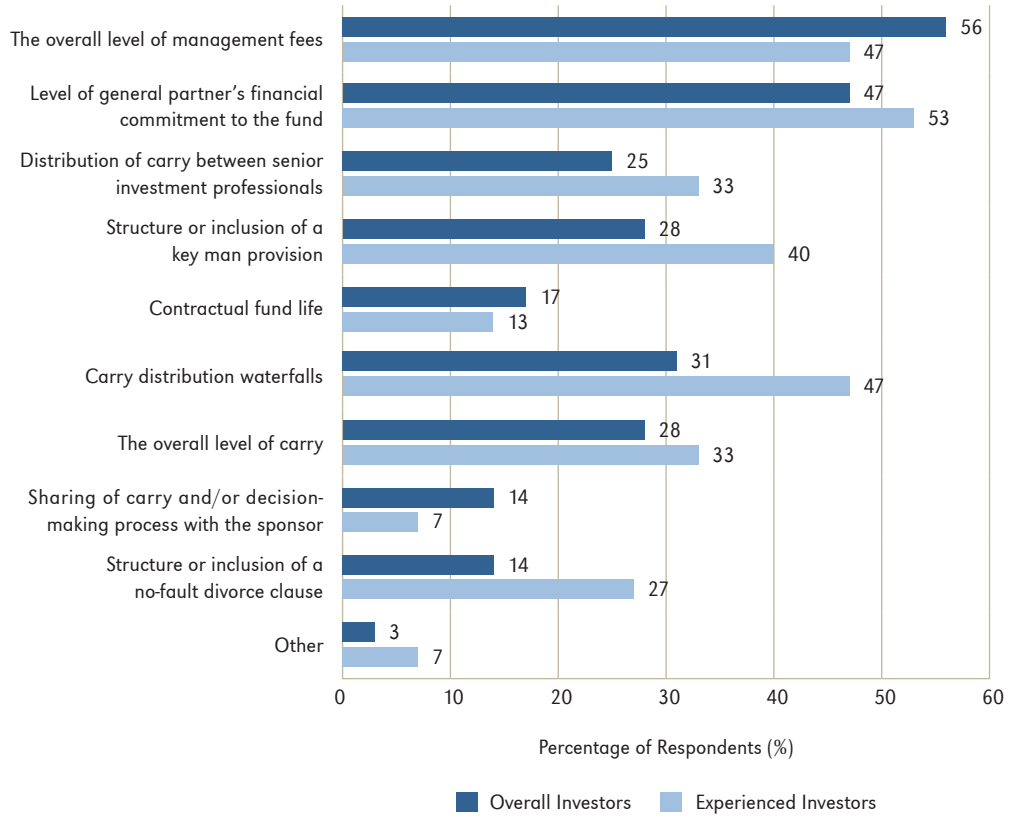
Funds with 10-year average lives attracted a clear plurality of support

Terms and Conditions

- The top two areas of focus on terms and conditions are management fee level and the amount of a general partner's financial commitment to the fund (Chart XXIV).
- Experienced investors focused more on carried interest distribution waterfalls, no-fault divorce clauses, and key man provisions.
- There were some geographical differences between respondents. The number one area of focus for North American investors was the overall level of management fees (65%), while investors headquartered outside North America focused most on the level of a general partner's financial commitment (50%).

Chart XXIV Terms and Conditions Focus

"As far as terms and conditions are concerned, separate from due diligence issues, my firm is most focused on (choose no more than two):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey
Note: "Experienced Investors" constitutes those investors who have been active in the sector for five years or more

Political Arena

This year we asked a few questions about current political events and how they might impact private infrastructure investing (Chart XXV).

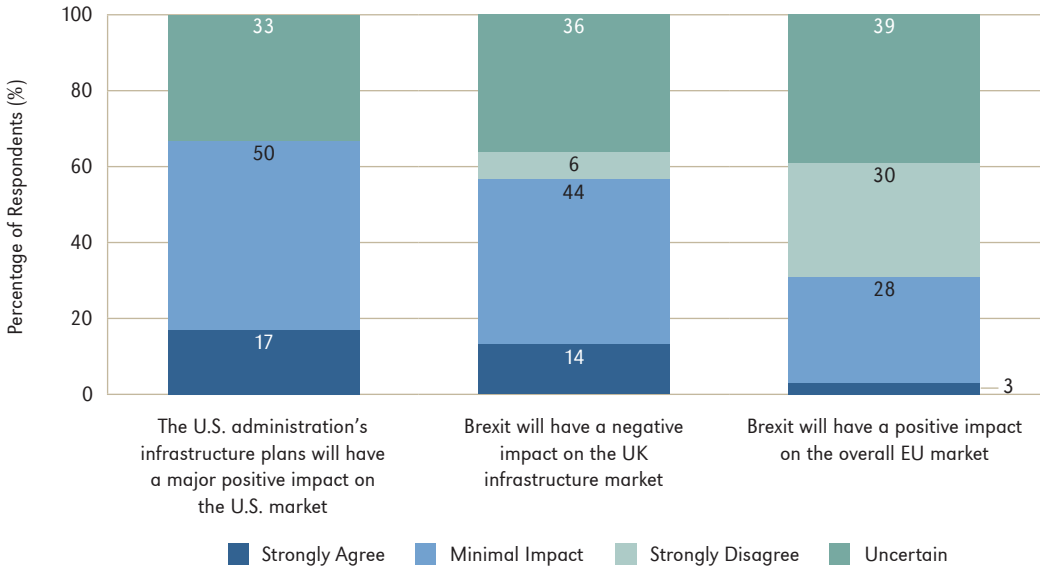
- Only 17% of respondents felt that the current U.S. administration's infrastructure plans would have a major positive impact on the U.S. market, while 50% felt it would have minimal impact. Among respondents from the U.S., a slightly larger number of 22, felt that it would have a major positive impact; 61% felt that any impact would be minimal. Interestingly, among European respondents, no one felt that the current plans would have a major positive impact in the U.S.

- Only 14% of overall respondents felt that Brexit would negatively impact the UK market — though 33% of European respondents felt that there would be negative consequences. Only 6% of U.S. respondents felt that the UK would be negatively impacted.

- There was little support for the theory in any geography that EU infrastructure investing would benefit from Brexit.

Chart XXV Political Arena

"In the political arena, I believe"



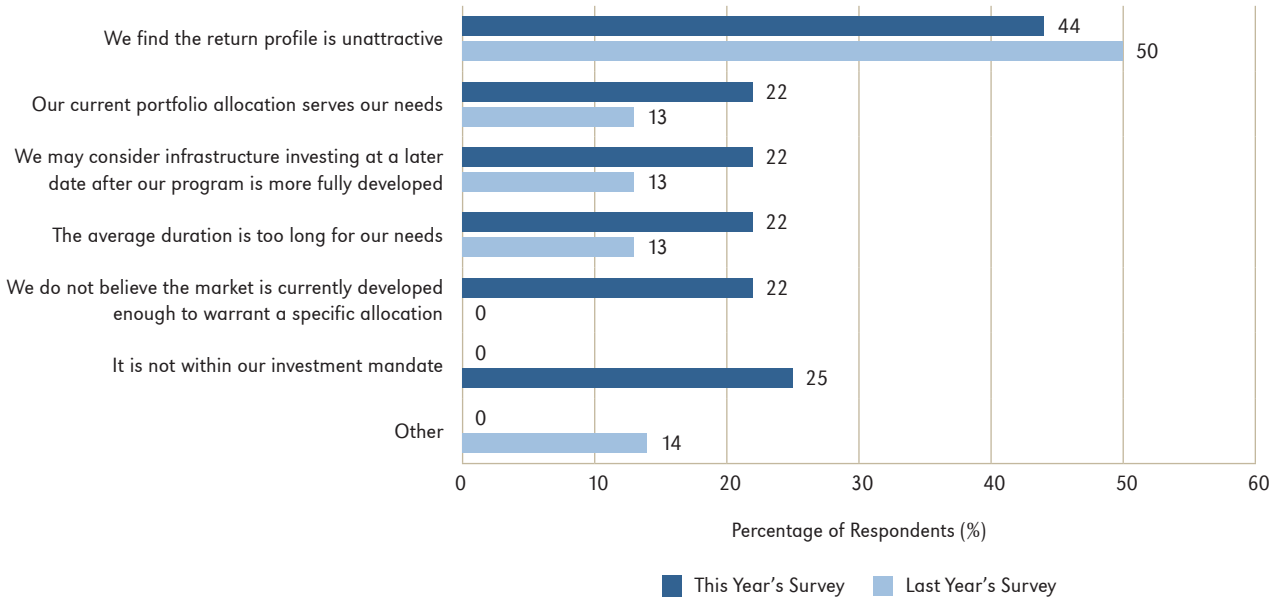
Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Reasons for Not Investing

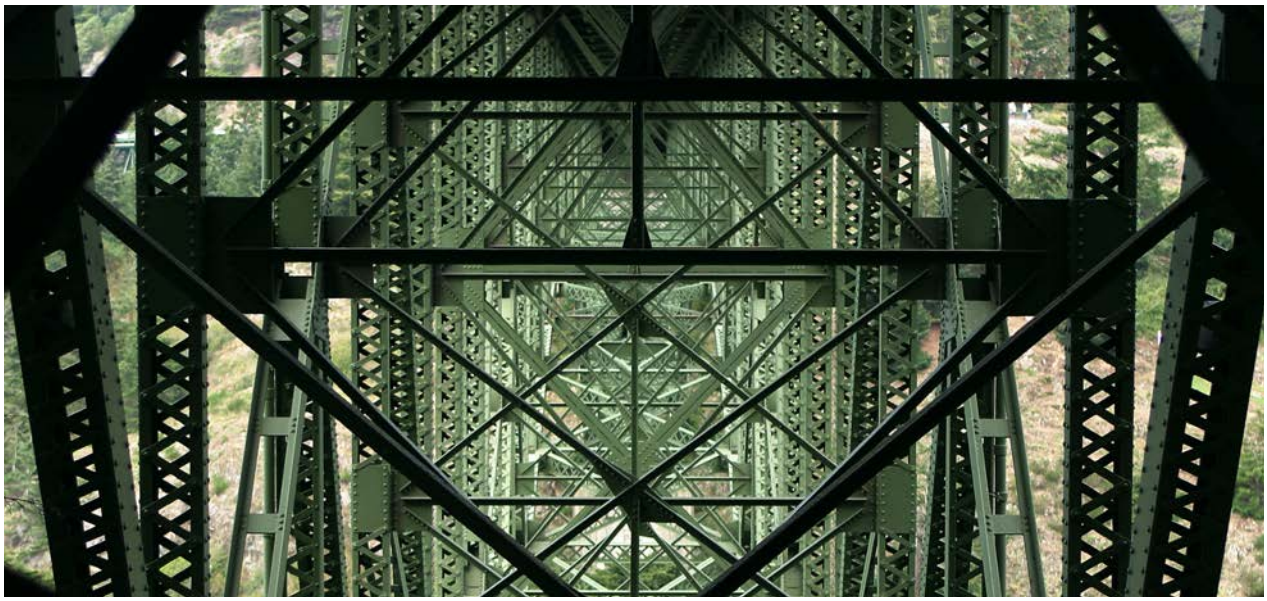
- Most of the respondents to the survey invest in infrastructure in some manner.
- For those that were not actively investing, most believed the return profile was unattractive, with a number of other concerns scattered among respondents (Chart XXVI).

Chart XXVI Reasons for Not Investing in Infrastructure

"My firm is not interested in infrastructure because (choose all that apply):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey



Infrastructure Investment Concerns

- Table II below compares the top four concerns today to concerns from our 2010 survey, taken in the aftermath of the Great Financial Crisis (GFC), in order to provide long term-term perspective.

- However, the most notable difference in this year's survey is a comparison to last year's results. Last year the second largest fear was that the market felt like it was at or close to the top of the cycle. It is still the second largest fear this year, but this year 62% of investors cited it compared to only 28% last year.

- Over the last eight years there has certainly been a degree of continuity in investor concerns, with the fear of too much new money coming into the sector and the amount of leverage being used by certain managers being constant concerns. What is striking about the comparison from 2010 to 2017 is the substantial majority of investors focused on the top two concerns in 2017.

- The complete list of responses for 2017 is included in Chart XXVII on the next page.

Table II What Keeps You Up at Night?
Top Four Responses

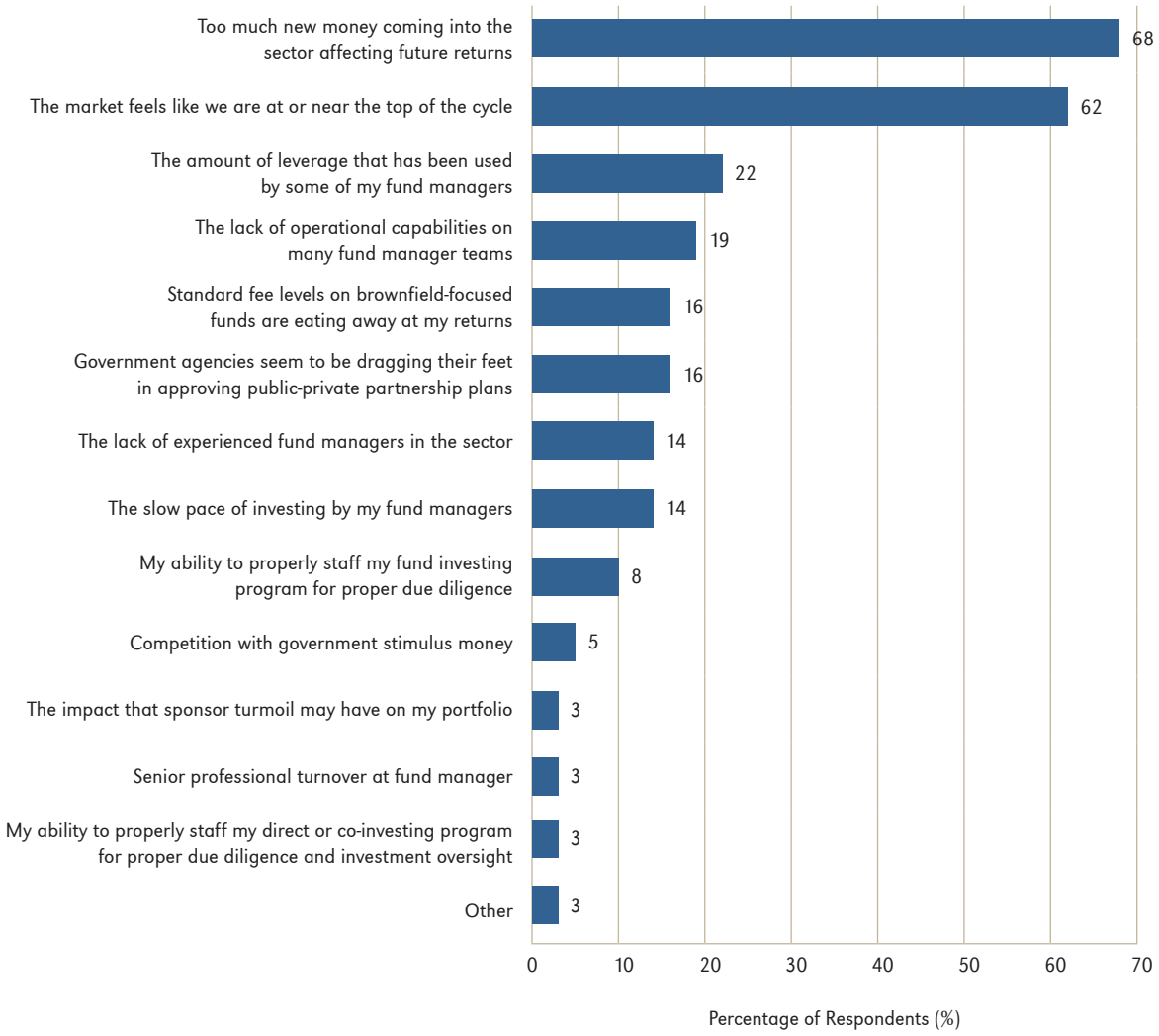
2010		2017	
Issue	%	**Issue**	%
The lack of experienced fund managers in the sector	34%	Too much new money coming into the sector affecting future returns	68%
Too much new money coming into the sector affecting future returns	31%	The market feels like we are at or near the top of the cycle	62%
The amount of leverage that has been used by some of my fund managers	28%	The amount of leverage that has been used by some of my fund managers	22%
Standard fee levels on brownfield-focused funds are eating away at my returns	23%	The lack of operational capabilities on many fund managers teams	19%

Source: Probitas Partners' Infrastructure Institutional Investor Trends Survey, 2010 & 2017

Last year the second largest fear was that the market felt like it was at or close to the top of the cycle...this year 62% of investors selected it compared to 28% last year.

Chart XXVII Infrastructure Investing Concerns

"As an infrastructure investor, what keeps you up at night? (choose no more than two):"



Source: Probitas Partners' Infrastructure Institutional Investor Trends for 2017 Survey

Key Trends

Besides issues covered at a high level in the survey, our ongoing conversations with investors provide more insight on a few key trends:

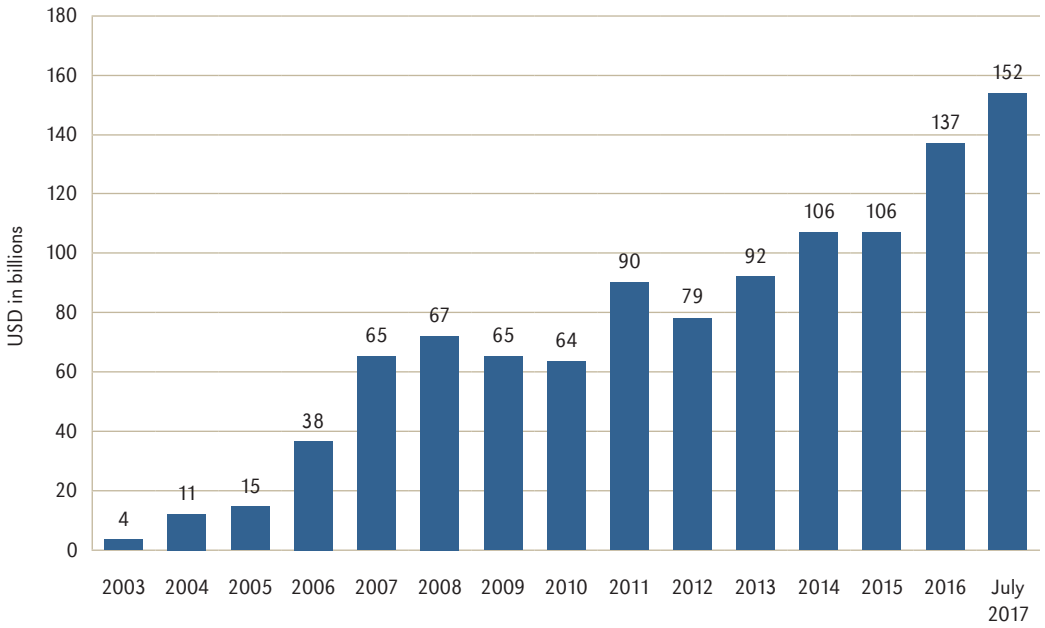
- ***Core brownfield projects continue to be a prime focus of large direct investors:*** These projects tend to have the lowest equity risk profile in infrastructure (unless they are highly-leveraged), and many of them have long maturities attractive to investors seeking to match long-lived liabilities to manage portfolio risk. However, many of these projects are pursued outside fund structures by sophisticated investors who believe that returns on these investments are attractive on a direct basis, but cannot support the usual fee and carried interest of a fund structure. In addition, heavy competition for these core assets by direct investors continues to drive return expectations even lower.

- ***The most attractive structure is still the 10-year private equity fund, but there is a notable shift toward funds in the 12- to 15-year maturity range:*** That is especially true among experienced investors, who have been active in the market for five years or more, as they increasingly dislike mismatches in holding longer-lived value-add or core plus assets in a short-term structure. There remains little interest in evergreen or open-end structures, or in funds with maturities greater than 15 years.

- ***Infrastructure dry powder is rocketing — and is understated:*** Surging fundraising combined with challenges in deploying capital has led to a huge increase in dry powder (Chart XXVIII). In addition, these dry powder numbers do not reflect the money targeting the sector from direct investors, co-investors and open-end funds. In this regard, investor fears that too much money is chasing too few deals are likely understated.

Chart XXVIII Infrastructure Dry Powder

Closed-end infrastructure funds



Source: PREQIN

Conclusion

- The survey results and the context provided by direct conversations with investors shows that there is a conflict in investors' perceptions of the market. Investors are worried that there is too much money in the market, and they are concerned that we are approaching a market peak. Yet their stated intent is to retain their allocation levels, and the strong fundraising totals for the first half of 2017 verify that.

- The biggest overall portfolio issue facing many of these investors currently is "Where do I expect better returns?". Even with the pressures facing all illiquid alternative assets, investors are not getting much comfort from their performance forecasts for the liquid markets and are seeing signs of danger everywhere. As long as this situation remains, interest in infrastructure, real estate, and private equity will remain strong.

Infrastructure Institutional Investor Trends for 2017 Survey

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