

Building for the future:

How alternative investment managers are rising to the demographic challenge



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1. Foreword

In the past ten years, the real estate, private equity and infrastructure industries have enjoyed exponential growth. While this is welcome, we at BNY Mellon believe the investment landscape is on the brink of a significant, long-term shift.

The alternative investment industry* has been presented with a unique historic opportunity. On the one hand, a combination of disparate, but profound and deep-rooted forces – macro-economic, demographic, environmental – are driving an unprecedented, broad-based demand for investment in real assets, property and infrastructure, in both developed and emerging markets. On the other hand, institutional investors are hungry for yield, but starved of attractive investment options. Low interest rates and asset-price inflation fuelled by quantitative easing (QE) are forcing investors to look further afield for returns, but periodic financial market shocks and a rolling programme of capital, prudential and market structure reforms are fraying investors' nerves. As such, institutional investors are increasingly looking to the alternative sector to guide them through fast-changing and sometimes unfamiliar terrain, and to shed light on new opportunities that satisfy their investment criteria. To meet this challenge effectively, alternative investment managers will not only need scalable investment expertise to identify and value a wide range of assets and businesses, but also a flexible business model that enables them to deliver on heightened expectations for transparency and client service, while achieving sustainable growth.

In this paper, we will highlight some of the key trends that are influencing institutional investor's appetite for alternative investments and their implications for fund managers. In the first part of the paper we identify and explore a number of themes that are already beginning to stoke a long-term, secular shift in institutional investment, effectively mobilising private capital in response to changes in funding needs dictated by macro-economic and demographic shifts. The second part considers the role of fund managers in supporting this significant evolution in investment priorities, setting the opportunities and challenges of growing allocation to alternative investments in the context of existing business priorities and dynamics: increasing levels of competition; heightened regulatory and client expectations for transparency.

BNY Mellon is delighted to partner with Prequin Ltd. to provide this detailed, statistical snapshot of how alternative investment managers view their current challenges and future prospects, as well as their evolving attitudes toward business and operating models as they build for growth, based on Prequin's survey of 340 fund managers. Whether ramping up your existing presence or identifying ways to tackle new and complex challenges, we hope you will use this paper as valuable input into your strategies. We look forward to sharing our insights and working with you as you think about your own strategies and the future of this industry.

* For the purposes of this paper, we define the alternative investment industry as including hedge funds, funds of funds, private equity funds, real estate funds, debt funds and infrastructure funds.

2. Executive Summary

- Fundamental demographic and macro-economic shifts are creating investment demands that far outstrip the reach of government finances, and must be met by alternative capital sources;
- Population growth in Africa and parts of Asia will be a strong driver of GDP levels, increasing demand for transport and communications infrastructure to support commerce, and driving up consumer spending; population aging in all regions will impact medical and social infrastructure needs;
- Greater urbanisation will increase pressure on transport, communication and social infrastructure as well as housing in all regions, but the more rapid the growth, and the lower the existing levels of development, the greater the need for planning and investment;
- In developed economies especially, the large Millennial cohort will favour multi-family, rental accommodation in thriving urban centres, over traditional suburban home-ownership, while also driving a radical repurposing of retail and office real estate;
- Long-term shifts in public finances are creating a severe infrastructure funding gap, but are also providing a widening range of opportunities for private investment in energy (especially green initiatives), utilities, transport and communications infrastructures;
- Driven by poor absolute returns in traditional asset classes and the need for diversification in current macro-economic conditions, investors are already increasing allocations to real assets, including infrastructure, pushing up valuations in mature investments / developed economies;
- To channel investment flows into a widening range of opportunities – thereby growing market share, serving client needs and meeting the aforementioned funding gap – alternative investment managers must adopt more flexible business and operating models.



3. The Demand Side – Growth, diversity and renewal on a global scale

A number of powerful forces are combining to generate a seismic shift in demand for capital in real estate and infrastructure. The outcomes vary globally, in terms of investment requirements, but collectively they represent a challenge for institutional investors and alternative asset managers. Though not exhaustive, this section provides investors and asset managers with a flavour of the size, scale and scope of the forces that are driving future investment needs.

3.1 Global demographics: lower fertility – longer lives

According to the latest ‘World Population Prospects’ report published by the United Nations’ Department of Social and Economic Affairs¹, slowing fertility rates are a global phenomenon, resulting in aging populations in both developed and emerging economies. Nevertheless, the report predicts strong population growth in certain regions, notably sub-Saharan Africa and the Indian sub-continent, and, perhaps more surprisingly, the United States.

Half of all population growth between 2015 and 2050 will come from just nine countries (three Asian; five African plus the US). Moreover, 28 African countries are expected to double their populations over the same period.

Global fertility rates are expected to slip to 2.25 by 2045-2050, albeit with regional variations (only European and North American rates are expected to edge up slightly). Overall, the United Nations predicts the global population will increase from 7.3 billion in July 2015 to 8.5 billion in 2030 and 9.7 billion in 2050.

At the same time, all regions will experience an increase in the number and proportion of retired and elderly people, albeit with less-developed countries lagging the global median age by a decade. According to the United Nations, the number of persons aged 60 and above will more than double by 2050, while the number over 80 will more than triple. And while today there are currently twice as many children under 15 as persons aged 60 or above, there will be “almost complete parity” between these groups by 2050. While this phenomenon is well-established in Western Europe and North America, it may have a greater impact on policy in Latin America and

Asia, where the proportion of the population aged 60+ will rise from just over 10% now to around a quarter by 2050.

What investment needs will these population trends bring? In Asia and Africa, overall population growth will inevitably bring greater pressure to bear on existing social and economic infrastructure. But it will also fuel GDP growth, ultimately increasing the spending power of households, expanding markets for a wider range of goods and services, from education to consumer electronics, which bring their own investment implications. In countries experiencing higher proportions of retired and elderly people, especially those witnessing the phenomenon at scale for the first time, hospitals and other medical facilities will need to be expanded and upgraded, alongside residential property developments that cater for a wide range of care and dependence.

3.2 Urban sprawl: a worldwide phenomenon

Urbanisation is growing in both emerging and developed economies, albeit for different reasons and with diverse implications. The United Nations’ 2014 revision to its world urbanisation prospects report² estimates that just under two-thirds of the world’s population (66%) will live in urban areas by 2050, compared with just over half (54%) in 2014, and 30% in 1950. Numerically, that’s a further 2.5 billion city-dwellers world-wide.

Inevitably, urbanisation is growing fastest in the regions with the fastest growing and youngest populations. In Africa, the urban population is set to grow from 40% in 2014 to 56% in 2050, while Asia is expected to register a 16 percentage point increase (to 64%) over the same period. Asia and Africa will

¹ United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, Key Findings and Advance Tables. ESA/P/WP.241.

² United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects – The 2014 Revision ESA/SER.A/366

contribute almost 90% of the increase in the global urban population, led by India, China, and Nigeria, the UN report asserts. Future increases in the world's urban population are expected to be highly concentrated in just a few countries, but overall, Asia will continue to host nearly one half of the world's urban population.

The number of mega-cities – urban agglomerations with more than 10 million inhabitants – will grow from 28 today (from less than 10 in 1990) to 41 by 2030, with a higher proportion in 'the global South'. The fastest growing cities are medium-sized cities in Africa and Asia. But urbanisation is not confined to these massive agglomerations. The global population living in medium-sized cities (1-5 million residents) nearly doubled between 1990 and 2014, and is expected to increase by another 36% between 2014 and 2030.

Urbanisation in all regions increases pressure on transport, communication and social infrastructure (education, health etc.) as well as housing, but the more rapid the growth, and the lower the existing levels of development, the greater the need for planning and investment. As the United Nations report notes: "rapid and unplanned urban growth threatens sustainable development when the necessary infrastructure is not developed or when policies are not implemented to ensure that the benefits of city life are equitably shared". In less developed economies, water and energy infrastructure needs will vie for investment with social, transport and communications facilities, while mature economies will see more of a repurposing of 'brownfield' sites.

3.3 The Millennial question: delayed decisions or permanent shifts?

Although the changes are less extreme than in emerging economies, technological and demographic developments are also reinforcing a long-term global drift toward increased urbanisation in mature, western economies.

The Millennial generation is a significant and very possibly permanent driver of urbanisation. Millennials are a global phenomenon. Around a quarter of the global population is between 15 and 30 years old. Millennials are taking longer than recent generations to accumulate the wealth and commitments to move into single-family home ownership in the suburbs (or even fly the family nest). A large proportion may never make that transition, preferring the smaller, city-centre, multi-occupier dwellings they currently rent in large numbers. While Millennials are currently priced out of the mortgage market in many developed economies, the global financial crisis has made them wary of taking on major financial commitments. Unsurprisingly, perhaps, they prefer to divert more of their incomes to technology and entertainment than financial services and asset ownership. In short, it's about owning the experience, not the object.

As if that wasn't enough, many 'empty nesters' are moving back into city centres to enjoy the facilities that are being developed in response to Millennial demands, many of whom are able to afford higher rents than their younger neighbours. Returning baby-boomers and the higher-end Millennials that rent by choice are driving demand for the unprecedented levels of multi-family dwellings being built in the US residential market.

The influence of Millennials and the connected world they inhabit is already impacting the real estate market in the US, with other mature economies expected to exhibit similar patterns over time:

RESIDENTIAL – An increased demand for city centre and periphery homes is already impacting the availability and value of rented apartments in thriving cities. Overall, multi-family construction now accounts for half of all US residential construction, a significant shift from historical norms. The rented apartment sector has grown from 20% to 45% of all new residential buildings in the US.

OFFICE – After decades of expansion, sometimes leading to a preference for non-urban locations, changes in work patterns, some associated with the graduation of Millennials, and technology usage are resulting in growing demand for refit and repurposing of office spaces on the fringes of established central business districts.

Having moved to sprawling edge-of-town campuses, easily accessed from motorways, many firms are moving back in, taking advantage of recent urban mass transport initiatives, to relocate to smaller, flexible, spaces in areas with a wider range of facilities and attractions.

RETAIL – The retail property market in mature economies is on the brink of a change every bit as significant as that already evident in the residential market. Online retail has been eating away significantly at high-street revenues over the past decade. Whilst at the same time, certain ‘big box’ retailers are threatening malls by bringing an exhaustive range and goods and services to customers under one – extremely large – roof.

In response, investment is being directed toward distribution warehouses, call and data centres, and other supporting facilities and networks required to meet the continued shift toward online retail.

Without wanting to over generalise, the things that the Millennial generation have in common are employment insecurity; student debts; and a ‘native’ facility for mobile and internet-enabled communication technology. This may make many of them long-term city-dwellers – flocking to ‘fintech’ hubs like London, Sydney or Singapore – but it will almost certainly delay the taking on of financial commitments such as home-ownership and will increase the length and extent of their dependence on family members.

3.4 Infrastructure renewal: mind the funding gap

As well as demographic changes, public funding shortages and infrastructure renewal needs are re-shaping investment demand. The World Economic Forum’s 2013 Green Investment Report³ claimed there was need for a US\$100 trillion infrastructure investment between 2010-2030, across energy generation and distribution, transportation, communications and utilities, notably water.

In 2014, a Standard & Poor’s⁴ report estimated an annual gap between investment needs and available public funds of at least US\$500 billion for each of the next 15 years. The Asian Development Bank has warned economic growth forecasts will not be achievable if a US\$8 trillion infrastructure funding gap for the period 2010-2020 is not closed.⁵ Governments do not have the resources to fund their requirements alone, either in developed but especially in emerging markets.

On the supply side, institutional investors currently prefer established infrastructures in developed countries because they meet their revenue and risk requirements more closely.

3 The Green Investment Report: The ways and means to unlock private finance for green growth - World Economic Forum, Geneva, Switzerland, 2013.

4 S&P Capital IQ Global Infrastructure: How to Fill a \$500 Billion Hole, January 2014.

5 Asian Development Bank Institute: Working Paper: Financing Asia’s Infrastructure: Modes of Development and Integration of Asian Financial Markets’, by Biswa Nath Bhattacharyay, July 2010.

On the demand side, there currently exists a wide range of financing arrangements for different types of infrastructure projects, with government funding often required for public goods such as mass transport. A more flexible approach to private investment may be necessary in both mature and developing economies in terms of social infrastructure, as changing migration and population patterns put new pressure on existing public resources.

Private capital is already well established in many areas of infrastructure investment, but the scale and variety of demand is overwhelming. Renewable energy generation and transmission projects are being implemented in OECD countries to replace gas and coal, but emerging economies will increasingly need to take international climate change into consideration too. Meanwhile, demographic and GDP growth trends in emerging markets will increase levels of trade, urbanisation and middle-class spending power. This will lead to increased demand for new transport (ports, airways, bridges, tunnel, roads, and railways), communication (especially towers and satellites) and social infrastructure, e.g. hospitals, housing, retail etc.

Economic infrastructure priorities

RENEWABLES AND ENERGY – In Europe and North America, climate change and energy security concerns have already spurred major policy initiatives to invest in renewables. Projects such as the North Seas Offshore Grid, which supports the EU's target of generating 40 gigawatts by 2020 via wind power, and the US Clean Power Plan 2015, which effects a shift to wind and solar investment, must also be accompanied by investment in electricity transmission capabilities. Shale gas facilities in the US as well as EU electricity market integration gas supply redundancy projects also require private capital.

TELECOMS AND DATA – New generations of smartphones, widespread use of tablets and other devices, and the 'internet of things' are rapidly rendering existing networks of mobile telecoms towers obsolete. Now typically operated by specialist infrastructure operators rather than telecom services providers, mobile tower networks will continue to expand and upgrade to meet the demand for data as a higher proportion of the global population conduct more of their economic and social lives via personal electronic telecommunications technologies.



4. The Supply Side – Channelling investment; delivering value

Investor appetite for alternatives has risen steadily over the past decade, notably for funds that expose investors to the trends referred to in the previous section. But this still-growing secular shift in allocations requires change in the business and operating models of alternative investment managers. Simultaneously, the industry is also being re-shaped by structural developments in the financial markets, changes in regulation, and increased client service expectations. In this section we look at how fund managers are responding to this fast-evolving landscape and identify areas for development, differentiation and efficiency, based on analysis of key trends and statistical data.

In collaboration with BNY Mellon, Preqin a provider of data and intelligence for the alternative assets industry surveyed 340 private equity, real estate and infrastructure fund managers on key challenges they are facing in the next 12 months, including deal flow, raising capital from institutional investors and regulation.

4.1 Investor appetite

Appetite for alternatives is already rising among retail and institutional investors and is forecast to continue.

PwC's 'Asset Management 2020: A Brave New World'⁶ report claims global assets under management (AUM) will rise from US\$63.9 trillion in 2012 to US\$101.7 trillion by 2020, with alternatives accounting for US\$13.0 trillion. Much of this growth will come from larger proportions of the mass affluent and high net worth individuals in developing economies; the continued expansion of sovereign wealth funds; and increasing numbers of defined contribution schemes, as governments effect shifts toward individual retirement planning. 'Emerging Middle Class in Developing Countries', an OECD report published in 2010⁷, asserted that more than one billion more middle-class consumers will emerge globally between 2010 and 2020, representing the largest ever increase across a single decade.

According to Preqin, the AUM of the private equity, real estate and infrastructure industries reached a record US\$4.17 trillion in December 2014, a 300% increase over the last ten years. The number of firms actively managing private equity, real estate and infrastructure funds has also grown, rising from 5,039 active firms in 2010 to 5,868 in 2015. A record-breaking 2,600 funds were competing for US\$941 billion as of January 2016.

This growth is being driven by more investors allocating to alternatives, as well as existing investors increasing their allocations. Over half (51%) of private equity investors surveyed expect to increase their allocations to the asset class in the longer term, and 34% and 44% of real estate and infrastructure investors expect to do the same for those asset classes.

Macro-economic conditions are supportive of continued growth in allocations to alternatives. An uncertain outlook for both developed and emerging economies means institutional investors will remain cautious and keen for diversification.

The challenges faced by established, largely OECD member countries as they struggle to recover from the global financial crisis, and those of developing and emerging economies in generating sustained, balanced growth, have been reflected in periods of market turmoil.

Nevertheless, central banks across the world have repeatedly emphasised their willingness to do everything in their power to bolster the existing financial and economic order, while reforming it. This should underpin investor confidence, albeit favouring developed markets. Reassuring noises and actions from major central banks, especially the US Federal Reserve, often draws money from emerging markets, although the need of investors to diversify can quickly reverse flows.

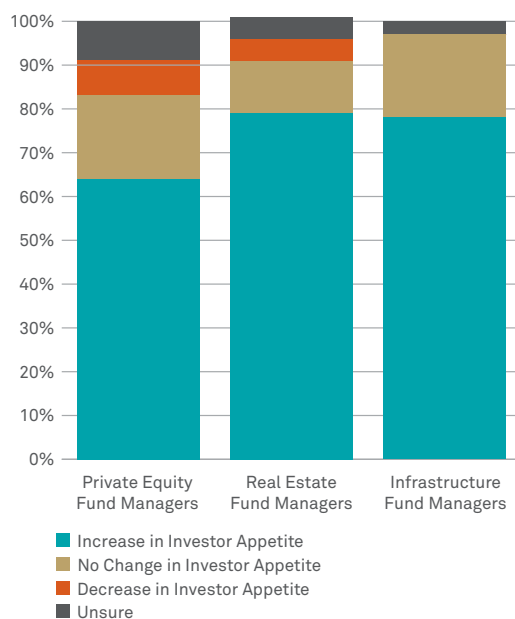
At the same time, unpredictable equity and bond market returns, accompanied by occasional adverse shocks, should strengthen alternative allocations. Low-to-no growth GDP and prevailing low interest rates in mature economies over the next three-to-five years are likely to keep benchmark 10-year government bond yields stuck at levels that will encourage investment in real estate assets and infrastructure.

⁶ Asset Management 2020: A Brave New World, PwC 2014.

⁷ The Emerging Middle Class in Developing Countries', OECD Development Centre, Working Paper No. 285, (2010).

A broadly favourable macro-economic outlook for alternative investment allocations is underlined by the BNY Mellon / Preqin survey of alternative investment managers. Across all asset classes, the vast majority of fund managers believe institutional investor appetite has increased over the past 12 months (Figure 1). A third of real estate managers and 41% of infrastructure managers are witnessing the greatest appetite from public pension funds, followed by private sector pension funds (19% and 22% respectively).

Figure 1: Change in institutional investor appetite over the last 12 months



Data Source: Preqin Ltd. 2015.

For the largest proportion (26%) of private equity fund managers, the greatest appetite is coming from family offices, followed by public pension funds (25%). The majority of fund managers will be seeking capital from investors based in North America in the year ahead; 72% and 75% of private equity and real estate fund managers stated they will seek to raise capital from there in the next 12 months, while 65% of infrastructure managers expect to do the same.

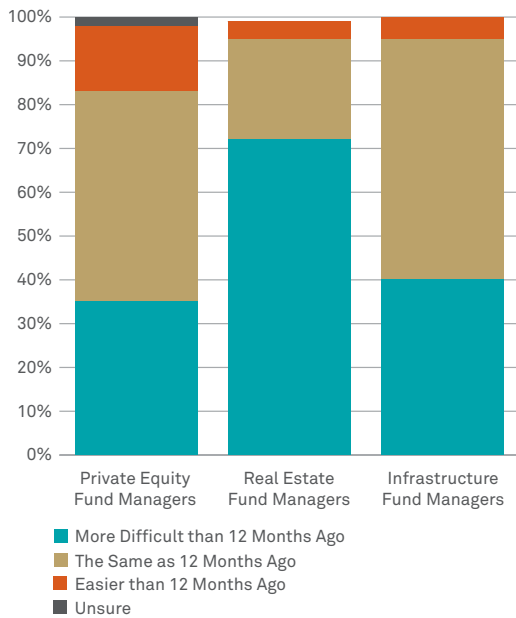
In an interview-based survey conducted for BNY Mellon in Q3 2015 by FT Remark, Research from the Financial Times Group,⁸ 93% of senior executives from 400 large institutional investment firms said their investments in alternatives had met or exceeded expectations over the last 12 months. More than half (53%) of investors said they would increase their allocation in private equity over the next 12 months, with over a third (36%) of respondents planning to raise their exposure to real estate; 40% said they would invest more in infrastructure. Emerging markets made up 31% of the institutions' alternative investment exposure, with investors planning to allocate 34% of future alternative investment to emerging markets.

Overall, the macro-economic background may support alternative investment allocations, but the unusual policy tools deployed by central banks – notably QE – have encouraged bubbles in the most attractive property, reinforcing investors' preferences for low-risk opportunities in developed/high-end markets. A key challenge for alternative investment managers is to facilitate diversification.

4.2 Competition and diversification

While large growth in investor allocations to real assets undeniably creates opportunities for fund managers, it also comes with its share of challenges. The difficulties of efficiently allocating large influxes of money are already evident in the impact of intensifying competition for assets on deal flow volumes and valuations (Figure 2).

Figure 2: Level of difficulty in finding attractive investment opportunities



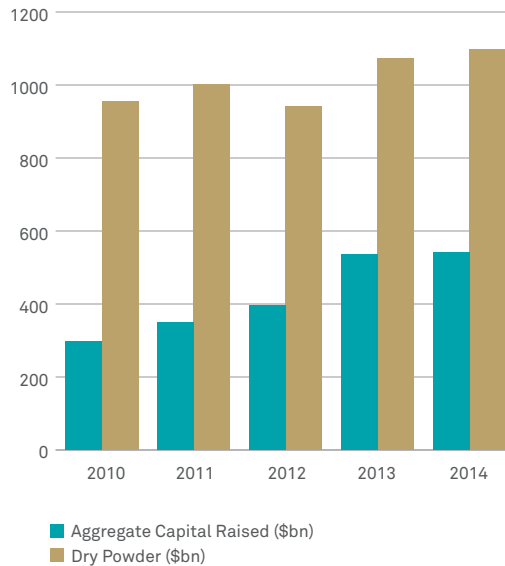
Data Source: Preqin Ltd. 2015.

Average deal size for infrastructure assets rose to a record US\$528 million in 2015, with Preqin attributing stronger competition to “rising demand for infrastructure, the growing availability of debt financing, investors’ preference for direct investments and record levels of dry powder available to fund managers.”

As a result, a lot of investors’ funds are not being put to work quickly.

Capital secured by alternative managers from investor commitments has risen year-over-year since 2010 (Figure 3). The amount of dry powder – capital committed to funds but not yet been deployed – currently stands at a record US\$1.32 trillion, putting pressure on fund managers to source opportunities and generate returns. For real estate alone, dry powder stood at a record-breaking US\$228 billion in August 2015.

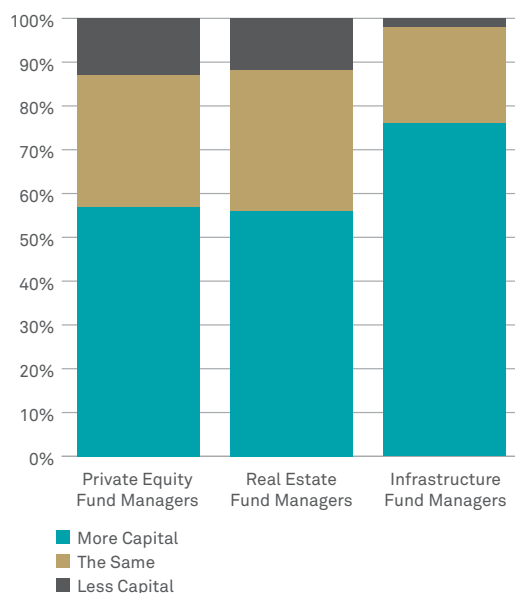
Figure 3: Annual fundraising and dry powder 2010 - 2014



Data Source: Preqin Ltd. 2015.

Over the next 12 months, most fund managers plan to deploy more capital than over the past year. Infrastructure fund managers expect to be particularly active, with 75% expecting to deploy more capital (Figure 4). Private equity and real estate managers are also set to increase the pace at which they make new investments. Survey participants’ responses suggested that availability of debt financing was supporting this optimism.

Figure 4: Capital deployment (%) in comparison to 12 months prior



Data Source: Preqin Ltd. 2015.

Responding to the more competitive environment, 37% of real estate fund managers and 43% of infrastructure fund managers stated they had altered their investment approach, either by investing in riskier assets or exploring different geographies and niche strategies.

To absorb and channel predicted higher investment flows effectively, portfolios will stretch to include a wider range of projects, with new portfolio construction methodologies and valuation capabilities developing, with implications for capacity and resourcing. In both real estate and infrastructure, further diversification may be needed to meet demand for new investment, as outlined below:

Real estate map redrawn

In developed, mature, largely Western economies, many see the real estate market as characterised by a bifurcation in the performance of assets, with investment flooding secure projects, creating asset bubbles, such as in central London's residential property market.

In the US, coastal regions and certain inland pockets - often in large cities drawing strength from high-skilled, often knowledge-based industries, such as Phoenix, Arizona - are delivering returns to investors, but many regions and cities are struggling to adapt, such as Detroit and its hinterland, historically dependent on an automotive industry in the midst of great change. As such, investment is flocking to beacons of growth - pushing up valuations on high-end residential projects in and around the central business districts of gateway cities - but financing for projects beyond that tier is far scarcer. Different skills and scale are required to conduct the due diligence necessary to separate the wheat from the chaff.

In addition to its impact on availability of capital, the global financial crisis has prompted shifts in the mechanisms for real estate investment. Since the financial crisis, US home ownership rates have slipped from 69% in 2006 to 63% in 2015, according to US Department of Commerce census data, a significant change in such a short space of time that represents both financing difficulties and opportunities. Moreover, securitisation will play a smaller role in real estate finance, while reduced lending appetite from banks is opening up opportunities for alternative asset managers to expand into direct lending.

Infrastructure branches out

In mature markets, infrastructure assets are in such short supply that auctions can develop, which only push prices higher. In response, managers are already going 'off-market', but this approach is hard to make scalable. As in other alternative asset classes, there may emerge a growing bifurcation between firms favouring high transaction turnover and those that do fewer deals aimed at achieving higher returns.

The core investment characteristics of established infrastructure assets explain their appeal over greenfield or emerging markets projects. High barriers to entry, and predictable revenue streams from a

diversified user-base typically resilient to economic cycles, are appealing to investors. Construction and operational difficulties, and changes to government policy and tax regimes that delay and diminish investment returns, are not.

Barriers to infrastructure assets in emerging markets will diminish over time, as investors become more confident through familiarity, while GDP growth should result in more stable governments, policies, tax and regulatory frameworks. Meanwhile, distinctions are emerging between funds that target listed or unlisted infrastructure. For investors, the core appeal of listed infrastructure – companies engaged in the development, management, and ownership of assets related to energy, communications, water, transportation, and other essential systems – is in its potential to provide consistent cashflow, inflation protection and diversification, without potential downsides, in terms of size, scale and time horizon of individual projects.

Listed infrastructure operators take responsibility for the development and ownership of multiple real assets and projects, and – critically from the investor's perspective – provide predictable levels of transparency and governance. REITs and smaller funds can also ease the flow of investment into infrastructure projects, by helping investors to avoid the size and illiquidity problems that can arise with long-term, complex initiatives. While listed infrastructure is more liquid, unlisted assets benefit from lower volatility and weaker correlation with other investments, and may also offer higher risk-adjusted returns.

Separately, infrastructure debt funds are a relatively new development, spurred in part by the comparability of infrastructure debt with traditional fixed-income investments, as well as bank retrenchment from lending in response to higher capital charges for holding long-term, illiquid assets under Basel III. Private infrastructure debt can offer strong illiquidity premia to long-term investors.

Alternative structures

Over the past few years, the ways in which investors access alternatives have become increasingly sophisticated. No longer satisfied with solely investing through commingled fund structures, more investors expect fund managers to offer a range of structures, which often allow more control over investments, greater transparency and lower fees.

At the institutional level, 'private credit' – typically strategies based on investment in loans and debt securities – is on its way to becoming an asset class in its own right, while liquid alternatives – whether in the form of mutual funds or ETFs – are opening up opportunities for retail investors in the private equity and real estate sectors. Initially shoe-horned into private equity-style funds with similar lock-in periods and fee structures, infrastructure funds are changing to better reflect the duration and the returns of the investment.

Moreover, the packaging of real assets in hybrid closed-style funds, effectively introducing liquidity measures to satisfy investor appetite for illiquid assets, is a further sign of innovation in response to demand. Such new structures offer investors the attractive returns of illiquid assets but do allow the option of redemption.

Co-investment opportunities will be offered to investors more frequently by fund managers in the year ahead compared to any other alternative structure. Thirty-six percent and 37% of private equity and real estate fund managers respectively plan to offer more co-investment opportunities in the year ahead. A number of infrastructure fund managers believe co-investment opportunities are a key way to differentiate themselves; over half (55%) of infrastructure managers intend to do so more often over the next year.

Institutional investors have shown increasing appetite for separate accounts; over half (56%) of real estate investors surveyed by Prequin in June 2015 are planning to increase their investments via separate accounts in the year ahead, and as a result, 30% of real estate

fund managers plan to offer more separate account structures to investors in the year ahead. A smaller proportion (19%) of private equity fund managers plan to offer more separate accounts to investors over the course of the next 12 months, despite 77% of investors expecting separate accounts might become a permanent feature of their portfolios in the future.

4.3 New models, new transparency

The need to diversify investment strategies and differentiate offerings to clients, as outlined above, has far-reaching implications for alternative fund managers. Innovation will likely continue in terms of investment strategy, asset valuation techniques, fund structures, area of special expertise and risk management capabilities. In infrastructure there is as yet little consensus in key areas such as suitable portfolio constituents, valuation and especially risk management techniques, which can have more in common with project finance than investment in bonds.

The business models of alternative fund managers must have the flexibility to thrive in such a fast-evolving competitive environment, but they must also be able to meet increasing regulatory reporting and transparency requirements. Institutional investors' approach to alternative investments has become increasingly sophisticated, leading to greater demands for transparent information on performance and fees. Regulation, affecting managers and their investors, has also become more complex. This has led to changes to the way in which fund managers operate.

Institutional investors are keen to scrutinise all fees managers charge, and they are more concerned than ever before with where the returns are coming from and whether they can be replicated in managers' subsequent vehicles. Transparency on fees demands simplicity and visibility. As such the total expense ratio must be clearly stated to allow comparability between funds, rather than details of management fees and additional

costs that require the investor to make further estimates, assumptions and calculations. Visibility and reporting may be particularly important for infrastructure investment funds as investors look for a deeper understanding of where the value comes from, how the revenue is generated and what risks these revenues are exposed to.

Increased transparency in reporting and operations was the most frequently cited (38%) way of differentiating themselves by both private equity and real estate managers. A total of 35% of fund managers across private equity, real estate and infrastructure cited regulation as one of the biggest challenges of the year ahead.

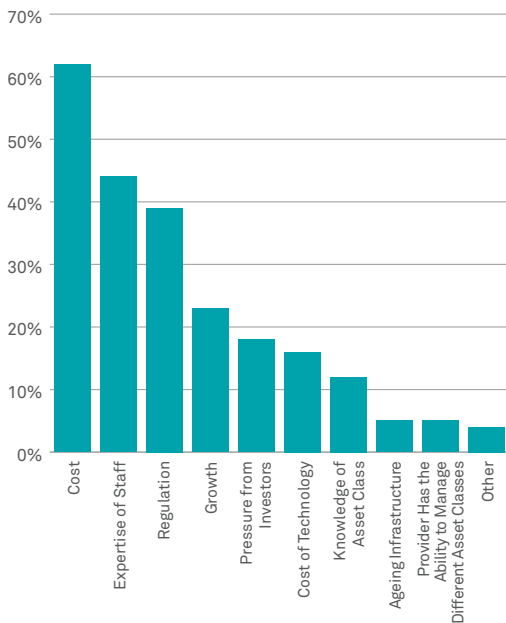
Role of outsourcing

Most fund managers recognise they must be prepared for increased compliance requirements and more frequent, detailed and standardised reporting demands of investors. They are considering whether they invest in the technology and staffing resources to handle this in-house or outsource to a third party service provider.

The increased demands on fund managers and the continued pressure for greater transparency, are leading growing numbers of managers to consider outsourcing certain functions to third parties. Over a quarter (26%) of real estate managers and 21% of private equity managers have outsourced services as a result of regulation. The proportion is much lower for infrastructure fund managers at 9%. Outsourcing is most common among smaller fund managers, with 25% of fund managers with less than US\$500 million AUM having already outsourced services as a result of regulation and a further 57% expect to in the future. Although only a small proportion (13%) of larger fund managers (US\$5 billion-plus AUM), have already outsourced services, two-thirds (67%) may do so as a result of regulation. Overall, two-thirds of fund managers across all asset classes (67%) feel regulation might lead to outsourcing in the future.

Cost was the most commonly stated reason to outsource (Figure 5), cited by 67% of private equity fund managers and 55% of both real estate and infrastructure fund managers. Over half (51%) of real estate fund managers and 43% and 32% of private equity and infrastructure managers, respectively, would consider outsourcing to benefit from the expertise of external staff. In addition to reducing costs, outsourcing offers value add opportunities, including independence, improved technology, enhanced transparency, operational efficiencies and the ability to switch to a variable cost structure as a fund level expense.

Figure 5: Reasons to outsource services

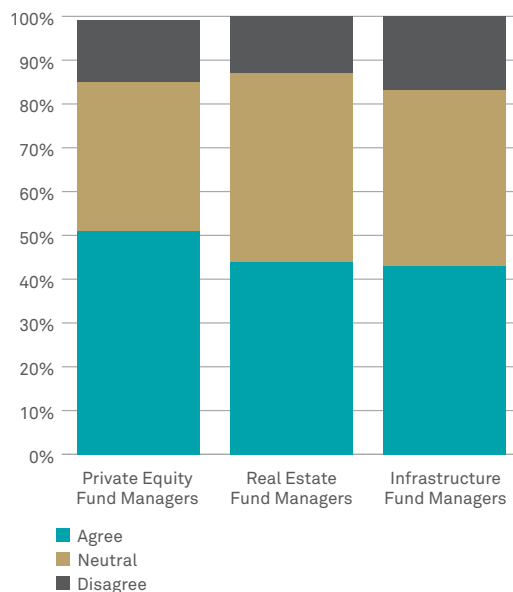


Data Source: Preqin Ltd. 2015.

In keeping with ever greater scrutiny, 48% of fund managers are looking to shadow the service providers they employ, with 65% seeking the provision of enriched data and analytics from these third parties. Almost three-quarters (73%) of real estate fund managers, 64% of private equity managers and half of infrastructure managers believe access to enriched data and analytics from an outsourcing provider is important.

Real estate and infrastructure managers are most likely to consider passing the costs of outsourcing to investors within the fund structure: half of real estate managers and 52% of infrastructure managers would consider passing the costs to LPs. However, just over a third (34%) of real estate managers and 30% of infrastructure managers would consider absorbing the costs as part of the overall management cost of the fund structure. The plans of private equity managers were more mixed: 43% of private equity managers reported they would absorb the cost themselves and 44% are likely to charge investors. Less than a quarter of fund managers across all asset classes would consider not passing on any costs involved with outsourcing to investors.

Figure 6: Fund managers' views on whether functions within the industry will be outsourced more frequently in 2020 than at present

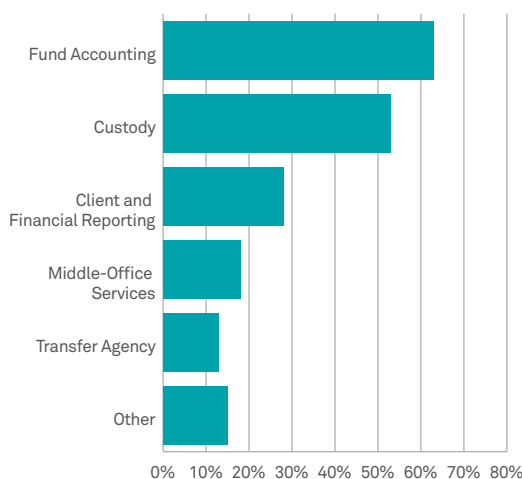


Data Source: Preqin Ltd. 2015.

Under pressure from regulation, reporting requirements and increased competition, over half (51%) of private equity fund managers expect to see more outsourcing over the next five years (Figure 6). Smaller managers were more likely to expect greater levels of outsourcing; 59% of managers with less than US\$500 million in AUM expect more outsourcing by 2020, compared to 30% of managers with US\$1 billion or more in AUM. Expectations of outsourcing vary between asset classes. A total of 73% of private equity fund managers with less than US\$500 million in AUM expect increased levels of outsourcing by 2020, compared to 13% of larger managers. In contrast, 58% of real estate managers with more than US\$1 billion in AUM expect more outsourcing, compared to 31% of smaller managers.

As alternative managers look to partners to help ensure they are compliant and meeting their investors' needs, while focusing on deal sourcing and creating value, fund accounting and custody services are most likely to be outsourced in the future, (Figure 7), while other areas under consideration included compliance, internal audit and regulatory registration.

Figure 7: Services fund managers have already outsourced or would consider outsourcing in the future



Data Source: Preqin Ltd. 2015.

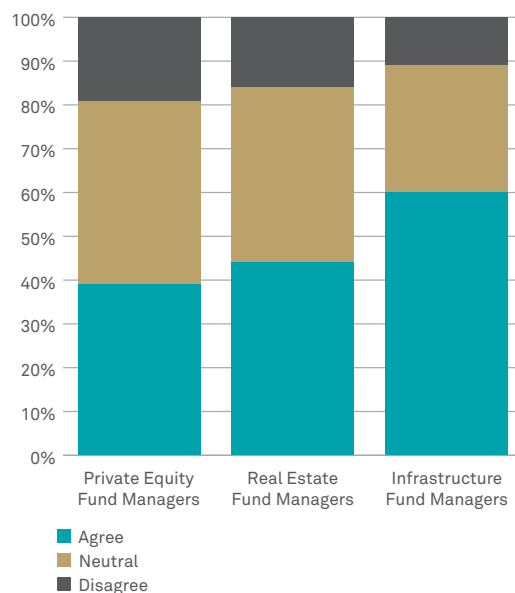
4.4 2020 Vision

The growth of the private equity, real estate and infrastructure industries over the past decade through difficult market conditions has been impressive; AUM now stands at \$4.17 trillion and there is no sign of this growth slowing. The marketplace has become increasingly crowded and competitive, creating even more challenges for fund managers to successfully deploy the capital they have secured from investors and to create sufficient value to distribute back to those investors.

Regulatory requirements and transparency expectations also present further challenges. Even though institutional investor appetite is currently strong, effective differentiation and mindfulness of investors' need for transparency in reporting and operations will be essential to their future operations.

Alternative fund managers' predictions for the size of the industry they operate in by 2020 reveal a strong level of optimism (Figure 8). Sixty per cent of infrastructure fund managers surveyed expect the assets under management to increase by at least 50% over the next five years, reflecting its current state of maturity and growth potential versus private equity or real estate.

Figure 8: Fund managers' views on whether the assets under management of the industry will be 50% higher in 2020 than at present

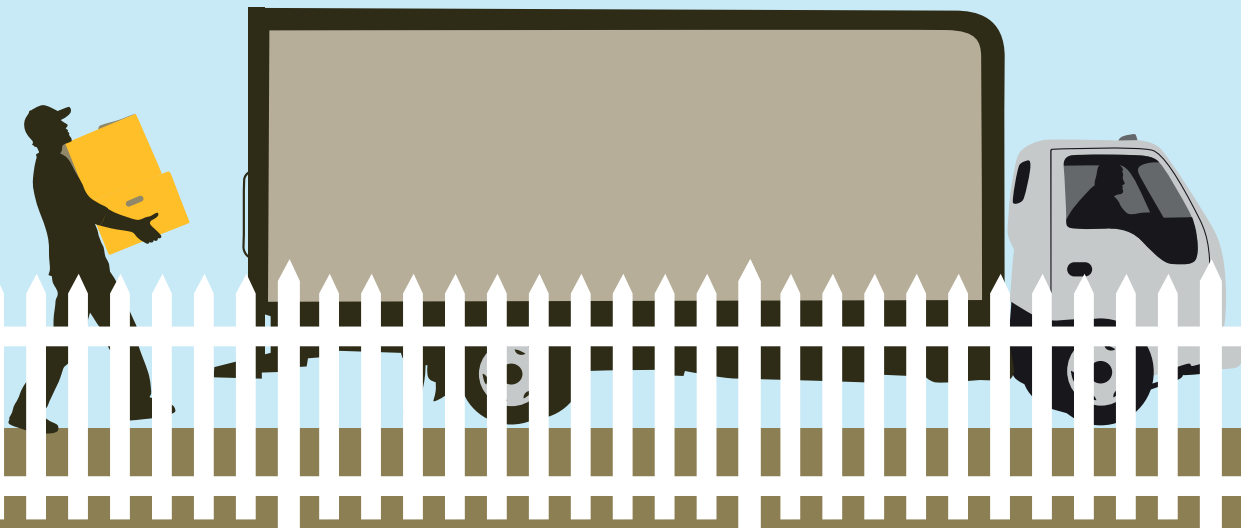


Data Source: Preqin Ltd. 2015.

Although much of the money flowing into the sector has concentrated on established firms, many fund managers believe there is enough opportunity for many to flourish in the long term. Over half (53%) of infrastructure fund managers surveyed do not believe there will be significantly fewer fund managers in five years. The private equity industry, however, is more sanguine: 44% of private equity managers expect significantly fewer managers to be active in five years' time.

While institutional investors, most notably pension funds and family offices, currently demonstrate the most appetite for private equity, real estate and infrastructure investments, there is scope for retail investors to play a more significant long-term role. Notable proportions of private equity (46%) and real estate fund managers (45%) believe that in 2020 retail investors will account for more capital raised for investments than they do today. A smaller proportion of infrastructure fund managers (31%) believe retail investors will be more prominent in the next five years, while 46% do not expect retail investors to become more important sources of capital than they are at present.

The biggest industry challenge may be yet to come. Increasing allocations from investors and heightened demand for capital across multiple diverse projects will require the development of new skills, products and capabilities. The demographic and macro-economic shifts outlined in section 3 of this report have the power to redefine investment in real assets. The range of assets and strategies available to alternative asset managers will diversify in unpredictable directions in response to these evolving supply and demand factors. As such, it is vital that strategic goals are clearly defined and supported by suitable operating models.



5. Appendix

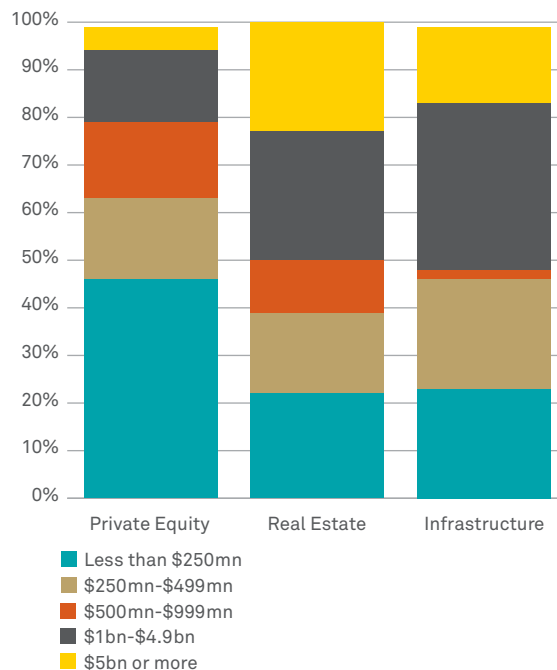
In collaboration with BNY Mellon, Prequin surveyed 340 fund managers globally operating in the private equity, real estate and infrastructure industries to find out the key challenges fund managers are facing in the next 12 months, including deal flow, raising capital from institutional investors and regulation. We also look at their plans for the coming year, as well as their long-term outlook for the alternative assets industry.

Study participants

Forty-five percent of respondents were based in North America, with a further 30% headquartered in Europe. The remaining 25% were located across Asia (10%), Australasia (5%), Latin America (4%), MENA (3%) and Sub-Saharan Africa (3%). The vast majority (94%) of respondents have less than five offices, while 4% have between six and 10 offices. Just over three-quarters (77%) of respondents operate in fewer than five countries, with a further 18% investing in between six and 15 countries. Six percent of respondents invest in more than 16 countries.

Just over half (54%) of respondents have less than \$500mn in assets under management (AUM), while 13% have between \$500 million and \$1 billion in AUM. A third of respondents have more than \$1 billion in AUM.

Figure 9: Breakdown of Respondents by Assets under Management (AUM)



Data Source: Prequin Ltd. 2015.



About Preqin:

Preqin, a source of data and intelligence for the alternative assets industry was founded in 2003, and operates from offices in New York, London, Singapore, San Francisco, Hong Kong and Manila. They are an independent business owned by their directors and employees. Preqin's products and services are utilized by more than 40,000 professionals located in over 90 countries for a range of activities including investor relations, fundraising and marketing, and market research.



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