

Direct Investing by Institutional Investors: Implications for Investors and Policy-Makers

Prepared in collaboration with Oliver Wyman

November 2014

World Economic Forum 2014 – All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

Contents

- Preface
- 2 **Executive Summary**
- 3 1. The Investor Ecosystem
 - 4 1.1 Defining direct investing
 - 4 1.2 Asset focus
 - 5 1.3 The investment value chain
 - 1.4 Key models of direct investing 6
- 2. Trends in Direct Investment: A Historical Perspective
 - 2.1 Early institutional investing pre-1880-1980
 - 9 2.2 The rise of the alternatives industry 1980-2000
 - 2.3 The maturing of illiquid 9 investment markets 2000-2007
 - 10 2.4 The 2007-2009 financial crisis
 - 10 2.5 The post-crisis years
- 11 3. What Drives and Constrains Direct Investment?
 - 12 3.1 Investment drivers
 - 14 3.2 Investor constraints
 - 16 3.3 Direct investment today
 - 21 3.4 Sizing direct investments
- 23 4. How Will Direct Investing Develop in the Future?
 - 24 4.1 The expected scenario
 - 29 4.2 Variation around the expected scenario
- 31 5. Implications
 - 32 5.1 For asset owners
 - 32 5.2 For asset managers
 - 33 5.3 For policy-makers
- Acknowledgements

Preface

The World Economic Forum is pleased to release Direct Investing by Institutional Investors: Implications for Investors and Policy-Makers, which examines the trend towards direct investing in illiquid assets by asset owners, such as pension funds, sovereign wealth funds, endowments, family offices and insurers.

While direct investing – an asset owner making the decision to take part in a specific investment - is not new, a number of large direct transactions in private equity and infrastructure since the financial crisis, for instance, have caught the investment community's attention and sparked speculation about the amount of direct investing, its growth trajectory and the likelihood of the trend reshaping institutional investing over the next few years. Direct investing can be done through various models - independently, in partnership with other investors or through co-investments. The focus of this report, as it reflects what could have the most impact for asset owners, policy-makers and society as a whole, is on direct investments in illiquid assets such as private equity, infrastructure and real estate, as implemented through these models. The report highlights the motivations for and constraints limiting direct investments, provides an overview of direct investing today, presents predictions on its growth and explores the implications for investors and policy-makers.

As long-term investors, asset owners such as pension funds and sovereign wealth funds play an important role in the financial markets, for instance by helping to stabilize markets and funding long-term corporate growth, infrastructure and urban development. Thus, changes to the models for how asset owners allocate long-term capital are noteworthy for companies, governments and developers potentially receiving capital; for asset owners and asset managers; and for society.

This report on direct investing is the third in a broader series by the Forum on long-term investing, defined as "investing with the expectation of holding an asset for an indefinite period of time by an investor with the capability to do so". The inaugural report in this series, The Future of Long-term Investing, 2 explores who long-term investors are, the constraints they face and the impact of the financial crisis on long-term investors. In that report's section on long-term investing after the financial crisis, one area of focus was on how long-term investors have been rethinking their relationship with external fund managers, the focus of the current report.3 The second report, Measurement, Governance and Long-term Investing, 4 looks at the relationship between an institutional investor's governance framework and the metrics used to measure whether, as a longterm investor, it is on track towards its goals. In the discussion on the implications for asset owners in this current report, an institutional investor's governance framework is highlighted as a key variable for determining whether direct investing is an appropriate investment strategy. The Measurement, Governance and Long-term Investing report lays out much of what constitutes a highly effective governance framework and the challenges involved with creating it.5

This report is the result of collaboration between the World Economic Forum and Oliver Wyman, with key industry practitioners, policy-makers and advisers participating in interviews and workshops. Throughout this process, intellectual stewardship and guidance were provided by an actively engaged steering committee and advisory committee.

Michael Drexler Senior Director

Mobil

Head of Investors Industries World Economic Forum USA Irwin Mendelssohn

Director

Head of Institutional Investors World Economic Forum USA

1. Mulh

Executive Summary

The focus of this report is on direct investing by institutional investors in illiquid assets, most notably private equity, real estate and infrastructure. Direct investing is not new. Since the late 19th century, some institutions have directly invested in illiquid assets such as real estate. However, interest in direct investing has grown in the wake of the financial crisis, as institutions have searched for ways to increase long-term returns and diversify their portfolios.

In this report, direct investing is defined as investing in which the future asset owner makes the decision to take part in a specific investment, e.g. to invest in a toll road directly as opposed to investing in a fund which invests in a toll road.

The three main ways (models) in which asset owners invest directly are: independently ("solo"), in partnership with other asset owners or an asset manager, or through co-investments.

- Solo direct investing offers the most discretion but is the most demanding model, requiring significant time and resources.
- Partnership direct investing with other asset owners or an asset manager allows investors to share tasks and responsibilities.
- · Co-investing with an asset manager alongside a traditional fund investment is the most popular and least demanding model.

The financial crisis of 2007-2009 shook investor confidence, disrupted some long-term investments and strained the flow of information between asset owners and their asset managers. In the aftermath of the crisis, volatile and uncertain returns from traditional investments have encouraged investors to increase allocations to illiquid assets. Indeed, the potential for improved returns, greater control and increased value for money have led many of them to explore the extent to which they could make these investments directly.

Direct investing is often framed around the question of cost. While some large institutions think they can run sophisticated direct-investing teams for similar or lower costs than those incurred when using external managers, very few say their direct-investing programme is primarily a cost-avoidance tactic once indirect costs are taken into account.

There are however key constraints on the adoption of direct investing, above all size and governance. An institution needs to be large enough to afford the cost of the staffing and supporting structure needed for making direct investments and have a governance framework robust enough to manage the downside risks of direct investing, e.g. around investment performance and reputation management.

The report features three broad trends in direct investing today, in terms of size, investing maturity and asset type. The greatest commitment to direct investing, including solo direct investing, is seen amongst the largest investors (those with over \$50 billion in assets). Institutions closer to \$25 billion in assets tend to rely more on coinvesting, while smaller institutions with under \$5 billion in assets typically use asset managers for all of their investing. Alongside size, investing maturity is important because most institutions (other than life insurers) begin by investing through asset managers and then move parts of the investment process in-house for selected assets as they gain expertise. Asset type is also important because the complexity of investing varies by both broad asset class (e.g. real estate compared to private equity) and type of deal (e.g. mature infrastructure versus to-be-built infrastructure).

Based on estimates of total institutional assets under management and allocations to illiquid assets by sector, and then filtering for size of institutions, governance structures and motivation to invest directly, we estimate that there are approximately \$700 billion of directly invested institutional assets. However the report also concludes that the most important switching by institutions into direct investing has already happened. While there may be growth in the supply side, for example, in public infrastructure funding requirements, this does not drive an increase in capacity for direct investing per se.

This means that although direct investing will grow steadily in absolute terms, it is not expected to become the dominant institutional model. Institutions that manage almost all their assets internally will remain exceptional. However, institutions with more flexible long-term mandates such as multi-generational sovereign wealth funds may shift further towards direct investing. Overall, however, direct investing is expected to grow only slightly ahead of overall institutional asset growth over the near to medium term. More broadly, the evolution in direct investing is also likely to influence approaches to delegated investing in illiquid investments.

In terms of direct-investing models, co-investment will likely remain the most popular model of direct investing in private equity. However, each asset class is likely to develop distinct structures that allow investors to select a specific level of involvement in each deal. Partnerships in various forms are expected to become more common, and may increasingly focus on particular investment styles, regions and asset classes.

There is strong evidence that direct investment is here to stay. However, institutions looking to invest directly must consider whether they have the commitment and scale to overcome the constraints, including whether they can implement the governance structures required to be successful. They should make an honest assessment of whether (and where) direct investing plays to their strengths. Meanwhile, asset managers need to consider how to position themselves in the investment value chain in an era that will favour well-defined positioning – whether to be a large-scale generalist, a specialist focused on particular asset types or a service provider to direct investors.

Direct investing also has wider implications for the global economy because it encourages institutions to invest for the long term and, as such, has potentially important stabilizing and counter-cyclical effects on capital markets. Direct investment may also be an important source of capital in particular sectors such as infrastructure. Many of the largest direct investors seek to invest outside the country in which they are based. In turn, policy-makers looking to attract direct investments in companies, infrastructure and real estate need to evaluate and potentially enhance their frameworks for enabling cross-border investments. It is recommended that they distinguish between ownership of an asset and control; that they develop an investment environment and capital market conducive to direct investing; and, when assessing specific direct investments, that they focus on the transaction's economic substance. This discussion is complemented with additional recommendations on attracting capital for infrastructure.

The Investor **Ecosystem**

Institutional investors such as pension funds, sovereign wealth funds, insurers, endowments, foundations and family offices pursue their investment strategy within a larger ecosystem of asset markets intermediaries and service providers. In this section, direct investing is defined in relation to this investor ecosystem; it explains why this report focuses on direct investing in illiquid investments and describes the three main models for direct investing.



In this report we define direct investing as investing in which the future asset owner makes the decision to take part in a specific investment.



1.1. Defining direct investing

A key challenge for those exploring the trend towards direct investing is to define it in a way that is objective and allows for the direct investing market to be characterized and quantified.

In this report direct investing is defined as investing in which the future asset owner makes the decision to take part in a specific investment. For example, the investor who decides to invest in a toll road is a direct investor. The investor that invests in a thirdparty fund which, in turn, decides to invest in the same asset is an indirect investor.

Under this definition, the direct investor may still make use of service providers for steps in the investment process, so long as the investment decision itself is made internally.

1.2 Asset focus

While some of the discussion in this report will be of relevance to traditional asset classes, the focus is on illiquid assets: real estate, infrastructure equity, private equity and emerging alternatives (including infrastructure debt). Illiquid assets are the largest portion of assets commonly referred to as "alternative investments" (Figure 1). There is no focus on hedge funds since investments in these funds are generally more liquid.

With illiquid assets, the role of third parties tends to be most intense, and the perceived benefits of direct investing and the associated complexities in obtaining them are greater as well. Moreover, illiquid assets have accounted for an increasing proportion of institutional investment portfolios since the 1980s, making questions about how illiquid assets are managed of increasing interest (see: potential benefits to asset owners from illiquid investments).

Figure 1: Asset class taxonomy

Investable universe

Traditional asset	Alternative assets						
classes		Traditional a	alternatives		Emerging alternatives		
Cash/money markets Fixed income Equities Futures and options Commodities	REAL ESTATE • Real estate equity — Public (REITs) — Private • Private real estate debt	OTHER REAL ASSETS Infrastructure equity Timber Natural resources	PRIVATE EQUITY • Leveraged buyout • Growth capital • Venture • Mezzanine	HEDGE FUNDS • Long/short • Global macro • Distressed debt • Etc.	 Loan funds Infrastructure debt Risk transfer deals Life insurance assets Equipment leasing Intellectual property and royalties 		

Focus of this document

Potential benefits to asset owners from illiquid investments

There has been a steady increase in interest in long-term illiquid assets by institutional investors. 6 Potential benefits for asset owners of long-term investing in illiquid assets include:

· Accessing structural risk premia

Investors may be paid a premium for accepting intermittent asset price volatility and for accepting the liquidity risk inherent with long-term investment markets.

Accessing opaqueness and complexity premia

The low volume of deals in illiquid markets makes it difficult for most investors to assess the correct market price. Conversely, it may reward the investors who have the skills to structure a viable deal based on their expertise in the asset class and the network of service providers and investment partners.

Timing advantages

Long-term investors can wait more patiently for market opportunities before investing or selling, as well as invest early in broad trends (e.g. growth in emerging markets, rise of the middle class), even when the timing of the impact of specific investment trends remains uncertain.

Avoid buying high and selling low

Sentiment is such that investors are often tempted to buy when markets are bullish and to sell when they are near a low point. Long-term investors have the mindset and structure to stay in the market and avoid the potential losses from buy and sell decisions driven by short-term pressures.

1.3 The investment value chain

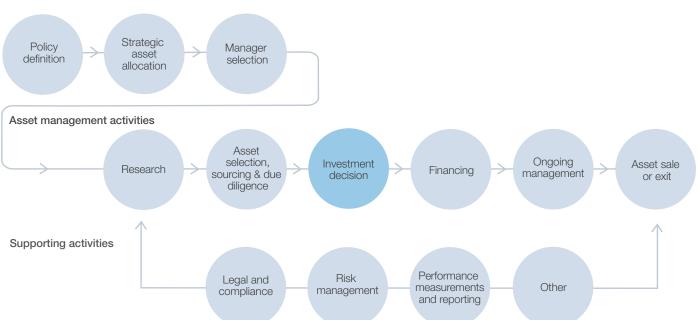
A large number of steps are involved in the typical process used by institutions to invest in illiquid assets (Figure 2), and almost all institutions outsource one or more of these steps to specialist providers.

Under the definition of direct investing used in this report, only the investment decision itself must remain with the institution for it to qualify as a direct investor. Thus, institutions that outsource steps of the value chain to an operational partner are still direct investors, as long as they retain investment decision-making in-house.

In the traditional delegated model, for example, strategic asset allocation decisions may be retained in-house, 7 but the asset management decisions, including the decision to invest in a specific asset and asset due diligence, are delegated to external asset managers.

Figure 2: Overview of the illiquid investment value chain





1.4 Key models of direct investing

There are three key models of direct investing: solo, partnerships and co-investing. Figure 3 below summarizes them.

The solo model represents direct investing in its purest form. With solo direct investing, an institution not only retains the investment decision, but usually also identifies the investment and performs – or directly oversees – critical investment activities, including due diligence and ongoing asset management.

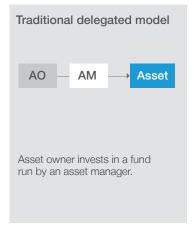
Under the *partnership model*, an asset owner forms a partnership with one or more asset owners or, sometimes, with an asset manager, to invest together in a specific deal or a series of deals over time. The partnership approach can be attractive because it allows for the pursuit of larger deals, enables a broader range of deal sourcing and can help mitigate risk – for example, a foreign investor investing in partnership with a local investor having onthe-ground knowledge and relationships.

The *co-investing model* is something of a middle ground between direct and indirect investment. Typically in this model, an institution invests in a fund run by an asset manager and then may have the opportunity to make direct investments alongside that fund's manager. Since fees are generally not charged on co-investments, institutions making co-investments can leverage the skills of the asset manager while paying lower fees in aggregate.

AO Asset owner

AM Asset manager

Figure 3: Models of investing in illiquid assets





Trends in Direct Investment: **A Historical** Perspective

The development of direct investing is best understood within the broader context of the development of institutional investing and associated advances in portfolio risk management. History shows that direct investment is not a new approach and it provides insight into why institutions now delegate much of their investment activities to asset managers.



Most institutions turned to specialist asset managers to help them invest, driving growth in private equity during the 1980s and the hedge fund industry in the 1990s.



In the early days of investing, investments were made directly out of necessity. From the 12th to 18th centuries, capital markets developed gradually while insurance, government bond trading, equity issuance and developments in mathematics joined to create modern capital markets and early financial institutions. The Dutch East India Company issued the first continuously traded equity in 1602.

Collective investment vehicles developed later, starting with the first closed-end funds offered in Great Britain and France in the 1880s, until the emergence of modern, liquid open-end funds in the 1920s. Alongside the development of the financial markets came the development of specialist branches of financial services, starting with insurance and pensions, followed by asset management and, most recently, the growth of sovereign wealth funds.8

The story of direct investing emerges in five phases, summarized in Figure 4.

2.1. Early institutional investing pre-1880-1980

During this phase, most investments were made directly by institutions, and many of the larger institutions tended to invest in safe, liquid assets such as government bonds. However, some institutions retained large direct investments in real estate, unlisted equities and other assets. In the late 19th century, a few began to appreciate that investing in illiquid, risky assets could reduce risks when the assets were held as part of a balanced portfolio.

Generali's 1885 decision to start a large, direct real estate investment programme is one of the earliest examples of using direct investments specifically to diversify an asset allocation. Similarly, MetLife credits its decision not to invest heavily in public equities for enabling it to make it through the 1929 US stock market collapse intact. In turn, MetLife was able to use funds from its direct real estate programme to help save the Empire State Building project.9

Other investors of the time chose to invest directly in illiquid assets because this practice was embedded in their historical approach to investing. Many of today's family offices, for instance, grew out of the investment offices of major 19th- and early 20th-century industrialists. These offices subsequently played a major role in the evolution of the US venture capital industry during the 1950s and 1960s.¹⁰ Similarly, the Wellcome Trust, created in 1936 to advance medical research, was for many years the sole shareholder of its founder's successful pharmaceutical company, and used its experience as an asset owner to develop further expertise in managing direct investments following partial flotation in 1986.

Figure 4: A historical perspective on direct investing: five phases

pre-1880 -1980 Early institutional investing

- In the first half of the 20th century, asset allocations typically focused on safe, liquid assets, but with a qualitative appreciation that illiquid investments could provide diversification benefits (although some investors focused on illiquid assets based on their historical roots)
- · 1974 ERISA act enabled greater diversification and use of external managers by US pension funds

Rise of the alternatives industry 1980 - 2000

- Use of external managers across most asset classes became common
- Development of more advanced asset allocations and flows toward illiquid investments
- Rapid growth of private equity funds in the 1980s and growth of hedge funds in the 1990s

2000 - 2007 The maturing of the illiquid investment markets

- · Private equity and certain hedge funds perform well through the dotcom crisis
- · Golden age for alternatives managers, as freely available credit and low interest rates boost asset markets
- · Emergence of sovereign wealth funds as a significant investor group in illiquid assets

2007-2009 The financial crisis

- Huge market volatility and widespread failure of diversification
- · Some institutional investors underestimated liquidity needs and did not have the transparency required to control their positions
- · Value for money provided by asset managers under scrutiny

2009 - Present The post-crisis years

- · Investors regained confidence in illiquid asset markets and increased allocations to reach return targets
- "Traditional alternatives" became part of mainstream investing
- · Rise of direct investing as institutional teams reach critical mass
- · Evolution of relationships between institutions and asset managers to meet institutions' desire for value, control and transparency

Until the 1980s, however, many larger institutions invested in a more narrow range of liquid assets. Despite the development of modern portfolio theory in the 1950s and 1960s, it was not until the introduction of the 1974 US Employee Retirement Income Security Act (ERISA) 11 and its various amendments that most US pension fund trustees felt able to fully diversify their portfolios and make full use of external managers – an approach soon emulated in other countries.

With economic and demographic fundamentals promoting ever faster growth in institutional assets since around 1980, the stage was set for the emergence of the modern asset management industry and for the rise of illiquid assets as a major class of outsourced institutional investment.

2.2. The rise of the alternatives industry 1980-2000

During the 1980s and 1990s, a much greater use of external managers took place, beginning in the United States and spreading quickly to the United Kingdom, continental Europe and other locations.

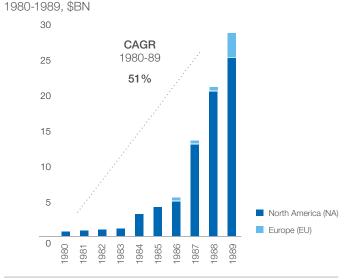
At the start of this period, most institutions had relatively simple asset allocations across cash, government bonds, listed equities and real estate. More flexible regulation, improvements in performance measurement techniques and the availability of cheap computing power and analysis software enabled more advanced asset allocations, fuelling the shift towards less liquid asset classes.

Most institutions turned to specialist asset managers to help them invest, driving growth in private equity during the 1980s and the hedge fund industry in the 1990s (Figure 5). They believed that private equity specialists, for example, were better placed to source private equity targets, apply the requisite amount of leverage, and inject management talent to improve operating performance. In the following 20 years, many of the early private equity firms grew to become leading alternative asset managers.

The shift towards outsourced asset management also took root in equity and bond markets, causing the 1980s to become known as the decade of the fund manager "superstar". In the United Kingdom, for example, the in-house management of pension funds was in decline across all asset classes by the late 1980s because of the increased size of the funds and difficulty hiring internal investment managers. 12

Figure 5: From the 1980s, in every decade a different asset class experienced a growth wave

Private Equity AuM (NA and EU)



Hedge Fund Global AuM* 1990-1999, \$BN



* Hedge funds are not part of illiquid assets as defined in this report. This chart is included to highlight the growth in alternative assets broadly over time.

Source: 2013 Pregin Global Alternatives Report; Pregin databases; Oliver Wyman analysis

2.3. The maturing of illiquid investment markets 2000-2007

During the dotcom crash in 2000, venture capital and listed equities collapsed, but some unlisted alternative sectors, such as private equity and certain types of hedge funds, performed relatively well, demonstrating that the right alternatives strategy could complement traditional investment strategies.

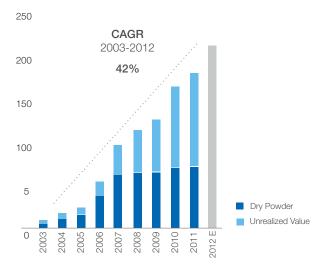
The period between 2003 and the financial crisis of 2007 marked something of a golden age for alternative assets and asset managers, as institutions looked for investment opportunities to help offset weak equity markets and low interest rates, and the availability of credit and leverage boosted asset markets.

The new enthusiasm for illiquid assets also helped the infrastructure equity market grow quickly at this time (Figure 6), catering to institutional investors' needs for predictable cash flows combined with long-term capital appreciation. Similarly, interest in infrastructure debt has grown significantly, with funds focused on infrastructure debt raising money since 2006.13

Figure 6: From the 1980s, in every decade a different asset class experienced a growth wave

Infrastructure Fund Global AuM

Unlisted funds 2003-2012 E, \$BN



Source: 2013 Pregin Global Alternatives Report; Pregin databases; Oliver Wyman analysis

Sovereign wealth funds emerged from 2000 onward as a largescale investor group, charged with creating long-term capital appreciation.¹⁴ Unlike pension funds and insurers, they were largely unconstrained by short-term liabilities and soon became major players in the alternative and illiquid investment markets.

2.4. The 2007-2009 financial crisis

The market volatility of the 2007-2009 financial crisis had a huge impact on institutional investors, both large and small.

Many were surprised that diversification failed to protect their portfolios, as valuations fell significantly across asset classes. Some institutional investors liquidated positions that they had considered as long-term investments, and many investors found their investment plans were dislocated or distorted when other investors were forced to exit. Institutions began to question how best to achieve their desired returns while also managing risks.

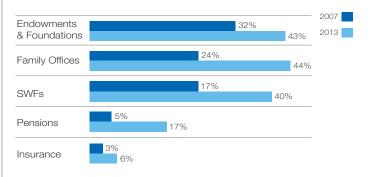
The crisis put a particular strain on flows of timely information between external managers and their investors, as institutions struggled to understand exactly where their money was invested, control their positions and gauge how liquid their holdings really were. In the years after the crisis, investors began to include short-term liquidity buffers as an essential part of their capital management process.

2.5. The post-crisis years

Despite these worries, by 2011 many institutional investors were regaining confidence in the long-term attractiveness of private equity and other illiquid asset classes.¹⁵ From 2009 onward, with interest rates at historic lows, investors increased allocations to illiquid and alternative assets to meet their return goals, with some opting to manage investments directly (Figure 7). Family offices, in particular, increased allocations to alternatives driven by increased confidence, attractive valuations, stronger potential returns and greater ability to add value.

Figure 7: Allocations to alternative assets¹⁶ have increased since before the financial crisis

Estimated allocation to alternative assets by investor type 2007 and 2013



Sources: SWF Institute; NACUBO; 2012 Patpatia Insurance Survey; Towers Watson Global Pension asset study 2013; Somerset Capital Annual Survey of Family Offices; MSCI; Watson Wyatt; Mercer; IFI; CEA; Broker research; Bloomberg; 2012 Commonfund E&F study; 2012 Tower Watson Alternatives study; Russell Investments 2012 Global Survey on Alternative Investing; Oliver Wyman proprietary data and analysis Note: Asset allocation for SWFs is as of 2011.

Alongside with new ability to attract top investing talent from the downsizing and de-risking banking industry, this has helped direct-investing teams reach critical mass, enabling some, for example, to feel comfortable extending into emerging alternative asset classes. Simultaneously, traditional alternative investments have increasingly come to be regarded as a component of mainstream investing.

This growing confidence and interest in illiquid assets, however, is refocusing attention on the processes that institutions use to access these investments. Many investors have become more sceptical about the value offered by intermediaries, leading to a restructuring of intermediary relationships, shifts towards co-investing and direct-investing partnerships, as well as solo direct investing.

Section 3 explores these related trends and examines the forces that drive and constrain the adoption of new investment processes in different kinds of institutions.

What Drives and **Constrains Direct** Investment?

Since the financial crisis of 2007-2009, there has been a major growth of interest in direct investing in illiquid assets as institutions seek sustainable, long-term returns. Institutions have approached direct investing in a variety of ways, depending on the type of institution and its size, goals and comparative advantage as an investor. Institutions with deep expertise and insight into a specific asset class within a specific geographic region, for instance, may be more motivated to invest directly in those assets. Similarly, institutions with a structure supporting swift decision-making may be more motivated to invest directly than those without such flexibility.



Direct investing allows institutions to invest in assets which, generally speaking, do not fit into the traditional asset manager model.



The focus of this section is on the key drivers and constraints of direct investing, how these shape the adoption of direct investing's three main models and an estimate of the size of the directinvesting universe.

3.1. Investment drivers

Institutions pursue direct investments for three main reasons: to improve returns while managing risks, strengthen control over the life of the investment, and to improve value and alignment with the institution's interests.

Returns

Direct investing allows asset owners to tailor their portfolios more specifically to their needs and take advantage of their long-term horizon.

Direct investing allows them to select specific types of investment to meet fundamental macro-investment requirements (e.g. they may be able to hedge long-term inflation by investing directly in toll roads or similar infrastructure). Direct strategies also allow an institution to innovate and to tailor each transaction structure to its micro-investment needs (e.g. in terms of the guarantees offered or the investor's place in the capital structure). Institutions may also use direct investments to explore nascent products before they are widely offered by asset managers. Examples include investments in emerging asset classes such as underwriting catastrophe bonds or infrastructure debt.

Direct investing allows institutions to invest in assets which, generally speaking, do not fit into the traditional asset manager model. If, for instance, an asset owner wanted to hold an infrastructure asset for 30-50 years, or potentially own a company indefinitely, this would not be possible with a traditional fund structure.

Control

Direct investing provides an institution with more control over its portfolio, as it lessens dependency on fund managers for when to sell an asset. It also reduces the likelihood that the limited partner (LP) base of a fund is comprised of institutions which do not share a similar investment time horizon or liquidity profile.

Investing directly gives an institution control over its own destiny. It can choose to stay invested in an asset that meets its needs, whereas a fund manager, in contrast, may be forced to sell if the life of a specific fund is coming to a close. Moreover, investing directly increases an investment's transparency within the context of the institution's overall portfolio. It is much easier to assess the value, risk and liquidity of a specific asset when it is owned directly, assuming that the operational infrastructure is in place to manage such functions.

During the financial crisis of 2007-2009, many asset owners found they lacked control over their investments when fellow investors had liquidity challenges that led them to sell their stakes in a fund or seek redemptions.16

Value and alignment

Institutions are keen to get good value for their money, and a number of the largest and most established institutions believe they can run sophisticated direct-investing teams for similar or lower costs than those incurred when using external managers.¹⁷ However, very few institutions say their direct-investing programme is principally a cost-avoidance tactic once indirect costs are taken into account, particularly good quality support functions and reductions in operational flexibility.

The costs of running a direct-investing programme can vary significantly, depending on the model adopted and the type of assets. As a general rule, a solo direct-investing approach is more expensive to set up and run than partnership investing, which is more expensive than co-investing. In terms of asset types, within each type of direct-investment strategy, private equity deals are generally more complex and costly than infrastructure and real estate deals. The key to a successful direct-investing programme is the combination of the right direct investing model for each asset type: for example, a solo infrastructure direct-investing programme is likely to be more expensive to manage internally than a private equity co-investing programme, and core real estate solo direct investing in a local market is potentially less expensive than partnership investing in emerging-market brownfield infrastructure.

The relative cost of delegated investing is clearly also a factor. Since the financial crisis, the threat of substitution by direct investing, together with cyclical factors, has helped push down the fees associated with investing in third-party funds (Figure 8, for example, highlights data related to buyout funds). Even so, what matters most is the overall value for money. Thus, funds with a strong track record can remain attractive despite charging higher fees. In turn, many fund investors have been focused on more intensive due diligence to identify top performers and consolidate their list of providers.

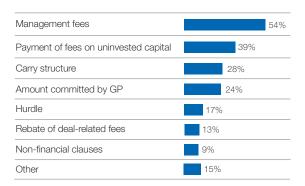
Costs aside, operational flexibility is a factor. By removing layers between an asset owner and an underlying asset, an institution reduces the complexities and costs introduced through additional intermediaries. However, it is more difficult to bench an internal team than to fire an asset manager if the institution's investment strategy or the broader investment environment changes. It can be difficult for an asset owner to be sure that an external asset manager's decision-making process is aligned as closely as possible with the interests of the asset owner (the discussion that follows on principal/agent challenges elaborates on this).18 Nonetheless, for most institutions, outsourcing at least some portion of their asset management to an external fund manager is the only practical approach given the structural constraints many asset owners face (detail for which is provided in the following subsection on investor constraints).

Figure 8: Fee trends and areas where private equity LPs believe alignment of interests could be improved

Average (mean) fees charged by buyout funds Management fees 2005-13%



Areas where private equity LPs believe alignment of interests can be improved Proportion of respondents



Source: 2014 Preqin Private Equity Fund Terms Advisor

Principal/agent challenges

Principal /agent challenges occur wherever a principal employs an agent to perform a task and is not able to directly supervise or measure the agent's activities. The challenge is therefore to ensure that the agent has the right incentives to act in the principal's best interests at all times. This becomes complex in asset management because there are multiple layers of principals and agents involved in any investment decision, creating opportunities for misalignment of interests. 19 There has been extensive academic research and policy-related discussion on this topic.²⁰ Highlighted here are some challenges specific to direct investment, in contrast to those related to traditional long-only investments.

Long-only investment fund

In a traditional long-only investment fund, principal/agent challenges are minimized by defining a clear investment mandate, publishing detailed performance information on a regular basis and providing incentives for the asset management firm and portfolio manager to ensure their interests are aligned with the beneficial owner. While this approach is generally satisfactory, it is not perfect. For instance, poorly structured incentives can make it attractive for fund managers to either take excessive risks or hug benchmarks to influence their compensation. In addition, there may be knock-on effects as investment managers put pressure on management of the companies they have invested in to meet short-term performance targets.

Illiquid closed-end fund

Management of illiquid investments using a closed-end fund structure is similar in principle but introduces some additional complications, for example:

Valuation

Since investments are illiquid, a clear and realistic framework for valuation is required, including how and when gains and losses should be realized.

Performance measurement

Performance cannot easily be marked-to-market or compared with peers, so investors use hurdle rates, carry structures and other incentives to align general partner (GP) compensation with realised performance.

Complexity

Investments may be highly complex, so more time must be spent to ensure investors understand investment and operational decisions including the knock-on effects of decisions concering cost allocation between the GP and LPs.

Conflicts

Greater potential for conflicts of interest exist, some of which may be discussed in offering documents, such as whether funds will be closed once gaining a certain scale.

Principal/agent challenges and direct investing

Despite bringing asset management in-house, direct investing does not automatically address all these issues. While problems of cost sharing are not relevant for solo direct investors, investors using partnerships still face the same challenges as when using an external manager. Aligning compensation schemes with longterm time horizons can be even harder for an asset owner since it can be difficult to provide compensation in the near-term while encouraging long-term thinking, especially when the investment life of some investments can be unlimited and compensation cannot be linked to the realized value of an investment. In addition, it becomes an even greater challenge to ensure that senior management and the board spend sufficient time understanding their institution's direct investing programme at the appropriate level of detail. Reducing an intermediary layer helps to overcome the principal/agent challenge, but places significant additional responsibilities on those governing a fund.

3.2. Investor constraints

Developing a successful direct investing programme requires a change of philosophy for many institutions and a commitment to a different governance process, mindset, tools and ability to manage new risks. While there is a spectrum of complexity for instance, co-investing alongside an established external manager is more complex than running a large-scale international solo investment programme - asset owners face a similar set of challenges as existing or potential direct investors.²¹

Constraints fall into four main categories: mandate and investment beliefs, investment resources and capabilities, ability to manage new risks, and external market factors.

Mandate and investment beliefs

The institution's mandate and beliefs can prevent it from adopting a direct investing strategy or make such a strategy difficult to develop:

- Mandate: Some institutions, including very large ones, are blocked from direct investing by their mandate, which requires using external managers.
- Beliefs: To build a direct-investing programme, institutions need to believe that illiquid assets will continue to offer longterm returns and leverage the unique strengths of the institution; and, they need to believe in the effectiveness of direct investing, for example in terms of delivering higher returns, more control or better value for money.

Investment resources and capabilities

Institutions that have the mandate and beliefs to undertake direct investing still need to have the right investment processes, staffing models and risk management-as well as back-office infrastructure. Having each presupposes that an institution has sufficient scale and a governance framework which supports the allocation of resources to building internal capabilities.

- Scale: Many organizations feel they are simply too small for direct investing to be a realistic option. As discussed in sub-section 3.3, the keenest direct investors tend to be large institutions with more than \$50 billion in assets under management (AuM) and a diversified portfolio, though there are many exceptions to this rule.
- Governance: As institutions become more involved in direct investing, they need to adapt investment management, governance, responsible investment guidelines and oversight mechanisms to adequately control their direct investments, e.g. in terms of additional board responsibilities, new staff capabilities, processes and infrastructure. Most of all, the board/trustees and internal investment team need to build a common understanding of objectives, financial and non-financial expectations, and potential outcomes. The board's responsibilities for risk management need to be delegated clearly, and important elements of how teams are organized and resourced will need to be determined.
- Investment capabilities: Successful direct investing requires new and highly tailored investment processes. Developing the right investment analysis and decision-making steps, in an institution where no similar skills and experience exist, is a huge challenge, most often achieved through the hiring experienced staff. There are also new challenges which must be managed, such as balancing the need to make a long-term commitment to direct investing against retaining the flexibility to use external managers and avoiding making investments in a specific asset class (if no good opportunities are available) simply because staff have been hired to do so.
- Investing talent and compensation: Direct-investing teams can be sizeable, and experienced personnel, paid higher salaries than before, are usually required. However, institutions are often constrained on the pay they can offer because they are part of a government entity, or because they are open to public scrutiny and may be attacked if pay seems too generous or performance is worse than expected.²² Rather than focusing on pay, some institutions make themselves attractive by giving high-flyers the chance to return from a global financial centre to their home geography, offering additional responsibilities and emphasizing their different organizational and investing cultures. That said, recent regulation aimed at controlling pay in the banking industry, for example European Union regulation to cap bonuses, has made it easier for nonbank institutions to offer competitive compensation, while the restructuring of the banking industry since 2007 has increased the pool of talent available to institutions. Nevertheless, institutions need to be

aware that bringing investment decisions in-house may not fully avoid the principal/agent challenges associated with using external managers; the compensation of in-house decision-makers needs to align their interests with those of the institution over the long term.

• Operational capabilities and risk management: Direct investing requires significant investment in new analytical and risk-management tools across a range of asset classes, for example to identify concentration risks at both the individual investment and portfolio levels.²³ Some institutions are putting in place multi-asset-class applications and associated processes to manage risk across a range of directly and indirectly invested illiquid assets (as well as traditional and other alternative products).²⁴ Direct investing also requires significant investments in policies, protocols and back-office personnel. A recent study of 19 pension funds found that for each frontoffice employee added by a direct investor, between one and two governance, operations and support staff were required. ²⁵

Ability to manage new risks

Institutions adopting a direct-investment approach will need to manage additional risks which, traditionally, were mitigated or managed primarily by an asset manager:

- Performance risk: The more committed an institution is to a direct-investment strategy, the more exposed it is to being criticized for underperforming relative to its externally defined peer group. When investments are made in third-party funds, both the board and management are somewhat insulated from lacklustre investment results, as blame can be placed on the intermediary. In contrast, when a board and management team decide to pursue direct investing, they are infinitely more exposed to criticism from policy-makers, the press or the beneficiaries of an institution when that approach does not appear to be effective.
- Operational and market risks: Direct investing requires significant operational asset management capabilities, which are not easily grown from scratch. Beyond the day-to-day operational capabilities noted previously, institutions need to work out how they will deal with significant operational events which might include issues such as investment blow ups, wars or fraud, without the guidance and resources of an experienced asset manager.
- Reputational risks: Direct investment involves taking responsibility for investment decisions. In particular, direct investing means that institutions can be publicly accountable for each investment decision and its relationship with their broader activities. An asset owner, for instance, could acquire a company whose subsidiaries include organizations that clash with the new owner's publicly stated ethical principles. Another instance would be when a government entity makes public decisions, such as the awarding of a contract or of mineral exploration rights to a company in which its pension funds also owns a stake.

External market factors

Other factors may limit an institution's ability to invest directly:

- Legal and tax: In addition to the standard investment-related legal and tax risks, direct investors face unique challenges. When multiple parties are involved in a direct investment, it is vital to ensure that ownership, governance and decision-making rights match investors' asset-management, liquidity and exit strategies. Deals also need to be structured carefully to minimize cross-border and inter-company tax liabilities. Crossborder investors, for instance, may be taxed at higher levels relative to domestic investors, depending on the investment-related tax framework and the nature of the investment. Different types of entities also have different requirements, e.g. sovereign wealth funds structuring investments to maintain sovereign tax exemption. Regulations vary significantly from country to country, so considerable complexity must be managed.
- Regulatory and political: Two main considerations apply here. First, the regulatory environment associated with the end investment must be sufficiently reliable, transparent and attractive enough to permit investment. This issue is particularly acute in directly regulated infrastructure sectors where regulatory uncertainty, for instance, can limit investor interest. Second, policymakers must be willing to permit direct investment. Large-scale deals involving assets that are perceived as strategic may require multiple layers of approvals to enable execution.
- Liquidity: Even when investing in liquid assets, investors will need to take a view on the long-term liquidity of assets and their exit strategies. This challenge is magnified in illiquid asset classes. Developments to standardize and package emerging alternatives such as infrastructure debt, and thus create a liquid market, make a material difference to assets' attractiveness.

3.3. Direct investment today

In this section we look at broad trends in direct investing today before discussing the pros and cons of the three main models of direct investing: solo direct investing, partnerships and co-investing.

Broad trends: size, investing maturity and asset type

The ability of an asset owner to invest directly is linked to size, as larger institutions find it easier to overcome constraints; asset type, as some assets require less intense management capabilities; and investing maturity, as investors need experience to invest directly.

• Size: The biggest commitment to direct investing, in terms of investment volume and the range of direct investing models employed, tends to be seen in the largest institutions, 26 while small investors continue to delegate most of their investing. Figure 9 sets out four broad divisions by size alongside their typical approach to direct investing. However, there are many

exceptions and corollaries; even among "mega investors", the allocation to direct investing varies from a few percentage points to over 90% of the investment portfolio. The relationship between size and direct investing is driven largely by economies of scale - notably the size of investments in a particular asset class in relation to the relatively fixed costs of building internal teams — as well as the bargaining power that investors gain as they become bigger. There seems to be a particular inflection point at around \$25 billion AuM. Above this size, institutions can often use their scale to gain co-investments and other services from asset managers. Rather below the \$25 billion mark, institutions often cannot make a full commitment to direct investing but may still have many of the characteristics of committed direct investors: significant volumes in illiquid assets, enhanced control and governance structures to cover these assets, and a more active relationship with asset managers. The strategies adopted by this group increasingly include mandates under which the institutional team retains significant discretion over the key investment decisions but uses an asset manager to implement the investment strategy.

Figure 9: Investor scale and direct investing approach

Investor segment	AuM	Typical approach to direct investing
"Mega" investors	Over ~\$50BN	 Have often already built internal investing capabilities Full range of models often used, including solo direct investing
Very large investors	~\$25 to 50BN	 Overall investment strategy and governance frameworks similar to mega investor segment Lower scale means co-investing is typically the primary direct investing model used
Large investors	~\$5 to 25BN	 Generally less developed than mega and very large investors in their approach to direct investing Greater focus on co-investing as a percentage of total direct investing than larger institutions Increasing focus on mandates where strategic investment decisions are controlled by a small highly qualified in-house team, but implementation itself is delegated to asset managers (and internal team does not invest directly)
Medium-sized investors	s ~\$1 to \$5BN	 Typically use intermediaries Lack scale to cover all asset classes internally, so gain advice from external experts on most investment decisions

Source: Oliver Wyman interviews and analysis; SWF Institute rankings 2014; P&I/Towers Watson Global 300 Investment Funds 2013.

- Investing maturity: Direct investing requires significant experience and considerable investment in resources and support structures, so most investors initially use asset managers for any given asset class. They then begin to move parts of the investment decision-value chain in-house to improve their access to the right kind of investment, increase control over investment decisions and assure value for money (Figure 10). Investors also tend to begin direct-investing activities close to home, in markets and geographical territories that they feel they already understand, although more mature direct investors sometimes see direct investing as a way of gaining exposure to new asset classes, such as in emerging markets or in terms of asset type.
- Asset type: Assets vary considerably in terms of the knowledge and resource necessary to acquire and manage them with regard to both broad asset classes and the more precise nature of each deal. Private equity is generally considered more complicated than infrastructure and and the latter is generally considered more complicated than real estate.²⁷ Many experienced direct investors will continue to use asset managers for private equity, even if they invest directly in other assets. Moreover, within certain asset classes, there can be a range of complexity (as illustrated in Figure 11). Equity investments made in an already-operating (or "brownfield") infrastructure asset, in a jurisdiction with well-established legal and regulatory

Figure 10: Overview of how an institution's experience with direct investing might evolve

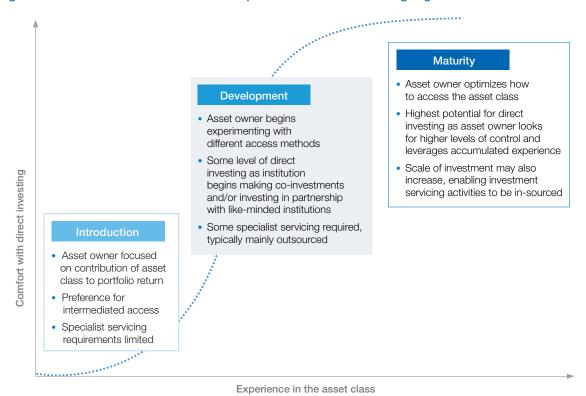


Figure 11: Complexity varies by asset class and subcategories within each

Complexity varies per asset class Simplified illustration of how risks - and potential returns -Illustrative, per asset class can vary for assets which are superficially similar Greenfield, emerging market Trade finance Private equity Corporate lending Infrastructure equity Acquisition intensity Real estate Non-performing loans Greenfield, developed market Potential returns Hedge Fund Forestry Brownfield, emerging market **Public equity Farmland № Bonds** Brownfield, developed market Low High Management intensity Risks/complexity

frameworks, for example, are generally considered less risky than equity investments in the new construction (or "greenfield" development) of an infrastructure asset in a frontier market with a less predictable legal and regulatory framework. Investing in the new construction of a suburban shopping mall is likely to be of higher risk and more complex than investing in an existing Class A office building in Midtown Manhattan, New York City.

There are many exceptions to the broad trends just noted, and they offset one another to a degree. For example, some investors have a long history of investing in illiquid assets, and this maturity allows them to behave more like mega investors despite their smaller scale (e.g. the Wellcome Trust). Family offices are another common exception to the rule, with many making direct investments. To overcome their scale and staffing disadvantage, many use intermediaries and trusted advisers to perform sourcing, screening and due diligence.

At the other end of the size spectrum, some mega-sized pension funds that would seem to be natural candidates for direct investing are deterred by their mandate or institutional culture.

Even among committed direct investors, the trends lead to a selective approach to direct investing in terms of asset type. As a workshop participant observed, "direct investing is like maintaining a house: you can do certain things yourself but need help for others."

Case Study: Canada Pension Plan Investment Board - A mega investor

The Canada Pension Plan Investment Board (CPPIB) invests the assets of the Canada Pension Plan not currently needed to pay pension, disability and survivor benefits. It was founded in 1997 as a separate entity. With C\$219.1 billion (US\$198.1 billion) in assets at the end of 31 March 2014, CPPIB is among the 10 largest retirement funds in the world, allowing it to make large-scale investments. It has both a very long investment time horizon and a very flexible liquidity profile since the pension plan's contributions are expected to exceed benefits paid until 2022.28

Without a pressing need for liquidity, CPPIB can look at the total risk-adjusted returns available from investments over the longer term. As a result, CPPIB invests a significant proportion of its portfolio in illiquid assets, with C\$88.5 billion (US\$80 billion) in private and real estate investments as of 31 March 2014. As well as investing in illiquid assets through third parties, CPPIB has become a leading direct investor over the last decade, alongside other large Canadian pension funds, and makes many of its private investments through dedicated business units.

- Funds, Secondaries and Co-Investments, which manages more than C\$45 billion in carrying value and unfunded commitments and maintains relationships with more than 80 general partners globally. FSC is a leading investor in private equity funds, engages in co-investments alongside private equity partners and is a large player in the secondary market, acquiring portfolios from other private equity owners.
- Principal Investments, which makes co-sponsorship and lead investments in private transactions globally through three business units: Direct Private Equity, Natural Resources and Private Debt.
- Infrastructure, which invests mainly in brownfield infrastructure assets in core developed markets, but is now increasing exposure to emerging markets, particularly India and in Latin America (Brazil, Peru and Colombia), as well as selective opportunities in Asia. The group is also exploring innovative structures to provide long-term capital to enable early-stage investors in such markets to release and recycle investment from maturing development projects.

These units are then supported by CPPIB's Portfolio Value Creation team, which is actively involved in the governance and management of CPPIB's private assets. Recently, the team launched an ESG monitoring process in support of CPPIB's responsible investment goals.

CPPIB quickly developed its expertise in illiquid and direct investments. Its first commercial real estate fund investment took place in 2002 and its first infrastructure fund commitment was made in 2003, shortly after the organization was founded. From 2009 to 2012, CPPIB participated in the largest or second-largest private equity transactions globally. 29

Direct investment models

Of today's three direct-investing models, solo direct investing is the least common, although it is more prevalent with real estate investing than it is with investing in infrastructure and, especially, private equity. Partnerships are becoming increasingly popular, for instance, as a more standard way to access infrastructure, while private equity partnerships stand out for the diverse combinations of LPs and GPs investing jointly as partners. Co-investing, in particular, has become increasingly common as a strategy for ramping up allocations to private equity, although it is employed across illiquid asset classes. Linkages between each model and key asset management activities are highlighted in Figure 12.

Figure 12: Models of direct investing

		Research	Selection sourcing & due diligence	Investment decision	Financing	Ongoing asset management	Asset sale or exit
HIGHER	Solo investment	Internal	Internal	Internal	Internal	Internal	Internal
	Partnerships*	Internal or delegated	Internal or delegated	Internal or shared	Internal or shared	Internal or shared	Internal
	Co-investment*	Delegated or internal	Delegated	Internal	Internal	Delegated or internal	Delegated or Internal
	Traditional delegated model	Delegated	Delegated	Delegated	Delegated	Delegated	Delegated

^{*} Note: Varving levels of asset owner involvement/discretion observed in these models Source: Oliver Wyman

Solo model

Asset owner engagement

Under solo direct investing, all the important steps of the investment decision and implementation are led by the in-house team, though they may outsource specific tasks to specialists such as lawyers. Solo direct investing sidesteps the need to use asset managers but requires investors to overcome many constraints and make considerable investments in building expertise and resources.

The demands of solo direct investing mean that only a minority of investors adopt the approach, and these typically focus their solo direct investing on particular asset classes where they have built up sufficient knowledge and investing capabilities. It is thus relatively rare to find institutions using solo direct investing in specialist areas such as venture capital and distressed debt.

Partnership model

Partnerships vary in form. An institution may partner with other institutional direct investors or with an asset manager, and partners may make an informal agreement to pursue an asset together or build a more formal multi-deal structure or platform, where expected deal flow is shared across a consortium of investors.

Partnerships mean that investors can help each other source assets and also pool some investment costs, while retaining control over the key investment decisions. However, partnering with another institution also brings considerable practical challenges because partners' governance, decision making and communication styles are often different, e.g. when gaining internal approval to make an investment.

Some peer-to-peer networks or platforms are now emerging to help "institutionalize" the formation of investment partnerships, e.g. around particular investment themes, a process that may prove important in the future. However, a number of large institutions think that the advantages of partnerships are often outweighed by the downsides. It can require a lot of trial and error to find and develop productive partnerships. Among other factors, it can be difficult to implement a governance structure for a partnership to address what happens if an investment does not perform as expected.

Co-investment model

Co-investment is where an asset manager running a fund allows fund investors to also invest directly in the fund's underlying assets, without paying further asset management fees.

The institution wins the ability to make an additional large investment while also avoiding many of the costs associated with direct investment, e.g. fully developing its own direct-investment team. Co-investment gives investors more control over their investments than traditional delegated investing, such as in terms of choosing the size of their allocation to a particular opportunity.

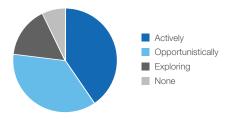
Compared to traditional delegated investing, co-investment requires an institution to make quick decisions about investing in a specific asset, and the institution must be able to conduct its own secondary due diligence process. During the research conducted for this report, both asset owners and asset managers noted that some asset owners are not fully prepared to participate in co-investment opportunities.

Even so, surveys suggest the majority of institutional investors have co-invested in the past and are actively petitioning for co-investment rights in exchange for committing to a fund.30 Investors say this is their preferred investment approach for a number of reasons, including better returns (Figure 13) — though the belief that co-investments offer high returns is not upheld by recent academic studies.31

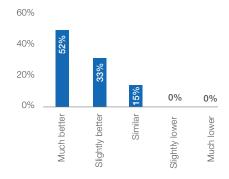
For asset managers, offering co-investments enables the manager to deepen relationships with LPs, attract a broader pool of potential investors and consider larger deals. Nonetheless, there are complicated dynamics which both GPs and LPs need to manage through so that both sides benefit. From a GP's perspective, for instance there is a need to balance the preferences of those investors making the most sizeable commitments with those able to commit only a smaller amount to a fund.

Figure 13: An overview of co-investing

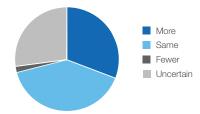
Current level of co-investment activity among private equity LPs



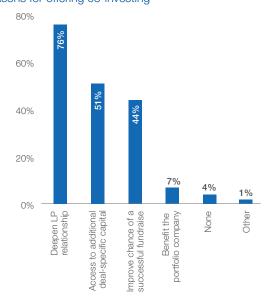
LP perception of the performance of PE co-investments compared to fund investments



Private equity GPs' plans around amount of co-investments they will offer to LPs



GPs' reasons for offering co-investing



Source: Preqin LP Co-investment Survey, February 2014, and Preqin GP Co-investment Survey, February 2014 (as cited in Duong, J. "The State of Co-Investments", in Private Equity Spotlight, March 2014, Preqin Ltd.).

3.4. Sizing direct investments

In this subsection, we provide an estimate of how widespread direct investing is today and discuss our methodology. It is recognized that making an estimate risks implying that the knowledge of how much is invested directly is more precise than it is.32 Nonetheless, it is useful to provide a baseline for analysing the impact of and outlook for direct investing.

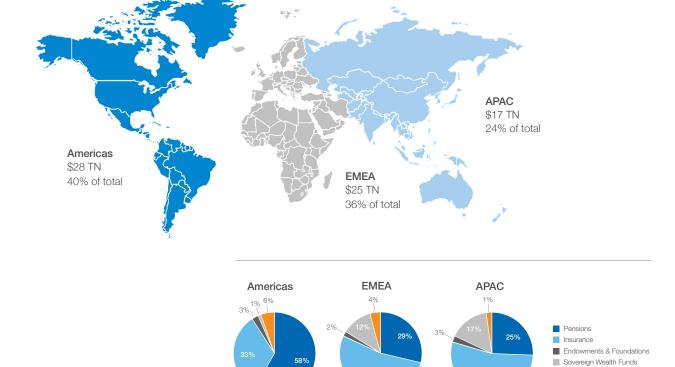
The starting point is an estimate of the global institutional asset base which is refined based on the estimated potential capability for and desire to invest directly in illiquid assets by sovereign wealth funds, pension funds, insurers, family officers, foundations and endowments.

Estimating the global institutional asset base

We started by estimating total institutional AuM globally, which we estimate to be approximately \$70 trillion in 2013.

Broken out by geography type of institution, the Americas represent approximately 40% of AuM with more than half derived from public and private pensions. Europe, the Middle East and Africa (EMEA) represents approximately 36% of AuM with insurance and pensions representing the two largest segments. Asia-Pacific (APAC) represents approximately 24% of the total global institutional assets — and is growing strongly — with assets concentrated in insurance, pensions and sovereign wealth funds. Additional detail is provided in Figure 14.

Figure 14: Estimated total global institutional assets under management as of 2013: \$70 trillion



Source: Oliver Wyman Global Asset Model

Family Offices

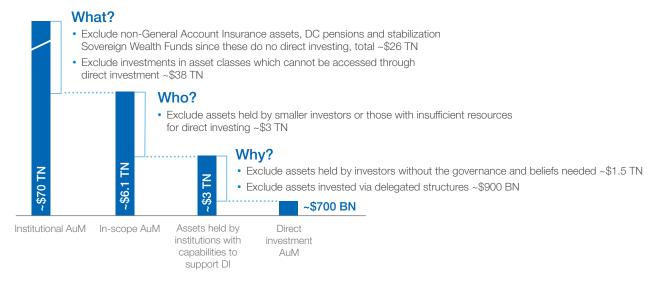
Identifying institutional direct investments

Applying a "what, who and why" framework then helped to estimate the amount of the approximately \$70 trillion that is directly invested by institutions (Figure 15).

- "What" filter First, non-life-insurance assets and defined contribution pension funds were excluded from the overall asset base, since these investors do not make significant direct investments. Applying the asset allocations adopted by the remaining institutional segments per region implies that approximately \$6.1 trillion of institutional assets are in illiquid assets, above all real estate, infrastructure equity, private equity and emerging alternatives.
- "Who" filter Next, institutions unlikely to be able to make direct investments because of their small size were screened out, with some adjustments for family offices and other exceptions, leaving roughly \$3.0 trillion in assets.
- "Why" filter Then, extensive interviews and a detailed view of the investment landscape were used to identify institutions not having the governance structures and beliefs necessary to support direct investing. Finally, desk research and interviews were used to identify the volume of assets held by institutions motivated to make direct investments. This final filter reduced the amount of assets likely to be invested directly to about \$700 billion, or approximately 1% of the total institutional asset base.

Figure 15: Sizing global direct investments in illiquid asset classes, 2013

FILTERS What Who Why is the total AuM invested is able to conduct direct would investors choose in in-scope assets? investing? direct rather than Total institutional delegated investment? ~\$700 BN asset base ~\$70 TN Real estate, infrastructure, Size and resources Governance, beliefs private equity and and motivations emerging alternatives



Source: Oliver Wyman

How Will Direct Investing Develop in the Future?

This section presents how direct investing is expected to evolve, and then describes alternative outcomes based on plausible but less likely scenarios.



A clearer division is likely to emerge between the seqments of investors who do. and do not, invest directly.



4.1. The expected scenario

Our research indicates that the most significant switching by institutions into direct investing has already happened. In turn, the key driver for growth in direct investing is expected to be the increase in size of the pool of institutional assets over the next five years and beyond.

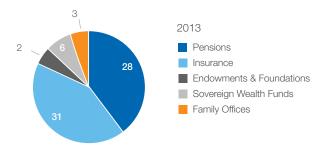
There will be offsetting factors as well. For instance, the pool of potential assets in which investors could invest directly is likely to increase. With infrastructure, for instance, there is a strong possibility that governments will create scalable project pipelines and improve investment frameworks, leading to increased opportunities for asset owners to invest in them. However, the constraints on direct investing at most institutions will continue to impact their ability to invest directly.

On balance, it is estimated that the net effect will be growth in directly invested assets slightly above the underlying growth in institutional assets over the near to medium term. Although direct investing would grow in absolute terms under this scenario, it is not expected to become the dominant institutional model. In response, asset managers will continue to improve and tailor their offering to institutions and, in some instances, broaden their product lines to target retail investors as well.

Market size and segment behaviour

Although we do not expect a major shift toward direct investing across institutions as a whole, there are some exceptions in terms of specific industry segments. An overview of global institutional assets under management by industry segment follows in Figure 16. We anticipate for instance, that sovereign wealth funds will likely grow in confidence and their investment capabilities will mature, increasing the likelihood that they will shift towards direct investing. Additionally, we anticipate that strong growth in insurance assets in the Asia-Pacific region, and rising allocations to illiquid assets, may support more direct investing, although the sector's allocation to illiquid investments is currently relatively low.

Figure 16: Global institutional AuM by segment, 2013 (\$70 TN)



^{*} Totals may not be exact due to rounding

Source: Oliver Wyman Asset Model

Figure 17: Drivers of changes in direct-investing volumes

	Changes in illiquid AuM		Changes to investor constraints	Changes to investor motivation
Defined benefit (DB) pensions	Shift toward defined contribution (DC) plans, which make minimal volume of illiquid investments Run-off of DB plans	\	 Regulations and governance tightening, with stricter funding and solvency requirements Trustees demonstrate prudence by using outside experts and asset managers 	Large funds may pool resources to share expertise and mitigate direct investment costs Greater need to demonstrate value for money
Insurance	Increased penetration of insurance products as world grows wealthier, particularly in emerging markets (partially offset by reduced demand for illiquid assets following changes to regulations such as Solvency II)	↑	Only largest insurers able to invest directly (smaller players use asset managers to access niche asset classes)	Strong balance sheet and bank deleveraging creates opportunities to invest in "emerging" alternatives
Sovereign wealth funds	Growth in existing SWFsCreation of new SWFs	1	Policy constraints on SWF investments potentially increasing, however number of potential deals increases	Professionalization of SWFs enabling greater allocation to alternatives
Family offices (FOs)	Increasing wealth concentrations Creation of new FO structures	1	Few FOs have scale to undertake direct investments outside the family business area	 Professionalization of FOs Desire for medium-term returns and ability to make unconstrained investments
Endowments/ foundations	Growth in global wealth Increasing allocations to illiquids	1	Regulations on expenditure make it difficult for foundations to commit money over the long term	Focused on generating higher returns to cover expenses while delivering programmes
Source: Oliver Wyma	n analysis		Positive for direct investing	Mixed or no change Negative for direct investing

- Defined benefit pensions³³ in developed countries are maturing and will have to increase the amount they pay out, while the shift to defined contribution pensions continues. Many funds will find it difficult to overcome the governance and compensation restrictions that constrain them from direct investing, though the motivation to repair funding gaps may counteract this in some cases.
- Insurers are likely to invest more in illiquid assets as global wealth increases. However, their asset allocation to illiquid assets remains relatively low, and only the largest insurers have the capabilities necessary to invest directly.
- Sovereign wealth funds are likely to continue to grow guickly in terms of assets, as more countries create funds to benefit from wealth in natural resources, and increasing sophistication and experience will lead existing funds to experiment with various direct-investing models. Nevertheless, national sensitivities often constrain sovereign wealth funds from taking direct stakes in key foreign assets, and their domestic political environment can spur changes in investment strategy and appetite for direct investing.
- Family offices are likely to increase the amount they invest in illiquid assets, and while some are highly motivated to invest directly, they need to ensure that returns match the additional operational expenses of direct investments. The small size of many of these entities will prevent most from undertaking direct investing on a significant scale. However, multi-family offices are likely to have the scale to invest directly more readily.
- Endowments and foundations will likely continue to display varying appetites for direct investment; our view is that many of the leading large institutions will continue to invest through asset managers rather than developing in-house capabilities.

We anticipate the following developments in key asset classes:

· Real estate: Large institutions will continue to conduct equitybased deals in major markets. Insurance and pension funds will continue to make the majority of their investments in core real estate, while sovereign wealth funds will make a broad range of investments across the sector, but will continue to attract disproportionate attention when investing in high-profile assets in major centres. Leading institutions will build diversified portfolios of real estate assets across all real estate risk segments and geographies. For smaller institutions real estate will continue to be the gateway asset class into direct investments.

- Infrastructure: Our view is that the first wave of investment into the infrastructure asset class has already occurred, so future activity will focus as much on reinvestment following exits as on new investment flows. Based on their experiences to date, institutions have become more sophisticated and think about their allocations to infrastructure across multiple dimensions, including equity/debt, brownfield/greenfield and developed /emerging market. Large institutions will continue to focus much of their infrastructure asset allocation on brownfield developed-market equity deals, effectively as a less-correlated fixed-income substitute. At the same time, increases in institutional investment in infrastructure debt are expected, both for liability-matching purposes and to fill the gap left by banks that continue to restrict lending based on tight balance sheets. Select institutions will invest directly across the capital structure. Depending on how institutions approach opportunities for accessing infrastructure across the risk/return spectrum, some institutions will also explore riskier infrastructure developments, e.g. clean energy development projects.
- Private equity: The largest institutions are increasingly likely to develop private equity capabilities, with teams focused on developing internal capabilities to source deals more broadly. Leaders may develop in-house "value creation" teams to add value to portfolio companies, or may choose partnership and co-investment routes to obtain external value creation expertise.

Institutions such as insurers, sovereign wealth funds and a few of the largest pension funds will be able to play a far greater role in funding debt transactions directly, based on availability of lower-cost long-term funding compared with banks under current regulations. As a result, it is expected that institutions will develop partnerships with banks and investment houses to enable "renting" of their balance sheets.34

Geographically, when assessing the differences by asset class, direct investing will likely be more prominent in developed markets, with some variation by asset class since a larger proportion of institutional capital is focused on developed markets relative to emerging markets.

However, there will be some impact in areas where attractive demographics enable investments with potential for long-term growth. Real estate direct investment is likely to have a larger impact than other classes because it is more mature and straightforward relative to other asset illiquid classes, while direct investment into significant emerging and frontier market infrastructure projects will continue. In contrast, impact on emerging and frontier market private equity will be limited; here large institutions will rely on global asset managers or local specialists for advice.

The emerging alternative sector will remain largely intermediated, with the impact of direct investments confined to developed markets because these will develop the fastest and offer reasonable scale. Here the scale of the opportunity is dependent on institutions driving industry and regulatory change to overcome the sector's challenges as highlighted in the following example concerning infrastructure debt.

Case Study: Swiss Re-Supporting infrastructure debt market development

The need for long-term funding over the next several decades is significant. For infrastructure alone, global annual spending requirements are estimated to increase from \$2.6 trillion to around \$4 trillion by 2030, generating a cumulative infrastructure financing need of \$60 trillion through 2030. Securing the funding for this type of investment is crucial for economic growth and financial market stability and, thus of keen interest to policy-makers.

One key issue is the lack of a transparent, harmonized set of financial market instruments that would allow institutional investors to access the infrastructure asset class. Bank loans remain the predominant instrument for institutional investors investing in infrastructure. Infrastructure loans meet many institutional investor needs: regular cash flows, attractive risk-adjusted yields, and high credit quality relative to comparable loan or corporate bond classes. However, current infrastructure finance deals are complex, and the secondary market remains almost non-existent. Also, long-term investors must have the ability to make adjustments to their portfolios as required.

Swiss Re has proposed the development of a transparent, harmonised and accessible infrastructure global project bond market to increase both the supply and the liquidity of infrastructure debt as an investable asset class. Besides benefiting economic growth and financial market stability, this would help those investors oriented towards matching assets to liabilities by increasing the pool of investable longer-term assets.

Specifically, Swiss Re has proposed a joint private/public market initiative, leveraging the role of multilateral development banks (MDBs) and, in Europe, leveraging the European Union-European Investment Bank Project Bond Initiative. Elements of the

Swiss Re initiative include the pooling of infrastructure projects and the setting up of insurance facilities to increase MDBs' lending capacity. This private/public-enabled asset type would feature a set of desirable characteristics, such as a marketable infrastructure asset class, potentially lower regulatory capital charges, and best-practice standards set by the MDBs to facilitate a global passport for investments in this asset class. In addition, the initiative would include an institutionalized risk transformation element with the (re-) insurance industry providing a facility to MDBs for risk coverage.35

Future direct-investing models

Under the expected scenario, the drivers for direct investing are strong for many institutions but their managers are held back by constraints that will not prove temporary or easy to overcome, particularly with regard to solo direct investing.

This will most likely lead to an evolution in the types of investment structures provided by asset managers, as well as to an evolution in the structures used to make direct investments.

Traditional delegated investing

The traditional model of investing via an asset manager's fund is evolving to offer a wider range of choices that deliver some of the benefits of direct investing to investors that do not wish to develop direct investing capabilities in a particular asset class.

Two of these choices exist already as mainstream models but are likely to become even more important:

• Separately managed accounts (SMAs): SMAs have already made inroads into the asset management market because they offer institutions a way of enhancing transparency while delegating the sourcing and management of the assets to the asset manager. The manager has discretion over which assets to purchase, but SMAs offer significant control and transparency advantages over traditional fund investing; the investor can see at a glance which assets it owns, and may be able to influence the asset selection and the timing of the exit. In addition, large institutions are particularly able to negotiate relatively low fees compared with fund investments in exchange for committing large amounts of capital over the long term. SMAs are a particularly significant development in the private equity market, where many investors already say they are considering applying the approach, following the lead of the Texas Teachers' Retirement System and New Jersey Division of Investment, which opened multibillion-dollar SMAs in late 2011.36

Seeding asset managers: Here institutions seek out the most talented start-up fund managers and offer them the capital they need to launch new firms in return for preferential treatment. APG, for instance, has run what it calls an "IMQubator" since 2009, which "aims to incubate the next generation of investment managers."37 The institution may gain lower fees and can steer contractual arrangements in the right direction, e.g. in terms of transparency, as well as helping funds emerge that focus on investment types and time horizons that suit its interests. The approach can help ease an institution's reliance on established top performers, but brings new challenges in terms of spotting rising stars and renegotiating when the manager becomes established.

In addition to growth in SMAs and seeding, we expect some more limited growth in a range of models that can be seen occasionally in the market today but that may develop further over the next few years:

- Non-discretionary mandates: Unlike SMAs, non-discretionary mandates allow institutions to retain key investment decisions over each asset while outsourcing resource-intensive tasks to the asset manager such as due diligence and dayto-day asset management. The institution gains much of the control associated with direct investing while, in return for a fee, sidestep the time-consuming chores.
- Evergreen funds: These funds have no end date by which the manager needs to realize gains, unlike traditional funds, and thus are attractive to investors keen on having exposure to long-horizon assets such as infrastructure, without facing the expiration of a fund's life. An asset manager can focus on creating value through sourcing and managing assets, however, the approach creates different complexities in terms of valuation, management continuity and managing a very long-term asset manager relationship. Evergreen funds should continue as an important but niche investing model. For example, IFM Investors is a uniquely structured asset manager with A\$53 billion (US\$46.3 billion) AuM as of 30 September 2014. It is owned by 30 pension funds and cites this ownership structure as enabling it to invest over the long term without conflicts of interest. Its infrastructure funds are structured as open-end funds, thus avoiding set maturity dates.
- · Stakes in asset managers and asset purchases: Over the past few years, some institutions have bought stakes in asset managers as a way to improve alignment of interests, gain additional control and learn from the asset manager. More recently, some institutions have begun providing exit capital to existing funds towards the end of their life as a way of acquiring a ready-made portfolio of high-quality, long-term investments.38

Co-investing models

Co-investing is expected to remain the most popular form of direct investing, particularly with regard to private equity. The demand for traditional co-investments is expected to continue to increase in the near to medium term, constrained by the supply of co-investment opportunities available and the extent to which LPs develop expertise and formalize processes to respond quickly to co-investment opportunities. Over the medium term, demand is likely to increase (or decrease) based on the specific investment results LPs see from their co-investing.

Alongside traditional co-investing, a greater variety of approaches, allowing institutions to tailor their involvement and level of control over their investments, have become more common and it is expected that this trend will continue. LPs, for instance, are helping to underwrite deals alongside GPs, becoming actively involved in due diligence during the development of a deal.

The evolving co-investing relationship provides positive opportunities for both sides. Asset owners gain access to a broader set of investment opportunities, reduced fees and experience in specific asset classes. Asset managers have the opportunity to deepen their relationship with their LPs, which can build trust and, ultimately, a broader relationship with the firm. But the dynamics are complicated. For instance, as noted previously, deepening a relationship with a subset of LPs having preferential access to co-investments risks impacting relationships with LPs (or potential LPs) that have less preferential access.

The need for co-investors to respond rapidly to potential opportunities is likely to increase in line with increased involvement in the process and control over their decisions. At present, 58% of GPs believe that offering co-investment rights to LPs slows the deal process.³⁹ While this may be weighted to the views of those reticent to offer more co-investments rather than the experience of those who have a very active programme, to the extent that the deal process did slow down and the performance of the underlying fund over time were impacted, this would be worth noting.

Partnership models

Investment partnerships between institutions have already emerged as one way to conduct direct investing and are likely to become more common. Typical partnership arrangements are deal-specific. Considerable energy is required to align partners' interests and iron out myriad issues given differences in scale, investment and control objectives. Thus, institutions will try to develop more lasting and "institutionalized" structures via joint ventures and platforms.

While an attempt had been made to provide reasonably precise definitions of each model, the industry uses these terms somewhat interchangeably, so the key here is the concept behind each structure.

- Joint ventures: These are permanent legal partnerships, based around a vehicle set up by asset owners with asset managers or other asset owners for the purpose of investing in deals on an ongoing basis. The use of a legally separate entity has major advantages in overcoming some institutional constraints, such as flexibility in offering the right packages to talent. Institutions will often be able to invest much larger sums through a joint venture than would be possible through an investment fund. At the same time, setting up a joint venture involves tackling a wide range of governance issues that require significant management time and attention. This structure will probably appeal to investors in the \$10 billion-50 billion AuM range, but the number of joint ventures that prosper over the long term is likely to remain small.
- Platforms: Platforms can be thought of as a longer-term partnership or less-structured joint venture, where multiple investors create an "investment club" or semi-structured collaboration model to originate, execute and then manage investments. Benefits include a greater information flow to participants, access to a broader set of opportunities and the ability to compete for larger deals. Platforms differ from joint ventures in that the collaboration model is less formal, and platforms do not require participants to agree on each investment decision. Some partnership platforms already exist,⁴⁰ and more may emerge to focus on particular investment styles, regions and asset classes. Examples include the transactions led by the Canada Pension Plan Investment Board to acquire and then syndicate 40% of the 407 Express Toll Route in Toronto to other institutional investors.41 We expect that this type of platform arrangement will become more common in the future.
- Asset owners investing on behalf of other asset owners: Institutions that have spent heavily to build their own directinvestment infrastructure are sometimes in a position to open up these capabilities to other investors by becoming both an operational partner and, in a sense, a special type of asset manager. OMERS and TIAA-CREF, for instance, have been active in this space. Some institutions are doing this because it leverages the largely fixed costs of their investment team, enabling them to scale up still further. Some potential client institutions see the approach as a way to access a high-quality investment team, familiar with institutional concerns, at a fair price. However, there are often substantial concerns about conflicts of interest and governance, should the "asset manager" prioritize its own interests in deals or abuse confidentiality, so safeguards need to be built in to protect the client's interests. Moving from serving a single client to serving multiple clients can be complex and time-consuming, since almost all functions within the business are affected

Case Study: How partnerships open emerging markets for the Caisse's real estate arm

Ivanhoé Cambridge, the Caisse de dépôt et placement du Québec's real estate subsidiary, has been turning to emerging markets as it seeks new opportunities outside of its traditional markets. But even for a global investor, operator and developer such as Ivanhoé Cambridge — with about one-tenth of the Caisse's C\$214.7 billion (US\$201.2 billion)* in net assets — it can be challenging to manage risk in emerging markets. This is why Ivanhoé Cambridge consistently teams up with a local operating company with a strong track record to develop its presence through partners that have an in-depth knowledge of the region.

Ivanhoé Cambridge made its first big platform investment in Brazil in 2006 in partnership with the Carvalho family. Their joint venture, Ancar Ivanhoe, has made \$1.5 billion worth of investments so far in this market characterized by a rapidly growing middle class. Ancar Ivanhoe now owns and operates 16 shopping centres. It also manages five additional centres owned by third parties, capitalizing on its in-house expertise to generate other sources of revenue. Ivanhoé Cambridge believes its success in this challenging market is largely attributable to its partnership model, which can provide the flexibility to invest in new projects or properties through a structure or a level of commitment that can differ from the original partnership.

Ivanhoé Cambridge has built on its Brazilian experience to gain a foothold in other growth markets. In 2013, it partnered with TPG to acquire P3 Logistic Parks for close to \$1 billion. Based in Prague, P3 is an operating company that specializes in supplychain types of warehouses in key Central and Eastern European countries. After the initial equity investment, P3 concluded a series of acquisitions in Italy, Romania, Poland and the Czech Republic, doubling the size of the company's assets in less than one year.

Ivanhoé Cambridge also took a similar approach in Mexico. In 2014, it partnered with Denver (USA)-based Black Creek Group to invest \$500 million through its MIRA platform in Mexico, targeting key Mexican cities to develop mixed-use urban communities. Black Creek and MIRA's local team have extensive experience and a proven track record in the country's real estate market. The company has already committed more than \$100 million to its first project in suburban Mexico City.

* As of 30 June 2014

Response of asset managers

Since we expect the growth of direct investing to mirror that of the broader institutional market, we do not think that direct investment poses a threat to the existence of managers of illiquid assets. However, asset managers will need to further tailor their offering to institutions and demonstrate more clearly how they add value, following the lead of the largest players.

- New product and partnership offerings: KKR, Apollo Group and Blackstone, for instance, have recently offered separate accounts for significant institutional investments for key LPs wishing to leverage their multi-product offering and also benefit from lowered fee structures.
- Position in the value chain: Asset managers are now diversifying how they cover the investment value chain. For instance, some managers offer specific client propositions including discretionary and non-discretionary accounts, as well as analytics packages which can be used by asset managers, fund of fund managers and end clients. 42
- Diversification: Several firms have been exploring ways to diversify their investor base, in part by attracting capital from retail investors. Carlyle, for instance, has diversified to offer its services to retail and private client investors, while Blackstone has also begun looking to attract retail investors, initially via a hedge fund of fund offering.
- Transition to permanent capital: Rather than focusing on raising capital and liquidating funds, firms such as KKR have gone public and then, recently, have hinted that they will grow their balance sheets and move towards permanently funding investment vehicles. On the one hand, this will better align interests with long-term investors, but others fear that going public will subject the firm to short-term profitability pressures.

4.2. Variation around the expected scenario

The following are important factors which could lead to outcomes other than the expected scenario:

- The size of the asset pool available for direct investment
- The constraints faced by direct investors
- Investors' motivation for direct investment

Specific trends that could impact each of these – either positively or negatively - include economic factors, such as global economic growth rates; changes in institutional risk appetite; new regulation; and the future experience of direct investors. Important interlinkages are summarized in Figure 18. The motivation of institutions to adopt direct investing, for instance, could be undercut by a major blow up of a direct investing strategy, which in turn might prompt tougher regulatory constraints. As this example implies, while the various influences might occur in isolation, it is more likely that they will have a major impact on direct investing to the extent they are interconnected.

Two potential multi-factor scenarios follow - one on the upside, the other on the downside.

Potential upside scenario

In this scenario, direct-investing programmes at major institutions deliver a run of strong returns over the next 10 years while avoiding blow ups, demonstrating that institutions have developed the right culture and governance to manage direct investing.

Figure 18: Future developments impacting direct investment growth rates

Changes in	Asset pool	Constraints	Motivation
Example influences (may be positive or negative)	Global economic growth rates Changes in commodity prices resulting in changes in flows to SWFs Governmental funding challenges Saving rates, particularly flows to pension funds Growth of insurance products in emerging markets Changes in allocations to illiquid assets	Supply of direct investment (DI) opportunities Availability of investment talent Regulation affecting Cost of running DI or traditional asset management programmes Ability to structure DI deals Political willingness to allow investments by foreign investors Ability of investors to deal with deal structuring and ongoing operational management	Changes in stakeholder acceptance of direct investment programmes based on Evidence around industry performance Evidence comparing cost of indirect and direct investments Desire for greater control Lack of blow ups Build-up of long-term experience

At the same time, asset-owner returns are vigorously discussed in the press and by politicians, leading to pressure to publish detailed information on the amounts they are charged by external managers.

In parallel, policy-makers create frameworks that increase opportunities for asset owners to invest directly in long-term assets such as infrastructure. A tipping point is reached as the industry comes to believe that:

- Institutions have the collective experience, culture and governance to run large-scale direct investing programmes
- Core investments are too important to delegate, given political and cost pressures
- Direct investing can deliver steady performance and should form a major allocation within any diversified investment portfolio
- · Roles within direct-investment programmes are well paid and attractive, enabling recruitment and retention of talented personnel

Under this scenario, the starting point of the size threshold for who can be a direct investor decreases. In turn, over the next 5-10 years, most institutions with over \$25 billion in AuM embark on a significant direct-investing programme, albeit focused on a particular geography or asset class. In aggregate, the growth of direct investing increases by about 3-5% per year over underlying asset growth, and direct investing becomes a significant part of the investment industry.

Potential downside scenario

Following multiple failures and disappointments over the next three to five years, the industry recognizes that maintaining a top-class direct-investing team is difficult to get right. Under this scenario, market volatility and regular leadership changes lead institutions to make regular and significant shifts in their asset allocation. Lack of a consistent strategy and related implementation challenges lead direct-investing teams to underperform relative to external managers.

Chief Investment Officers (CIOs) of major asset owners take the view that direct investing is risky, as any underperformance is immediately blamed on their teams, since few have succeeded in educating the broader organization about the nature of direct investing and in building the governance mechanisms needed to work through periods of market tension. Some CIOs gradually wind down their direct investing programmes, while the more successful direct-investing teams are spun off to form independent boutiques, or sold to asset managers along with an asset management contract.

In parallel, following a strong listed asset performance, investment flows toward more liquid asset classes, reducing the impetus for direct investing.

Five to ten years from now, only institutions with over \$50 billion in AuM will continue to develop direct investing capabilities, usually focusing on one or two key asset classes such as real estate. Direct investing grows by roughly 2-4% per year below the underlying growth in institutional assets.

These additional scenarios are presented to highlight how some of the variables driving the growth in direct investing are related. Other factors, such as a severe market crisis with specific asset classes or in general, could negatively impact those direct investors unable to withstand performance volatility, while providing potential investment opportunities for those who can. The extent to which individual asset owners or asset managers will be positioned to benefit from this trend will depend on the extent to which they address it directly.

Implications

Direct investing by institutional investors in illiquid assets is here to stay, although it will not displace the traditional delegated investment model. Growth is likely to be steady, corresponding to the underlying increase in institutional assets, with some potential for faster growth if direct-investing teams deliver long-term performance and value for money superior to that obtainable via delegated investing. Even in an adverse scenario, direct investing is likely to grow in absolute terms, the main difference being that only the largest institutions would be likely to pursue direct investing, and larger institutions will become more selective in considering when and how to do so.



Many governments have expressed an interest in attracting capital to fund the development and refurbishment of infrastructure.



The steady growth of direct investing alongside delegated investing models has implications for asset owners, asset managers and policy-makers alike.

5.1. For asset owners

Institutional investors face a choice over whether to develop or expand their direct-investing capabilities and, if so, which directinvesting model to adopt. In light of the constraints noted earlier in the report, boards and management need to consider a series of critical issues associated with direct investing, in particular the following:

- Commitment: Institutions need to consider whether they are able to make a long-term commitment to direct investing on a meaningful scale in specific asset classes, particularly in the case of solo direct investing. Substantive commitments enable institutions to attract talent and build the tools, processes and culture that are essential to overcome key constraints. A significant commitment is likely to be highly visible inside and outside the institution and grab the attention of others in the investment eco-system such as potential investees and specialized investment professionals. However, commitment has its downside. A change in asset allocation or investment viewpoint might turn the new in-house capability into an unacceptable burden. This loss of flexibility must be justified in terms of the scale of potential gains.
- Governance: Senior internal stakeholders need to build a common view about the ongoing goals and risks of the directinvesting programme, e.g. in terms of control over investment decisions, the investment time horizon, flexibility and costs. They need to be clear about how major decisions – those both routine and addressed under stress – will be made and implemented. More specifically, they will need governance processes in place to address the new risks which the institution would be taking on as a direct investor
 - Performance risks: The institution needs to consider how to react in situations where it can no longer ascribe underperformance to an asset manager, and eventually switch to another manager. Furthermore, the question of when to look for a new investment team or pull the plug altogether on a specific strategy needs to be addressed.
 - Operational risks: Above all, institutions need to have a framework, from the board level down for assessing and managing operational challenges associated with in-house investment management. They need to develop the policies, procedures and controls to support this.
 - Reputational risks: Under a direct-investment approach, institutions become far more exposed to the impact of public opinion as the press, lobbyists and interest groups quickly highlight perceived issues. Institutions need to be prepared to respond constructively to these challenges.

- Talent management and infrastructure: The institution needs to ensure it has the right level of operational knowledge, experience and infrastructure to deal with the challenges associated with making and managing direct investments. Institutions embarking on direct investing for the first time will likely face gaps, which they will need to identify and mend, particularly in terms of developing the talent in their internal teams, e.g. around recruitment, compensation, career development and training.
- Competitive advantage: Institutions need to make an honest assessment of how direct investing will play to their strengths relative to investing through external asset managers. For example, the institution may feel it has better access to some investment opportunities in certain markets, or it may have built up the skills to select or manage investments in particular asset types. In turn, this will help the institution to build a shared view of where external specialist service providers should be used to support or supplement the direct-investing programme. It is also worth considering the reverse point to define where the institution's current or prospective asset managers can add the most value.
- Communication: First, despite being long-term investors, asset owners are likely to face short-term pressures on performance. As direct investors, they will be held to account even more closely than if their assets were managed by an external party. In turn, asset owners will have to build their capabilities in communicating their near-, medium- and long-term strategy to those on whose behalf the fund is managed, the press, domestic policy-makers and the public at large. Second, institutions should engage in brand building as long-term investors through interactions with potential counterparties and governments to foster understanding of their investment priorities as well as to help generate sufficient deal flow.

5.2. For asset managers

Asset managers need to consider how to respond to the directinvesting trends and challenges outlined in this report, particularly in terms of redefining their strategic position:

• Value chain: Asset managers must decide where and how to position themselves in the investment value chain in order to stand out in a more competitive environment. In particular, they may need to make a clearer choice between offering general asset management, becoming a specialist that focuses on particular asset classes based on their existing strengths, or helping institutions develop direct investing programmes by providing one or more specific elements of the value chain. Our research indicates that the value chain will continue to fragment, with winners identifying and occupying areas where they have a sustainable competitive advantage. This will foster vertical specialists, who offer an all-in service for investors in a particular asset class, and horizontal specialists in certain investment activities such as valuation, project

management, legal, reporting and due diligence. To exploit this, asset managers may need to consider reshaping their business models, for example "renting" investment capabilities to direct investors on an agency basis. This might involve offering some combination of deal sourcing, due diligence and deal monitoring services to direct investors, without making a commitment of capital.

- Client focus: Asset managers need to focus on the client segments or individual clients they are best able to serve, given each segment's investment preferences and the asset manager's comparative advantages. Top-quartile asset managers focus heavily on their long-term investment track record, whereas there is increasing evidence that track records are becoming less persistent than in the past. This suggests that successful asset managers will need to change their story to cover all elements of their value proposition and articulate how their services are tailored to the particular needs of institutional sub-segments. Moving quickly to partner with the right clients may help firms to scale up, better positioning them to compete with other asset managers and making them more attractive to the sellers of assets. In the future, asset managers may have to manage several different types of relationship with institutions, and address the question of whether it is efficient to offer different investing models under one roof (and brand).
- Stakeholder management: As direct-investing teams within major asset owners grow and mature, the asset managers' relationship with their clients is changing. These in-house teams represent potential partners on some transactions, and competition on others. So, to the extent they represent an alternative option, this might create checks and balances on the activities of asset managers and, over time, a potential shift in asset managers' business towards more specialist areas where they do not compete.
- Delivery of delegated investing: The direct-investing trend and its underlying drivers have begun to shape investor expectations with regard to traditional delegated investing. To win or retain significant mandates, asset managers will increasingly need to demonstrate how asset owners can retain control over their investments and build a more transparent investment portfolio. This may mean considering approaches beyond traditional investment mandates such as partnerships, crossshareholdings or infrastructure sharing. Alternatively, supporting non-discretionary mandates, which allow institutions to retain key investment decisions over each asset while outsourcing resource-intensive tasks to the asset manager (such as due diligence and the day-to-day asset management), may enable retention of large asset owner clients who wish to take investment decisions themselves, but also wish to avoid the complication and overhead associated with implementing and operationalizing these decisions.

Communication: Our interviews suggest that asset managers and service providers have not always been able to demonstrate the value for money, investment control and performance required by asset owners. Asset managers hoping to work with major investors will need to do more than demonstrate a good investment-performance track record. They will need to articulate how they can add value to the institution by addressing the asset-owner agenda above, e.g. in terms of helping direct investors focus on their particular strengths (rather than trying to do everything), or supplying hard-to-find investment talent in particular asset classes.

5.3. For policy-makers

A benefit of the growth of interest by asset owners in investing directly in illiquid assets is that more capital is available for longterm investments in companies, infrastructure and real estate.

Increased opportunities to attract cross-border investments

Much of the long-term capital available for direct investments is from investors outside the potential country in which the investment would be made. The focus of this sub-section is on high-level recommendations to help policy-makers develop a framework conducive to attracting foreign capital flows while taking domestic concerns into account.43

Three recommendations are put forward: policy-makers should distinguish between ownership of an asset and control of it; they should develop an investment environment and capital market conducive to direct investing; and when assessing specific direct investments, they should focus on the economic substance of transactions.

• Distinguish between ownership and control: "Ownership" involves having cash flow claims as a result of owning an asset, while "control" means decision-making authority related to the asset.⁴⁴ With a widely held public corporation, for instance, a management team typically has control while the majority of the shareholders (who are generally not also the business's managers) have a claim to the cash flow generated by the operations of the business. In contrast, a wholly self-funded business owner who is also CEO of the business has both full ownership and control.

It is understandable that many assume ownership implies control. Much of the debate in academic circles about corporate governance, for instance, is on how to overcome the agency hurdles between the dispersed shareholders of large public companies and the business management team, implying that the role of ownership is to effectively exercise control. In another context, entrepreneurs looking to raise capital from venture investors are often concerned about the control rights they give up alongside an ownership stake.

Regardless, the interplay of ownership and control is not fixed. Different corporate structures, for instance, can allow key shareholders to maintain underlying control despite outside shareholders having disproportionate ownership stakes over cash flows. With an infrastructure asset, an investor investing, for example, in the cash flow of a toll road through an equity investment in a lease of the road would have cash flow rights proportionate to its ownership stake in the lease. The extent of the investor's operational control would depend on the details of the agreement with the underlying government entity. Nonetheless, the government entity would still have ultimate control of the asset.

- Create an investment environment/capital market conducive to direct investing: Policy-makers will be more successful in attracting direct investments in companies, infrastructure and real estate to the extent that their broader investment environment is perceived to be attractive. Investment frameworks should be transparent, consistent and unbiased. Applicable rules and principles should be spelled out and applied consistently. Finally, regulatory and tax policies should not structurally disadvantage foreign investors relative to domestic ones. Related to this, the more liquid and diversified a country's capital market, the more investors will be willing to consider investing in it. It will provide more information for valuing a transaction, options for financing it and confidence in the ability to exit the transaction if desired.
- Focus on the economic substance of transactions: An important challenge for policy-makers is how to take into account domestic national security concerns related to large foreign investors taking positions in national assets (e.g. infrastructure, utilities, media, other strategically important industries), while still being open to foreign capital flows. By focusing on the economic substance of transactions, policy-makers will be best positioned to distinguish when an investment is being made for other than commercial reasons.

Regarding sensitive assets, policy-makers can address the impact of potential non-financial factors on a case-by-case basis. Concern is often focused on foreign institutions controlling domestic assets and the implications of this control. To address this, many cross-border investors make a point of only taking minority ownership stakes in partnership with other investors to mitigate concerns about who controls the asset.⁴⁵ However, even if an investor has majority ownership of an asset, it does not necessarily control it.

Increased supply of capital for infrastructure

Many governments have expressed an interest in attracting capital for the development and refurbishment of infrastructure. The World Economic Forum engaged in structured interviews with leading long-term investors in infrastructure to understand what makes one country or jurisdiction a more attractive investment environment to them than another. The consensus was that potential destinations will be compelling for investors when they have a clear strategic vision for attracting capital for infrastructure; have a supportive policy and regulatory environment; and pro-actively take the investor perspective into account early in the process of project prioritization and structuring.

While there is no template for which specific policies will work in various jurisdictions, to the extent that some governments adopt more of this general framework than others, those jurisdictions are likely to be more attractive as a destination for capital. A more detailed presentation of the central aspects of such a policy framework is presented in the *Infrastructure Investment* Policy Blueprint.46

Institutional investors can play an important role in providing long-term capital. Policy-makers and potential investees often find them especially attractive as a result. However, since many investments would be made by investors outside the country of destination, it can be challenging for capital to flow into potential investments without a policy framework conducive to attracting capital from across national borders.

Some important points that asset owners, asset managers and policy-makers should take into account have been highlighted here, given the increase in capital being invested directly. Assuming that they are large enough to invest directly, asset owners, above all, need to ensure that they formalize a governance structure robust enough to support their direct-investing ambitions. Asset managers should proactively refine their approach to adding value to asset owners, acknowledging that the investment landscape is evolving, but that they still have a central role to play. Finally, policy-makers should recognize the need for frameworks conducive to attracting long-term capital for investment in companies, infrastructure and real estate.

Acknowledgements

This report was prepared by The World Economic Forum in collaboration with Oliver Wyman.

Project team

Julia Hobart, Partner, Wealth and Asset Management Practice, Oliver Wyman Samir Misra, Partner, Wealth and Asset Management Practice, Oliver Wyman Andrew Salmon, Principal, Wealth and Asset Management Practice, Oliver Wyman Radina Mihaleva, Project Manager, Oliver Wyman

Irwin Mendelssohn, Director, Head of Institutional Investors, World Economic Forum

This publication reflects the ideas and contributions of many individuals, gleaned through interviews, conference calls, workshops and document reviews. The project team would like to offer its special gratitude to the members of the project steering and advisory committees as well as the other industry experts who graciously shared their time and insights during the preparation of this report.

Steering committee

Name	Position	Organisation
Jean-Paul Villain	Director, Strategy Unit	Abu Dhabi Investment Authority
Angelien Kemna	Chief Finance and Risk Officer	APG Group
Paul Costello	Former Chairman	Blackstone Group Australia
Michael Sabia	President and Chief Executive Officer	Caisse de dépôt et placement du Québec
Jack Ehnes	Chief Executive Officer	CalSTRS
André Bourbonnais	Senior Vice-President, Private Investments	Canada Pension Plan Investment Board
Nikhil Srinivasan	Group Chief Investment Officer	Generali
Hisham Hamdan	Executive Director, Investments	Khazanah Nasional Berhad
Adrian Orr	Chief Executive Officer	New Zealand Superannuation Fund
Kirill Dmitriev	Chief Executive Officer	Russian Direct Investment Fund
Guido Fürer	Group Chief Investment Officer	Swiss Re
Stefan Meister	Group Chief Operating Officer	Waypoint Capital Holdings
Danny Truell	Chief Investment Officer	Wellcome Trust

Advisory committee

Name	Position	Organisation
Mustafa Abdel-Wadood	Partner and Chairman of the Executive Committee	The Abraaj Group
Laurent de Rosiere	Partner	BC Partners
Real Desrochers	Senior Investment Officer, Private Equity	CalPERS
Dave Marchick	Managing Director	The Carlyle Group
Winston Ma Wenyan	Managing Director and Head of the North America Office	China Investment Corporation
J. Frank Brown	Managing Director and Chief Operating Officer	General Atlantic
Ang Eng Seng	President (Europe)	GIC Private Limited
Jon Zehner	Global Head, Client Capital Group	LaSalle Investment Management
Andrew Weinberg	Partner	Lindsay Goldberg
Amjad Ahmad	Senior Managing Director, Alternative Investments	NBK Capital
Ken Hersh	Chief Executive Officer	NGP Energy Capital Management
Massimiliano Castelli	Global Head of Strategy, Global Sovereign Markets	UBS
Stephen Vineburg	Independent Expert	

Special thanks

To Peter Gratzke, Project Manager, Investors Industries and other members of the Investors team at the World Economic Forum: Katherine Bleich, Amy Chang, Maha Eltobgy, Alice Heathcote, Tik Keung, Abigail Noble, Megan O'Neill, Jason Rico Saavedra, Dena Stivella.

Production and design team (in alphabetical order)

Ann Brady, Head of Editing, World Economic Forum Adelheid Christian-Zechner, Designer Kamal Kimaoui, Head of Production and Design, World Economic Forum Alem Tedeneke, Media Manager, World Economic Forum

Endnotes

- ¹ The Future of Long-term Investing, January 2011. New York: World Economic Forum, p. 13.
- ² Ibid.
- ³ Ibid., pp. 58-60.
- ⁴ Measurement, Governance and Long-term Investing, March 2012. New York: World Economic Forum.
- ⁵ Ibid.
- ⁶ The Future of Long-term Investing, pp. 35-42, provides a broader detailed discussion of long-term investing covering liquid, illiquid, direct and indirect investments.
- ⁷ Often with the help of an investment adviser.
- 8 Sovereign wealth funds themselves are not new. The Kuwait Investment Authority, for instance, was created in 1954. The growth of sovereign wealth funds, more broadly in terms of asset size and number of funds, is more recent.
- 9 Source: MetLife.
- ¹⁰ See: Leamon, A.; Lerner, J.; Garcia-Robles, S. The Evolving Relationship Between LP & GPs, September 2012. Multilateral Investment Fund.
- 11 ERISA made it the duty of pension trustees to ensure that investments were reasonably diversified, encouraging a wider set of investments and a portfolio perspective. ERISA also made it clear that US pension trustees could outsource investment management, as long as they did this prudently.
- ¹² See, for instance: *Institutional Investment in the United Kingdom:* A Review (the Myners Report), March 2001.
- ¹³ Bishop, P. "The Rise of Infrastructure Debt: New Opportunities and Investor Interest", in Infrastructure Spotlight, Preqin Ltd., February 2013.
- ¹⁴ The first sovereign wealth funds were founded in the 1950s, but they emerged as a fully-fledged investor class only in the 2000s.
- ¹⁵ For example, far more respondents to the *Coller Capital Global* Barometer, Winter 2013, thought that private equity had become more rather than less attractive following the crisis.
- ¹⁶ For example, general partners (GPs) often set up liquidity gates or were forced to sell assets at a loss, despite some fund investors wishing to continue with the investment strategy.
- ¹⁷ As an example of the costs associated with asset management, one large investor reported that private equity represented about 15% of their investment portfolio, but that it accounted for over half of the investment fees they paid out.
- ¹⁸ A recent study, based on over a decade of detailed data from a large investor in private equity funds, showed that about two-thirds of the expected revenue derived by the funds came from fixed-revenue components. Metrick, A. and Yasuda, A. The Economics of Private Equity Funds, 2010.
- ¹⁹ For additional detail on the principal/agent problem as it applies to asset owners, see also The Future of Long-term Investing, January 2011. New York: World Economic Forum.

- ²⁰ For example, see *Incentive structures in institutional asset* management and their implications for financial markets, Bank for International Settlements, March 2003.
- ²¹ For a more detailed discussion of the challenges facing direct investors, see Clark, G. and Monk, A. "Principles and policies for in-house asset management", in The Journal of Financial Perspectives, Vol. 1, Issue 3, November 2013.
- ²² See, for instance: Phillips, F. "Pension fund bonuses under scrutiny". The Boston Globe. 8 November 2011, at: http://www. bostonglobe.com/metro/2011/11/08/pension-fund-bonusesunder-scrutiny/D1Pnjl5nkM7CHoFaJ5nH1K/story.html.
- ²³ In any case, many institutions need to adjust their institutional infrastructure to keep pace with the growing size and diversity of investment portfolios, the larger allocations to alternative investments and the greater scrutiny since the financial crisis of 2007-2009.
- ²⁴ One of the advantages of a multi-asset system is that it allows institutions to spot portfolio-wide concentrations (e.g. in particular asset types or industry sectors).
- ²⁵ MacIntosh, J. and Scheibelhut, T. "How Large Pension Funds Organize Themselves: Findings from a Unique 19-Fund Survey", in Rotman International Journal of Pension Management, Vol. 5, No. 1, Spring 2012, p. 35. The same study highlighted differences between asset classes in terms of the amount of assets that can be managed per fund employee (e.g. private equity is particularly work-intensive).
- ²⁶ Size creates its own virtuous circle, i.e. the resources available to "mega investors" allow them to move at the pace necessary to capture the best direct-investing opportunities.
- ²⁷ Assuming the same investment model is being employed. Solo infrastructure could be more difficult to undertake than private equity co-investments (for instance, once model and asset type are both taken into account).
- ²⁸ Main sources for the case study: CPPIB, 2014 Annual Report; and Lerner, J., Rhodes-Kropf, M. and Burbank, N. "The Canada Pension Plan Investment Board: October 2012." Harvard Business School Case 813-103, October 2012 (revised January 2013).
- ²⁹ Through the acquisition of IMS Health Inc. (2009), Tomkins Plc (2010), Kinetic Concepts, Inc. (2011) and Suddenlink Communications (2012).
- 30 Source: Duong, J. "The State of Co-Investments", in Private Equity Spotlight, March 2014, Pregin Ltd, covering a Pregin February 2014 survey of private equity LPs which showed that 73% of institutional investors had previously co-invested, while 40% were actively seeking co-investment opportunities and 37% were seeking co-investment opportunities on an opportunistic basis.

- 31 For example, one study based on very detailed analysis covering seven large institutions suggests that private equity coinvestments tend to underperform traditional fund investments, probably because co-investments tend to take the form of large deals made at the peak of the investment cycle. See: Fang, L., Ivashina, V. and Lerner, J. The Disintermediation of Financial Markets: Direct Investing in Private Equity, Working Paper 19299, August 2013 (accessed January 2014), Cambridge: National Bureau of Economic Research, pp. 3-4.
- 32 "Large" here is relative: what's large enough for a megabuyout fund is different from a mid-market-focused fund. The key notion is of a fund being large enough to pursue its targeted strategy.
- 33 Defined contribution pensions rarely, if ever, make direct investments. This is because scheme members typically retain control over investment decisions and have specific timing requirements, making large-scale illiquid direct investments impractical. In addition, plan sponsors retain fiduciary responsibility for selection of investment options and administration providers, so they only offer investments which are traditionally thought to be suitable for retail clients.
- ³⁴ See: Whitworth, J. and Byron, E. *The* 200 Billion Opportunity: Why Insurers Should Lend More. Oliver Wyman, 2012.
- ³⁵ For additional information, see: *Infrastructure Investing*. It Matters. Swiss Re and the Institute of International Finance, 2014. Zurich: Swiss Re
- ³⁶ For example, see: "CalSTRS Eyes Big Commitments Through Separate Accounts", Reuters, PE Hub, February 2012; and, more recently, "Blackstone raises \$4.6 bln for separate accounts business", Reuters, PE Hub, November 2013.
- ³⁷ See company website www.imgbator.com for further details.
- ³⁸ For example, see: Willmer, S. "Calpers Said to Enter Buyout Secondaries Business", Bloomberg, 13 Nov. 2013, at: http:// www.bloom-berg.com/news/2013-11-13/calpers-said-toenter-buyout-secondaries-busines.html.
- ³⁹ Duong, J. "The State of Co-Investments", in *Private Equity* Spotlight, March 2014, Pregin Ltd, covering a Pregin February 2014 survey of private equity GPs.
- ⁴⁰ For example, see: Pooling of Institutional Investors Capital Selected Case Studies in unlisted equity infrastructure, Organisation for Economic Co-operation and Development, April 2014.
- ⁴¹ See: Dyck, A. and Virani, A. Buying into the 407: The Syndication Protocol as a New Model for Infrastructure Investing, 2012. Toronto: Rotman International Centre for Pension Management
- ⁴² Source: various company websites and marketing materials.
- ⁴³ For a well-formulated articulation of the issues, with a particular focus on sovereign wealth funds, see: Kimmitt, R. "Public Footprints in Private Markets", in Foreign Affairs, Jan.-Feb. 2008.
- ⁴⁴ See, for instance: Fama, E. and Jensen, M. "Separation of Ownership and Control", Journal of Law and Economics, Vol. 26, No. 2, June 1983.

- ⁴⁵ Kalb, S. "The Growing Trend of Cooperation Among Sovereign Wealth Funds", Sovereign Asset Management for a Post-Crisis World. Central Bank Publications, 2011.
- ⁴⁶ World Economic Forum, *Infrastructure Investment Policy* Blueprint, February 2014, at: http://www3.weforum.org/docs/ WEF_II_InfrastructureInvestmentPolicyBlueprint_Report_2014.pdf.



COMMITTED TO IMPROVING THE STATE OF THE WORLD

The World Economic Forum is an independent international organization committed to improving the state of the world by engaging business, political, academic and other leaders of society to shape global, regional and industry agendas.

Incorporated as a not-for-profit foundation in 1971 and headquartered in Geneva, Switzerland, the Forum is tied to no political, partisan or national interests.

World Economic Forum

91-93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel: +41 (0) 22 869 1212 Fax: +41 (0) 22 786 2744

contact@weforum.org www.weforum.org